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STATESSECURITIES AND EXCHANGE COMMISSIONWashington, D.C. 20549FORM 10-Qâ˜Â Â Â Â Â QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934For the quarterly period ended SeptemberÂ 30, 2024ORâ˜Â Â TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934For the Transition Period fromÂ Â Â Â Â Â Â Â Â Â toÂ Â Â Â Â Â Â Â Â Â Â Commission File Number: 001-34949ARBUTUS BIOPHARMA CORPORATION(Exact Name of Registrant as Specified in Its Charter)British Columbia, Canada98-0597776(State or Other Jurisdiction of(I.R.S. EmployerIncorporation or Organization)Identification No.)701 Veterans Circle, Warminster, PA 18974(Address of Principal Executive Offices and Zip Code)267-469-0914(Registrantâ€™s Telephone Number, Including Area Code)Securities registered pursuant to Section 12(b) of the Act:Title of each classTrading Symbol(s)Name of each exchange on which registeredCommon Shares, without par valueABUSÂ Â Â Â Â Â The Nasdaq Stock Market LLCIndicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes â˜’Â Â Â Â Â Â No â˜Â Â Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (Â§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes â˜’Â Â Â Â Â Â Â No Â â˜Â Â Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of â€œlarge accelerated filer,â€ â€œaccelerated filer,â€ â€œsmaller reporting company,â€ and â€œemerging growth companyâ€ in Rule 12b-2 of the Exchange Act.Large accelerated filer Accelerated filerNon-accelerated filer Smaller reporting companyEmerging growth company â˜â˜’â˜If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.Â â˜Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes Â â˜Â Â Â Â No â˜’ As of NovemberÂ 5, 2024, the registrant had 189,491,685Â common shares, without par value, outstanding. ARBUTUS BIOPHARMA CORPORATION PageÂ Â Â PART I. FINANCIAL INFORMATION1Â Â Â Â Â Â Â Â Â Â ITEM 1.FINANCIAL STATEMENTS (UNAUDITED)1Â Â Â Â Â Â Â Â Â Â ITEM 2.MANAGEMENTâ€™S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS18Â Â Â Â Â Â Â Â Â Â ITEM 3.QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK35Â Â Â Â Â Â Â Â Â Â ITEM 4.CONTROLS AND PROCEDURES35Â PART II. OTHER INFORMATION37Â Â Â Â Â Â Â Â Â Â ITEM 1.LEGAL PROCEEDINGS37Â Â Â Â Â Â Â Â Â Â ITEM 1A.RISK FACTORS39Â Â Â Â Â Â Â Â Â Â ITEM 2.UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS39Â Â Â Â Â Â Â Â Â Â ITEM 3.DEFAULTS UPON SENIOR SECURITIES39Â Â Â Â Â Â Â Â Â Â ITEM 4.MINE SAFETY DISCLOSURES39Â Â Â Â Â Â Â Â Â Â ITEM 5.OTHER INFORMATION39Â Â Â Â Â Â Â Â Â Â ITEM 6.EXHIBITS40PART I. FINANCIAL INFORMATIONITEM 1. FINANCIAL STATEMENTS (UNAUDITED)ARBUTUS BIOPHARMA

CORPORATIONCondensed Consolidated Balance Sheets(Unaudited)(In thousands of U.S. Dollars, except share amounts)September 30, 2024December 31, 2023AssetsCurrent assets:Cash and cash equivalents$31,846Â $26,285Â Investments in marketable securities, current95,948Â 99,718Â Accounts receivable1,608Â 1,776Â Prepaid expenses and other current assets3,375Â 4,248Â Total current assets132,777Â 132,027Â Property and equipment, net of accumulated depreciation of $12,663 (December 31, 2023: $11,900) 3,556Â 4,674Â Investments in marketable securities, non-current2,964Â 6,284Â Right of use asset1,144Â 1,416Â Total assets$140,441Â $144,401Â Liabilities and stockholdersâ€™ equityCurrent liabilities:Accounts payable and accrued liabilities$7,544Â $10,271Â Deferred license revenue, current10,911Â 11,791Â Lease liability, current468Â 425Â Total current liabilities18,923Â 22,487Â Liability related to sale of future royalties5,315Â 6,953Â Contingent consideration8,335Â 7,600Â Lease liability, non-current978Â 1,343Â Total liabilities33,551Â 38,383Â Stockholdersâ€™ equityÂ Â Common sharesAuthorized: unlimited number without par valueIssued and outstanding: 189,438,135(December 31, 2023: 169,867,414)1,407,595Â 1,349,821Â Additional paid-in capital81,425Â 81,270Â Deficit(1,334,040)(1,276,652)Accumulated other comprehensive loss(48,090)(48,421)Total stockholdersâ€™ equity106,890Â 106,018Â Total liabilities and stockholdersâ€™ equity$140,441Â $144,401Â See accompanying notes to the condensed consolidated financial statements.1ARBUTUS BIOPHARMA CORPORATIONCondensed Consolidated Statements of Operations and Comprehensive Loss(Unaudited)(In thousands of U.S. Dollars, except share and per share amounts)Three Months Ended September 30,Nine Months Ended September 30,20242023202420232023RevenueCollaborations and licenses$767Â $3,935Â $2,861Â $13,329Â Non-cash royalty revenue572Â 723Â 1,736Â 2,667Â Total Revenue1,339Â 4,658Â 4,597Â 15,996Â Operating expensesÂ Research and development14,273Â 20,169Â 45,227Â 56,136Â General and administrative4,537Â 5,842Â 17,396Â 17,374Â Change in fair value of contingent consideration344Â 205Â 735Â (158)Restructuring3,625Â â€”Â 3,625Â â€”Â Total operating expenses22,779Â 26,216Â 66,983Â 73,352Â Loss from operations(21,440)(21,558)(62,386)(57,356)Other incomeInterest income1,747Â 1,494Â 5,121Â 4,223Â Interest expense(29)(46)(107)(415)Foreign exchange gain/(loss)5Â 6Â (16)11Â Total other income1,723Â 1,454Â 4,998Â 3,819Â Net loss$(19,717)$(20,104)$(57,388)$(53,537)Loss per shareÂ Basic and diluted(0.10)(0.12)(0.31)(0.32)Weighted average number of common sharesÂ Basic and diluted188,997,194Â 167,512,708Â 184,244,819Â 165,085,243Â Comprehensive lossUnrealized gain on available-for-sale securities$218Â $584Â $331Â $1,604Â Comprehensive loss$(19,499)$(19,520)$(57,057)$(51,933)See accompanying notes to the condensed consolidated financial statements.2ARBUTUS BIOPHARMA CORPORATIONCondensed Consolidated Statements of Stockholdersâ€™ Equity(Unaudited)(In thousands of U.S. Dollars, except share amounts)Common SharesÂ Number of SharesShare CapitalAdditional Paid-In CapitalDeficitAccumulated Other Comprehensive LossTotal Stockholders' EquityBalance December 31, 2023169,867,414Â $1,349,821Â $81,270Â $(1,276,652)$(48,421)$106,018Â Stock-based compensation expenseâ€”Â â€”Â 2,014Â â€”Â â€”Â 2,014Â Issuance of common shares pursuant to the Open Market Sale Agreement8,666,077Â 21,765Â â€”Â â€”Â â€”Â 21,765Â Issuance of common shares pursuant to exercise of options1,126,691Â 4,268Â (1,814)â€”Â â€”Â 2,454Â Issuance of common shares pursuant to ESPP121,563Â 271Â (60)â€”Â â€”Â 211Â Issuance of common shares upon vesting of RSUs410,482Â 1,190Â (1,190)â€”Â â€”Â â€”Â Unrealized gain on available-for-sale securitiesâ€”Â â€”Â â€”Â â€”Â 50Â 50Â Net lossâ€”Â â€”Â â€”Â (17,875)â€”Â (17,875)Balance March 31, 2024180,192,227Â $1,377,315Â $80,220Â $(1,294,527)$(48,371)$114,637Â Stock-based compensation expenseâ€”Â â€”Â 3,180Â â€”Â â€”Â 3,180Â Issuance of common shares pursuant to the Open Market Sale Agreement7,833,922Â 22,359Â â€”Â â€”Â â€”Â 22,359Â Issuance of common shares pursuant to exercise of options712,895Â 3,660Â (1,649)â€”Â â€”Â 2,011Â Unrealized gain on available-for-sale securitiesâ€”Â â€”Â â€”Â â€”Â 63Â 63Â Net lossâ€”Â â€”Â â€”Â (19,796)â€”Â (19,796)Balance June 30, 2024188,739,044Â $1,403,334Â $81,751Â $(1,314,323)$(48,308)$122,454Â Stock-based compensation expenseâ€”Â â€”Â 2,160Â â€”Â â€”Â 2,160Â Issuance of common shares pursuant to exercise of options593,321Â 3,996Â (2,406)â€”Â â€”Â 1,590Â Issuance of common shares pursuant to ESPP105,770Â 265Â (80)â€”Â â€”Â 185Â Unrealized gain on available-for-sale securitiesâ€”Â â€”Â â€”Â â€”Â 218Â 218Â Net lossâ€”Â â€”Â â€”Â (19,717)â€”Â (19,717)Balance September 30, 2024189,438,135Â $1,407,595Â $81,425Â $(1,334,040)$(48,090)$106,890Â See accompanying notes to the condensed consolidated financial statements.3ARBUTUS BIOPHARMA CORPORATIONCondensed Consolidated Statements of Stockholdersâ€™ Equity(Unaudited)(In thousands of U.S. Dollars, except share amounts)Common SharesÂ Number of SharesShare CapitalAdditional Paid-In CapitalDeficitAccumulated Other Comprehensive LossTotal Stockholders' EquityBalance December 31, 2022157,455,363Â $1,318,737Â $72,406Â $(1,203,803)$(50,488)$136,852Â Stock-based compensation expenseâ€”Â â€”Â 2,131Â â€”Â â€”Â 2,131Â Issuance of common shares pursuant to the Open Market Sale Agreement7,423,622Â 19,862Â â€”Â â€”Â â€”Â 19,862Â Issuance of common shares pursuant to exercise of options101,356Â 457Â (198)â€”Â â€”Â 259Â Issuance of common shares pursuant to ESPP151,852Â 397Â (101)â€”Â â€”Â 296Â Unrealized gain on available-for-sale securitiesâ€”Â â€”Â â€”Â â€”Â 854Â 854Â Net lossâ€”Â â€”Â â€”Â (16,339)â€”Â (16,339)Balance March 31, 2023165,132,193Â $1,339,453Â $74,238Â $(1,220,142)$(49,634)$143,915Â Stock-based compensation expenseâ€”Â â€”Â 2,964Â â€”Â â€”Â 2,964Â Issuance of common shares pursuant to the Open Market Sale Agreement1,790,546Â 4,742Â â€”Â â€”Â â€”Â 4,742Â Unrealized loss on available-for-sale securitiesâ€”Â â€”Â â€”Â â€”Â 166Â 166Â Net lossâ€”Â â€”Â â€”Â (17,094)â€”Â (17,094)Balance June 30, 2023166,922,739Â $1,344,195Â $77,202Â $(1,237,236)$(49,468)$134,693Â Stock-based compensation expenseâ€”Â â€”Â 2,483Â â€”Â â€”Â 2,483Â Issuance of common shares pursuant to the Open Market Sale Agreement633,922Â 1,396Â â€”Â â€”Â â€”Â 1,396Â Issuance of common shares pursuant to ESPP138,586Â 424Â (139)â€”Â â€”Â 285Â Unrealized loss on available-for-sale securitiesâ€”Â â€”Â â€”Â â€”Â 584Â 584Â Net lossâ€”Â â€”Â â€”Â (20,104)â€”Â (20,104)Balance September 30, 2023167,695,247Â $1,346,015Â $79,546Â $(1,257,340)$(48,884)$119,337Â See accompanying notes to the condensed consolidated financial statements.4ARBUTUS BIOPHARMA CORPORATIONCondensed Consolidated Statements of Cash Flows(Unaudited)(In thousands of U.S. Dollars)Â Nine Months Ended September 30,Â 20242023OPERATING ACTIVITIESNet loss$(57,388)$(53,537)Non-cash items:Depreciation1,047Â 1,045Â Loss on impairment of lab equipment167Â â€”Â Gain on sale of property and equipmentâ€”Â (20)Stock-based compensation expense7,354Â 7,578Â Change in fair value of contingent consideration735Â (158)Non-cash royalty revenue(1,736)(2,667)Non-cash interest expense98Â 412Â Net accretion and amortization of investments in marketable securities(2,212)(1,577)Net change in operating items:Accounts receivable168Â (819)Prepaid expenses and other assets1,145Â (2,040)Accounts payable and accrued liabilities(2,727)(6,223)Change in deferred license revenue(880)(10,349)Other liabilities(306)(289)Net cash used in operating activities(54,535)(68,644)INVESTING ACTIVITIESPurchase of investments in marketable securities(98,318)(56,490)Proceeds from sale of property and equipmentâ€”Â 20Â Disposition of investments in marketable securities107,951Â 86,026Â Acquisition of property and equipment(96)(1,008)Net cash provided by investing activities9,537Â 28,548Â FINANCING ACTIVITIESIssuance of common shares pursuant to the Open Market Sale Agreement44,124Â 26,000Â Issuance of common shares pursuant to exercise of stock options6,055Â 259Â Issuance of common shares pursuant to ESPP396Â 581Â Net cash provided by financing activities50,575Â 26,840Â Effect of foreign exchange rate changes on cash and cash equivalents(16)11Â Increase/(decrease) in cash and cash equivalents5,561Â (13,245)Cash and cash equivalents, beginning of period26,285Â 30,776Â Cash and cash equivalents, end of period$31,846Â $17,531Â See accompanying notes to the condensed consolidated financial statements.5ARBUTUS BIOPHARMA CORPORATIONNotes to Condensed Consolidated Financial Statements(Tabular amounts in thousands of U.S. Dollars, except share and per share amounts)Â 1.Â Â Â Â Â Nature of business and future operationsDescription of the BusinessArbutus Biopharma Corporation (â€œArbutusâ€ or â€œthe Companyâ€) is a clinical-stage biopharmaceutical company leveraging its extensive virology expertise to develop novel therapeutics with distinct mechanisms of action, which can potentially be combined to provide a functional cure for patients with chronic hepatitis B virus (cHBV) infection. The Company believes the key to success in developing a functional cure involves suppressing hepatitis B virus deoxyribonucleic acid, reducing hepatitis B surface antigen and boosting HBV-specific immune responses. The Companyâ€™s pipeline of internally developed, proprietary compounds includes an RNAi therapeutic, imdusiran (AB-729), and an oral PD-L1 inhibitor, AB-101. Imdusiran has generated meaningful clinical data demonstrating an impact on both surface antigen reduction and reawakening of the HBV-specific immune response. Imdusiran is currently in two Phase 2a combination clinical trials. AB-101 is currently being evaluated in a Phase 1a/1b clinical trial. The Company continues to protect and defend its intellectual property, which is the subject of the Companyâ€™s ongoing lawsuits against Moderna Therapeutics, Inc. (Moderna) and Pfizer Inc. and BioNTech SE (collectively, Pfizer/BioNTech) for their use of the Companyâ€™s patented lipid nanoparticle (LNP) technology in their COVID-19 vaccines. With respect to the Moderna lawsuit, the claim construction hearing occurred on February 8, 2024. On April 3, 2024, the court provided its claim construction ruling in which it construed the disputed claim terms and agreed with the Companyâ€™s position on most of the disputed claim terms. On August 5, 2024, the Company and Genevant Sciences Ltd. (Genevant), along with Moderna, filed a Stipulation to Extend Time with the court that requested an amended case schedule to accommodate certain outstanding discovery from Moderna and third parties. The court approved the amended case schedule and the start of the trial was moved from April 21, 2025 to September 24, 2025, subject to the courtâ€™s availability. The lawsuit against Pfizer/BioNTech is ongoing and a date for a claim construction hearing has been scheduled for December 18, 2024.LiquidityAt SeptemberÂ 30, 2024, the Company had an aggregate of $130.8 million in cash, cash equivalents and investments in marketable securities. The Company had no outstanding debt as of SeptemberÂ 30, 2024. The Company believes it has sufficient cash resources to fund its operations for at least the next 12 months. The success of the Company is dependent on obtaining the necessary regulatory approvals to bring its products to market and achieve profitable operations. The Companyâ€™s research and development activities and the commercialization of its products are dependent on its ability to successfully complete these activities and to obtain adequate financing through a combination of financing activities and operations. It is not possible to predict either the outcome of the Companyâ€™s existing or future research and development programs or the Companyâ€™s ability to continue to fund these programs in the future. 62.Â Â Â Â Significant accounting policiesBasis of presentation and principles of consolidationThese unaudited condensed consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles for interim financial statements and accordingly, do not include all disclosures required for annual financial statements. These statements should be read in conjunction with the Companyâ€™s audited consolidated financial statements and notes thereto for the year ended DecemberÂ 31, 2023 included in the Companyâ€™s Annual Report on Form 10-K for the year ended DecemberÂ 31, 2023. These unaudited condensed consolidated financial statements include the accounts of Arbutus Biopharma Corporation and its one wholly-owned subsidiary, Arbutus Biopharma, Inc., and reflect, in the opinion of management, all adjustments and reclassifications necessary to fairly present the Companyâ€™s financial position as of SeptemberÂ 30, 2024 and DecemberÂ 31, 2023, the Companyâ€™s results of operations for the three and nine months ended September 30, 2024 and 2023, and the Companyâ€™s cash flows for the nine months ended September 30, 2024 and 2023. Such adjustments are of a normal recurring nature. The results of operations for the three and nine months ended September 30, 2024 are not necessarily indicative of the results for the full year. These unaudited condensed consolidated financial statements follow the same significant accounting policies as those described in the notes to the audited consolidated financial statements of the Company for the year ended DecemberÂ 31, 2023, except as described below under the section entitled â€œRecent Accounting Pronouncements.â€All intercompany balances and transactions have been eliminated. Net loss per shareNet loss per share is calculated based on the weighted average number of common shares outstanding. Diluted net loss per share does not differ from basic net loss per share for the three and nine months ended September 30, 2024 and 2023, since the effect of including potential common shares would be anti-dilutive. For the nine months ended September 30, 2024, potential common shares of 18.7 million pertaining to outstanding stock options and unvested restricted stock units were excluded from the calculation of net loss per share. A total of approximately 21.0 million outstanding stock options were excluded from the calculation for the nine months ended September 30, 2023. Revenue from collaborations and licensesThe Company generates revenue through certain collaboration agreements and license agreements. Such agreements may require the Company to deliver various rights and/or services, including intellectual property rights or licenses and research and development services. Under such agreements, the Company is generally eligible to receive non-refundable upfront payments, funding for research and development services, milestone payments and royalties.The Companyâ€™s collaboration agreements fall under the scope of Accounting Standards Codification (ASC) Topic 808, Collaborative Arrangements (ASC 808), when both parties are active participants in the arrangement and are exposed to significant risks and rewards. For certain arrangements under the scope of ASC 808, the Company analogizes to ASC Topic 606, Revenue from Contracts with Customers (ASC 606), for some aspects, including for the delivery of a good or service (i.e., a unit of account).ASC 606 requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers under a five-step model: (i) identify contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when or as a performance obligation is satisfied.In contracts where the Company has more than one performance obligation to provide its customer with goods or services, each performance obligation is evaluated to determine whether it is distinct based on whether (i) the customer can benefit from the good or service either on its own or together with other resources that are readily available and (ii) the good or service is separately identifiable from other promises in the contract. The consideration under the contract is then allocated between the distinct performance obligations based on their respective relative stand-alone selling prices. The estimated stand-alone selling price of each deliverable reflects the Companyâ€™s best estimate of what the selling price would be if the deliverable was regularly sold on a stand-alone basis and is determined by reference to market rates for the good or service when sold to others or by using an adjusted market assessment approach if the selling price on a stand-alone basis is not available. 7The consideration allocated to each distinct performance obligation is recognized as revenue when control is transferred to the customer for the related goods or services. Consideration associated with at-risk substantive performance milestones, including sales-based milestones, is recognized as revenue when it is probable that a significant reversal of the cumulative revenue recognized will not occur. Sales-based royalties received in connection with licenses of intellectual property are subject to a specific exception in the revenue standards, whereby the consideration is not included in the transaction price and recognized in revenue until the customerâ€™s subsequent sales or usages occur.Deferred RevenueWhen consideration is received or is unconditionally due from a customer, collaborator or licensee prior to the Company completing its performance obligation to the customer, collaborator or licensee under the terms of a contract, deferred revenue is recorded. Deferred revenue expected to be recognized as revenue within the 12 months following the balance sheet date is classified as a current liability. Deferred revenue not expected to be recognized as revenue within the 12 months following the balance sheet date is classified as a long-term liability. In accordance with ASC Topic 210-20, Balance Sheet - Offsetting (ASC 210-20) the Companyâ€™s deferred revenue is offset by a contract asset as further discussed in Note 9.Segment informationThe Company operates as a single segment. Recent accounting pronouncementsIn November 2023, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures (ASU 2023-07), which requires disclosure of significant segment expenses and other segment items on an annual and interim basis under ASC 280. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and for interim periods beginning after December 15, 2024. Early adoption is permitted and the amendments in this ASU should be applied on a retrospective basis to all periods presented. The Company has not yet determined the impact ASU 2023-07 may have on the Companyâ€™s financial statement disclosures. In December 2023, the FASB issued ASU No. 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures (ASU 2023-09), which improves income tax disclosures by requiring: (1) consistent categories and greater disaggregation of information in the rate reconciliation, and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for annual periods beginning after December 15, 2024. Early adoption is permitted. The ASU indicates that all entities will apply the guidance prospectively with an option for retroactive application to each period presented in the financial statements. The Company has not yet determined the impact ASU 2023-09 may have on the Companyâ€™s financial statement disclosures. The Company has reviewed all other recently issued standards and has determined that such standards will not have a material impact on the Companyâ€™s financial statements or do not otherwise apply to the Companyâ€™s operations.3.Â Â Â Â Fair value measurementsThe Company measures certain financial instruments and other items at fair value.To determine the fair value, the Company uses the fair value hierarchy for inputs used in measuring fair value that maximize the use of observable inputs and minimize the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs market participants would use to value an asset or liability and are developed based on market data obtained from independent sources. Unobservable inputs are inputs based on assumptions about the factors market participants would use to value an asset or liability. The three levels of inputs that may be used to measure fair value are as follows:Â â€¢Level 1 inputs are quoted market prices for identical instruments available in active markets.â€¢Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly or indirectly. If the asset or liability has a contractual

term, the input must be observable for substantially the full term. An example includes quoted market prices for similar assets or liabilities in active markets. 8â€¢Level 3 inputs are unobservable inputs for the asset or liability and will reflect managementâ€™s assumptions about market assumptions that would be used to price the asset or liability.Assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurements. Changes in the observability of valuation inputs may result in a reclassification of levels for certain securities within the fair value hierarchy.The carrying values of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate their fair values due to the immediate or short-term maturity of these financial instruments.To determine the fair value of the contingent consideration (Note 8), the Company uses a probability weighted assessment of the likelihood the milestones would be met and the estimated timing of such payments, and then the potential contingent payments are discounted to their present value using a probability adjusted discount rate that reflects the early stage nature of the development program, the time to complete the program development, and overall biotech indices. The Company determined the fair value of the contingent consideration was $8.3 million as of SeptemberÂ 30, 2024 and the increase of $0.7 million from DecemberÂ 31, 2023 has been recorded as a component of total operating expenses in the statements of operations and comprehensive loss for the nine months ended September 30, 2024. The assumptions used in the discounted cash flow model are level 3 inputs as defined above. The Company assessed the sensitivity of the fair value measurement to changes in these unobservable inputs, and determined that changes within a reasonable range would not result in a materially different assessment of fair value. Â The following tables present information about the Companyâ€™s assets and liabilities that are measured at fair value on a recurring basis, and indicates the fair value hierarchy of the valuation techniques used to determine such fair value:Level 1Level 2Level 3TotalAs of September 30, 2024(in thousands)AssetsCash and cash equivalents$31,846Â $â€”Â $â€”Â $31,846Â Investments in marketable securities, currentâ€”Â 95,948Â â€”Â 95,948Â Investments in marketable securities, non-currentâ€”Â 2,964Â â€”Â 2,964Â Total$31,846Â $98,912Â $â€”Â $130,758Â LiabilitiesContingent considerationâ€”Â â€”Â 8,335Â 8,335Â Total$â€”Â $â€”Â $8,335Â $8,335Â Level 1Level 2Level 3TotalAs of December 31, 2023(in thousands)AssetsCash and cash equivalents$26,285Â $â€”Â $â€”Â $26,285Â Investments in marketable securities, currentâ€”Â 99,718Â â€”Â 99,718Â Investments in marketable securities, non-currentâ€”Â 6,284â€”Â 6,284Â Total$26,285Â $106,002Â $â€”Â $132,287Â LiabilitiesContingent considerationâ€”Â â€”Â 7,600Â 7,600Â Total$â€”Â $â€”Â $7,600Â $7,600Â 9The following table presents the changes in fair value of the Companyâ€™s contingent consideration: Â Liability at beginning of the periodChange in fair value of liabilityLiability at end of the period(in thousands)Nine Months Ended September 30, 2024$7,600Â $735Â $8,335Â Nine Months Ended September 30, 2023$7,531Â (158)7,373Â See Note 4 for additional information regarding the fair value of the Companyâ€™s investments in marketable securities. 4.Â Â Â Â Investments in marketable securitiesÂ Investments in marketable securities consisted of the following:Amortized CostGross Unrealized Gain(1)Gross Unrealized Loss(1)Fair ValueAs of September 30, 2024(in thousands)Cash equivalentsMoney market$25,948Â $â€”Â $â€”Â $25,948Â Total$25,948Â $â€”Â $â€”Â $25,948Â Investments in marketable short-term securitiesUS corporate bonds43,477Â 23Â (9)43,491Â US treasury bills52,408Â 49Â â€”Â 52,457Â Total$95,885Â $72Â (9)95,948Â Investments in marketable long-term securitiesUS corporate bonds2,932Â 32Â â€”Â 2,964Â Total$2,932Â $32Â $â€”Â $2,964Â Â (1)Â Gross unrealized gain (loss) is pre-tax and is reported in accumulated other comprehensive loss. Amortized CostGross Unrealized Gain(1)Gross Unrealized Loss(1)Fair ValueAs of December 31, 2023(in thousands)Cash equivalentsMoney market fund$18,029Â $â€”Â $â€”Â $18,029Â Total$18,029Â $â€”Â $â€”Â $18,029Â Investments in marketable short-term securitiesUS government agency bonds$17,918Â $â€”Â (44)17,874Â US corporate bonds71,045Â 30Â (189)70,886Â Yankee bonds2,000Â â€”Â (17)1,983Â US government bonds$9,001Â $â€”Â (26)8,975Â Total$99,964Â $30Â (276)99,718Â Investments in marketable long-term securitiesUS corporate bonds6,273Â 18Â (7)6,284Â Total$6,273Â $18Â (7)6,284Â (1)Â Gross unrealized gain (loss) is pre-tax and is reported in accumulated other comprehensive loss.The contractual term to maturity of the $95.9Â million of short-term marketable securities held by the Company as of SeptemberÂ 30, 2024 is less than one year. As of SeptemberÂ 30, 2024, the Company held $3.0 million of long-term marketable securities with contractual maturities of more than one year, but less than five years. As of DecemberÂ 31, 2023, the Companyâ€™s 10$99.7 million of short-term marketable securities had contractual maturities of less than one year, while the Companyâ€™s $6.3 million of long-term marketable securities had maturities of more than one year, but less than five years.At SeptemberÂ 30, 2024 and DecemberÂ 31, 2023, the Company had 7 and 27, respectively, available-for-sale investment debt securities in an unrealized loss position without an allowance for credit losses. Unrealized losses on the Companyâ€™s investments in debt securities have not been recognized into income as the issuersâ€™ bonds are of high credit quality and the decline in fair value is largely due to market conditions and/or changes in interest rates. The Company does not intend to sell and it is more likely than not that the Company will not be required to sell the securities prior to the anticipated recovery of their amortized cost basis. The issuers continue to make timely interest payments on the bonds. The fair value is expected to recover as the bonds approach maturity. Accrued interest receivable on investments in marketable securities of $0.3 million at both SeptemberÂ 30, 2024 and DecemberÂ 31, 2023 is included in prepaid expenses and other current assets. The Company had realized gains of less than $0.1 million for the three and nine months ended September 30, 2024 and zero and less than $0.1 million realized gains for same periods in 2023, respectively.See Note 3 for additional information regarding the fair value of the Companyâ€™s investments in marketable securities. 5.Â Â Â Â Investment in GenevantIn April 2018, the Company entered into an agreement with Roivant Sciences Ltd. (Roivant), its largest shareholder, to launch Genevant, a company focused on a broad range of RNA-based therapeutics enabled by the Companyâ€™s LNP and ligand conjugate delivery technologies. The Company licensed rights to its LNP and ligand conjugate delivery platforms to Genevant for RNA-based applications outside of HBV, except to the extent certain rights had already been licensed to other third parties (the Genevant License). The Company retained all rights to its LNP and conjugate delivery platforms for HBV. Under the Genevant License, as amended, if a third party sublicensee of intellectual property licensed by Genevant from the Company commercializes a sublicensed product, the Company becomes entitled to receive a specified percentage of certain revenue that may be received by Genevant for such sublicense, including royalties, commercial milestones and other sales-related revenue, or, if less, tiered low single-digit royalties on net sales of the sublicensed product. The specified percentage is 20% in the case of a mere sublicense (i.e., naked sublicense) by Genevant without additional contribution and 14% in the case of a bona fide collaboration with Genevant.Additionally, if Genevant receives proceeds from an action for infringement by any third parties of the Companyâ€™s intellectual property licensed to Genevant, the Company would be entitled to receive, after deduction of litigation costs, 20% of the proceeds received by Genevant or, if less, tiered low single-digit royalties on net sales of the infringing product (inclusive of the proceeds from litigation or settlement, which would be treated as net sales). The Company accounts for its interest in Genevant as equity securities without readily determinable fair values. Accordingly, an estimate of the fair value of the securities is based on the original cost less previously recognized equity method losses, less impairments, plus or minus changes resulting from observable price changes in orderly transactions for identical or a similar Genevant securities. As of SeptemberÂ 30, 2024, the carrying value of the Companyâ€™s investment in Genevant was zero and the Company owned approximately 16% of the common equity of Genevant. 116.Â Â Â Â Accounts payable and accrued liabilitiesAccounts payable and accrued liabilities are comprised of the following:Â September 30, 2024December 31, 2023(in thousands)Trade accounts payable$2,315Â $3,223Â Research and development accruals1,367Â 2,884Â Professional fee accruals709Â 815Â Payroll accruals2,588Â 3,349Â Restructuring liabilities565Â â€”Â Total accounts payable and accrued liabilities$7,544Â $10,271Â 7.Â Â Â Â Sale of future royalties On July 2, 2019, the Company entered into a Purchase and Sale Agreement (the Agreement) with the Ontario Municipal Employees Retirement System (OMERS), pursuant to which the Company sold to OMERS part of its royalty interest on future global net sales of ONPATTROÂ® (Patisiran) (ONPATTRO), an RNA interference therapeutic currently being sold by Alnylam Pharmaceuticals, Inc. (Alnylam).ONPATTRO utilizes the Companyâ€™s LNP technology, which was licensed to Alnylam pursuant to the Cross-License Agreement, dated November 12, 2012, by and between the Company and Alnylam (the LNP License Agreement).Â Under the terms of the LNP License Agreement, the Company is entitled to tiered royalty payments on global net sales of ONPATTRO ranging from 1.00% to 2.33% after offsets, with the highest tier applicable to annual net sales above $500 million. This royalty interest was sold to OMERS, effective as of January 1, 2019, for $20 million in gross proceeds before advisory fees. OMERS will retain this entitlement until it has received $30 million in royalties, at which point 100% of such royalty interest on future global net sales of ONPATTRO will revert to the Company. OMERS has assumed the risk of collecting up to $30 million of future royalty payments from Alnylam and the Company is not obligated to reimburse OMERS if they fail to collect any such future royalties. The $30 million in royalties to be paid to OMERS is accounted for as a liability, with the difference between the liability and the gross proceeds received accounted for as a discount. The discount, as well as $1.5 million of transaction costs, will be amortized as interest expense based on the projected balance of the liability as of the beginning of each period. As of SeptemberÂ 30, 2024, the Company estimated an effective annual interest rate of approximately 2.0%. Over the course of the Agreement, the actual interest rate will be affected by the amount and timing of royalty revenue recognized and changes in the timing of forecasted royalty revenue. On a quarterly basis, the Company will reassess the expected timing of the royalty revenue, recalculate the amortization and effective interest rate and adjust the accounting prospectively as needed. The Company recognizes non-cash royalty revenue related to the sales of ONPATTRO during the term of the Agreement. As royalties are remitted to OMERS from Alnylam, the balance of the recognized liability is effectively repaid over the life of the Agreement. From the inception of the royalty sale through SeptemberÂ 30, 2024, the Company has recorded an aggregate of $24.4 million of non-cash royalty revenue for royalties earned by OMERS. There are a number of factors that could materially affect the amount and timing of royalty payments from Alnylam, none of which are within the Companyâ€™s control. During the nine months ended September 30, 2024, the Company recognized non-cash royalty revenue of $1.7 million and related non-cash interest expense of lessÂ thanÂ $0.1Â million. During the nine months ended September 30, 2023, the Company recognized non-cash royalty revenue of $2.7 million and related non-cash interest expense of $0.4 million. 12The table below shows the activity related to the net liability for the nine months ended September 30, 2024 and 2023:Nine Months Ended September 30,20242023(in thousands)Net liability related to sale of future royalties - beginning balance$6,953Â $10,365Â Non-cash royalty revenue(1,736) (2,667)Non-cash interest expense98Â 412Â Net liability related to sale of future royalties - ending balance$5,315Â $8,110Â In addition to the royalty from the LNP License Agreement, the Company is also receiving a second royalty interest ranging from 0.75% to 1.125% on global net sales of ONPATTRO, with 0.75% applying to sales greater than $500 million, originating from a settlement agreement and subsequent license agreement with Acuitas Therapeutics, Inc. (Acuitas). The royalty from Acuitas has been retained by the Company and was not part of the royalty sale to OMERS.8.Â Â Â Â Contingencies and commitmentsStock Purchase Agreement with EnantigenIn October 2014, Arbutus Inc., the Companyâ€™s wholly-owned subsidiary, acquired all of the outstanding shares of Enantigen Therapeutics, Inc. (Enantigen) pursuant to a stock purchase agreement. The amount paid to Enantigenâ€™s selling shareholders could be up to an additional $102.5 million in sales performance milestones in connection with the sale of the first commercialized product by the Company for the treatment of HBV, regardless of whether such product is based upon assets acquired under this agreement, and a low single-digit royalty on net sales of such first commercialized HBV product, up to a maximum royalty payment of $1.0 million that, if paid, would be offset against the Companyâ€™s milestone payment obligations. Certain other development milestones related to the acquisition were tied to programs which are no longer under development by the Company, and therefore the contingency related to those development milestones is zero.The contingent consideration is a financial liability and is measured at its fair value at each reporting period, with any changes in fair value from the previous reporting period recorded in the statements of operations and comprehensive loss (see Note 3). The fair value of the contingent consideration was $8.3 million as of SeptemberÂ 30, 2024.9.Â Â Â Â Collaborations, contracts and licensing agreementsCollaborationsQilu Pharmaceutical Co., Ltd.In December 2021, the Company entered into a technology transfer and licensing agreement (the License Agreement) with Qilu Pharmaceutical Co., Ltd. (Qilu), pursuant to which the Company granted Qilu a sublicensable, royalty-bearing license, under certain intellectual property owned by the Company, which is non-exclusive as to development and manufacturing and exclusive with respect to commercialization of imdusiran, including pharmaceutical products that include imdusiran, for the treatment or prevention of hepatitis B in China, Hong Kong, Macau and Taiwan (the Territory). In partial consideration for the rights granted by the Company, Qilu paid the Company a one-time upfront cash payment of $40.0 million, net of withholding taxes, on January 5, 2022, and agreed to pay the Company milestone payments totaling up to $245.0 million, net of withholding taxes, upon the achievement of certain technology transfer, development, regulatory and commercialization milestones. Qilu paid $4.4 million of withholding taxes to the Chinese taxing authority on the Companyâ€™s behalf, related to the upfront cash payment. In addition, Qilu agreed to pay the Company double-digit royalties into the low twenties percent based upon annual net sales of imdusiran in the Territory. The royalties are payable on a product-by-product and region-by-region basis, subject to certain limitations.Qilu is responsible for all costs related to developing, obtaining regulatory approval for, and commercializing imdusiran for the treatment or prevention of hepatitis B in the Territory. Qilu is required to use commercially reasonable efforts to develop, seek regulatory approval for, and commercialize at least one imdusiran product candidate in the Territory. A joint development 13committee has been established between the Company and Qilu to coordinate and review the development, manufacturing and commercialization plans. Both parties also have entered into a supply agreement and related quality agreement pursuant to which the Company will manufacture or have manufactured and supply Qilu with all quantities of imdusiran necessary for Qilu to develop and commercialize in the Territory until the Company has completed manufacturing technology transfer to Qilu and Qilu has received all approvals required for it or its designated contract manufacturing organization to manufacture imdusiran in the Territory.Concurrent with the execution of the License Agreement, the Company entered into a Share Purchase Agreement (the Share Purchase Agreement) with Anchor Life Limited, a company established pursuant to the applicable laws and regulations of Hong Kong and an affiliate of Qilu (the Investor), pursuant to which the Investor purchased 3,579,952 of the Companyâ€™s common shares at a purchase price of USD $4.19 per share, which was a 15% premium on the thirty-day average closing price of the common shares as of the close of trading on December 10, 2021 (the Share Transaction). The Company received $15.0 million of gross proceeds from the Share Transaction on January 6, 2022. The common shares sold to the Investor in the Share Transaction represented approximately 2.5% of the common shares outstanding immediately prior to the execution of the Share Purchase Agreement. The License Agreement falls under the scope of ASC 808 as both parties are active participants in the arrangement and are exposed to significant risks and rewards. While this arrangement is in the scope of ASC 808, the Company analogizes to ASC 606 for some aspects of this arrangement, including for the delivery of a good or service (i.e., a unit of account). In accordance with the guidance, the Company identified the following commitments under the arrangement: (i) rights to develop, use, sell, have sold, offer for sale and import any product comprised of Licensed Product (as defined in the License Agreement) (the Qilu License) and (ii) drug supply obligations and manufacturing technology transfer (the Manufacturing Obligations). The Company determined that these two commitments are not distinct performance obligations for purposes of recognizing revenue as the manufacturing process is highly specialized and Qilu would not be able to benefit from the Qilu License without the Companyâ€™s involvement in the manufacturing activities until the transfer of the manufacturing know-how is complete. As such, the Company will combine these commitments into one performance obligation to which the transaction price will be allocated to and will recognize this transaction price associated with the bundled performance obligation over time using an inputs method based on labor hours expended by the Company on its Manufacturing Obligations.The Company determined the initial transaction price of the combined performance obligation to be $50.4 million, which includes the $40.0 million upfront fee, $4.4 million of withholding taxes paid by Qilu on behalf of the Company, the premium paid for the Share Transaction of $4.1 million. The Company determined the milestone payments to be variable consideration subject to constraint at inception. At the end of each subsequent reporting period, the Company will reevaluate the probability of achievement of the future development, regulatory, and sales milestones subject to constraint and, if necessary, will adjust its estimate of the overall transaction price. Any such adjustments will be recorded on a cumulative catch-up basis, which would affect revenues and earnings in the period of adjustment. The following table outlines the transaction price and the changes to the related liability balance:Transaction PriceCumulative Collaboration Revenue RecognizedDeferred License Revenue(in thousands)Combined performance obligation$50,445Â $37,561Â $12,884Â Less contract asset(1,973)Total deferred license revenue10,911Â The Company recognized $0.1 million and $0.9 million of revenue based on labor hours expended by the Company on its Manufacturing Obligations during the three and nine months ended September 30, 2024, respectively, and $3.2 million and $10.3 million during the three and nine months ended September 30, 2023, respectively.As of SeptemberÂ 30, 2024, the balance of the deferred license revenue was $12.9 million, which, in accordance with ASC 210-20, was partially offset by the contract asset associated with the manufacturing cost reimbursement of $2.0 million, resulting in a net deferred license revenue liability of $10.9 million. 14The Company incurred $0.6 million of incremental costs in obtaining the Qilu License, which the Company capitalized in other current assets and other assets and amortizes as a component of general and administrative expense commensurate with the recognition of the combined performance obligation. The Company recognized amortization expense of less than $0.1 million for both the three and nine months ended September 30, 2024 and amortization expense of less than $0.1 million for the three months ended SeptemberÂ 30, 2023 and $0.1 million for the nine months ended SeptemberÂ 30, 2023.The Company

reevaluates the transaction price and the total estimated labor hours expected to be incurred to satisfy the performance obligations and adjusts the deferred revenue at the end of each reporting period. Such changes will result in a change to the amount of collaboration revenue recognized and deferred revenue.Barinthus Biotherapeutics plcIn July 2021, the Company entered into a clinical collaboration agreement with Barinthus Biotherapeutics plc (Barinthus), formerly Vaccitech plc, to evaluate imdusiran followed by Barinthusâ€™ VTP-300, an HBV antigen specific immunotherapy, and ongoing nucleos(t)ide analogue therapy in patients with cHBV. This clinical trial was amended and is now dosing patients in an additional treatment arm that includes an approved PD-1 monoclonal antibody inhibitor, nivolumab (OpdivoÂ®).The Company is responsible for managing this Phase 2a proof-of-concept clinical trial, subject to oversight by a joint development committee comprised of representatives from the Company and Barinthus. The Company and Barinthus retain full rights to their respective product candidates and will split all costs associated with the clinical trial. The Company incurred $0.5 million and $1.7 million of expenses, net of Barinthusâ€™s 50% share, during the three and nine months ended September 30, 2024, respectively, and $0.7 million and $1.6 million during the three and nine months ended SeptemberÂ 30, 2023 respectively, and reflected those costs in research and development in the statements of operations and comprehensive loss. Royalty EntitlementsAlnylam Pharmaceuticals, Inc. and Acuitas Therapeutics, Inc. The Company has two royalty entitlements to Alnylamâ€™s global net sales of ONPATTRO. In 2012, the Company entered into the LNP License Agreement with Alnylam that entitles Alnylam to develop and commercialize products with the Companyâ€™s LNP technology. Alnylam launched ONPATTRO, the first approved application of the Companyâ€™s LNP technology, in 2018. Under the terms of this license agreement, the Company is entitled to tiered royalty payments on global net sales of ONPATTRO ranging from 1.00% - 2.33% after offsets, with the highest tier applicable to annual net sales above $500 million. This royalty interest was sold to OMERS, effective as of January 1, 2019, for $20 million in gross proceeds before advisory fees. OMERS will retain this entitlement until it has received $30 million in royalties, at which point 100% of this royalty entitlement on future global net sales of ONPATTRO will revert back to the Company. OMERS has assumed the risk of collecting up to $30 million of future royalty payments from Alnylam and the Company is not obligated to reimburse OMERS if they fail to collect any such future royalties. If this royalty entitlement reverts to the Company, it has the potential to provide an active royalty stream or to be otherwise monetized again in full or in part. From the inception of the royalty sale through SeptemberÂ 30, 2024, an aggregate of $24.4 million of royalties have been earned by OMERS. The Company also is receiving a second royalty interest of 0.75% to 1.125% on global net sales of ONPATTRO, with 0.75% applying to sales greater than $500 million, originating from a settlement agreement and subsequent license agreement with Acuitas.Â This royalty entitlement from Acuitas has been retained by the Company and was not part of the royalty entitlement sale to OMERS. 15Revenues are summarized in the following table:Three Months Ended September 30,Nine Months Ended September 30,2024202320242023(in thousands)(in thousands)Revenue from collaborations and licensesAcuitas Therapeutics, Inc.$644Â $714Â $1,981Â $2,980Â Qilu Pharmaceutical Co., Ltd.123Â 3,221Â 880Â 10,349Â Non-cash royalty revenueAlnylam Pharmaceuticals, Inc.572Â 723Â 1,736Â 2,667Â Total revenue$1,339Â $4,658Â $4,597Â $15,996Â 10.Â Â Â Â Shareholdersâ€™ equityAuthorized share capitalThe Companyâ€™s authorized share capital consists of an unlimited number of common shares and preferred shares, without par value, and 1,164,000 Series A participating convertible preferred shares, without par value.Open Market Sale AgreementThe Company has an Open Market Sale AgreementSM with Jefferies LLC (Jefferies) dated December 20, 2018, as amended by Amendment No. 1, dated December 20, 2019, Amendment No. 2, dated August 7, 2020 and Amendment No. 3, dated March 4, 2021 (as amended, the Sale Agreement), under which the Company may issue and sell common shares, from time to time.On December 23, 2019, the Company filed a shelf registration statement on Form S-3 with the Securities and Exchange Commission (the SEC) (File No. 333-235674) and accompanying base prospectus, which was declared effective by the SEC on January 10, 2020 (the January 2020 Registration Statement), for the offer and sale of up to $150.0Â million of the Companyâ€™s securities. The January 2020 Registration Statement also contained a prospectus supplement for an offering of up to $50.0Â million of the Companyâ€™s common shares pursuant to the Sale Agreement. This prospectus supplement was fully utilized during 2020. On August 7, 2020, the Company filed a prospectus supplement with the SEC (the August 2020 Prospectus Supplement) for an offering of up to an additional $75.0Â million of its common shares pursuant to the Sale Agreement under the January 2020 Registration Statement. The August 2020 Prospectus Supplement was fully utilized during 2020. The January 2020 Registration Statement expired in January 2023.On August 28, 2020, the Company filed a shelf registration statement on Form S-3 with the SEC (File No. 333-248467) and accompanying base prospectus, which was declared effective by the SEC on October 22, 2020 (the October 2020 Registration Statement), for the offer and sale of up to $200.0Â million of the Companyâ€™s securities. On March 4, 2021, the Company filed a prospectus supplement with the SEC (the March 2021 Prospectus Supplement) for an offering of up to an additional $75.0 million of its common shares pursuant to the Sale Agreement under the October 2020 Registration Statement. The March 2021 Prospectus Supplement was fully utilized during 2021. On October 8, 2021, the Company filed a prospectus supplement with the SEC (the October 2021 Prospectus Supplement) for an offering of up to an additional $75.0Â million of its common shares pursuant to the Sale Agreement under the October 2020 Registration Statement. The October 2020 Registration Statement expired in October 2023 with $29.3 million that was not utilized under the October 2021 Prospectus Supplement.On November 4, 2021, the Company filed a shelf registration statement on Form S-3 with the SEC (File No. 333-260782) and accompanying base prospectus, which was declared effective by the SEC on November 18, 2021 (the November 2021 Registration Statement), for the offer and sale of up to $250.0Â million of the Companyâ€™s securities.On March 3, 2022, the Company filed a prospectus supplement with the SEC (the March 2022 Prospectus Supplement) for an offering of up to an additional $100.0Â million of its common shares pursuant to the Sale Agreement under: (i) the January 2020 Registration Statement; (ii) the October 2020 Registration Statement; and (iii) the November 2021 Registration Statement, of which only the November 2021 Registration Statement remains active. 16During the three months ended September 30, 2024, the Company did not issue any common shares pursuant to the Sale Agreement. During the nine months ended September 30, 2024, the Company issued 16,499,999 common shares pursuant to the Sale Agreement, resulting in net proceeds of approximately $44.1 million. During the three and nine months ended September 30, 2023, the Company issued 633,922 and 9,848,090 common shares pursuant to the Sale Agreement, respectively, resulting in net proceeds of $1.4Â million and $26.0 million, respectively. As of SeptemberÂ 30, 2024, there was approximately $25.4 million of common shares remaining available in aggregate under the March 2022 Prospectus Supplement, pursuant to the November 2021 Registration Statement.Stock-based compensationThe table below summarizes information about the Companyâ€™s stock-based compensation for the three and nine months ended SeptemberÂ 30, 2024 and 2023 and the expense recognized in the condensed consolidated statements of operations: Three Months Ended September 30,Nine Months Ended September 30,2024202320242023(in thousands, except share and per share data)Stock optionsOptions granted during periodâ€”Â 784,240Â 4,163,000Â 5,082,640Â Weighted average exercise price$â€”Â $2.25Â $2.49Â $2.78Â Restricted stock units (RSUs)Restricted stock units granted during periodâ€"Â â€"Â 1,316,200Â 1,344,550Â Grant date fair value$â€"Â $â€"Â $2.40Â $2.90Â Stock compensation expenseResearch and development$847Â $1,002Â $3,007Â $2,854Â General and administrative1,313Â 1,481Â 4,347Â 4,724Â Total stock compensation expense$2,160Â $2,483Â $7,354Â $7,578Â 11.Â Â Â Â RestructuringOn July 29, 2024, the Companyâ€™s Board of Directors approved a plan, effective August 1, 2024, to streamline the organization to focus its efforts on advancing the clinical development of imdusiran and AB-101, and therefore ceased all discovery efforts and discontinued its IM-PROVE III clinical trial. In taking these steps to streamline the organization, the Company implemented a 40% reduction in its workforce, primarily affecting the discovery and general and administrative functions. As a result, the Company incurred a one-time restructuring charge in the third quarter of 2024 of $3.6Â million, which includes approximately $2.9 million of cash severance and continued benefits paid, a non-cash impairment charge for laboratory equipment of $0.2 million and $0.5 million of cash payments to vendors for close-out activities in connection with the cessation of discovery efforts and the discontinuation of the IM-PROVE III clinical trial. As of SeptemberÂ 30, 2024, there were $0.6 million of accrued restructuring costs for contract close-out activities and severance payments included in accounts payable and accrued liabilities. 17 ITEM 2. MANAGEMENTâ€™S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONSYou should read the following discussion and analysis by our management of our financial position and results of operations in conjunction with our audited consolidated financial statements and related notes thereto included as part of our Annual Report on Form 10-K for the year ended DecemberÂ 31, 2023 and our unaudited condensed consolidated financial statements for the three and nine months ended September 30, 2024. Our consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles and are presented in U.S. dollars.REFERENCES TO ARBUTUS BIOPHARMA CORPORATIONThroughout this Quarterly Report on Form 10-Q (Form 10-Q), the â€œCompany,â€ â€œArbutus,â€ â€œwe,â€ â€œus,â€ and â€œour,â€ except where the context requires otherwise, refer to Arbutus Biopharma Corporation and its consolidated subsidiary, and â€œour Board of Directorsâ€ refers to the board of directors of Arbutus Biopharma Corporation.CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTSThis Form 10-Q contains â€œforward-looking statementsâ€ or â€œforward-looking informationâ€ within the meaning of applicable United States and Canadian securities laws (we collectively refer to these items as â€œforward-looking statementsâ€). Forward-looking statements are generally identifiable by use of the words â€œbelieves,â€ â€œmay,â€ â€œplans,â€ â€œwill,â€ â€œanticipates,â€ â€œintends,â€ â€œbudgets,â€ â€œcould,â€ â€œestimates,â€ â€œexpects,â€ â€œforecasts,â€ â€œprojectsâ€ and similar expressions that are not based on historical fact or that are predictions of or indicate future events and trends, and the negative of such expressions. Forward-looking statements in this Form 10-Q, including the documents incorporated by reference, include statements about, among other things:â€¢our strategy, future operations, preclinical studies, clinical trials, prospects and the plans of management;â€¢the potential for our product candidates to achieve their desired or anticipated outcomes;â€¢the expected cost, timing and results of our clinical development plans and clinical trials, including our clinical collaborations with third parties;â€¢the development and commercialization of a curative combination regimen for chronic hepatitis B infection, a disease of the liver caused by the hepatitis B virus;â€¢the potential of our product candidates to improve upon the standard of care and contribute to a functional curative combination treatment regimen;â€¢obtaining necessary regulatory approvals;â€¢obtaining adequate financing through a combination of financing activities and operations;â€¢the expected returns and benefits from strategic alliances, licensing agreements, and research collaborations with third parties, and the timing thereof;â€¢our expectations regarding our technology licensed to third parties, and the timing thereof;â€¢our anticipated revenue and expense fluctuation and guidance;â€¢our expectations regarding the timing of announcing data from our ongoing clinical trials;â€¢our expectations regarding current patent disputes and litigation;â€¢our expectation of a net cash burn between $63 million and $67 million in 2024; andâ€¢our belief that we have sufficient cash resources to fund our operations into the fourth quarter of 2026,as well as other statements relating to our future operations, financial performance or financial condition, prospects or other future events. Forward-looking statements appear primarily in the sections of this Form 10-Q entitled â€œPart I, Item 1-Financial Statements (Unaudited),â€ and â€œPart I, Item 2-Managementâ€™s Discussion and Analysis of Financial Condition and Results of Operations.â€18 Forward-looking statements are based upon current expectations and assumptions and are subject to a number of known and unknown risks, uncertainties and other factors that could cause actual results to differ materially and adversely from those expressed or implied by such statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in this Form 10-Q and our Annual Report on Form 10-K for the year ended DecemberÂ 31, 2023 (the Form 10-K), and in particular the risks and uncertainties discussed under â€œItem 1A-Risk Factorsâ€ of this Form 10-Q and the Form 10-K. As a result, you should not place undue reliance on forward-looking statements.Additionally, the forward-looking statements contained in this Form 10-Q represent our views only as of the date of this Form 10-Q (or any earlier date indicated in such statement). While we may update certain forward-looking statements from time to time, we specifically disclaim any obligation to do so, even if new information becomes available in the future. However, you are advised to consult any further disclosures we make on related subjects in the periodic and current reports that we file with the Securities and Exchange Commission (the SEC).The foregoing cautionary statements are intended to qualify all forward-looking statements wherever they may appear in this Form 10-Q. For all forward-looking statements, we claim protection of the safe harbor contained in the Private Securities Litigation Reform Act of 1995.This Form 10-Q also contains estimates, projections and other information concerning our industry, our business, the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.19 OVERVIEWArbutus Biopharma Corporation (â€œArbutusâ€, the â€œCompanyâ€, â€œweâ€, â€œusâ€, and â€œourâ€) is a clinical-stage biopharmaceutical company leveraging its extensive virology expertise to develop novel therapeutics with distinct mechanisms of action, which can potentially be combined to provide a functional cure for patients with chronic hepatitis B virus (cHBV) infection. We believe the key to success in developing a functional cure involves suppressing hepatitis B virus deoxyribonucleic acid (HBV DNA), reducing hepatitis B surface antigen (HBsAg) and boosting HBV-specific immune responses. Our pipeline of internally developed, proprietary compounds includes an RNAi therapeutic, imdusiran (AB-729), and an oral PD-L1 inhibitor, AB-101. Imdusiran has generated meaningful clinical data demonstrating an impact on both surface antigen reduction and reawakening of the HBV-specific immune response. Imdusiran is currently in two Phase 2a combination clinical trials. AB-101 is currently being evaluated in a Phase 1a/1b clinical trial.â€˜We continue to protect and defend our intellectual property, which is the subject of our ongoing lawsuits against Moderna Therapeutics, Inc. (Moderna) and Pfizer Inc. and BioNTech SE (collectively, Pfizer/BioNTech) for their use of our patented lipid nanoparticle (LNP) technology in their COVID-19 vaccines. With respect to the Moderna lawsuit, the claim construction hearing occurred on February 8, 2024. On April 3, 2024, the court provided its claim construction ruling in which it construed the disputed claim terms and agreed with our position on most of the disputed claim terms. On August 5, 2024, we and Genevant Sciences Ltd. (Genevant), along with Moderna, filed a Stipulation to Extend Time (the Stipulation) with the court that requested an amended case schedule to accommodate certain outstanding discovery from Moderna and third parties. The court approved the amended case schedule and the start of the trial was moved from April 21, 2025 to September 24, 2025, subject to the courtâ€™s availability. The lawsuit against Pfizer/BioNTech is ongoing and a date for a claim construction hearing has been scheduled for December 18, 2024.StrategyOur strategy is to advance our therapeutic product candidates with complementary mechanisms of action into late-stage clinical trials with the goal of developing a functional cure for people with cHBV infection. We believe that a combination of compounds that can suppress HBV DNA replication and HBsAg expression as well as boost patientsâ€™ HBV-specific immune response could address the most important elements to achieving a functional cure. Functional cure is defined as sustained HBsAg loss and HBV DNA less than the lower limit of quantification
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+S]/7V]_CY^O_$!\! ,! 0$! 0$! 0$ M ! @,$!08'" D*"__$ +41 (! @0$ P0'!00$ $"=P ! @,1! 4A,082 M05$'87$3(C*!"!1"D:&QP0DC,U+P%6)RT0H6)#3A)?$7&!D:)BH*#A(6&AXB)BI*3
ME)66EYB9FJ*CI*6FIZBIJK*SM+6VM[BYNL+#Q,7&Q\C)RM+3U-76U]C9VN+C MY.7FY^CIZO+S]/7V]_CY^O_: P# 0 "$0,1 #\ ^D:*** "BBB@ HHHH ** M** "BBB@ HHHH **** "BBB@ HHHH
**** "BBB@ HHHH **** "BBB@ HHH MH **** "BBB@ HHHH **** "BBB@ HHHH **** "BBB@ HHHH **** "BBB@ M HHHH **** "BBB@ HHHH **** "BBB@ HHHH **** "BBB@ HHHH **** "
MBBB@ HHHH **** "BBB@ HHHH **** "BBB@ HHHH **** "BBB@ HHHH ** M** "BBB@ HHHH **** "BBB@ HHHH **** "BBB@ HHHH **** "BBB@ HHH MH **** "BBB@ HJIY\G][]*//D_O?
I0!;HJIY\G][]*//D_O?I0!;HJIY\G] M[]*//D_O?I0!;HJIY\G][]*//D_O?I0!;HJIY\G][]*//D_O?I0!;HJIY\G] M[]*//D_O?I0!;HJIY\G][]*//D_O?I0!;HJIY\G][]*//D_O?I0!;HJIY\G] M[]*//D_O?I0!;HJ*-V:%F)Y&?)_>_2
M@"W153SY/[WZ4>?)_>_2@"W153SY/[WZ4>?)_>_2@"W153SY/[WZ4>?)_>_2 M@"W153SY/[WZ4>?)_>_2@"W153SY/[WZ4>?)_>_2@"W153SY/[WZ4>?)_>_2
M@"W153SY/[WZ4>?)_>_2@"W153SY/[WZ4>?)_>_2@"W12(-)T894O'P#P>XXH]GHKR+XW:YJND>(O ,6 ME:E=V4=WK CN$MYVC$R[XQM?!^8*GQ!J%_:/=*O]H):X52%)ZB@#T&BN* M\&?
$[2_%&BW=YJ4?]@7-A>FPO+:_F5?*GS@('. 23P.AR",5T7_"3:%_9 "3Z &@#;HK)MO%?A MZ\W?8]>TR?;!]I;RKR-L19QYG!^[DXW=*DTKQ'HFNM*NB:SI^I-#_K!9W23%
M/KM)Q0!I45CP>,/#5U+:Q6WB'2II+P$VR1WL;&< D'8 WS<@CCN#5K3MV;9.MK<)*8F]&"DX/!X- %ZBBB@ HHHH **** "BBB@ HHHH * M*** "BBB@"A1110 4444 KBZ2X1SV!90
.>._./6L[X^_P#).(_^O^+_ -!> MK-MX(\2:WXVT[Q!XVOM,QI8S;6FF+)L+=_0=*ZHQA[.\O,Y92J>TM M'R-WP;XS_P"$MGUB,6/V3^S+QK;/G;_-P3\WW1CITY^M,\&>-QXNOM:MA8&T M.E77V?
=YV_S>6&[[HQ]WISUZUYU\/=(\1:EJWBI_#_BC^Q(TU6021_V?'<>8 M=S8.6/'TJ'X?ZR_A70?B%J5U.)[BTN !*5"^;+F15..@RQ''O52HQ][E\NY$ M:TO=YMM>QV=E\6;:\^(7_"-
V:R6KW4MI%J7GY625!DJ%V^I ^\>H/>M;Q9X MX/A[6-/T73-)EUC5]0#-#:QRK$ HSDESD#H>W8YQ7BEW+/9#++1S;>']?@U3 M3;W^TFU.:Q*VY+')/F9SCB/G'.VO4M?\/Z7\1;?2-
9TK6_[*UR.T6YM989 7 M6-LG#+D' (89&/XNO2G*E",DWMJ$*M246D]=&:%]X]O]*\"ZGKVK^&;FQN=/ ME2-K*:<8EW,B[DD"D$?/U [8J3P]XJ\5:S)]9UOX1>,]+\0317D^CW-O
+V(#;./M"CMP<;.O<,*]#\!Z M-XDM=-TN[U'Q5]OTYK&,I8?V='%L!0;1Y@.3MZ>]3*G&$&VE>_GV6W_!*C4E M.:2;M;R[O?\ X!T^M:J='TXW*V-W?ON");V<6]V)Z<=AZD\"L'P'XY/C:'4F M;3#I[6-
QY!1IQ(6Z\\ 8Z>_UKK:\I^!__T_]A(_^S5E&,73D[:JQK*4E4BK MZ.YZM1116)L%%%% %B+_ (]W_'^55ZL1?\>[_C_*J]J !1110 5R?COQM)X-B MTW[/I?\ :<^H7'V>.+[0(<-VY*GN0.U=97E7QM_?
X4^Q^7]H_M,>5YN=F_Y M<;L;YG0 YS@>OI6-H?@C79O'R>+O&5 M_8RWMO 8+6VT]7\J,$,,Y?GHS<<\MUXKC/A%HGBC4?!3S:%XO_L>V^UNIMO[
M,BN,MM7+;F.>>./:MG"FXMK3;OYF*G44DGKOV\CTGX?^-E\=>'I]4^P_8!#< MM;F,S>9G"JV[.!_>].U8_A3XL6_BCQ@@^BKIC6L,BRO979GW"Y",1D+M&,@,> MIQC%>?>"M?\
^$=_9\U^YC;%Q/J,EM!CKO>*(9'N!N/X54U._?P]I'@^]M/# M>O:?<>'W NKB]L##%*'(9U#9[L6 SCAC6GL(\TE;R1G[>7+%W\V>N>(O'LVF M>*(O#F@:'+K>JO#Y[Q+<+ D:>[L",_XCGFJVO?
$:Y\/^!DU^_P##EQ!<&Z%L M]C<3;"IP?F#[3D<<''-5?%7@@^T\4:PGB'PMXC72]PK"R<[15_2_ZZG1=J%Y.WK; M]-#(\&?$1%?.[CM@^Q^M.M7^BW^DS:3JM@@"TMN\HD! 8*<, .A([=Q@@UVE>=_##PGJ-G=
M:CXL\2+Y>KZRQ;R,8\B,G=@^A/''8 =\UZ)1545.T0I.3A>04445D:A5C_ES M_P ^M5ZL?\N?^?6@"O1110 4444 <=XS\=77AC7-)TG3=$_M:[U3>(D^UB#! M!'&2I'.>^*J:3\3?
M=SK&G:MHDVE:QI5H]V]G).KB157=@.![CMT.>:P?BE_ M:'_"SO!G]C?9OMVZ3R/M>[RMV5^]MYQ]*MIX(U2Q7Q1XK\57UK=:K=Z7-"L= MFC"*%?+[%N3PH'3UZYKK4*?
(F^O^9R.=3G:73_(ZG0?&/]M_#K_A*OL/D?Z/ M/-]E\W=_JV<8W8'79Z<9I?"7C*Q-X*'B.XMOL$($K2(9/,V*A.3NP,\#/2O M,O"6B>*+CX+?;+?'Q?]CTW[)=-_9W]F12?*&DW+YA.[YB"<]L^U4+?6I--
_9O MM;"T#/>:M=R6<4: EF!D); '7(&W_@0JG1BVTN]O0E5Y))R[7]3T3P%\$\: MZM<6$NDOIDJ0"X@WS[_.CW8)^Z,=1Z]?:IM6^(5W%XKNO#_AGPY-KEY91B2[M(N5@6,$
X!8'<>1QQ7G%YK<6@>,O"&KVN@ZUH]I8PIIEW+J5EY"RIC&#@^L:CXL\'>)5TO5K>,_;$$H:-RJ]'_ +IX'!!'3BATX*5[M:/\ ,(U)N-KZK\C5\1?$:ZT'0]%O/^$[U:8P"QN)Q \3YQ@DJ0E:]I@N?
^$A\1_VYYFWR?]!CMO)Q MG/W#\V_?[BZ 9?"FE?87N]91)C]HEEWA M9(R!\['4]*L?$G4?#.E?M/Z;=^.([9]&71P)5NK4W"%CYH7*!6SSCMQ7T51 M0!X)\+;6VO\
XZ:SKO@&&QGLO!LED$9_(:"WGEPN/+0@=\GIQSTR!7&_$^34O MAW\1?%^D:/;,]MXXLT,*H#_K'D ?ZG)F&/\ IHM?5M% &)X-\.Q>$_!>E:%! M@BQMEC9A_$_5V_%B3^-
>6_$73M7U3]HSPQ;>'M:.B7K:/,4OOLBW&P R9&QB M 7&HW>I:U!"9KO0TC\#V-Q*T\J/[-'-*,!FC1@,+DG(QR&P!S@6/A&OAK4O& MTVJ-JOAG^T[?1WM++3T^:WW84AT3*EIF,J+F7;N!*YR"">!<=???
%7A?3/&7ANYT M/7(WDL[G;O$;E&!5@P(([@@&N>\-?"C2/#OB)]5US7=1M8FBM9]9OOM!M ME88(3@8R"1^)H \N\&:19Z/^RG/XCTGPW9ZCK=U:SI,TMOYCS1_:BA#=RBH@ M;;T^3ZUF_"
VA^-^FW&E:I#J-O<:/,'EM-$73(E<$%H@J@"0J<9&-&_P"&9=#U<:7;_P!I76N".6\"?O63?(NW?U"X X'&1GK7K.A:/I_A MG]J*73O#]A!IUE-X9#/!;QA$8B8#=@=_E'/7KZU[+10 4444 %%%% !1110
M4444 %%%% !1110 4444 4**** "BBB@#,U_P[I7B?318:Y:_:K82"01^8R? M,,X.5(/_S$XZ]!@5F M2?#KPM+9WUH^EY@U"X%S=(+B4>9("2#G=D!Q[5TU%/GE>]QG2N;N?A=X-
O+&TM+G14>&S0QP?OY0R*6+ M;=P;<1N9C@DXS76T4*'1X9E\/)I<2:7,0TEO&S+O(8,"6 M!W$Y4$-"U6#4M*TCR+NW),R9(.1RI!Z^]8NC?2#/PEX?U>'4](TG[/
M>0;O+E^TROMW*5/#,1T)'2NJHI*&---AH=K]EMC(9#'YC/\QQDDY8D]A6G11=VL%E> MYR\7PW*0:9!I\>D@6D%W]LCB-Q*0)L ;CEN> !@Y'M6WK&CV.O:3/IFK6N[!!'((Y
/%7:*;E)N[8E"*5DCDKWX7>#=0%O\ ;-%20V\2PQMY M\H(11A02&RV .-VC 89YRI!SR>_.:WJ* M?M)]Q>SAV.9T+X=>%?#6IC4-$TO[-=*A02?:)7X/489B*N>(_"&A^+8X(_$% MC]K6W+-$/=-=-
I.,_=89Z#K6U11SROS7U#DC;EMHHPS$5TU%%*4G)W;'&*BK)6"BBBI*"K'_+G_GUJO5C_)<_\^M M%>BBB@ HHHH S-0\.:5JFL6&J7UIYM[IY)M9?,8>63UX!P>G<&KUU0WMG-:
MW*;X9XVCD7)&Y6&",CV-2T4[L5D9EAX=TK3/#O\ 85C:^5IOEO'Y'F,WRN26 M&XG=R6/?O6?;> /#-HNEK!I@@5=)D:6R4SR$1.Q#%%L%OF.0#SGI71T4^7>7 M'L9NO>'M+\3Z;_9^N6HNK7>)-
A=DPPZ'*D'N>]8M_P#"_P ':G>B[OM$CDGP M 7$TB[L# R P!/'4UUE%"*.S$X1ENC!U?P?/X&X-&WB M6/C'&PBF>'? GAOPI=RW6@:=]DFFC\MV\^1K/\ Y(WO;
M4Q/$/@[0/%:Q#7]-CNS#D1N69&4>FY2#CVS4^@^&M'\,6;6N@V$5G$Y!?9DL MY'3+$DG\36I12YI6Y;Z#Y8WYK:A1114E!1110!=C_P!6OT.IL?^K7Z"G4 % M%%% !1110 4444 %%%% !1110
4444 %%%% !1110 4444 %%%% !1110 44 M44 %%%% !1110 4444 %%%% !1110!0HHHH **** "BBB@ HHHH **** "BB MB@ HHHH **** "BBB@"Q%_Q[O^/\JKU8B_X]W_'^55Z "BBB@ HHHH
**** M"BBB@ HHHH **** "BBB@ HHHH *L?\ +G_GUJO5C_ES_P ^M %>BBB@ HHH MH **** "BBB@ HHHH **** "BBB@ HHHH **** +L?\ JU^@IU-C_P!6OT%. MH **** "BBB@#A?
#/CB_UGXD>)= O8K2.STD PR(K!R,X.XEB/R KHV\6^'% M@@F;Q!I8BN"1#(;V/;*0<$*<\\\<5YCX0_Y+#\1/^N#?SKD/"WAO1[K]GOQ!
MK%UI\,VHQRNL=RZY>,+L("G^'ECTZYYS78Z,6^VWXG$JTTN^_P"!]"2Z_H\% M_%8SZK8QWU?R?$'QR\)6GB94GL' MTE)HX+CF.21D<\@\,2P''? '/2I]A'>_?\"O;RVMV_$ZC3/&6I7_ ,=;S0H=
M0CN-$&GK/#'&B,NXJAW!P,G[Q[XKN[76M+OK2:ZLM2L[FWMR1--#.KI&0,D, M0<# Y.:\:\&V>CV'[26JVWASRA8I9. D+91'PF]1Z -GCMTJO\,[ZULOA7XZ M-Y<1PXDG!#L J[+\10JM:/N_P/;(]_\
4:>B:O:2>&_B#H\W MAFRT+6;729EO/[./[B8)%(!A0<*1N/KG/)XJ?8I7L]G^HU6;M=:K]#T7PMK# MVOA'39?%7B72;^[NI&C2]MYD6&XYBU>P>" MW?9-*MRA6)O1CG
/L:^=M;3S/V>O!"$E=VI3#*G!'[V;I7;>.-%\+_#OP[IV MEZ9X=BU!]3U!&BCOKAS")54H'?GGA_N\#DGM3E1C?S;?X"C6E;R27XGJNFZ[MI&L[P"Q]5LK_P
O[_V6X27;]=I.*AE\5>'X(9)IM=TR.**4PR.]Y&%20=4) MSPP].M>+>'K:^T;]HO2+2]MM!LKB:SD6>#059(5'E2, RGH_RJ2.F-IZ\U)\
M._#&C:]J/CZ;6=/AO9(+J5(3,N[R]QDR5'8_*.>O%#HQ6K>EE^(U7D]$M;O\ M#W>">*Y@2:VE2:*0922-@RL/4$=:\U^*6LZC+XJ*^%-&O[FQDU*[$MU+:RM M&XA! QN4@XQO./\ 9%-
_9^FDE^&.V1RRQ7TJ("?NC"G _$D_C5/Q1A/VG/"3 MW'^I.GNJ9Y&_%QCCUR5Y^E3"')5:[7'.;G23[V.Q^(WBZ3P7X.FU.UBCGO&E M2"UBD!*O(QZ$ @GY0QP/2J/PS\;W_BZTU2VU^VM[35]+NS!
<00 A0.@."Q.< MJXZ]JX[XGZXM]\6?#VD#3[_5+71L7]W:Z=;^=*SG!4;1T/'/UKSVS\-CQ/\?/%]HVK:II82 ,9--N?)9^(QM8X.5YZ M5:^%<^L:;/XN\+>&9-.O!ILVZRO+B,B-
V+E3YC1\ME1[\CTISA'DTWLB85)\ M^NUV>O:U_:W]CS_\([]B_M+Y?)^W[_)^\,[MGS?=SC'?%>6^*_'/Q)\(7&FV MU]#X5NKK4YO)MK>T2Y9V.0,G9^&,>]><^&F_X6)\=-0\0-^\TGP\OD6F1\K/R
1^.]L_[M9TDE?FLT MC6JV[J#R[>* M(9:%3QYA]_3Z$G@5%X4^%UAH/PTO]#UJ8-+J49?4+A6P$..-I/&$ZY/?])]J$
MN/3@5?\ 'GB&]T/QKX,\0V.HW']C:@XMKFV$K")U?!5RF<$XV^CR^-)=4M99HTT_2EM41F&R^%_A33B,7\ M5S;Q(1V*PLI_7;6RC!RC;K=?(QB6&L:CJMI9>7>ZF MNV[E\USYH^A.!^ %0V7@?
P[I_A>Y\.V>G"/2KHL9K?SI&W%L9^8MN'0=#VJD M?B!9*]Q)+I>I1Z?;7[:?-J++$84E5_+R0)"X7=@9V=Q5V'QEIDWCBX*[9TU
M"&$3;W0".0$!MJMG)8!@<8Z9K6U3^O(RO3_KS%NO!/AZ]*P^'+G3]^DP;?+ MM_.D&W!R/F#;N_K2:[X&\-^)K2UMM;TJ*YCM%V0?.R-&N,8#*0<<#C-2V_BK_M3Y]'U74R)8;;2I[B"X,,H

P;H&@79NM)TY8)RNWS#([D#VW$X_"MNO.QN8NNN2GI'\STL#EJH/GJ:RZ> M04445Y)[4444 %%%% !5C_ES_SZU7JQ_P N?^?6@"O1110 4444 %%%% !1 M110 4444 %%%% !1110 4444
%%%% %V/_5K]!3J;'_JU^@IU !1110 5C^+ MO^1)US_L'7'_ *+:MBL?Q=_R).N?]@ZX_P#1;5I2_B1]49U?X"->8P[;6 I.VR*47L/ER/G&P/OVE\@_+G/!XXJ MK8^&=6U$3&WM-@@F$$AN)4A
E/2/YR,MQ]T66-!:JOF6BWH>2 M>-$$+' =F+ +D]B0:4:T)14K[CE1J1DXVV_X8R**WT\/.NCW[7%I=B_MKJ*! M2LD?DKOSC/.3G'!7Y<2JXRTGS?(O(P6
MP#D8SD4>UA>UP]C4M>QB45LQ^$M;FU0Z=#9>9<^0+E525&5XB =ZL#M8<]B> M_H:J:EH][I(@:]C01W"EH98IDECD .#AT)4D$8(SD52J0;LFB73FE=IE&BK4 M&GW5S8W5Y!%N@LPAG?
J2RQ6$)FDBB:9E# '8HRQ&3 MSQV'-/FBKZ[$\LG;3')+31M4GU"VN/ M/M1;M%+!-$T&V0GDD$[P0."F1D'-3[6'?^MA^RJ=OZW,&BMR_P#!NNZ9!<2W MMDL8ME#S()XV=%)P&*!BVW/?
&*A_X1C5_P"S?MWV4>5Y'VG9YR>;Y6<>9Y6= M^WONVXQSTYIJK3:NI+[P=*HG9Q?W&314D$,EQ<1P0KNDD8(BYQDDX K?\,>& MXM1\9'1M<::W2'SOM @92ZF-6) /(ZK[TYSC!-
OIJ*%.4Y**ZZ'.45U]SX,C ML1XD6ZEE)TR&.:T="-LR.X"L>.05/;'--MO"5K-X'DU(S3'53"]Y#;J1L-LD MBHS$$$9SDL>O1>]9?6*=KWZI?>KFOU>I>UNC?W.QR5%%%=!SGIWPZ^(OV+RM% MU^;_
$;A;:Y<_P"J]$8_W?0]OIT]AKY0KT[X=?$7[%Y6BZ_-_HW"VURY_P!5 MZ(Q_N^A[?3IX.89?>]6DO5'T&79C:U&L_1_HSV&BBBOGCZ,**** "BBB@ HH MHH **** "K'_ "Y_Y]:KU8_Y<_\ /K0!7HHHH
**** "BBB@ HHHH **** " MBBB@ HHHH **** "BBB@"['_ *M?H*=38_\ 5K]!3J "BBB@ K'\7?\ (DZY M_P!@ZX_]%M6Q6/XN_P"1)US_ +!UQ_Z+:M*7\2/JC.K_ Y>C/EFM[5M#MK# MP?X?
U6%Y6GU/[3YRL1M7RY J[1C/0\Y)K!KL/$?_ "3+P7_V_?\ HX5]I4DU M*"75_HSX:E%.$V^B_5%_QYX L?#>DQ7VCW%S.L5VPJ@D$>I/X5W6K31ZA\0-5\+7;@0:SI ML2Q%N0DZ)N1OY_7 K,TZ-
O#>K>#_ OC9ZG:WG>W^3^\\TUBS33M>NXCFMKP5-I=MH/C.5;:>]TU(82(9G\J21-S<%ES@_ M2NNK5E['2]]/Q:..C2C[;6UM?P3W,C5O#6BS^$&\1>%[J]:""<07-O?A=Z$X MP05X/4?G[5JWWA?
P7I-_IFG:E/K@N;ZWAE\V)HC&A?CD%C)-,UA;[-0>= ML0YR%S']T@'G)]?:L)RK023OU[7MI:YO3C1FVU;[/>U];V_I'#?\(#=O\0I_ M#$5PA\@[Y+HKPD6T-O(]<,./4]>]6H]-
^'MQJ0TZ+4]:1W;RTOG2/R-W0';C M=MS_)[UN:);ZB?BAXHT[5;H?VG>Z=<00S !=[,$*%1_N ''M7G-MI%_=ZNF MEPVLIO6D\OR2I#!N^1VQW]*UA*5324[62V\^IE.,:2O&%[MK7RZ'4VW@)1J'
MB/1[V:7^U=-MOM%F(B-DZCDY!&3D%< $8)/6LCP9X?C\2^)8K&Z=XK14>:YD MC(#(BC.1D'O@=.]=CXE\3PZ5\:[:\AD!ALQ':W3 \",/]/]:W.KM= M9L(]!\-
V[SXELM3>>X78WR(60@YQS]T\#)XJYJ6J:-K=IJEDVJ)9*^O37\4T ML$C++"XQ\H52=PP#A@H^;J*XBK5[IUUIXMS>1>7]J@6XB^8'=&V<'@\9P>#S M6;H0YKWU_P"#?
+:UU_P+';ZKX@T75]0\3V\>HBWAU..T:VN9H9-FZ(+N M5@H+]><$@)J?JL$M]/EV2[>17UJE9W_!7ZA4KSE=26_P#P'^AT^D^+WT_PWJ.GO!;-+,D*V[?V? R_*^3Y MA*Y?CINW<^G6LS1-:?2?
$UKJQ53YT MWW,_;3]W7X=CNWU;PW%KMM8PS)<:5I]E,EG-=0,T7VER7WNF-S+DA?NG[HX(MYJZ_BG1X1I-I)J,4ZFPN[*[N;*S,"6YF.0ZQA5R!WP 2,G&>#P-GIUUJ"W+6 MD7F"U@-Q-\P&V,$
GD\\L.!SS56L/JU.3M=Z?\'_ #N;K%5(J]EKZ^7^5CK- M+FTC3+/4M*DUE)/[4L]AO(89!%!(K[E4Y4.58+@D)QD=>2(H[G2]-\+Z[ID& MI"[FNOLC1LD#JKLK,7"Y&<#
(Y8+GTKF**U]BKZM]'TZ6\O(R)N[6275=>M_/ MS.[O/$>DR^+_ !7>I=;K?4--D@MG\MOWCD1X&,9'W3R<#BGZEXKCN9AJNF:I M8V,C681K5M+1[E)!'Y919?
*P5.!\Q<$*QXXVG@:*CZK3T\M.G^1?UNIKYZ]? M\S2T/5WT?4HKA8X702(9!);1S':#D[=X.T^XQ]:Z73O%]K-X^N-4OS%:V3"[M\IELT1\2*P4/Y:Y8\CDD]^>IKB**TG1A.[?
56,Z=>=.R3T3N=U8^*].N/AU? M:7J4GEZHL*6EO(49O.A\T, 2 <;/FZ]CQDU9'C;2+3QG;"VL+6;2+>%-/%V_ MGB0VVW:Q*[MIZL<%,GZ\UYY16?U6FV]];_C8U^MU$EMI;\+_ .9-=QPQ7DT= MK-
Y\"2,LG?#KXB_8O*T77YO]&X6VN7/^ MJ]$8_P!WT/;Z=/8:^;/"OA6^\5:H+6S&R%,&>X8?+$O]3Z"OHG3-/BTK2[:P M@>1X[>,1JTK;F(';^7S2E1A4O#=[H^KRJK6G3M-:+9EJBBBBO(/8"BBB@ HH
MHH **** "K'_ "Y_Y]:KU8_Y<_\ /K0!7HHHH **** "BBB@ HHHH **** " MBBB@ HHHH **** "BBB@"['_ *M?H*=38_\ 5K]!3J "BBB@ K'\7?\ (DZY M_P!@ZX_]%M6Q6/XN_P"1)US_
+!UQ_Z+:M*7\2/JC.K_ Y>C/EFKESJM[=Z M99:?<3;[6Q\S[/'M V;SN;D#)R1WS5.BONFD]SX%-K1&G=^(M5OM;BU>ZNR M_"4,(M5E\1#79+LMJ0<2"%.0,D9'7MBJ-%%
Q35FB5*2=T]0J]JFL7VLS0RZE/Y[P0K!&=BKA M%S@< 9ZGGK5&BG9-W#F:5C3O_$6K:GJ4&H7H7E[(UY;HJ13H C*%ZLY+31[T0022>8R&"-\M@#/S*>P%0:YXEU;Q&T+:S:S=+<& M$1XA2/&
<9^Z!GH.M95%3[*FI<_*K][:E^UJ./(Y.W:^A>LM8O]/L;VSLY_+M M[Y%2X38IW@$D#)&1U/3%NLW\VB0:1+/NL;>0RQ1;%^5CG)SC/<]ZHT57)&&] M[$\\K6N%%%%42%%%% !1110 4444
%%%% !1110 4444 %7M*LX+Z]6*ZOK> MS3(^:<2$/R/E&Q6.?K@>]4:4$JP*D@@Y!':DU=60TTG=G7:GX3M7^(?]BZ5= MP-%+?-%Y$7F;K6,'G<74 X7)X+=*J:W/:>)-?OK[^U+.P@5Q%:Q3I,?
W2C:F M D; < <''.:IZ9X@FT^XU&[E62YOKRV>!;F24[HR_#/T)+8R,Y'6L>N>%.=_ M>>RM?_T.B=2%O=6[O;\OU.B\'6.GWMYJ3ZK:&[AM--FN5B$K1Y9,$_F^S_ %L51K4X)FZ!I%
['HVKFV)TV.SF;4XA(Q_>P MC)YSP7W1X QUHCTW1K+4/#^FW6DK=MK$,4TUP9Y%>+SFVJL0#;?EQGY@V3FN M7M];U&UT>YTJWN2EE=,&FBVCYB"#UQD?='0\X&:LVGBK6+&SBMK:
[54@#B!V MAC:2 ,/F\N0J63_@)'K2=&KK[WXOS_S*C6I:>[^"\O\ +\3M;;0K.:;PKHE\ M/M5JNHZE"WS%?,"E<'(.1T!X-<[HNC6%WX6M;NX@WSR:]!9L^]AF)D)*X!QU M'7K[UB0ZYJ5O'8)!=-
&-.D:6UVJ 8V8@L11137:"*&Y6 MZ2..VBC591G#X50,_,<^O?-)4:RT3_J[?XW&ZU%%%ZM?AY)?A8Z2ZL?#\1 M-!C T.Y2.!?M4O[[,C1D2'=RN<, NT\8R>33;GPWI\=Y]O@L;6*Q;2K>]=;V
MZE$%LTO&/DS(^2#@]3SD<5R3ZWJ$B:BKW&1J<@DNQL7]ZP8N#TX^8D\8JPG MBK6$P#%.._S8/;MROB&QL1H&B:O M86@LFOUF66!'9D#1N!N7>2W.>A)Z5&?&GB ZJ^I'4#]K>
6S2>2G,08-MQMQ MC(';D<=.*S]2U>]U>2)KZ56$*>7$D<:QI&O7"HH"C\!3I4:L9)R?KJ^UOZ8J MM:E*+45Z:+O?^D4:***[3B"BBB@ HHHH **** "BBB@ K<*^%;[Q5J@M;,;
M(4P9[AA\L2_U/H*/"OA6^\5:H+6S&R%,&>X8?+$O]3Z"OH/0]#L?#VEQV&FQ M;(TY9C]Z1N[,>YKS,=CEAUR0^+\CU,!@'B'SS^'\PT/0['P']I<=AIL6R-.68 M_>D;NS'N:T***^5E)R=WN?
6QBHKECL%%%%24%%%% !1110 4444 %6/^7/\ MSZU7JQ_RY_Y]: *]%%% !1110 4444 %%%% !1110 4444 %%%% !1110 44 M44 78_\ 5K]!3J;'_JU^@IU !1110 53U>P_M71+[3_,\K[7;R0>9MW;-
RE< MXXSC/2KE%--IW0FDU9GD'_"A_P#J8_\ R1_^V4?*'_ZF/\ \D?_ +97K]%= M_P#:6*_F_!?Y'G_V9A/Y/Q?^9Y!_PH?_ *F/_P D?_ME'_"A_P#J8_\ R1_^ MV5Z_11_:6*_F_!?Y!_9F$_D_%_YGD'_"A_\
J8__ "1_^V4?*'_ .IC_P#) M'_[97K]%']I8K^;\%_D']F83^3\7_F>0?*'_P"IC_\ )'_[91_PH?\ ZF/_ M ,D?_ME>OT4?VEBOYOP7^0?V9A/Y/Q?^9Y!_PH?_ *F/_P D?_ME'_"A_P#J M8_\
R1_^V5Z_11_:6*_F_!?Y!_9F$_D_%_YGD'_"A_\ J8__ "1_^V4?*'_ M .IC_P#)'_[97K]%']I8K^;\%_D']F83^3\7_F>0?*'_P"IC_\ )'_[91_P MH?\ ZF/_ ,D?_ME>OT4?VEBOYOP7^0?V9A/Y/Q?^9Y!_PH?_
*F/_P D?_ME M'_"A_P#J8_\ R1_^V5Z_11_:6*_F_!?Y!_9F$_D_%_YGD'_"A_\ J8__ "1_ M^V4?*'_ .IC_P#)'_[97K]%']I8K^;\%_D']F83^3\7_F>0?*'_P"IC_\ M)'_[91_PH?\ ZF/_ ,D?_ME>OT4?
VEBOYOP7^0?V9A/Y/Q?^9Y!_PH?_ *F/ M_P D?_ME'_"A_P#J8_\ R1_^V5Z_11_:6*_F_!?Y!_9F$_D_%_YGD'_"A_\ MJ8__ "1_^V4?*'_ .IC_P#)'_[97K]%']I8K^;\%_D']F83^3\7_F>0?*' M_P"IC_\
)'_[91_PH?\ ZF/_ ,D?_ME>OT4?VEBOYOP7^0?V9A/Y/Q?^9Y!_ MPH?_ *F/_P D?_ME'_"A_P#J8_\ R1_^V5Z_11_:6*_F_!?Y!_9F$_D_%_YG MD'_"A_\ J8__ "1_^V4?*'_
.IC_P#)'_[97K]%']I8K^;\%_D']F83^3\7 M_F>,_P#"D/\ J8/_ "2_^V4?*0_ZF#_ ,DO_ME>KT4?VEBOYOP7^0?V9A/Y M/Q?^9Y1_PI#_ *F#_P DO_ME'_"D/^I@_P#)+_[97J]%']I8K^;\%_D']F83
M^3\7_F>4?*0_P"I@_\ )+_[91_PI#_J8/\ R2_^V5ZO11_:6*_F_!?Y!_9F M$_D_%_YGE'_"D/\ J8/_ "2_^V4?*0_ZF#_ ,DO_ME>KT4?VEBOYOP7^0?V M9A/Y/Q?^9Y1_PI#_ *F#_P
DO_ME'_"D/^I@_P#)+_[97J]%']I8K^;\%_D' M]F83^3\7_F>4?*0_P"I@_\ )+_[91_PI#_J8/\ R2_^V5ZO11_:6*_F_!?Y M!_9F$_D_%_YGE'_"D/\ J8/_ "2_^V4?*0_ZF#_ ,DO_ME>KT4?VEBOYOP7 M^0?
V9A/Y/Q?^9Y1_PI#_ *F#_P DO_ME'_"D/^I@_P#)+_[97J]%']I8K^;\ M%_D']F83^3\7_F>4?*0_P"I@_\ )+_[91_PI#_J8/\ R2_^V5ZO11_:6*_F M_!?Y!_9F$_D_%_YGEB? O=&S?\)%C';[#_\ ;*C_ .%
(?]3!_P"27_VRO7XO M^/=_Q_E5>C^TL5_-^"_R#^S,)_)^+_S/*/\ A2'_%,'_DE_]LH_X4A_U,'_ M))?_;*]7HH_M+%?S?@O\@_LS"?R?B_\SRC_ (4A_P!3!_Y)?_;*!\$.>?$' M'_7E_P#;*]7HH_M+%?S?
@O\ (/[,PG,G\K^XQZ*V/^$1\2?]"_JO_@%)_P#$T?\ "(^)/^A?U7_P M"D_^)H]K3_F0>RJ?RO[C'HK8_P"$1\2?]"_JO_@%)_\ $T?\(CXD_P"A?U7_ M ,
@O\ (/[,PG\GXO,>YK0HHKAE)R=WN=\8J*Y8[!1114E!1110 4444 %%%% !1110 58_P"7 M/_/K5>K'_+G_)]: *]%%% !1110 4444 %%%% !1110 4444 %%%%
!1110 M 4444 78_P#5K]!3J;'_ *M?H*=0 4444 %%%% !1110 4444 %%%% !1110 M 4444 %%%% !1110 4444 %%%% !1110 4444 %%%% !1110 4444 %%%% % M"BBB@ HHHH **** "BBB@
HHHH **** "BBB@ HHHH **** +$7_ ![O^/\ M*J]6(O\ CW?\?Y57H **** "BBB@ HHHH **** "BBB@ HHHH **** "BBB@ M JQ_RY_Y]:KU8_Y<_P#/K0!7HHHH **** "BBB@ HHHH **** "BBB@
HHHH M **** "BBB@"['_ JU^@IU-C_ -6OT%.H **** "BBB@ HJIJ.K:=H]NL^KZA M:V$+-L62ZF6)2V,X!8@9X/'M4T-U;W-HEU;SQRV\B;TF1PR,N,Y!'!'O3L]Q
M76Q+16)'XV*S2+'#XFT>1V.%5;^(DGV&ZML'(R.10TUN":>P44R6:."%Y9Y M%BC0%G=V 50.Y)Z5!I^J6&KVOVG2KZVOH-Q7S:99%R.HRI(SS2LQWZ%JBLV M;Q)H=OJ
L+C6=/BO"=HMGND60GTVDYJ]//#:V[SW,J0PQC<\DC!54>I)Z4[, M5T2456L-2L=5M1=:7>V][;DE1+;2K(A(ZC*DBK-(>X4444 %%%% !1110 44 M44 %%%% !1110 4444 %%%% !1110 4444
4**** "BBB@ HHHH **** "BB MB@ HHHH **** "BBB@ HHHH L1?\>[_C_*J]6(O^/=_Q_E5>@ HHHH **** M"BBB@ HHHH **** "BBB@ HHHH **** "K'_ "Y_Y]:KU8_Y<_\ /K0!7HHH MH ****
"BBB@ HHHH **** "BBB@ HHHH **** "BBB@"['_ *M?H*=38_\ M5K]!3J "BBB@ HHHH \@\?6(^(/Q8T_P?O86>FV,MU=LO\+NN$_+,?\ WT:L M_!W69;OX;ZEH=]D7NAM+;NAZJA#%<_B'7_@-5?
#?PPUK5==UWQ!XHU'6?#]] M?7;&*/2[]$)BZ@,R[L@< #/\-2:!\/M>\(_$S4I--^U:CH>J63K->WES&TOG M%2V7Y#,=X(R!T?GN:[FXG/O7O7@K7]$T;X;Z -2\1Z?M:V"1W$]R(Q(5X8 M+O()VY
]N.E<+X2T;XA^&O -]X7C\&0RM>M+_IDVIP;(Q(H4YC!); 'KWKN/ M!GPVT[1?!-AI'B.QL-6N(&DE9I[=95C9SDA-PX& H]\4Z\H-:OKWN*A&::LN MG56)?
&NA:1XY\)_:SJ,MS86T,T\:V5T/)N&"G&XKG<%*GH>N:XOX1WTNE_ 3 M7=0MCB:U:\GC/HRPJP_45WGBA-3TCPXNE^#/"L-_#/'+"T,%S%:);!AU"D8. M2Q.!C]:XWX9>&O%&D^%KWPAXD\-
9=/OEG,FH"^B?;YB!=OEJ23TZYK.+7LF MF]+FDD:II:V.6,<]SZUGVWA;XBZ=X"NO M5OH]G-:2R.B:N;Y0BQ,VYAY?WN23V[G@]:[#5-*USPS\.[/POX6T'^W]C+: MSS?;8[?R6*XWX?[V2S'
Z8Z\UI.6NCZZ:]#.$--5TL].I1^ 7_)+8O\ K[F_ MF*],KS+X/Z9XJ\,:2- U_P -_9+56DG%_P#;HI,L2,)Y:DGUYSVKTVN:M_$; M1TT/X:3"BBBL38**** "BBB@ HHHH **** "BBB@ HHHH **** "BBB@ HHH
MH H4444 %%%% !1110 4444 %%%% !1110 4444 %%%% !1110!8B_X]W_'^ M55ZL1?\ 'N_X_P JKT %%%% !1110 4444 %%%% !1110 4444 %%%% !111 M0 58_P"7/_/K5>K'_+G_)]: *]%%%
!1110 4444 %%%% !1110 4444 %% M%% !1110 4444 78_P#5K]!3J;'_ *M?H*=0 4444 %%%% !17CPU@O_ &HU MAKU[+XHC\1S06>GIJ$DFZ(7&"K6VXJ(Q'O);:,!!QS4.#5[]"U-.UNIU%%
<3I(U6T^+5[:ZCK,]]%-I(N5AV^7 M##F=E 2,$\A0 6))//..!<\8WES:ZUX42VN)84N-7$)'=7TNAHFDV>J-IL]R;T>9D3^2)%CV65I>QSW4C70B8(+:+(C7:V]@ 3@E1TP3DX:I28G
M5BCTNBO,O&NH)=6/C:&*6[=%T&&90]QF'#^9@I'M&TGRT5['8T5YSI7B M'Q VI^$+338XYK&_T3[2ZWU^6ED(6(EGD\DDLN\],!LDG;@"M2Y\=W,6G7FM MP:.LV@65P\,MU]JQ,RH^R25(MA#
(&#=7!(4\=,ITY JL;'945SMGXDOM1\6Z MCI-EI<1M=-DC2>]DN]NX/$DB[$"'S*YU:Z.JHKAO#UA+XSTFXUK5-4U.&2ZGGBM8[* M_DMUM(XY71<*A"NW&2SALG Z#%%5]#\<:S<:3X=M?
[.BU/5=22[1YFG%O&&MI M1&SMA6P&&3\H/. !@Y%>S>R)]HMWU/0:*XS5/'_]CZ];Z??6^G();J*U:(:H MK78,A $@@"\IDCDL&V\[1TKG]1A=]#^(=U =MQI^J"_@<'!1X8(9 ?\ QTCZ
M$T*FWN#JI;'J=%16EPMW9PW,?W)HUD7Z$9J6LC4**** "BBB@ HHHH **** M"BBB@"A1110 4444 %%%% !1110 4444 %%%% !1110 4444 %%%% %B+_CW M?\?Y57JQ%_Q[O^/\JKT %%%%
!1110 4444 %%%% !1110 4444 %%%% !11 M10 58_Y<_P#/K5>K'_+G_GUH KT444 %%%% !1110 4444 %%%% !1110 44 M44 %%%% !1110!=C_P!6OT%.IL?^K7Z"G4 %%%% !114-
Y=PV%C/=W;^7!;Q MM+*^"=JJ,DX')X':FDV[(3:2NS.\/:%_8,%_']H^T?;-0N+W.S;L\URVWJ<32!]/,DT)\M4.Q_-"YPN1E#@]C3/^%J^ M#/\ H,_^2LW_ ,11_P +5\&?]!G_ ,E9O_B*Z?
88F]^1_=_P#E^L8:R7.OO_ M ."=%HVDVNA:-;;98!O(MDV*7;;\C+MSD8^]G//2LC_A M:O@S_H,_^2LW_P 11_PM7P9_T&?_ "5F_P#B*/88F]^1_=_P!?6,-:W.OO\ M^"/N?
_VCPMJ6C_VAM^W:NU7;?S=D>N.U27?@S[58>*K;[? MM_X2$D[O)S]GS"L73=\WW<]NN/>H/^%J^#/^@S_Y*S?_ !%'_"U?!G_09_\ M)6;_ .(I^QQ/\C^X7M\+_.OO7^8E_P"
OMMOK,7]I;/[4TJ'3L^1GRO+#_/] M[G._IQC'6IX_"-Y<7R7&LZPM\;2SEM;():^48_, #2288AWVJ!P$7[V%&>(? M^%J^#/\ H,_^2LW_ ,11_P +5\&?]!G_ ,E9O_B*/8XG^1_=_P /;87^=?? M_P
$E@\'7%B/#4FGZE$EQH=C]A9YK4NMQ&5C#':'78?W8(.3C)R#4$O@6Y;3 M[O18=86/P_>7#S26AM2TRJ[;WB67?@(6+=4) 8C/0AW_ M7P9_T&?\ R5F_ M^(H_X6KX,_Z#/_DK-_\$4>QQ/\ (_N_X
>VPO\ .OO_ .";.EZ&-,UO6=06 M<.-4FBD$0CV^5LA6/&<\YV9Z#KBJ&K65Q!\0-"UBWADDBDAGT^Z*(6\M6 D1 MC@<#=%@GIEA57_A:O@S_ *#/_DK-_P#$4?\ "U?!G_09_P#)6;_XBE[#$7OR
M/[F/ZQAK6AO_ $?+0D4@^>A;O1N]'3[-V\/GN2DPVE&$C?@"\X@*\$\$<:7H MH=/FUA=7:+[#NE:02*Y1I-^"N1QA01A1D@8*>
(_#MW:>&_$T&G-+=W'B2Z5% M2.$_N!(B0L6.3\H568L<>E6?^%J^#/\ H,_^2LW_ ,11_P +5\&?]!G_ ,E9 MO_B*?LL3?X']W_)]MA;?&OO7^9UD$*6]O'#$,)&H11[8%/KD/^%J^#/^@S
M_P"2LW_Q%'_"U?!G_09_\E9O_B*/8XG^1_=_P1_:,-_.OO/0RLV%OFKF?$:?0 M/_DK-_\ $4?\+5\&?]!G_P E9O\ XBCZK7_D?W,?UK#_\ ,Z^]'7T5R7_ M7 MP9_T&?\ R5F_^(H_X6KX,_Z#/_DK-_\ $4?5:_\ )+[F'UK#_P#/Q?>CK:*
(_N8?6L/_O7/[&OO1U=%$/^@O\ ^2TW_P 11]5K_P C^YA] M:P \Z^]'5T5RG_"SO"'_ $%__):;_P"(H_X6=X0_Z"__)+3?_$4?5:_\C^Y MA]:P_P#.OO1U=%$/^@O\ ^2TW_P 11]5K M_P
C^YA]:P_\Z^]'5T5RG_"SO"'_ $%__):;_P"(H_X6=X0_Z"__)+3?_$4 M?5:_\C^YA]:P_P#.OO1U=%$/^@O\ ^2TW M_P 11]5K_P C^YA]:P_\Z^]'5T5RG_"SO"'_ $%__):;_P"(J]I'C;P]KM\+
M/2]26:X*EA&TH6 ZXW 9^@I2P]:*NX.WHQQQ-"3M&:;]4;M%%%8&X4444 % M%%% %B+_ (]W_'^55ZL1?\>[_C_*J] !1110 4444 %%%% !1110 4444 %% M%% !1110 4444 %6/^7/_/K5>K'_
"Y_Y]: *]%%% !1110 4444 %%%% !1 M110 4444 %%%% !1110 4444 78_]6OT%.IL?^K7Z"G4 %%%% !6/XN_Y$G7 M/^P=^ M*M6-AISPQR+&TK/.Q5%48Y))ZD#IWK[F4E"/-
+8^"C&4Y*,5JS(HJUJ6GSZ M5JES87B[9[:1HW Z9!QD>W<5ULGPMU*.]6R;6M#^W.H9+0W;"5LC(4I42K4 MX).3W+A1J3;45L<114UW:3V%Y-:7<9BG@M9NM345)O1FJH57)Q M2U1R-
%::^'M6?7GT6.QE?4$?8T"C)!]<],=\],T M#&Y:=PB0!>I9O3Z9S4^L^#+[2-)74X[RPU*Q\SRGGT^?S5C;L&X&,_YZBE[: MGS*-]1^QJ.+ERZ(YVBNCTSP-K6J:#=ZPD4=O9VT#SA[ABIF51D[!@Y^O
YZU MSE5&<9-J+V)E3G!)R5KA1115D!1110 445?T/3'UG7;/3X\C[1*J,1_"O\3? M@,G*4FHJ['&+DTD4**[U/#VBWWCC0GT^U8Z%JP;;"TC<,A977=G=U4-U_BJ
MAKGAUI=.TB;2=*C^V71F2:'2YFNX\H05P0S_ #;220&/&#Q7.L3!M+O_ ,'_ M ".AX::BY;V_X'^:.1HKI=&TRT;3=?MM4TV9-1LK-IT>61D,)#QKM\O Y^6"=P.2QZ<4Y5XQO
MIM_E<4*:UB5V1F9?,R_#]+W7-4^Q_:X;*'5&L84M+1KHQ]]S_ ##:@!7G)//2L[2_ LVHR75O MYUQ]JMY9X6,-DTENCQJ3B2;("[B,# ;MG&:E8JDU>Y;PM9.UCDZ*]!M]$T2[MLH&U"-HC'X:-
T#;P@DN)G!D.'7#W(P*K3^'=-U+2-#CMKH6U]-IL\T M:"T&+@QO(V9'#?*2JX'WNG..,KZU"^H_JL[:?UM_F3]P\9Y M?R]>,>9UYZ>]:WC3P_K=0^Q1?8;"295(M
)=]SDH@W+R68]>.*PKCPW;:;IZ2ZQJ36]Q,9Q#%%;^:I\IBIW-N!7%-*NM;L++2;FY MC$FE)=R)]FW22GR@W[M/,.YVR24R ,'!-P);7TT$?G;8W*?OXO+<8X(9< MG:?;)JX585-B)TIT]6>X?#_X@1>)
(%T_4V6/58U^@N /XA_M>H_$<9 [BOE2 M&:6WG2:WD:*6-@R.AP5(Z$&O<_A_\0(O$D"Z?J;+'JL:_07 '\0_VO4?B.,@ M?/X_ >SO5I+3JNW_ #Z/+\P]K:E5?O='W_X)W%%%%>*>V%%%%
%B+_CW?\ M'^55ZL1?\>[_ (_RJO0 4444 %%%% !1110 4444 %%%% !1110 4444 %%% M% !5C_ES_P ^M5ZL?\N?^?6@"O1110 4444 %%%% !1110 4444 %%%% !11 M10 4444 %%%%
%V/_5K]!3J;'_JU^@IU !1110 5C^+O^1)US_L'7'_HMJV* MQ_%W_(DZY_V#KC_T6U:4OXD?5&=7^'+T9\LUZ1X5T'64^&=_>Z%:S37VJW"P MQM$P!CAC.6;)]6!6O-
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Cover - shares	9 Months Ended Sep. 30, 2024	Nov. 05, 2024
Cover [Abstract]		
Document Type	10-Q	
Document Quarterly Report	true	
Document Period End Date	Sep. 30, 2024	
Document Transition Report	false	
Entity File Number	001-34949	
Entity Registrant Name	ARBUTUS BIOPHARMA CORP	
Entity Incorporation, State or Country Code	A1	
Entity Tax Identification Number	98-0597776	
Entity Address, Address Line One	701 Veterans Circle	
Entity Address, City or Town	Warminster	
Entity Address, State or Province	PA	
Entity Address, Postal Zip Code	18974	
City Area Code	267	
Local Phone Number	469-0914	
Title of 12(b) Security	Common Shares, without par value	
Trading Symbol	ABUS	
Security Exchange Name	NASDAQ	
Entity Current Reporting Status	Yes	
Entity Interactive Data Current	Yes	
Entity Filer Category	Non-accelerated Filer	
Entity Small Business	true	
Entity Emerging Growth Company	false	
Entity Shell Company	false	
Entity Common Stock, Shares Outstanding		189,491,685
Amendment Flag	false	
Entity Central Index Key	0001447028	
Current Fiscal Year End Date	--12-31	
Document Fiscal Year Focus	2024	
Document Fiscal Period Focus	Q3	

XML 14 R2.htm IDEA: XBRL DOCUMENT

Condensed Consolidated Balance Sheets (Unaudited) - USD ($) $ in Thousands	Sep. 30, 2024	Dec. 31, 2023
Current assets:		
Cash and cash equivalents	$ 31,846	$ 26,285
Investments in marketable short-term securities	95,948	99,718
Accounts receivable	1,608	1,776
Prepaid expenses and other current assets	3,375	4,248
Total current assets	132,777	132,027
Property and equipment, net of accumulated depreciation of $12,663 (December 31, 2023: $11,900)	3,556	4,674
Investments in marketable securities, non-current	2,964	6,284
Right of use asset	1,144	1,416
Total assets	140,441	144,401
Current liabilities:		
Accounts payable and accrued liabilities	7,544	10,271
Deferred license revenue, current	10,911	11,791
Lease liability, current	468	425
Total current liabilities	18,923	22,487
Liability related to sale of future royalties	5,315	6,953
Contingent consideration	8,335	7,600
Lease liability, non-current	978	1,343
Total liabilities	33,551	38,383
Stockholders' equity		
Issued and outstanding: 189,438,135 (December 31, 2023: 169,867,414)	1,407,595	1,349,821
Additional paid-in capital	81,425	81,270
Deficit	(1,334,040)	(1,276,652)
Accumulated other comprehensive loss	(48,090)	(48,421)
Total stockholders' equity	106,890	106,018
Total liabilities and stockholders' equity	$ 140,441	$ 144,401

XML 15 R3.htm IDEA: XBRL DOCUMENT

Condensed Consolidated Balance Sheets (Unaudited) (Parenthetical) - USD ($) $ in Thousands	Sep. 30, 2024	Dec. 31, 2023
Statement of Financial Position [Abstract]		
Accumulated depreciation of property and equipment	$ 12,663	$ 11,900
Common shares, shares issued (in shares)	189,438,135	169,867,414
Common shares, shares outstanding (in shares)	189,438,135	169,867,414

XML 16 R4.htm IDEA: XBRL DOCUMENT

Condensed Consolidated Statements of Operations and Comprehensive Loss (Unaudited) - USD ($) $ in Thousands	3 Months Ended		9 Months Ended	
	Sep. 30, 2024	Sep. 30, 2023	Sep. 30, 2024	Sep. 30, 2023
Revenue				
Revenues	$ 1,339	$ 4,658	$ 4,597	$ 15,996
Operating expenses				
Research and development	14,273	20,169	45,227	56,136
General and administrative	4,537	5,842	17,396	17,374
Change in fair value of contingent consideration	344	205	735	(158)
Restructuring charges	3,625	0	3,625	0
Total operating expenses	22,779	26,216	66,983	73,352
Loss from operations	(21,440)	(21,558)	(62,386)	(57,356)
Interest income	1,747	1,494	5,121	4,223
Interest expense	(29)	(46)	(107)	(415)
Foreign exchange gain/(loss)	5	6	(16)	11
Total other income	1,723	1,454	4,998	3,819
Net loss	$ (19,717)	$ (20,104)	$ (57,388)	$ (53,537)
Loss per share				
Basic (in USD per share)	$ (0.10)	$ (0.12)	$ (0.31)	$ (0.32)
Diluted (in USD per share)	$ (0.10)	$ (0.12)	$ (0.31)	$ (0.32)

Weighted average number of common shares				
Basic (in shares)	188,997,194	167,512,708	184,244,819	165,085,243
Diluted (in shares)	188,997,194	167,512,708		
Comprehensive loss				
Unrealized gain on available-for-sale securities	$ 218	$ 584	$ 331	$ 1,604
Comprehensive loss	(19,499)	(19,520)	(57,057)	(51,933)
Collaborations and licenses				
Revenue				
Revenues	767	3,935	2,861	13,329
Non-cash royalty revenue				
Revenue				
Revenues	$ 572	$ 723	$ 1,736	$ 2,667

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Condensed Consolidated Statement of Stockholders' Equity (Unaudited) - USD ($) $ in Thousands	Total	Common Shares	Additional Paid-In Capital	Deficit	Accumulated Other Comprehensive Loss
Beginning balance (in shares) at Dec. 31, 2022		157,455,363			
Beginning balance at Dec. 31, 2022	$ 136,852	$ 1,318,737	$ 72,406	$ (1,203,803)	$ (50,488)
Increase (Decrease) in Stockholders' Equity [Roll Forward]					
Stock-based compensation expense	2,131		2,131		
Issuance of common shares pursuant to the Open Market Sale Agreement (in shares)		7,423,622			
Issuance of common shares pursuant to the Open Market Sale Agreement	19,862	$ 19,862			
Issuance of common shares pursuant to exercise of options (in shares)		101,356			
Issuance of common shares pursuant to ESPP	259	$ 457	(198)		
Issuance of common shares pursuant to ESPP (in shares)		151,852			
Issuance of common shares pursuant to ESPP	296	$ 397	(101)		
Unrealized gain on available-for-sale securities	854				854
Net loss	(16,339)			(16,339)	
Ending balance (in shares) at Mar. 31, 2023		165,132,193			
Ending balance at Mar. 31, 2023	143,915	$ 1,339,453	74,238	(1,220,142)	(49,634)
Beginning balance (in shares) at Dec. 31, 2022		157,455,363			
Beginning balance at Dec. 31, 2022	136,852	$ 1,318,737	72,406	(1,203,803)	(50,488)
Increase (Decrease) in Stockholders' Equity [Roll Forward]					
Net loss	(53,537)				
Ending balance (in shares) at Sep. 30, 2023		167,695,247			
Ending balance at Sep. 30, 2023	119,337	$ 1,346,015	79,546	(1,257,340)	(48,884)
Beginning balance (in shares) at Mar. 31, 2023		165,132,193			
Beginning balance at Mar. 31, 2023	143,915	$ 1,339,453	74,238	(1,220,142)	(49,634)
Increase (Decrease) in Stockholders' Equity [Roll Forward]					
Stock-based compensation expense	2,964		2,964		
Issuance of common shares pursuant to the Open Market Sale Agreement (in shares)		1,790,546			
Issuance of common shares pursuant to the Open Market Sale Agreement	4,742	$ 4,742			
Unrealized gain on available-for-sale securities	166				166
Net loss	(17,094)			(17,094)	
Ending balance (in shares) at Jun. 30, 2023		166,922,739			
Ending balance at Jun. 30, 2023	134,693	$ 1,344,195	77,202	(1,237,236)	(49,468)
Increase (Decrease) in Stockholders' Equity [Roll Forward]					
Stock-based compensation expense	2,483		2,483		
Issuance of common shares pursuant to the Open Market Sale Agreement (in shares)		633,922			
Issuance of common shares pursuant to the Open Market Sale Agreement	1,396	$ 1,396			
Issuance of common shares pursuant to ESPP (in shares)		138,586			
Issuance of common shares pursuant to ESPP	285	$ 424	(139)		
Unrealized gain on available-for-sale securities	584				584
Net loss	(20,104)			(20,104)	
Ending balance (in shares) at Sep. 30, 2023		167,695,247			
Ending balance at Sep. 30, 2023	$ 119,337	$ 1,346,015	79,546	(1,257,340)	(48,884)
Beginning balance (in shares) at Dec. 31, 2023	169,867,414	169,867,414			
Beginning balance at Dec. 31, 2023	$ 106,018	$ 1,349,821	81,270	(1,276,652)	(48,421)
Increase (Decrease) in Stockholders' Equity [Roll Forward]					
Stock-based compensation expense	2,014		2,014		
Issuance of common shares pursuant to the Open Market Sale Agreement (in shares)		8,666,077			
Issuance of common shares pursuant to the Open Market Sale Agreement	21,765	$ 21,765			
Issuance of common shares pursuant to exercise of options (in shares)		1,126,691			
Issuance of common shares pursuant to ESPP	2,454	$ 4,268	(1,814)		
Issuance of common shares pursuant to ESPP (in shares)		121,563			
Issuance of common shares pursuant to ESPP	211	$ 271	(60)		
Unrealized gain on available-for-sale securities	50				50
Net loss	(17,875)			(17,875)	
Issuance of common shares upon vesting of RSUs		410,482			
Stock Issued During Period, Value, Restricted Stock Award, Net of Forfeitures	0	$ 1,190	(1,190)		
Ending balance (in shares) at Mar. 31, 2024		180,192,227			
Ending balance at Mar. 31, 2024	$ 114,637	$ 1,377,315	80,220	(1,294,527)	(48,371)
Beginning balance (in shares) at Dec. 31, 2023	169,867,414	169,867,414			
Beginning balance at Dec. 31, 2023	$ 106,018	$ 1,349,821	81,270	(1,276,652)	(48,421)
Increase (Decrease) in Stockholders' Equity [Roll Forward]					
Net loss	$ (57,388)				
Ending balance (in shares) at Sep. 30, 2024	189,438,135	189,438,135			
Ending balance at Sep. 30, 2024	$ 106,890	$ 1,407,595	81,425	(1,334,040)	(48,090)
Beginning balance (in shares) at Mar. 31, 2024		180,192,227			
Beginning balance at Mar. 31, 2024	114,637	$ 1,377,315	80,220	(1,294,527)	(48,371)
Increase (Decrease) in Stockholders' Equity [Roll Forward]					
Stock-based compensation expense	3,180		3,180		
Issuance of common shares pursuant to the Open Market Sale Agreement (in shares)		7,833,922			
Issuance of common shares pursuant to the Open Market Sale Agreement	22,359	$ 22,359			
Issuance of common shares pursuant to exercise of options (in shares)		712,895			
Issuance of common shares pursuant to ESPP	2,011	$ 3,660	(1,649)		
Unrealized gain on available-for-sale securities	63				63
Net loss	(19,796)			(19,796)	
Ending balance (in shares) at Jun. 30, 2024		188,739,044			
Ending balance at Jun. 30, 2024	122,454	$ 1,403,334	81,751	(1,314,323)	(48,308)
Increase (Decrease) in Stockholders' Equity [Roll Forward]					

Stock-based compensation expense	2,160		2,160		
Issuance of common shares pursuant to exercise of options (in shares)		593,321			
Issuance of common shares pursuant to ESPP	1,590	$ 3,996	(2,406)		
Issuance of common shares pursuant to ESPP (in shares)		105,770			
Issuance of common shares pursuant to ESPP	185	$ 265	(80)		
Unrealized gain on available-for-sale securities	218				218
Net loss	$ (19,717)			(19,717)	
Ending balance (in shares) at Sep. 30, 2024	189,438,135	189,438,135			
Ending balance at Sep. 30, 2024	$ 106,890	$ 1,407,595	$ 81,425	$ (1,334,040)	$ (48,090)

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Condensed Consolidated Statements of Cash Flow (Unaudited) - USD ($) $ in Thousands	9 Months Ended	
	Sep. 30, 2024	Sep. 30, 2023
OPERATING ACTIVITIES		
Net loss	$ (57,388)	$ (53,537)
Non-cash items:		
Depreciation	1,047	1,045
Loss on impairment of lab equipment	167	0
Gain on sale of property and equipment	0	20
Stock-based compensation expense	7,354	7,578
Change in fair value of contingent consideration	735	(158)
Non-cash royalty revenue	(1,736)	(2,667)
Non-cash interest expense	98	412
Net accretion and amortization of investments in marketable securities	(2,212)	(1,577)
Net change in operating items:		
Accounts receivable	168	(819)
Prepaid expenses and other assets	1,145	(2,040)
Accounts payable and accrued liabilities	(2,727)	(6,223)
Change in deferred license revenue	(880)	(10,349)
Other liabilities	(306)	(289)
Net cash used in operating activities	(54,535)	(68,644)
INVESTING ACTIVITIES		
Purchase of investments in marketable securities	(98,318)	(56,490)
Proceeds from Sale of Property, Plant, and Equipment	0	20
Disposition of investments in marketable securities	107,951	86,026
Acquisition of property and equipment	(96)	(1,008)
Net cash provided by investing activities	9,537	28,548
FINANCING ACTIVITIES		
Issuance of common shares pursuant to the Open Market Sale Agreement	44,124	26,000
Issuance of common shares pursuant to exercise of stock options	6,055	259
Issuance of common shares pursuant to ESPP	396	581
Net cash provided by financing activities	50,575	26,840
Effect of foreign exchange rate changes on cash and cash equivalents	(16)	11
Increase/(decrease) in cash and cash equivalents	5,561	(13,245)
Cash and cash equivalents, beginning of period	26,285	30,776
Cash and cash equivalents, end of period	$ 31,846	$ 17,531

XML 19 R7.htm IDEA: XBRL DOCUMENT

Nature of business and future operations	9 Months Ended
	Sep. 30, 2024
Organization, Consolidation and Presentation of Financial Statements [Abstract]	
Nature of business and future operations	**Nature of business and future operations**

Description of the Business

Arbutus Biopharma Corporation (“Arbutus” or “the Company”) is a clinical-stage biopharmaceutical company leveraging its extensive virology expertise to develop novel therapeutics with distinct mechanisms of action, which can potentially be combined to provide a functional cure for patients with chronic hepatitis B virus (cHBV) infection. The Company believes the key to success in developing a functional cure involves suppressing hepatitis B virus deoxyribonucleic acid, reducing hepatitis B surface antigen and boosting HBV-specific immune responses. The Company’s pipeline of internally developed, proprietary compounds includes an RNAi therapeutic, imdusiran (AB-729), and an oral PD-L1 inhibitor, AB-101. Imdusiran has generated meaningful clinical data demonstrating an impact on both surface antigen reduction and reawakening of the HBV-specific immune response. Imdusiran is currently in two Phase 2a combination clinical trials. AB-101 is currently being evaluated in a Phase 1a/1b clinical trial.

The Company continues to protect and defend its intellectual property, which is the subject of the Company’s ongoing lawsuits against Moderna Therapeutics, Inc. (Moderna) and Pfizer Inc. and BioNTech SE (collectively, Pfizer/BioNTech) for their use of the Company’s patented lipid nanoparticle (LNP) technology in their COVID-19 vaccines. With respect to the Moderna lawsuit, the claim construction hearing occurred on February 8, 2024. On April 3, 2024, the court provided its claim construction ruling in which it construed the disputed claim terms and agreed with the Company’s position on most of the disputed claim terms. On August 5, 2024, the Company and Genevant Sciences Ltd. (Genevant), along with Moderna, filed a Stipulation to Extend Time with the court that requested an amended case schedule to accommodate certain outstanding discovery from Moderna and third parties. The court approved the amended case schedule and the start of the trial was moved from April 21, 2025 to September 24, 2025, subject to the court’s availability. The lawsuit against Pfizer/BioNTech is ongoing and a date for a claim construction hearing has been scheduled for December 18, 2024.

Liquidity

At September 30, 2024, the Company had an aggregate of $130.8 million in cash, cash equivalents and investments in marketable securities. The Company had no outstanding debt as of September 30, 2024. The Company believes it has sufficient cash resources to fund its operations for at least the next 12 months.

The success of the Company is dependent on obtaining the necessary regulatory approvals to bring its products to market and achieve profitable operations. The Company’s research and development activities and the commercialization of its products are dependent on its ability to successfully complete these activities and to obtain adequate financing through a combination of financing activities and operations. It is not possible to predict either the outcome of the Company’s existing or future research and development programs or the Company’s ability to continue to fund these programs in the future.

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Significant accounting policies	9 Months Ended
	Sep. 30, 2024
Accounting Policies [Abstract]	
Significant accounting policies	**Significant accounting policies**

Basis of presentation and principles of consolidation

These unaudited condensed consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles for interim financial statements and accordingly, do not include all disclosures required for annual financial statements. These statements should be read in conjunction with the Company’s audited consolidated financial statements and notes thereto for the year ended December 31, 2023 included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2023. These unaudited condensed consolidated financial statements include the accounts of Arbutus Biopharma Corporation and its one wholly-owned subsidiary, Arbutus Biopharma, Inc., and reflect, in the opinion of management, all adjustments and reclassifications necessary to fairly present the Company’s financial position as of September 30, 2024 and December 31, 2023, the Company’s results of operations for the three and nine months ended September 30, 2024 and 2023, and the Company’s cash flows for the nine months ended September 30, 2024 and 2023. Such adjustments are of a normal recurring nature. The results of operations for the three and nine months ended September 30, 2024 are not necessarily indicative of the results for the full year. These unaudited condensed consolidated financial statements follow the same significant accounting policies as those described in the notes to the audited consolidated financial statements of the Company for the year ended December 31, 2023, except as described below under the section entitled “Recent Accounting Pronouncements.”

All intercompany balances and transactions have been eliminated.

Net loss per share

Net loss per share is calculated based on the weighted average number of common shares outstanding. Diluted net loss per share does not differ from basic net loss per share for the three and nine months ended September 30, 2024 and 2023, since the effect of including potential common shares would be anti-dilutive. For the nine months ended September 30, 2024, potential common shares of 18.7 million pertaining to outstanding stock options and unvested restricted stock units were excluded from the calculation of net loss per share. A total of approximately 21.0 million outstanding stock options were excluded from the calculation for the nine months ended September 30, 2023.

Revenue from collaborations and licenses

The Company generates revenue through certain collaboration agreements and license agreements. Such agreements may require the Company to deliver various rights and/or services, including intellectual property rights or licenses and research and development services. Under such agreements, the Company is generally eligible to receive non-refundable upfront payments, funding for research and development services, milestone payments and royalties.

The Company's collaboration agreements fall under the scope of Accounting Standards Codification (ASC) Topic 808, *Collaborative Arrangements* (ASC 808), when both parties are active participants in the arrangement and are exposed to significant risks and rewards. For certain arrangements under the scope of ASC 808, the Company analogizes to ASC Topic 606, *Revenue from Contracts with Customers* (ASC 606), for some aspects, including for the delivery of a good or service (i.e., a unit of account).

ASC 606 requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers under a five-step model: (i) identify contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when or as a performance obligation is satisfied.

In contracts where the Company has more than one performance obligation to provide its customer with goods or services, each performance obligation is evaluated to determine whether it is distinct based on whether (i) the customer can benefit from the good or service either on its own or together with other resources that are readily available and (ii) the good or service is separately identifiable from other promises in the contract. The consideration under the contract is then allocated between the distinct performance obligations based on their respective relative stand-alone selling prices. The estimated stand-alone selling price of each deliverable reflects the Company's best estimate of what the selling price would be if the deliverable was regularly sold on a stand-alone basis and is determined by reference to market rates for the good or service when sold to others or by using an adjusted market assessment approach if the selling price on a stand-alone basis is not available.
The consideration allocated to each distinct performance obligation is recognized as revenue when control is transferred to the customer for the related goods or services. Consideration associated with at-risk substantive performance milestones, including sales-based milestones, is recognized as revenue when it is probable that a significant reversal of the cumulative revenue recognized will not occur. Sales-based royalties received in connection with licenses of intellectual property are subject to a specific exception in the revenue standards, whereby the consideration is not included in the transaction price and recognized in revenue until the customer's subsequent sales or usages occur.

Deferred Revenue

When consideration is received or is unconditionally due from a customer, collaborator or licensee prior to the Company completing its performance obligation to the customer, collaborator or licensee under the terms of a contract, deferred revenue is recorded. Deferred revenue expected to be recognized as revenue within the 12 months following the balance sheet date is classified as a current liability. Deferred revenue not expected to be recognized as revenue within the 12 months following the balance sheet date is classified as a long-term liability. In accordance with ASC Topic 210-20, *Balance Sheet - Offsetting* (ASC 210-20) the Company's deferred revenue is offset by a contract asset as further discussed in Note 9.

Segment information

The Company operates as a single segment.

Recent accounting pronouncements

In November 2023, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures (ASU 2023-07), which requires disclosure of significant segment expenses and other segment items on an annual and interim basis under ASC 280. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and for interim periods beginning after December 15, 2024. Early adoption is permitted and the amendments in this ASU should be applied on a retrospective basis to all periods presented. The Company has not yet determined the impact ASU 2023-07 may have on the Company's financial statement disclosures.

In December 2023, the FASB issued ASU No. 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures (ASU 2023-09), which improves income tax disclosures by requiring: (1) consistent categories and greater disaggregation of information in the rate reconciliation, and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for annual periods beginning after December 15, 2024. Early adoption is permitted. The ASU indicates that all entities will apply the guidance prospectively with an option for retroactive application to each period presented in the financial statements. The Company has not yet determined the impact ASU 2023-09 may have on the Company's financial statement disclosures.

The Company has reviewed all other recently issued standards and has determined that such standards will not have a material impact on the Company's financial statements or do not otherwise apply to the Company's operations.

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Fair value measurements	**9 Months Ended Sep. 30, 2024**
Fair Value Disclosures [Abstract]	
Fair value measurements	

Fair value measurements

The Company measures certain financial instruments and other items at fair value.

To determine the fair value, the Company uses the fair value hierarchy for inputs used in measuring fair value that maximize the use of observable inputs and minimize the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs market participants would use to value an asset or liability and are developed based on market data obtained from independent sources. Unobservable inputs are inputs based on assumptions about the factors market participants would use to value an asset or liability. The three levels of inputs that may be used to measure fair value are as follows:

- Level 1 inputs are quoted market prices for identical instruments available in active markets.
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly or indirectly. If the asset or liability has a contractual term, the input must be observable for substantially the full term. An example includes quoted market prices for similar assets or liabilities in active markets.
- Level 3 inputs are unobservable inputs for the asset or liability and will reflect management's assumptions about market assumptions that would be used to price the asset or liability.

Assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurements. Changes in the observability of valuation inputs may result in a reclassification of levels for certain securities within the fair value hierarchy.

The carrying values of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate their fair values due to the immediate or short-term maturity of these financial instruments.

To determine the fair value of the contingent consideration (Note 8), the Company uses a probability weighted assessment of the likelihood the milestones would be met and the estimated timing of such payments, and then the potential contingent payments are discounted to their present value using a probability adjusted discount rate that reflects the early stage nature of the development program, the time to complete the program development, and overall biotech indices. The Company determined the fair value of the contingent consideration was $8.3 million as of September 30, 2024 and the increase of $0.7 million from December 31, 2023 has been recorded as a component of total operating expenses in the statements of operations and comprehensive loss for the nine months ended September 30, 2024. The assumptions used in the discounted cash flow model are level 3 inputs as defined above. The Company assessed the sensitivity of the fair value measurement to changes in these unobservable inputs, and determined that changes within a reasonable range would not result in a materially different assessment of fair value.

The following tables present information about the Company's assets and liabilities that are measured at fair value on a recurring basis, and indicates the fair value hierarchy of the valuation techniques used to determine such fair value:

As of September 30, 2024	Level 1	Level 2	Level 3	Total
		(in thousands)		
Assets				
Cash and cash equivalents	$ 31,846	$ —	$ —	$ 31,846
Investments in marketable securities, current	—	95,948	—	95,948
Investments in marketable securities, non-current	—	2,964	—	2,964
Total	$ 31,846	$ 98,912	$ —	$ 130,758
Liabilities				
Contingent consideration	—	—	8,335	8,335
Total	$ —	$ —	$ 8,335	$ 8,335

As of December 31, 2023	Level 1	Level 2	Level 3	Total
		(in thousands)		
Assets				
Cash and cash equivalents	$ 26,285	$ —	$ —	$ 26,285
Investments in marketable securities, current	—	99,718	—	99,718
Investments in marketable securities, non-current	—	6,284	—	6,284
Total	$ 26,285	$ 106,002	$ —	$ 132,287
Liabilities				
Contingent consideration	—	—	7,600	7,600
Total	$ —	$ —	$ 7,600	$ 7,600

The following table presents the changes in fair value of the Company's contingent consideration:

	Liability at beginning of the period	Change in fair value of liability	Liability at end of the period
		(in thousands)	
Nine Months Ended September 30, 2024	$ 7,600	$ 735	$ 8,335
Nine Months Ended September 30, 2023	$ 7,531	$ (158)	$ 7,373

See Note 4 for additional information regarding the fair value of the Company's investments in marketable securities.

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Investments in marketable securities	**9 Months Ended Sep. 30, 2024**
Investments, Debt and Equity Securities [Abstract]	
Investments in marketable securities	

Investments in marketable securities

Investments in marketable securities consisted of the following:

As of September 30, 2024	Amortized Cost	Gross Unrealized Gain[1]	Gross Unrealized Loss[1]	Fair Value
		(in thousands)		
Cash equivalents				
Money market	$ 25,948	$ —	$ —	$ 25,948
Total	$ 25,948	$ —	$ —	$ 25,948
Investments in marketable short-term securities				
US corporate bonds	43,477	23	(9)	43,491
US treasury bills	52,408	49	—	52,457
Total	$ 95,885	$ 72	$ (9)	$ 95,948
Investments in marketable long-term securities				
US corporate bonds	2,932	32	—	2,964
Total	$ 2,932	$ 32	$ —	$ 2,964

[1] Gross unrealized gain (loss) is pre-tax and is reported in accumulated other comprehensive loss.

As of December 31, 2023	Amortized Cost	Gross Unrealized Gain[1]	Gross Unrealized Loss[1]	Fair Value
	(in thousands)			
Cash equivalents				
Money market fund	$ 18,029	$ —	$ —	$ 18,029
Total	$ 18,029	$ —	$ —	$ 18,029
Investments in marketable short-term securities				
US government agency bonds	$ 17,918	$ —	$ (44)	$ 17,874
US corporate bonds	71,045	30	(189)	70,886
Yankee bonds	2,000	—	(17)	1,983
US government bonds	$ 9,001	$ —	$ (26)	$ 8,975
Total	$ 99,964	$ 30	$ (276)	$ 99,718
Investments in marketable long-term securities				
US corporate bonds	6,273	18	(7)	6,284
Total	$ 6,273	$ 18	$ (7)	$ 6,284

[1] Gross unrealized gain (loss) is pre-tax and is reported in accumulated other comprehensive loss.

The contractual term to maturity of the $95.9 million of short-term marketable securities held by the Company as of September 30, 2024 is less than one year. As of September 30, 2024, the Company held $3.0 million of long-term marketable securities with contractual maturities of more than one year, but less than five years. As of December 31, 2023, the Company's $99.7 million of short-term marketable securities had contractual maturities of less than one year, while the Company's $6.3 million of long-term marketable securities had maturities of more than one year, but less than five years.

At September 30, 2024 and December 31, 2023, the Company had 7 and 27, respectively, available-for-sale investment debt securities in an unrealized loss position without an allowance for credit losses. Unrealized losses on the Company's investments in debt securities have not been recognized into income as the issuers' bonds are of high credit quality and the decline in fair value is largely due to market conditions and/or changes in interest rates. The Company does not intend to sell and it is more likely than not that the Company will not be required to sell the securities prior to the anticipated recovery of their amortized cost basis. The issuers continue to make timely interest payments on the bonds. The fair value is expected to recover as the bonds approach maturity.

Accrued interest receivable on investments in marketable securities of $0.3 million at both September 30, 2024 and December 31, 2023 is included in prepaid expenses and other current assets.

The Company had realized gains of less than $0.1 million for the three and nine months ended September 30, 2024 and zero and less than $0.1 million realized gains for same periods in 2023, respectively.
See Note 3 for additional information regarding the fair value of the Company's investments in marketable securities.

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Investment in Genevant | **9 Months Ended Sep. 30, 2024**

Equity Method Investments and Joint Ventures [Abstract]

Investment in Genevant — Investment in Genevant

In April 2018, the Company entered into an agreement with Roivant Sciences Ltd. (Roivant), its largest shareholder, to launch Genevant, a company focused on a broad range of RNA-based therapeutics enabled by the Company's LNP and ligand conjugate delivery technologies. The Company licensed rights to its LNP and ligand conjugate delivery platforms to Genevant for RNA-based applications outside of HBV, except to the extent certain rights had already been licensed to other third parties (the Genevant License). The Company retained all rights to its LNP and conjugate delivery platforms for HBV.

Under the Genevant License, as amended, if a third party sublicensee of intellectual property licensed by Genevant from the Company commercializes a sublicensed product, the Company becomes entitled to receive a specified percentage of certain revenue that may be received by Genevant for such sublicense, including royalties, commercial milestones and other sales-related revenue, or, if less, tiered low single-digit royalties on net sales of the sublicensed product. The specified percentage is 20% in the case of a mere sublicense (i.e., naked sublicense) by Genevant without additional contribution and 14% in the case of a bona fide collaboration with Genevant.

Additionally, if Genevant receives proceeds from an action for infringement by any third parties of the Company's intellectual property licensed to Genevant, the Company would be entitled to receive, after deduction of litigation costs, 20% of the proceeds received by Genevant or, if less, tiered low single-digit royalties on net sales of the infringing product (inclusive of the proceeds from litigation or settlement, which would be treated as net sales).

The Company accounts for its interest in Genevant as equity securities without readily determinable fair values. Accordingly, an estimate of the fair value of the securities is based on the original cost less previously recognized equity method losses, less impairments, plus or minus changes resulting from observable price changes in orderly transactions for identical or a similar Genevant securities. As of September 30, 2024, the carrying value of the Company's investment in Genevant was zero and the Company owned approximately 16% of the common equity of Genevant.

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Accounts payable and accrued liabilities | **9 Months Ended Sep. 30, 2024**

Payables and Accruals [Abstract]

Accounts payable and accrued liabilities — Accounts payable and accrued liabilities

Accounts payable and accrued liabilities are comprised of the following:

	September 30, 2024	December 31, 2023
	(in thousands)	
Trade accounts payable	$ 2,315	$ 3,223
Research and development accruals	1,367	2,884
Professional fee accruals	709	815
Payroll accruals	2,588	3,349
Restructuring liabilities	565	—
Total accounts payable and accrued liabilities	$ 7,544	$ 10,271

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Sale of future royalties | **9 Months Ended Sep. 30, 2024**

Other Liabilities Disclosure [Abstract]

Sale of future royalties — Sale of future royalties

On July 2, 2019, the Company entered into a Purchase and Sale Agreement (the Agreement) with the Ontario Municipal Employees Retirement System (OMERS), pursuant to which the Company sold to OMERS part of its royalty interest on future global net sales of ONPATTRO® (Patisiran) (ONPATTRO), an RNA interference therapeutic currently being sold by Alnylam Pharmaceuticals, Inc. (Alnylam).

ONPATTRO utilizes the Company's LNP technology, which was licensed to Alnylam pursuant to the Cross-License Agreement, dated November 12, 2012, by and between the Company and Alnylam (the LNP License Agreement). Under the terms of the LNP License Agreement, the Company is entitled to tiered royalty payments on global net sales of ONPATTRO ranging from 1.00% to 2.33% after offsets, with the highest tier applicable to annual net sales above $500 million. This royalty interest was sold to OMERS, effective as of January 1, 2019, for $20 million in gross proceeds before advisory fees. OMERS will retain this entitlement until it has received $30 million in royalties, at which point 100% of such royalty interest on future global net sales of ONPATTRO will revert to the Company. OMERS has assumed the risk of collecting up to $30 million of future royalty payments from Alnylam and the Company is not obligated to reimburse OMERS if they fail to collect any such future royalties.

The $30 million in royalties to be paid to OMERS is accounted for as a liability, with the difference between the liability and the gross proceeds received accounted for as a discount. The discount, as well as $1.5 million of transaction costs, will be amortized as interest expense based on the projected balance of the liability as of the beginning of each period. As of September 30, 2024, the Company estimated an effective annual interest rate of approximately 2.0%. Over the course of the Agreement, the actual interest rate will be affected by the amount and timing of royalty revenue recognized and changes in the timing of forecasted royalty revenue. On a quarterly basis, the Company will reassess the expected timing of the royalty revenue, recalculate the amortization and effective interest rate and adjust the accounting prospectively as needed.

The Company recognizes non-cash royalty revenue related to the sales of ONPATTRO during the term of the Agreement. As royalties are remitted to OMERS from Alnylam, the balance of the recognized liability is effectively repaid over the life of the Agreement. From the inception of the royalty sale through September 30, 2024, the Company has recorded an aggregate of $24.4 million of non-cash royalty revenue for royalties earned by OMERS. There are a number of factors that could materially affect the amount and timing of royalty payments from Alnylam, none of which are within the Company's control.

During the nine months ended September 30, 2024, the Company recognized non-cash royalty revenue of $1.7 million and related non-cash interest expense of less than $0.1 million. During the nine months ended September 30, 2023, the Company recognized non-cash royalty revenue of $2.7 million and related non-cash interest expense of $0.4 million.
The table below shows the activity related to the net liability for the nine months ended September 30, 2024 and 2023:

	Nine Months Ended September 30, 2024	2023
	(in thousands)	
Net liability related to sale of future royalties - beginning balance	$ 6,953	$ 10,365
Non-cash royalty revenue	(1,736)	(2,667)
Non-cash interest expense	98	412
Net liability related to sale of future royalties - ending balance	$ 5,315	$ 8,110

In addition to the royalty from the LNP License Agreement, the Company is also receiving a second royalty interest ranging from 0.75% to 1.125% on global net sales of ONPATTRO, with 0.75% applying to sales greater than $500 million, originating from a settlement agreement and subsequent license agreement with Acuitas Therapeutics, Inc. (Acuitas). The royalty from Acuitas has been retained by the Company and was not part of the royalty sale to OMERS.

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Contingencies and commitments | **9 Months Ended Sep. 30, 2024**

Commitments and Contingencies Disclosure [Abstract]

Contingencies and commitments — Contingencies and commitments

Stock Purchase Agreement with Enantigen

In October 2014, Arbutus Inc., the Company's wholly-owned subsidiary, acquired all of the outstanding shares of Enantigen Therapeutics, Inc. (Enantigen) pursuant to a stock purchase agreement. The amount paid to Enantigen's selling shareholders could be up to an additional $102.5 million in sales performance milestones in connection with the sale of the first commercialized product by the Company for the treatment of HBV, regardless of whether such product is based upon assets acquired under this agreement, and a low single-digit royalty on net sales of such first commercialized HBV product, up to a maximum royalty payment of $1.0 million that, if paid, would be offset against the Company's milestone payment obligations. Certain other development milestones related to the acquisition were tied to programs which are no longer under development by the Company, and therefore the contingency related to those development milestones is zero.

The contingent consideration is a financial liability and is measured at its fair value at each reporting period, with any changes in fair value from the previous reporting period recorded in the statements of

operations and comprehensive loss (see Note 3).

The fair value of the contingent consideration was $8.3 million as of September 30, 2024.

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Collaborations, contracts and licensing agreements	9 Months Ended Sep. 30, 2024
Revenue from Contract with Customer [Abstract]	
Collaborations, contracts and licensing agreements	Collaborations, contracts and licensing agreements

Collaborations

Qilu Pharmaceutical Co., Ltd.

In December 2021, the Company entered into a technology transfer and licensing agreement (the License Agreement) with Qilu Pharmaceutical Co., Ltd. (Qilu), pursuant to which the Company granted Qilu a sublicensable, royalty-bearing license, under certain intellectual property owned by the Company, which is non-exclusive as to development and manufacturing and exclusive with respect to commercialization of imdusiran, including pharmaceutical products that include imdusiran, for the treatment or prevention of hepatitis B in China, Hong Kong, Macau and Taiwan (the Territory).

In partial consideration for the rights granted by the Company, Qilu paid the Company a one-time upfront cash payment of $40.0 million, net of withholding taxes, on January 5, 2022, and agreed to pay the Company milestone payments totaling up to $245.0 million, net of withholding taxes, upon the achievement of certain technology transfer, development, regulatory and commercialization milestones. Qilu paid $4.4 million of withholding taxes to the Chinese taxing authority on the Company's behalf, related to the upfront cash payment. In addition, Qilu agreed to pay the Company double-digit royalties into the low twenties percent based upon annual net sales of imdusiran in the Territory. The royalties are payable on a product-by-product and region-by-region basis, subject to certain limitations.

Qilu is responsible for all costs related to developing, obtaining regulatory approval for, and commercializing imdusiran for the treatment or prevention of hepatitis B in the Territory. Qilu is required to use commercially reasonable efforts to develop, seek regulatory approval for, and commercialize at least one imdusiran product candidate in the Territory. A joint development committee has been established between the Company and Qilu to coordinate and review the development, manufacturing and commercialization plans. Both parties also have entered into a supply agreement and related quality agreement pursuant to which the Company will manufacture or have manufactured and supply Qilu with all quantities of imdusiran necessary for Qilu to develop and commercialize in the Territory until the Company has completed manufacturing technology transfer to Qilu and Qilu has received all approvals required for it or its designated contract manufacturing organization to manufacture imdusiran in the Territory.

Concurrent with the execution of the License Agreement, the Company entered into a Share Purchase Agreement (the Share Purchase Agreement) with Anchor Life Limited, a company established pursuant to the applicable laws and regulations of Hong Kong and an affiliate of Qilu (the Investor), pursuant to which the Investor purchased 3,579,952 of the Company's common shares at a purchase price of USD $4.19 per share, which was a 15% premium on the thirty-day average closing price of the common shares as of the close of trading on December 10, 2021 (the Share Transaction). The Company received $15.0 million of gross proceeds from the Share Transaction on January 6, 2022. The common shares sold to the Investor in the Share Transaction represented approximately 2.5% of the common shares outstanding immediately prior to the execution of the Share Purchase Agreement.

The License Agreement falls under the scope of ASC 808 as both parties are active participants in the arrangement and are exposed to significant risks and rewards. While this arrangement is in the scope of ASC 808, the Company analogizes to ASC 606 for some aspects of this arrangement, including for the delivery of a good or service (i.e., a unit of account). In accordance with the guidance, the Company identified the following commitments under the arrangement: (i) rights to develop, use, sell, have sold, offer for sale and import any product comprised of Licensed Product (as defined in the License Agreement) (the Qilu License) and (ii) drug supply obligations and manufacturing technology transfer (the Manufacturing Obligations). The Company determined that these two commitments are not distinct performance obligations for purposes of recognizing revenue as the manufacturing process is highly specialized and Qilu would not be able to benefit from the Qilu License without the Company's involvement in the manufacturing activities until the transfer of the manufacturing know-how is complete. As such, the Company will combine these commitments into one performance obligation to which the transaction price will be allocated to and will recognize this transaction price associated with the bundled performance obligation over time using an inputs method based on labor hours expended by the Company on its Manufacturing Obligations.

The Company determined the initial transaction price of the combined performance obligation to be $50.4 million, which includes the $40.0 million upfront fee, $4.4 million of withholding taxes paid by Qilu on behalf of the Company, the premium paid for the Share Transaction of $4.1 million. The Company determined the milestone payments to be variable consideration subject to constraint at inception. At the end of each subsequent reporting period, the Company will reevaluate the probability of achievement of the future development, regulatory, and sales milestones subject to constraint and, if necessary, will adjust its estimate of the overall transaction price. Any such adjustments will be recorded on a cumulative catch-up basis, which would affect revenues and earnings in the period of adjustment.

The following table outlines the transaction price and the changes to the related liability balance:

	Transaction Price	Cumulative Collaboration Revenue Recognized	Deferred License Revenue
		(in thousands)	
Combined performance obligation	$ 50,445	$ 37,561	$ 12,884
Less contract asset			(1,973)
Total deferred license revenue			10,911

The Company recognized $0.1 million and $0.9 million of revenue based on labor hours expended by the Company on its Manufacturing Obligations during the three and nine months ended September 30, 2024, respectively, and $3.2 million and $10.3 million during the three and nine months ended September 30, 2023, respectively.

As of September 30, 2024, the balance of the deferred license revenue was $12.9 million, which, in accordance with ASC 210-20, was partially offset by the contract asset associated with the manufacturing cost reimbursement of $2.0 million, resulting in a net deferred license revenue liability of $10.9 million.
The Company incurred $0.6 million of incremental costs in obtaining the Qilu License, which the Company capitalized in other current assets and other assets and amortizes as a component of general and administrative expense commensurate with the recognition of the combined performance obligation. The Company recognized amortization expense of less than $0.1 million for both the three and nine months ended September 30, 2024 and amortization expense of less than $0.1 million for the three months ended September 30, 2023 and $0.1 million for the nine months ended September 30, 2023.

The Company reevaluates the transaction price and the total estimated labor hours expected to be incurred to satisfy the performance obligations and adjusts the deferred revenue at the end of each reporting period. Such changes will result in a change to the amount of collaboration revenue recognized and deferred revenue.

Barinthus Biotherapeutics plc

In July 2021, the Company entered into a clinical collaboration agreement with Barinthus Biotherapeutics plc (Barinthus), formerly Vaccitech plc, to evaluate imdusiran followed by Barinthus' VTP-300, an HBV antigen specific immunotherapy, and ongoing nucleos(t)ide analogue therapy in patients with cHBV. This clinical trial was amended and is now dosing patients in an additional treatment arm that includes an approved PD-1 monoclonal antibody inhibitor, nivolumab (Opdivo®).

The Company is responsible for managing this Phase 2a proof-of-concept clinical trial, subject to oversight by a joint development committee comprised of representatives from the Company and Barinthus. The Company and Barinthus retain full rights to their respective product candidates and will split all costs associated with the clinical trial. The Company incurred $0.5 million and $1.7 million of expenses, net of Barinthus's 50% share, during the three and nine months ended September 30, 2024, respectively, and $0.7 million and $1.6 million during the three and nine months ended September 30, 2023 respectively, and reflected those costs in research and development in the statements of operations and comprehensive loss.

Royalty Entitlements

Alnylam Pharmaceuticals, Inc. and Acuitas Therapeutics, Inc.

The Company has two royalty entitlements to Alnylam's global net sales of ONPATTRO.

In 2012, the Company entered into the LNP License Agreement with Alnylam that entitles Alnylam to develop and commercialize products with the Company's LNP technology. Alnylam launched ONPATTRO, the first approved application of the Company's LNP technology, in 2018. Under the terms of this license agreement, the Company is entitled to tiered royalty payments on global net sales of ONPATTRO ranging from 1.00% - 2.33% after offsets, with the highest tier applicable to annual net sales above $500 million. This royalty interest was sold to OMERS, effective as of January 1, 2019, for $20 million in gross proceeds before advisory fees. OMERS will retain this entitlement until it has received $30 million in royalties, at which point 100% of this royalty entitlement on future global net sales of ONPATTRO will revert back to the Company. OMERS has assumed the risk of collecting up to $30 million of future royalty payments from Alnylam and the Company is not obligated to reimburse OMERS if they fail to collect any such future royalties. If this royalty entitlement reverts to the Company, it has the potential to provide an active royalty stream or to be otherwise monetized again in full or in part. From the inception of the royalty sale through September 30, 2024, an aggregate of $24.4 million of royalties have been earned by OMERS.

The Company also is receiving a second royalty interest of 0.75% to 1.125% on global net sales of ONPATTRO, with 0.75% applying to sales greater than $500 million, originating from a settlement agreement and subsequent license agreement with Acuitas. This royalty entitlement from Acuitas has been retained by the Company and was not part of the royalty entitlement sale to OMERS.
Revenues are summarized in the following table:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
	(in thousands)		(in thousands)	
Revenue from collaborations and licenses				
Acuitas Therapeutics, Inc.	$ 644	$ 714	$ 1,981	$ 2,980
Qilu Pharmaceutical Co., Ltd.	123	3,221	880	10,349
Non-cash royalty revenue				
Alnylam Pharmaceuticals, Inc.	572	723	1,736	2,667
Total revenue	$ 1,339	$ 4,658	$ 4,597	$ 15,996

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Shareholders' equity	9 Months Ended Sep. 30, 2024
Stockholders' Equity Note [Abstract]	
Shareholders' equity	Shareholders' equity

Authorized share capital

The Company's authorized share capital consists of an unlimited number of common shares and preferred shares, without par value, and 1,164,000 Series A participating convertible preferred shares, without par value.

Open Market Sale Agreement

The Company has an Open Market Sale Agreement℠ with Jefferies LLC (Jefferies) dated December 20, 2018, as amended by Amendment No. 1, dated December 20, 2019, Amendment No. 2, dated August 7, 2020 and Amendment No. 3, dated March 4, 2021 (as amended, the Sale Agreement), under which the Company may issue and sell common shares, from time to time.

On December 23, 2019, the Company filed a shelf registration statement on Form S-3 with the Securities and Exchange Commission (the SEC) (File No. 333-235674) and accompanying base prospectus, which was declared effective by the SEC on January 10, 2020 (the January 2020 Registration Statement), for the offer and sale of up to $150.0 million of the Company's securities. The January 2020 Registration Statement also contained a prospectus supplement for an offering of up to $50.0 million of the Company's common shares pursuant to the Sale Agreement. This prospectus supplement was fully utilized during 2020. On August 7, 2020, the Company filed a prospectus supplement with the SEC (the August 2020 Prospectus Supplement) for an offering of up to an additional $75.0 million of its common shares pursuant to the Sale Agreement under the January 2020 Registration Statement. The August 2020 Prospectus Supplement was fully utilized during 2020. The January 2020 Registration Statement expired in January 2023.

On August 28, 2020, the Company filed a shelf registration statement on Form S-3 with the SEC (File No. 333-248467) and accompanying base prospectus, which was declared effective by the SEC on October

22, 2020 (the October 2020 Registration Statement), for the offer and sale of up to $200.0 million of the Company's securities. On March 4, 2021, the Company filed a prospectus supplement with the SEC (the March 2021 Prospectus Supplement) for an offering of up to an additional $75.0 million of its common shares pursuant to the Sale Agreement under the October 2020 Registration Statement. The March 2021 Prospectus Supplement was fully utilized during 2021. On October 8, 2021, the Company filed a prospectus supplement with the SEC (the October 2021 Prospectus Supplement) for an offering of up to an additional $75.0 million of its common shares pursuant to the Sale Agreement under the October 2020 Registration Statement. The October 2020 Registration Statement expired in October 2023 with $29.3 million that was not utilized under the October 2021 Prospectus Supplement.

On November 4, 2021, the Company filed a shelf registration statement on Form S-3 with the SEC (File No. 333-260782) and accompanying base prospectus, which was declared effective by the SEC on November 18, 2021 (the November 2021 Registration Statement), for the offer and sale of up to $250.0 million of the Company's securities.

On March 3, 2022, the Company filed a prospectus supplement with the SEC (the March 2022 Prospectus Supplement) for an offering of up to an additional $100.0 million of its common shares pursuant to the Sale Agreement under: (i) the January 2020 Registration Statement; (ii) the October 2020 Registration Statement; and (iii) the November 2021 Registration Statement, of which only the November 2021 Registration Statement remains active.
During the three months ended September 30, 2024, the Company did not issue any common shares pursuant to the Sale Agreement. During the nine months ended September 30, 2024, the Company issued 16,499,999 common shares pursuant to the Sale Agreement, resulting in net proceeds of approximately $44.1 million. During the three and nine months ended September 30, 2023, the Company issued 633,922 and 9,848,090 common shares pursuant to the Sale Agreement, respectively, resulting in net proceeds of $1.4 million and $26.0 million, respectively.

As of September 30, 2024, there was approximately $25.4 million of common shares remaining available in aggregate under the March 2022 Prospectus Supplement, pursuant to the November 2021 Registration Statement.

Stock-based compensation

The table below summarizes information about the Company's stock-based compensation for the three and nine months ended September 30, 2024 and 2023 and the expense recognized in the condensed consolidated statements of operations:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
	(in thousands, except share and per share data)			
Stock options				
Options granted during period	—	784,240	4,163,000	5,082,640
Weighted average exercise price	$ —	$ 2.25	$ 2.49	$ 2.78
Restricted stock units (RSUs)				
Restricted stock units granted during period	—	—	1,316,200	1,344,550
Grant date fair value	$ —	$ —	$ 2.40	$ 2.90
Stock compensation expense				
Research and development	$ 847	$ 1,002	$ 3,007	$ 2,854
General and administrative	1,313	1,481	4,347	4,724
Total stock compensation expense	$ 2,160	$ 2,483	$ 7,354	$ 7,578

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Restructuring	9 Months Ended Sep. 30, 2024
Restructuring and Related Activities [Abstract]	
Restructuring, Impairment, and Other Activities Disclosure	Restructuring On July 29, 2024, the Company's Board of Directors approved a plan, effective August 1, 2024, to streamline the organization to focus its efforts on advancing the clinical development of imdusiran and AB-101, and therefore ceased all discovery efforts and discontinued its IM-PROVE III clinical trial. In taking these steps to streamline the organization, the Company implemented a 40% reduction in its workforce, primarily affecting the discovery and general and administrative functions. As a result, the Company incurred a one-time restructuring charge in the third quarter of 2024 of $3.6 million, which includes approximately $2.9 million of cash severance and continued benefits paid, a non-cash impairment charge for laboratory equipment of $0.2 million and $0.5 million of cash payments to vendors for close-out activities in connection with the cessation of discovery efforts and the discontinuation of the IM-PROVE III clinical trial. As of September 30, 2024, there were $0.6 million of accrued restructuring costs for contract close-out activities and severance payments included in accounts payable and accrued liabilities.

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Pay vs Performance Disclosure - USD ($) $ in Thousands	3 Months Ended						9 Months Ended	
	Sep. 30, 2024	Jun. 30, 2024	Mar. 31, 2024	Sep. 30, 2023	Jun. 30, 2023	Mar. 31, 2023	Sep. 30, 2024	Sep. 30, 2023
Pay vs Performance Disclosure								
Net loss	$ (19,717)	$ (19,796)	$ (17,875)	$ (20,104)	$ (17,094)	$ (16,339)	$ (57,388)	$ (53,537)

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Insider Trading Arrangements	3 Months Ended Sep. 30, 2024 shares
Trading Arrangements, by Individual	
Non-Rule 10b5-1 Arrangement Adopted	false
Rule 10b5-1 Arrangement Terminated	false
Non-Rule 10b5-1 Arrangement Terminated	false
Michael J. Sofia [Member]	
Trading Arrangements, by Individual	
Name	Michael J. Sofia
Irrevocable Deed of Trust of Michael J. Sofia [Member]	
Trading Arrangements, by Individual	
Material Terms of Trading Arrangement	On September 18, 2024, the Irrevocable Deed of Trust of Michael J. Sofia dated July 6, 2020 (the Trust), adopted a "Rule 10b5-1 trading arrangement," as defined in Item 408 of Regulation S-K, to satisfy the affirmative defense of Rule 10b5-1(c) of the Exchange Act. Michael J. Sofia is our Chief Scientific Officer. This plan provides for the sale of an aggregate of up to 96,456 shares of our common stock, held by the Trust. This plan will terminate on April 15, 2025, or earlier upon the completed sale of the maximum number of common shares subject to the plan, subject to early termination for certain specified events set forth in the plan.
Irrevocable Deed of Trust of Michael J. Sofia [Member] | Michael J. Sofia [Member]	
Trading Arrangements, by Individual	
Rule 10b5-1 Arrangement Adopted	true
Adoption Date	September 18, 2024
Expiration Date	April 15, 2025
Aggregate Available	96,456

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Significant accounting policies (Policies)	9 Months Ended Sep. 30, 2024
Accounting Policies [Abstract]	
Basis of presentation	***Basis of presentation and principles of consolidation*** These unaudited condensed consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles for interim financial statements and accordingly, do not include all disclosures required for annual financial statements. These statements should be read in conjunction with the Company's audited consolidated financial statements and notes thereto for the year ended December 31, 2023 included in the Company's Annual Report on Form 10-K for the year ended December 31, 2023. These unaudited condensed consolidated financial statements include the accounts of Arbutus Biopharma Corporation and its one wholly-owned subsidiary, Arbutus Biopharma, Inc., and reflect, in the opinion of management, all adjustments and reclassifications necessary to fairly present the Company's financial position as of September 30, 2024 and December 31, 2023, the Company's results of operations for the three and nine months ended September 30, 2024 and 2023, and the Company's cash flows for the nine months ended September 30, 2024 and 2023. Such adjustments are of a normal recurring nature. The results of operations for the three and nine months ended September 30, 2024 are not necessarily indicative of the results for the full year. These unaudited condensed consolidated financial statements follow the same significant accounting policies as those described in the notes to the audited consolidated financial statements of the Company for the year ended December 31, 2023, except as described below under the section entitled "Recent Accounting Pronouncements."
Principles of consolidation	All intercompany balances and transactions have been eliminated.
Net loss attributable to common shareholders per share	***Net loss per share*** Net loss per share is calculated based on the weighted average number of common shares outstanding. Diluted net loss per share does not differ from basic net loss per share for the three and nine months ended September 30, 2024 and 2023, since the effect of including potential common shares would be anti-dilutive. For the nine months ended September 30, 2024, potential common shares of 18.7 million pertaining to outstanding stock options and unvested restricted stock units were excluded from the calculation of net loss per share. A total of approximately 21.0 million outstanding stock options were excluded from the calculation for the nine months ended September 30, 2023.
Revenue from collaborations and	***Revenue from collaborations and licenses*** The Company generates revenue through certain collaboration agreements and license agreements. Such agreements may require the Company to deliver various rights and/or services, including intellectual

licenses and Deferred Revenue

property rights or licenses and research and development services. Under such agreements, the Company is generally eligible to receive non-refundable upfront payments, funding for research and development services, milestone payments and royalties.

The Company's collaboration agreements fall under the scope of Accounting Standards Codification (ASC) Topic 808, *Collaborative Arrangements* (ASC 808), when both parties are active participants in the arrangement and are exposed to significant risks and rewards. For certain arrangements under the scope of ASC 808, the Company analogizes to ASC Topic 606, *Revenue from Contracts with Customers* (ASC 606), for some aspects, including for the delivery of a good or service (i.e., a unit of account).

ASC 606 requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers under a five-step model: (i) identify contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when or as a performance obligation is satisfied.

In contracts where the Company has more than one performance obligation to provide its customer with goods or services, each performance obligation is evaluated to determine whether it is distinct based on whether (i) the customer can benefit from the good or service either on its own or together with other resources that are readily available and (ii) the good or service is separately identifiable from other promises in the contract. The consideration under the contract is then allocated between the distinct performance obligations based on their respective relative stand-alone selling prices. The estimated stand-alone selling price of each deliverable reflects the Company's best estimate of what the selling price would be if the deliverable was regularly sold on a stand-alone basis and is determined by reference to market rates for the good or service when sold to others or by using an adjusted market assessment approach if the selling price on a stand-alone basis is not available.
The consideration allocated to each distinct performance obligation is recognized as revenue when control is transferred to the customer for the related goods or services. Consideration associated with at-risk substantive performance milestones, including sales-based milestones, is recognized as revenue when it is probable that a significant reversal of the cumulative revenue recognized will not occur. Sales-based royalties received in connection with licenses of intellectual property are subject to a specific exception in the revenue standards, whereby the consideration is not included in the transaction price and recognized in revenue until the customer's subsequent sales or usages occur.

Deferred Revenue

When consideration is received or is unconditionally due from a customer, collaborator or licensee prior to the Company completing its performance obligation to the customer, collaborator or licensee under the terms of a contract, deferred revenue is recorded. Deferred revenue expected to be recognized as revenue within the 12 months following the balance sheet date is classified as a current liability. Deferred revenue not expected to be recognized as revenue within the 12 months following the balance sheet date is classified as a long-term liability. In accordance with ASC Topic 210-20, *Balance Sheet - Offsetting* (ASC 210-20) the Company's deferred revenue is offset by a contract asset as further discussed in Note 9.

Segment information

Segment information

The Company operates as a single segment.

Recent accounting pronouncements

Recent accounting pronouncements

In November 2023, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures (ASU 2023-07), which requires disclosure of significant segment expenses and other segment items on an annual and interim basis under ASC 280. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and for interim periods beginning after December 15, 2024. Early adoption is permitted and the amendments in this ASU should be applied on a retrospective basis to all periods presented. The Company has not yet determined the impact ASU 2023-07 may have on the Company's financial statement disclosures.

In December 2023, the FASB issued ASU No. 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures (ASU 2023-09), which improves income tax disclosures by requiring: (1) consistent categories and greater disaggregation of information in the rate reconciliation, and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for annual periods beginning after December 15, 2024. Early adoption is permitted. The ASU indicates that all entities will apply the guidance prospectively with an option for retroactive application to each period presented in the financial statements. The Company has not yet determined the impact ASU 2023-09 may have on the Company's financial statement disclosures.

The Company has reviewed all other recently issued standards and has determined that such standards will not have a material impact on the Company's financial statements or do not otherwise apply to the Company's operations.

Fair value measurements

Fair value measurements

The Company measures certain financial instruments and other items at fair value.

To determine the fair value, the Company uses the fair value hierarchy for inputs used in measuring fair value that maximize the use of observable inputs and minimize the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs market participants would use to value an asset or liability and are developed based on market data obtained from independent sources. Unobservable inputs are inputs based on assumptions about the factors market participants would use to value an asset or liability. The three levels of inputs that may be used to measure fair value are as follows:

- Level 1 inputs are quoted market prices for identical instruments available in active markets.
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly or indirectly. If the asset or liability has a contractual term, the input must be observable for substantially the full term. An example includes quoted market prices for similar assets or liabilities in active markets.
- Level 3 inputs are unobservable inputs for the asset or liability and will reflect management's assumptions about market assumptions that would be used to price the asset or liability.

Assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurements. Changes in the observability of valuation inputs may result in a reclassification of levels for certain securities within the fair value hierarchy.

The carrying values of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate their fair values due to the immediate or short-term maturity of these financial instruments.

To determine the fair value of the contingent consideration (Note 8), the Company uses a probability weighted assessment of the likelihood the milestones would be met and the estimated timing of such payments, and then the potential contingent payments are discounted to their present value using a probability adjusted discount rate that reflects the early stage nature of the development program, the time to complete the program development, and overall biotech indices.

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Fair Value Measures and Disclosures (Policies)	**9 Months Ended**
	Sep. 30, 2024
Fair Value Disclosures [Abstract]	

Fair value measurements

Fair value measurements

The Company measures certain financial instruments and other items at fair value.

To determine the fair value, the Company uses the fair value hierarchy for inputs used in measuring fair value that maximize the use of observable inputs and minimize the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs market participants would use to value an asset or liability and are developed based on market data obtained from independent sources. Unobservable inputs are inputs based on assumptions about the factors market participants would use to value an asset or liability. The three levels of inputs that may be used to measure fair value are as follows:

- Level 1 inputs are quoted market prices for identical instruments available in active markets.
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly or indirectly. If the asset or liability has a contractual term, the input must be observable for substantially the full term. An example includes quoted market prices for similar assets or liabilities in active markets.
- Level 3 inputs are unobservable inputs for the asset or liability and will reflect management's assumptions about market assumptions that would be used to price the asset or liability.

Assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurements. Changes in the observability of valuation inputs may result in a reclassification of levels for certain securities within the fair value hierarchy.

The carrying values of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate their fair values due to the immediate or short-term maturity of these financial instruments.

To determine the fair value of the contingent consideration (Note 8), the Company uses a probability weighted assessment of the likelihood the milestones would be met and the estimated timing of such payments, and then the potential contingent payments are discounted to their present value using a probability adjusted discount rate that reflects the early stage nature of the development program, the time to complete the program development, and overall biotech indices.

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Fair value measurements (Tables)	**9 Months Ended**
	Sep. 30, 2024
Fair Value Disclosures [Abstract]	

Assets and liabilities measured at fair value on a recurring basis

The following tables present information about the Company's assets and liabilities that are measured at fair value on a recurring basis, and indicates the fair value hierarchy of the valuation techniques used to determine such fair value:

As of September 30, 2024	Level 1	Level 2	Level 3	Total
	(in thousands)			
Assets				
Cash and cash equivalents	$ 31,846	$ —	$ —	$ 31,846
Investments in marketable securities, current	—	95,948	—	95,948
Investments in marketable securities, non-current	—	2,964	—	2,964
Total	$ 31,846	$ 98,912	$ —	$ 130,758
Liabilities				
Contingent consideration	—	—	8,335	8,335
Total	$ —	$ —	$ 8,335	$ 8,335

As of December 31, 2023	Level 1	Level 2	Level 3	Total
	(in thousands)			
Assets				
Cash and cash equivalents	$ 26,285	$ —	$ —	$ 26,285
Investments in marketable securities, current	—	99,718	—	99,718
Investments in marketable securities, non-current	—	6,284	—	6,284
Total	$ 26,285	$ 106,002	$ —	$ 132,287
Liabilities				
Contingent consideration	—	—	7,600	7,600
Total	$ —	$ —	$ 7,600	$ 7,600

Schedule of changes in fair value of contingent consideration

The following table presents the changes in fair value of the Company's contingent consideration:

	Liability at beginning of the period	Change in fair value of liability	Liability at end of the period
		(in thousands)	
Nine Months Ended September 30, 2024	$ 7,600	$ 735	$ 8,335
Nine Months Ended September 30, 2023	$ 7,531	$ (158)	$ 7,373

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Investments in marketable securities (Tables)

9 Months Ended

Sep. 30, 2024

Investments, Debt and Equity Securities [Abstract]

Marketable securities

Investments in marketable securities consisted of the following:

As of September 30, 2024	Amortized Cost	Gross Unrealized Gain[1]	Gross Unrealized Loss[1]	Fair Value
		(in thousands)		
Cash equivalents				
Money market	$ 25,948	$ —	$ —	$ 25,948
Total	$ 25,948	$ —	$ —	$ 25,948
Investments in marketable short-term securities				
US corporate bonds	43,477	23	(9)	43,491
US treasury bills	52,408	49	—	52,457
Total	$ 95,885	$ 72	$ (9)	$ 95,948
Investments in marketable long-term securities				
US corporate bonds	2,932	32	—	2,964
Total	$ 2,932	$ 32	$ —	$ 2,964

[1] Gross unrealized gain (loss) is pre-tax and is reported in accumulated other comprehensive loss.

As of December 31, 2023	Amortized Cost	Gross Unrealized Gain[1]	Gross Unrealized Loss[1]	Fair Value
		(in thousands)		
Cash equivalents				
Money market fund	$ 18,029	$ —	$ —	$ 18,029
Total	$ 18,029	$ —	$ —	$ 18,029
Investments in marketable short-term securities				
US government agency bonds	$ 17,918	$ —	$ (44)	$ 17,874
US corporate bonds	71,045	30	(189)	70,886
Yankee bonds	2,000	—	(17)	1,983
US government bonds	$ 9,001	$ —	$ (26)	$ 8,975
Total	$ 99,964	$ 30	$ (276)	$ 99,718
Investments in marketable long-term securities				
US corporate bonds	6,273	18	(7)	6,284
Total	$ 6,273	$ 18	$ (7)	$ 6,284

[1] Gross unrealized gain (loss) is pre-tax and is reported in accumulated other comprehensive loss.

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Accounts payable and accrued liabilities (Tables)

9 Months Ended

Sep. 30, 2024

Payables and Accruals [Abstract]

Schedule of accounts payable and accrued liabilities

Accounts payable and accrued liabilities are comprised of the following:

	September 30, 2024	December 31, 2023
	(in thousands)	
Trade accounts payable	$ 2,315	$ 3,223
Research and development accruals	1,367	2,884
Professional fee accruals	709	815
Payroll accruals	2,588	3,349
Restructuring liabilities	565	—
Total accounts payable and accrued liabilities	$ 7,544	$ 10,271

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Sale of future royalties (Tables)

9 Months Ended

Sep. 30, 2024

Other Liabilities Disclosure [Abstract]

Schedule of activity related to the net liability from inception of the Agreement

The table below shows the activity related to the net liability for the nine months ended September 30, 2024 and 2023:

	Nine Months Ended September 30,	
	2024	2023
	(in thousands)	
Net liability related to sale of future royalties - beginning balance	$ 6,953	$ 10,365
Non-cash royalty revenue	(1,736)	(2,667)
Non-cash interest expense	98	412
Net liability related to sale of future royalties - ending balance	$ 5,315	$ 8,110

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Collaborations, contracts and licensing agreements (Tables)

9 Months Ended

Sep. 30, 2024

Revenue from Contract with Customer [Abstract]

Schedule of deferred collaborations and contracts revenue

The following table outlines the transaction price and the changes to the related liability balance:

	Transaction Price	Cumulative Collaboration Revenue Recognized	Deferred License Revenue
		(in thousands)	
Combined performance obligation	$ 50,445	$ 37,561	$ 12,884
Less contract asset			(1,973)
Total deferred license revenue			10,911

Summary of collaborations

Revenues are summarized in the following table:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
	(in thousands)		(in thousands)	
Revenue from collaborations and licenses				
Acuitas Therapeutics, Inc.	$ 644	$ 714	$ 1,981	$ 2,980
Qilu Pharmaceutical Co., Ltd.	123	3,221	880	10,349
Non-cash royalty revenue				
Alnylam Pharmaceuticals, Inc.	572	723	1,736	2,667
Total revenue	$ 1,339	$ 4,658	$ 4,597	$ 15,996

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Shareholders' equity (Tables)

9 Months Ended

Sep. 30, 2024

Stockholders' Equity Note [Abstract]

Schedule of stock based compensation expense

The table below summarizes information about the Company's stock-based compensation for the three and nine months ended September 30, 2024 and 2023 and the expense recognized in the condensed consolidated statements of operations:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
	(in thousands, except share and per share data)			
Stock options				
Options granted during period	—	784,240	4,163,000	5,082,640
Weighted average exercise price	$ —	$ 2.25	$ 2.49	$ 2.78
Restricted stock units (RSUs)				
Restricted stock units granted during period	—	—	1,316,200	1,344,550
Grant date fair value	$ —	$ —	$ 2.40	$ 2.90
Stock compensation expense				
Research and development	$ 847	$ 1,002	$ 3,007	$ 2,854
General and administrative	1,313	1,481	4,347	4,724
Total stock compensation expense	$ 2,160	$ 2,483	$ 7,354	$ 7,578

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Nature of business and future operations (Details)

Sep. 30, 2024
USD ($)

Organization, Consolidation and Presentation of Financial Statements [Abstract]

Cash

$ 130,800,000

Long-term debt	$ 0

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Significant accounting policies (Details) shares in Millions	9 Months Ended	
	Sep. 30, 2024 subsidiary shares	Sep. 30, 2023 shares
Accounting Policies [Abstract]		
Number of wholly-owed subsidiaries | subsidiary	1	
Earnings Per Share, Basic, by Common Class, Including Two Class Method [Line Items]		
Anti-dilutive common shares excluded from calculation of loss per common share (in shares)		21.0
Employee Stock Option		
Earnings Per Share, Basic, by Common Class, Including Two Class Method [Line Items]		
Anti-dilutive common shares excluded from calculation of loss per common share (in shares)	18.7	

XML 42 R30.htm IDEA: XBRL DOCUMENT

Fair value measurements - Narrative (Details) - USD ($) $ in Thousands	9 Months Ended			
	Sep. 30, 2024	Sep. 30, 2023	Dec. 31, 2023	Dec. 31, 2022
Fair Value Disclosures [Abstract]				
Fair value of contingent consideration	$ 8,335	$ 7,373	$ 7,600	$ 7,531
Increase (decrease) in fair value of contingent consideration	$ 735	$ (158)		

XML 43 R31.htm IDEA: XBRL DOCUMENT

Fair value measurements - Assets and Liabilities Measured at Fair Value on Recurring Basis (Details) - USD ($) $ in Thousands	Sep. 30, 2024	Dec. 31, 2023	Sep. 30, 2023	Dec. 31, 2022
Assets				
Investments in marketable securities, non-current	$ 2,964	$ 6,284		
Liabilities				
Contingent consideration	8,335	7,600	$ 7,373	$ 7,531
Recurring				
Assets				
Cash and cash equivalents	31,846	26,285		
Investments in marketable securities, current	95,948	99,718		
Investments in marketable securities, non-current	2,964	6,284		
Total	130,758	132,287		
Liabilities				
Contingent consideration	8,335	7,600		
Total	8,335	7,600		
Recurring | Level 1				
Assets				
Cash and cash equivalents	31,846	26,285		
Investments in marketable securities, current	0	0		
Investments in marketable securities, non-current	0	0		
Total	31,846	26,285		
Liabilities				
Contingent consideration	0	0		
Total	0	0		
Recurring | Level 2				
Assets				
Cash and cash equivalents	0	0		
Investments in marketable securities, current	95,948	99,718		
Investments in marketable securities, non-current	2,964	6,284		
Total	98,912	106,002		
Liabilities				
Contingent consideration	0	0		
Total	0	0		
Recurring | Level 3				
Assets				
Cash and cash equivalents	0	0		
Investments in marketable securities, current	0	0		
Investments in marketable securities, non-current	0	0		
Total	0	0		
Liabilities				
Contingent consideration	8,335	7,600		
Total	$ 8,335	$ 7,600		

XML 44 R32.htm IDEA: XBRL DOCUMENT

Fair value measurements - Changes in Fair Value of Contingent Consideration (Details) - USD ($) $ in Thousands	9 Months Ended	
	Sep. 30, 2024	Sep. 30, 2023
Fair Value, Liabilities Measured on Recurring Basis [Roll Forward]		
Liability at beginning of the period	$ 7,600	$ 7,531
Change in fair value of liability	735	(158)
Liability at end of the period	$ 8,335	$ 7,373

XML 45 R33.htm IDEA: XBRL DOCUMENT

Investments in marketable securities - Marketable Securities (Details) - USD ($) $ in Thousands	3 Months Ended	9 Months Ended	
	Sep. 30, 2024	Sep. 30, 2024	Dec. 31, 2023
Debt Securities, Available-for-Sale [Abstract]			
Investments in marketable securities, non-current	$ 2,964	$ 2,964	$ 6,284
Accrued investment income receivable	300	300	300
Realized gains or losses	100	100	
Investments in marketable long-term securities, Amortized Cost	2,932	2,932	6,273
Cash and Cash Equivalents			
Cash and Cash Equivalents [Abstract]			
Cash Equivalents, at Carrying Value	25,948	25,948	18,029
Cash Equivalents, Fair Value Disclosure	25,948	25,948	18,029
Short Term Marketable Securities			
Debt Securities, Available-for-Sale [Abstract]			

Amortized Cost	95,885	95,885	99,964
Gross Unrealized Gain	72	72	30
Gross Unrealized Loss	(9)	(9)	(276)
Fair Value	95,948	95,948	99,718
Long Term Marketable Securities			
Debt Securities, Available-for-Sale [Abstract]			
Gross Unrealized Gain	32	32	18
Gross Unrealized Loss	0	0	(7)
Fair Value	3,000	3,000	6,300
Money market | Cash and Cash Equivalents			
Cash and Cash Equivalents [Abstract]			
Money Market Funds, at Carrying Value	25,948	25,948	18,029
US treasury bills | Short Term Marketable Securities			
Debt Securities, Available-for-Sale [Abstract]			
Amortized Cost	52,408	52,408	
Gross Unrealized Gain	49	49	
Gross Unrealized Loss	0	0	
Fair Value	52,457	52,457	
US government agency bonds | Short Term Marketable Securities			
Debt Securities, Available-for-Sale [Abstract]			
Amortized Cost			17,918
Gross Unrealized Gain			0
Gross Unrealized Loss			(44)
Fair Value			17,874
US corporate bonds			
Debt Securities, Available-for-Sale [Abstract]			
Investments in marketable long-term securities, Amortized Cost	2,932	2,932	6,273
US corporate bonds | Short Term Marketable Securities			
Debt Securities, Available-for-Sale [Abstract]			
Amortized Cost	43,477	43,477	71,045
Gross Unrealized Gain	23	23	30
Gross Unrealized Loss	(9)	(9)	(189)
Fair Value	43,491	43,491	70,886
US corporate bonds | Long Term Marketable Securities			
Debt Securities, Available-for-Sale [Abstract]			
Gross Unrealized Gain	32	32	18
Gross Unrealized Loss	0	0	(7)
Investments in marketable securities, non-current	$ 2,964	$ 2,964	6,284
Yankee bonds | Short Term Marketable Securities			
Debt Securities, Available-for-Sale [Abstract]			
Amortized Cost			2,000
Gross Unrealized Gain			0
Gross Unrealized Loss			(17)
Fair Value			1,983
US government bonds | Short Term Marketable Securities			
Debt Securities, Available-for-Sale [Abstract]			
Amortized Cost			9,001
Gross Unrealized Gain			0
Gross Unrealized Loss			(26)
Fair Value			$ 8,975

XML 46 R34.htm IDEA: XBRL DOCUMENT

Investments in marketable securities - Narrative (Details) $ in Thousands	**3 Months Ended Sep. 30, 2024 USD ($) numberOfSegments**	**9 Months Ended Sep. 30, 2024 USD ($) numberOfSegments**	**Dec. 31, 2023 USD ($) numberOfSegments**
Investments, Debt and Equity Securities [Abstract]			
Debt securities, available-for-sale, unrealized loss Position, number of positions | numberOfSegments	7	7	27
Accrued investment income receivable	$ 300	$ 300	$ 300
Realized gains or losses	$ 100	$ 100	

XML 47 R35.htm IDEA: XBRL DOCUMENT

Investment in Genevant (Details) $ in Millions	**9 Months Ended Sep. 30, 2024 USD ($)**
Schedule of Equity Method Investments [Line Items]	
Equity investment	$ 0.0
Genevant	
Schedule of Equity Method Investments [Line Items]	
Sub-licensing revenue percentage	20.00%
Bona fide collaboration Percentage	14.00%
Ownership interest in equity method investment (as a percentage)	16.00%

XML 48 R36.htm IDEA: XBRL DOCUMENT

Accounts payable and accrued liabilities (Details) - USD ($) $ in Thousands	**Sep. 30, 2024**	**Dec. 31, 2023**
Payables and Accruals [Abstract]		
Trade accounts payable	$ 2,315	$ 3,223
Research and development accruals	1,367	2,884
Professional fee accruals	709	815
Payroll accruals	2,588	3,349
Other Accrued Liabilities	565	0
Accounts payable and accrued liabilities	$ 7,544	$ 10,271

XML 49 R37.htm IDEA: XBRL DOCUMENT

Sale of future royalties - Narrative (Details) - USD ($) $ in Thousands	**Jul. 02, 2019**	**Jan. 01, 2019**	**9 Months Ended Sep. 30, 2024**	**12 Months Ended Sep. 30, 2023**	**63 Months Ended Dec. 31, 2015**	**Sep. 30, 2024**
Other Liabilities Disclosure [Line Items]						
Non-cash royalty revenue			$ 1,736	$ 2,667		
Non-cash interest expense			$ 98	412		
Minimum						
Other Liabilities Disclosure [Line Items]						
Royalty interest, % interest			0.75%			
Maximum						
Other Liabilities Disclosure [Line Items]						
Royalty interest, % interest			1.125%			
OMERS						
Other Liabilities Disclosure [Line Items]						
Gross proceeds from sale of royalty interest, before advisory fees		$ 20,000				

Entitlement of royalties to be received	$ 30,000	30,000					
Future royalty payments	30,000	$ 30,000					
Transaction costs on sale of royalties	$ 1,500						
Effective annual interest rate on royalty liability			2.00%				
Non-cash royalty revenue			$ 1,700	2,700			$ (24,400)
Non-cash interest expense			$ 100	$ 400			
OMERS | Minimum							
Other Liabilities Disclosure [Line Items]							
Royalty interest, % interest	1.00%				1.00%		
OMERS | Maximum							
Other Liabilities Disclosure [Line Items]							
Royalty interest, % interest	2.33%				2.33%		

XML 50 R38.htm IDEA: XBRL DOCUMENT

Sale of future royalties - Liability Activity (Details) - USD ($) $ in Thousands			**9 Months Ended**		**12 Months Ended**
	Jul. 02, 2019	**Sep. 30, 2024**	**Sep. 30, 2023**		**Dec. 31, 2015**
Liability Related To Sale Of Future Royalties [Roll Forward]					
Net liability related to sale of future royalties - beginning balance		$ 6,953	$ 10,365		
Non-cash royalty revenue		(1,736)	(2,667)		
Non-cash interest expense		98	412		
Net liability related to sale of future royalties - ending balance		5,315	8,110		
Research and Development Arrangement, Contract to Perform for Others [Line Items]					
Non-cash interest expense		98	412		
ONPATTRO					
Research and Development Arrangement, Contract to Perform for Others [Line Items]					
Royalty interest sold, annual revenue threshold of highest tier	$ 500,000	500,000			$ 500,000
OMERS					
Liability Related To Sale Of Future Royalties [Roll Forward]					
Non-cash interest expense		100	400		
Research and Development Arrangement, Contract to Perform for Others [Line Items]					
Non-cash interest expense		$ 100	$ 400		

XML 51 R39.htm IDEA: XBRL DOCUMENT

Contingencies and commitments (Details) - USD ($) $ in Thousands	**Sep. 30, 2024**	**Dec. 31, 2023**	**Sep. 30, 2023**	**Dec. 31, 2022**	**Oct. 31, 2014**
Contingencies and Commitments [Line Items]					
Fair value of contingent consideration	$ 8,335	$ 7,600	$ 7,373	$ 7,531	
Recurring					
Contingencies and Commitments [Line Items]					
Fair value of contingent consideration	8,335	$ 7,600			
Enantigen's Selling Shareholders | Recurring					
Contingencies and Commitments [Line Items]					
Fair value of contingent consideration	$ 8,300				$ 0
Enantigen's Selling Shareholders | Arbutus Inc.					
Contingencies and Commitments [Line Items]					
Development and regulatory milestones payment per licensed compound series, maximum					102,500
Development and regulatory milestones payment per royalty, maximum					$ 1,000

XML 52 R40.htm IDEA: XBRL DOCUMENT

Collaborations, contracts and licensing agreements (Details) $ / shares in Units, $ in Thousands	**Jan. 06, 2022 USD ($)**	**Jan. 05, 2022 USD ($)**	**Jul. 02, 2019 USD ($)**	**Jan. 01, 2019 USD ($)**	**3 Months Ended**				**9 Months Ended**		**12 Months Ended**	**28 Months Ended**	**63 Months Ended**		
					Sep. 30, 2024 USD ($) product shares	**Mar. 31, 2024 USD ($)**	**Sep. 30, 2023 USD ($)**	**Mar. 31, 2022 USD ($)**	**Sep. 30, 2024 USD ($) product shares**	**Sep. 30, 2023 USD ($)**	**Dec. 31, 2015 USD ($)**	**Mar. 31, 2024 USD ($)**	**Sep. 30, 2024 USD ($) product shares**	**Dec. 31, 2023 USD ($) shares**	**Dec. 13, 2021 USD ($) / shares shares**
Research and Development Arrangement, Contract to Perform for Others [Line Items]															
Common shares, shares issued (in shares) | shares					189,438,135				189,438,135				189,438,135	169,867,414	
Deferred license revenue, current					$ 10,911				$ 10,911				$ 10,911	$ 11,791	
Revenues					1,339		$ 4,658		4,597	$ 15,996					
Total deferred license revenue					$ 10,911				$ 10,911				$ 10,911		
Number of royalty entitlements | product					2				2				2		
Non Cash Royalty Revenue Related To Sale Of Future Royalties									$ 1,736	2,667					
Qilu Pharmaceutical Co, LTD.															
Research and Development Arrangement, Contract to Perform for Others [Line Items]															
Income taxes paid						$ 4,400		$ 4,400							
Common Shares | Qilu Pharmaceutical Co, LTD.															
Research and Development Arrangement, Contract to Perform for Others [Line Items]															
Noncontrolling interest, ownership percentage by noncontrolling owners															2.50%
Non-cash royalty revenue															
Research and Development Arrangement, Contract to Perform for Others [Line Items]															
Revenues					$ 572		723		$ 1,736	2,667					
Minimum															
Research and Development Arrangement, Contract to Perform for Others [Line Items]															
Royalty interest, % interest									0.75%						
Maximum															
Research and Development Arrangement, Contract to Perform for Others [Line Items]															
Royalty interest, % interest									1.125%						
Vaccitech															
Research and Development Arrangement, Contract to Perform for															

Others [Line Items]												
Costs related to collaboration					500	700	$ 1,700	1,600				
OMERS												
Research and Development Arrangement, Contract to Perform for Others [Line Items]												
Gross proceeds from sale of royalty interest. before advisory fees				$ 20,000								
Entitlement of royalties to be received			$ 30,000	30,000								
Future royalty payments			$ 30,000	$ 30,000								
Non Cash Royalty Revenue Related To Sale Of Future Royalties							1,700	2,700			$ (24,400)	
OMERS	Minimum												
Research and Development Arrangement, Contract to Perform for Others [Line Items]												
Royalty interest, % interest			1.00%						1.00%			
OMERS	Maximum												
Research and Development Arrangement, Contract to Perform for Others [Line Items]												
Royalty interest, % interest			2.33%						2.33%			
Arbutus Biopharma Corp												
Research and Development Arrangement, Contract to Perform for Others [Line Items]												
Royalty guarantees commitments percentage			100.00%	100.00%								
Acuitas Therapeutics, Inc.	Revenue from collaborations and licenses												
Research and Development Arrangement, Contract to Perform for Others [Line Items]												
Revenues					644	714	1,981	2,980				
Alnylam Pharmaceuticals, Inc.	Non-cash royalty revenue												
Research and Development Arrangement, Contract to Perform for Others [Line Items]												
Revenues					572	723	1,736	2,667				
Qilu Pharmaceutical Co, LTD.												
Research and Development Arrangement, Contract to Perform for Others [Line Items]												
Potential milestone payments												$ 245,000
Premium on closing stock price ($ paid)		$ 4,100										
Revenue, remaining performance obligation, amount					12,884		12,884				12,884	50,445
Recovery of direct costs							2,000			$ 1,973		
Cumulative Collaboration Revenue Recognized										37,561		
Total deferred license revenue					10,900		10,900				$ 10,900	
Other deferred costs, gross												$ 600
Amortization of other deferred charges					100	100	100	100				
Deferred Revenue Arrangement [Line Items]												
Recovery of direct costs							2,000			$ 1,973		
Qilu Pharmaceutical Co, LTD.	Common Shares												
Research and Development Arrangement, Contract to Perform for Others [Line Items]												
Common shares, shares issued (in shares)	shares												3,579,952
Share price (in USD per share)	$ / shares												$ 4.19
Premium on closing stock price (as a percent)												15.00%
Issuance of common shares pursuant to the Open Market Sale Agreement	$ 15,000											
Qilu Pharmaceutical Co, LTD.	One-Time Upfront Cash Payment												
Research and Development Arrangement, Contract to Perform for Others [Line Items]												
Proceeds from collaborators		$ 40,000										
Qilu Pharmaceutical Co, LTD.	Revenue from collaborations and licenses												
Research and Development Arrangement, Contract to Perform for Others [Line Items]												
Revenues					$ 123	$ 3,221	880	$ 10,349				
ONPATTRO												
Research and Development Arrangement, Contract to Perform for Others [Line Items]												
Royalty interest sold, annual revenue threshold of highest tier			$ 500,000				$ 500,000		$ 500,000			

XML 53 R41.htm IDEA: XBRL DOCUMENT

Shareholders' equity - Narrative (Details) - USD ($) $ in Millions	**3 Months Ended**	**9 Months Ended**									
	Sep. 30, 2023	**Sep. 30, 2024**	**Sep. 30, 2023**	**Oct. 22, 2023**	**Mar. 03, 2022**	**Nov. 04, 2021**	**Oct. 08, 2021**	**Mar. 04, 2021**	**Oct. 22, 2020**	**Aug. 07, 2020**	**Jan. 10, 2020**
Class of Stock [Line Items]											
Preferred stock, shares authorized (in shares)		1,164,000									
Common Shares	Jan 2020 Registration Stmt											
Class of Stock [Line Items]											
Aggregate sale price of common shares under agreement											$ 150.0
Common Shares	Oct 2020 Registration Stmt											
Class of Stock [Line Items]											
Aggregate sale price of common shares under agreement									$ 200.0		
Common Shares	Nov 2021 Registration Stmt											

Class of Stock [Line Items]										
Aggregate sale price of common shares under agreement							$ 250.0			
Jefferies LLC | Common Shares | Sale Agreement										
Class of Stock [Line Items]										
Number of shares issued under agreement (in sales)	633,922	16,499,999	9,848,090							
Proceeds from issuance of shares under the agreement	$ 1.4	$ 44.1	$ 26.0							
Jefferies LLC | Common Shares | Mar 2021 Prospectus Supplement Agreement | Oct 2020 Registration Stmt										
Class of Stock [Line Items]										
Aggregate sale price of common shares under agreement								$ 75.0		
Jefferies LLC | Common Shares | October 2021 Prospectus Supplement | Oct 2020 Registration Stmt										
Class of Stock [Line Items]										
Aggregate sale price of common shares under agreement							$ 75.0			
Common Stock, Value, Subscriptions Expired				$ 29.3						
Jefferies LLC | Common Shares | March 2022 Prospectus Supplement										
Class of Stock [Line Items]										
Aggregate sale price of common shares under agreement		$ 25.4								
Jefferies LLC | Common Shares | March 2022 Prospectus Supplement | Jan 2020 Oct 2020 and Nov 2021 Registration Stmts										
Class of Stock [Line Items]										
Aggregate sale price of common shares under agreement					$ 100.0					
Jefferies LLC | Common Shares | Jan 2020 Prospectus Supplement | Jan 2020 Registration Stmt										
Class of Stock [Line Items]										
Aggregate sale price of common shares under agreement										$ 50.0
Jefferies LLC | Common Shares | Aug 2020 Prospectus Supplement | Jan 2020 Registration Stmt										
Class of Stock [Line Items]										
Aggregate sale price of common shares under agreement									$ 75.0	

XML 54 R42.htm IDEA: XBRL DOCUMENT

Shareholders' equity - Stock-based Compensation (Details) - USD ($) $ / shares in Units, $ in Thousands	**3 Months Ended**		**9 Months Ended**	
	Sep. 30, 2024	**Sep. 30, 2023**	**Sep. 30, 2024**	**Sep. 30, 2023**
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]				
Weighted average exercise price (in USD per share)	$ 0	$ 2.25	$ 2.49	$ 2.78
Restricted stock units granted during period (in shares)	0	0	1,316,200	1,344,550
Grant date fair value (in USD per share)	$ 2.40	$ 2.90	$ 2.40	$ 2.90
Allocated share-based compensation expense	$ 2,160	$ 2,483	$ 7,354	$ 7,578
Research and development				
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]				
Allocated share-based compensation expense	847	1,002	3,007	2,854
General and administrative				
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]				
Allocated share-based compensation expense	$ 1,313	$ 1,481	$ 4,347	$ 4,724
Arbutus Plans				
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]				
Options granted during period (in shares)	0	784,240	4,163,000	5,082,640

XML 55 R43.htm IDEA: XBRL DOCUMENT

Restructuring and Related Activities (Details) - USD ($) $ in Thousands	**3 Months Ended**	
	Aug. 01, 2024	**Sep. 30, 2024**
Restructuring Cost and Reserve [Line Items]		
Restructuring Reserve		$ 600
Employee Severance		
Restructuring Cost and Reserve [Line Items]		
Cash severance		2,900
Other Restructuring		
Restructuring Cost and Reserve [Line Items]		
Restructuring and related cost, number of positions eliminated, percent	40.00%	
Laboratory equipment impairment	$ 200	
Restructuring Costs		3,600
Contract Termination		
Restructuring Cost and Reserve [Line Items]		
Close-out activities with vendors		$ 500

EXCEL 56 Financial_Report.xlsx IDEA: XBRL DOCUMENT begin 644 Financial_Report.xlsx M4$L#!!0 (%" 9ED'04UB@0 +$ 0 9&]C4')O<',O87!P+GAM M;$V./0L",1!$_\IQO;=!P4)B0-!2L+ (/>QLOD&1#LD)^OCG!CVX>;QA&WPIG M*N*I#BV&5(_C(I(/ !47BK9.7:=N')=HI6-Y #OGDK7A.YNJQ<&4GPZ4A!0W_J=0U[R;UEA_6\#MI7E!+ P04 M " !0@&99)H?PZNX K @ $0 &1O8U!R;W!S+V-O&ULS9+! M2L0P$(9?17)O)TEE#Z';B^))07!!\1:2V=U@TX9DI-VW-XV[740?P&-F_GSS M#4QK@C)CQ.$S]@5F#6"/'@=*(&H!K%LF MAM/U*+-4_L:4#[)R0621A'^_1S80RY8- [9)-NIL\!"SI^\Y%1^?H.'GS[BYBZ(:(E/)X M8-DOV]:[MR_>X%#BVR]*+ M41B1%G\@M MNN01.+5)#3(3/PB=AIAJ4!P"I DQEJ&&^+3&K!'@$WVWO@C(WXV(]ZMOFCU7 MH5A)VH3X$$8:XIQSYG/1;/L'I4;1]E6\W*.76!4!EQC?-*HU+,76>)7 \:V< M/!T3$LV4"P9!AI@S M&L%&KQMUAVC2/'K^!?F<-0HACA*FNVB<5@$_9Y>PTG!Z(++9OVX?H;5,VPLCO='U!=*Y \FIS_I,C0' MHYI9";V$5FJ?JH,@H%\;D>/N5Z> HWEL:\4*Z"\>P' T=HWPJOX@L Y M?RY]SZ7ON?0]H=*W-R-]9\'3BUO>1FY;Q/NN,=K7-"XH8U=RSTS0LS0[=R2^JVE+ZU)CA* M]+', <$X>RPP[9SR2';9WH!TU^_9==N0CI3!3ET.X&D*^ VVZG=PZ.)Z8D;D* MTU*0;\/YZ<5X&N(YV02Y?9A7;>?8T='[Y\%1L*/O/)8=QXCRHB'NH8:8S\-# MAWE[7YAGE<90- !1M;*PD+$:W8+C7\2P4X&1@+: '@Z]1 O)256 Q6\8#*Y"B M?$R,1>APYY=<7^/1DN/;IF6U;J\I=QEM(E(YPFF8$V>KRMYEL<%5'<]56_*P MOFH]M!5.S_Y9KF4Q9Z;RWRT,"2Q;B%D2XDU= [=7GFYRN>B)V^I=W MP6#R_7#)1P_E.^=?]%U#KG[VW>/Z;I,[2$R<><41 71% B.5' 86%S+D4.Z2 MD 83 >LX=SFWJXPD6L_UC6'ODRWSEPVSK> U[F M$RQ#I'[!? 8J*@!&K8KZZKT_Y)9P[M'OQ@2";_-;;I/;=X Q\U*M:I60K$3]+ M!WP?D@9CC%OT-%^/%&*MIK&MQMHQ#'F 6/,,H68XWX=%FAHSU8NL.8T*;T'5 M0.4_V]0-:/8--!R1!5XQF;8VH^1."CS<_N\- L,+$CN'MB[\!4$L#!!0 (M %" 9EF]W*,ASP4 ,(> 8 >&PO=V]R:W-H965T&UL MM9EK;]LV&(7_"N$!PP;$L43YVCD&;#5I@S6):R&T+])='M'/,1;T?D<"OD]W3-N2+/41BG5XVU4LF[5BOUUCQBZ:5(M> QWED)&3,&I7+721'+FYZ(H;%'+ZK8B%L2-T3"_-I6CHBNU5PVX<+LR"U5KI"ZW1,&$K/N?J*9E*.&L5+GX0\3@-1$PD7UXUQO8[MUZ%:D#_Q)>#;]-4QT2@+(; [KDUO_JF'I$O&0>TI;,/BWX2X/0^T$Y?AW;]HH M?E,+7Q\?W&]R>(!9L)2[(OP:^&I]U>@WB,^7+ O53&P_\CU01_MY(DSSOV2[M>[;=;A O2Y6()F(H013$N__L>?\B7@D<\N22.=4&H1=N&\KBX M_%YL+HG5,)$J"4WN'],;VCFTS0ZZ'[Y+$^;QJP9T MM)3+#6^,?OW%[EI_F/!^DMD/L.T"MHVYC]X++X,NJLCC2\)-I+CD'F"CHF$9*X(HN5?('_OO$E''$?VR9B7%07^56,L$]!?F3/Y-:'CAHL M R_G1EKS$KVOD1<5U>6G)2T_A'?L^N*<7AP/R"9XC#[&Y7G'+ MGF63+QSF*!CAB!M(+S2.4KA+7? R#]EH OD?N*O/H%$_BFULA,;MOC()J395 MQA;BXN*ZK&4&3C MF>:3*"^IFL18_'AB$F[.VA:]M<;><(1W:9CFP\VCP&"H*16!*;_K;XG.6=>'+]&3CL0)!YE"+Y/K96[-XQ2MCX1&C^_'_=CX MZ8D+ZQ*6J8B>E(K<3$K]\;+[8LFK$F:2S+C<B(S[V(F\SS M.-B B;\S-/*>(P#1,@#1DP+0/&)A2"99"K=3L4-*Y<6<%U=T#+U4#RT'.IQS:$>,3S/&0*LFRL)U C\4_*-?OWL'/KY&YZ!V6C@W![M8'?[G6%K8X(L(Q#%@\LXXK&?KX'=A,S,@AM4U]XYX@TMXPT]:77(!30)(? 8V M]ODS^9.;&RAN95F6W6[W+-HW9I2CR]&KG;,"RN%ANTXWQ;LE4^OMO=O6-Z MPDQ)R)<@M2Y[,.+)W8;I[D2))-]S7 BE1)0?KCGSN=0/P/VE$.IPHG^@V+8> M_0=02P,$% @ 4(!F6=P"^@*M!0 =A8 !@ !X;"]W;W)KY2!JL=GW/TG-='TO)!R'NU84RCQ[*HU,5LH_7V?+%0 MV8:55'T46U;!E[60)=7P*N\6:BL9S1NELE@0SXL6)>75;+5L?KN6JZ6H=<$K M=BV1JLN2RJ_[A! [_;://#8K77#FEBIV*8I_>:XW%[-DAG*VIG6A?XB'KZQU M*#3V,E&HYG_TT,IZ,Y352HNR508$):_V?^EC&X@#!1R,*)!6@;Q4P6\5_,;1 M/;+&K2NJZ6HIQ0.21AJLF8,,KD\8;+>$K!SV]NA15#DEA.8(G)0J> M4PTO7VA!JXRA&V-8H?>_*EKG'+Y\0&?HU\T5>O_V WJ+>(5^;D2M:)6KY4(# M'F-UD;5K?]FO34;6OF';C\CWYHAX)'"H7TZK7[$,U'&C[A^K+R *72A(%PK2 MV//'0E%+R2J-J%+@\[G+G[V!P&W =-RYVM*,7%@RIC9#Z3#-9(L6R6G+- MF1/]?H'P % <:ID$R0.^02F.0'2*>21V@TPZD,F)T +32OW4A-3T MU]84\1Q5P,QB#>R5U65=-+,V9]#@&:<-K<&WMYC,H\A'[V' L?(6DO$\Y,[A M&YZGGO?!Y6]B)R0,AUUJ"P51'+A]33M? T__;I%UG@N>B.FN3YD*?6L!(&@4# M]+80C)@1]-CK*=";Q-_L74SD:\7V]>3D,L\N%!P,$;JD CS2I_B I?$+:GZ\ MUEOUXV6](,!#>"ZY((#P","">._'+R+/@])873; [ECXU]6Z:'5I;UM#6!Y%P!L*W,A&'=CG94AAFTUBZ>EK%T[QZQ=8,$F90 M9F;T T/M6%6S.9IH46R3)/92;-680PS'Z1CFGDSQ-)M^9[!=[\+Z- W5ILL@ M&E*J2XB,;%APSZEXFE2/Z>E4%=@$B9/4;&>/D=IB!'ATA*-PSZ1XFDJ_/P<3 M\K\G(RV0@IV@F8;K6M<2*D,\T6(4O\V>H8^'NP"'5)2&_@CZGF+Q-,?"B47S MZLZ$.8/#"\^9;$C4"=0FOL3W+:"V5!QYW@C0GA_Q-$%:E7N""['-0$.TFM?WQJ>R5KQZX?G%$G*6WU32E#+LU&O=9*PP.TP#F" MJ3$/_&2._="Y<<11.D^B>![@P+EY;)<=;"#B,!VVB$O0#U) (PDA6>S8E)]@T MS[EI7R@_@(E)PF49]S9O<3F MOS/L^[=\X;@7)(DCJ*0C.#KR9*> M!8F76M"=+&PO=V]R:W-H965T&ULK55=3]LP%/TK5H:F M5F+DLZ6P-A(4(? 8PJ:)C>YCVX":WC85C!]MIX=_OVDFC,J4,37MI[/B>XW.. MG=OI3JI'70 8\EQRH6=>84QUZ?LZ*Z"D^DQ6('!E+55)#4[5QM>5 IH[4,G] M* C&?DF9\-*I> [=0Z536AC,!"T5T7994O5P#E[N9%WK[%_=L4QC[PD^G%=W M$LQ#M5 X\SN6G)4@-)."*%C/O*OP6DZOV]("#\=[]EOG';VLJ(:YY#]8;HJ9-_%(#FM: MT+*$Z(W%P2J(@2GK@\[?A-Y A/'3P^#7< MQU2Z:*(NFLCQQ]C.LDW#:#S&8]H>^NRI"B^" MH*MZ92#I#"1O&IC+LD2YNL![JT_;)V%:U^AHP/8KPS[9#?/H4-#D(HDG83SZ M0WI/Y?AB,CY/PJ1? _JB3/_H'^=B0M<'4F=C\S6!&@L;2NP=D73K)\9F[:%2:(G MT4Z[7S_J$K)BC/YL1Q_'G.TF)V>]W<^UC>7HN] MS-*"?RQ1M<]S5GZ[XYEXNIGAV?.-3^EF*^L;\]OK'=OP>RX?=A]+]6U^9%FE M.2^J5!2HY.N;V5M\E= FH$"\F?*GZN0:U5(>A?BK_O)N=3-SZA;QC"]E3<'4 MQX$O>);53*H=?W>DL^,SZ\#3ZV?V7QKQ2LPCJ_A"9%_2E=S>S,(96O$UVV?R MDWCZC7>"O)IO*;*J^8N>.JPS0\M)47>!:L6Y&G1?K*O74>.(!T 40/ M<$<":!= SWV"VP6XYS[!ZP(:Z?-6>]-Q,9/L]KH43ZBLT8JMOFAZOXE6_946 M=:+^BJM#KAX+M5ZD*?8,NT,-]C%Z_>H- >H;1 G[=B7ZFPZGHN M58/KQ\Z77>/NVL:1D<91]%X4(.C\AXA 7:,_B_' *R?E_3T_^\],'G4&/J4,;/CK"]XD?>+'GT+"V@2X< M6->^JVK'EOQFIO*HXN6!SVY_ '[SL]0GTY)%D])EDQ$- NA]]]C[KHW]N??! M6=5&^DUDO5(<;C&ET?7\<-JM)LCUO7 (B@&0%P5#4 (\SHLB_X@:Z/..^CQK M=G4UI]@@_G575RA0J3=EHDU)%D])EDQ$-A@(_S@0_G<2K>*L7&Z;TK]269>) M7;TR0,/1,GFGF>"2@&J99Z*(@WTM/V,3Y7J$Z+EGHCP?TY'<"XZ2 ZOD7WFA MDB]K%+.56G732M;)> "+70 TE&KM7)@@+W2))MD$X8">3*16,H@*7%AR>)0< M6B4OMJS8\'J]7K.T1 >6[7F]]"_5 JHFH1KO^K)*5YT3@#HB-!I&75?K!Q-# M'$_K!A,34 V3F)@+?%*]!GT0'?L@^EZFRW*_E/NR+CO++2LW<-6)3*$^T5JX M,$&.IO,%UL%=Y8U74I\F?Q*J-

!T=C,+H)=U]%5@SC/6$4AG$]H MJ,]L".>IW!\I9YCTPHE5^+M"$^5A M@G6U)LHEA(YH[5TIMMJN7FN7UJ!8"@RT"U558;X4(I7;;E>\/28OXZ4VG^!I3MFN.BBS8AAF03$
MV&ITG@N7W/+2ELD>D,E$-R$0RO6,3#91;A2%NE@314,V.Z\/7*)Z M+$&1OF&Z+W 48&/" CCEMAQ#*(!3I2NIWAF)[RX4#J]]O:K.JRJA2 MZRX\KE;3]E*S/RE;/"E;,A7;
<"AZ*XCM7O".5>D2O59>L#[(.8X)7%):JN T M'YQ+K&G:4<1AG*09BI'(:- M*">](R2.=?)]: ME"V9BFTX2+U[)7;WVD_+=C# K"2FA<1A&*F507=I"PCJ!\JH!8YN8$%6E[CN
MZ2K7=1+$ZCFA1]P1:T=Z&TOL-O9T@MKZ #"I8WT 0,?ZP-JV%^?21&S#GNQ- M,K&?W0Z/\,=,!IGT''=2MGA2MF0JMN%P]$:>V(W\0U%REJ7_J-RN+3RJ?T$[ML#1CCQF_6(ORHF(91Q5?
[LM4IB-UV#R&)3C4\]T$>:'N!0$0-98B *2Z8^04 MBO06G]@M_IF):1INY7Z5,]?E@CB/Z"ER]%3&SO;BB3DE6SPI6S(5VW!<^ET)L>]*++]QD4FW(Y.RQ9.R M)5.Q#<>@WXX0^W;$]DL7
AW/=2^Z['-_BYTX&8";6N] $#&:6 ,@'!]4-- $5\ M7S_ZFI^\C9/S[QU>MWC8O&&GW[_#5 @/W8WR5M"]2 M]?
3M>UWO6;E)E7_(^%H]RKD,5)TJVU>EVB]2[)IW@1Z%E")O+K>/;0M)\7MU7515]FT_GBSMY]5E&RV6LUG9_O6NFC8/ M;TZ2DZ]_^%#?W';]'T[/S^[*F^JJZC[>7;;ZV^D&95+/JOFB;N916UV_.7F;
M_*Q2WA=86?Q15P^+K<]1WY1/3?.Y__)^\N8D[FM43:MQUT.4^K_[ZJ*:3GLD M78_UZ G&Y]]P>W/7]'5JO&Z,9_*17713/]=3[K;-R?I232IKLOEM/O0//R]
M6C=H5<%Q,UVL_HT>UK;Q231>+KIFMBZL:S"KYX__EU_6';%5(*$["I!U >(6 M8#L*T'4!ZA0@^OK*NNU;_6NEQW?M',)_HZJ2:1_K1HIO6D[/27JT[_
MIR^@+FJN]9=F_/FVF4ZJ=O'#=RE)Y"]1\>>R[OZ*?OPX+Y>36A=Y%8VBCU=Y M]./WKZ+OHWH>_7[;+!?E?+(X.^UT17MWI^-UI=X]5HKLJ-3O35=.@6(7X6(7
MS6RF+]:KV[*M(*]YN/C;B6Z(OMK+:719UI/1^WET4=[5<%6*,%9>7=?CN@,* MJCV5&(^7L^5T1<)OW6W5:EYF>LZX[0?S?17]LUDX33O5C&]H)QO:R()J\C$A,",1C$[^?#GQ=W MY;AZ'^>
<,DXIX*>G=YO4XCIML $ M4TA@%IUT0R<=2.IR+EQ.[R"\@L2265#C6^G20L%K95X5N-$A+3 M-':85H ACUF:;LRLGF*;GF*KU:=7_62U/<7][>OD M]I\/S70:Z07LH6PG_X5ZD&$. DRP'!.LP 132&
6^WS#/@^.DQ7-HWXG,HG& M>E[5DVJYVN!47_K/%<0Q]^8FHJ]_9XP$W0[E[A"/!:9'A01F<2(VG(@@)^\7 MB^5JRM([C?'C"OZX#D5WR[;_J8NZ)M)+8?2;YBCZM6P_ZPWW53FMHK; %0YG#!%-
(8!9SZ8:Y%(&YZDO5CNO%RJJYZR?7Q;[1&70[='2F M_G40)Y0[VY !"::0P"R*LPW%&0+%Q=7E)<1CYJ];/',&8.8-0,;=C:2/ M,]*CU%G_@@T9VN=(8%:?)[$)P6.D7M\WDL*.A@ZE-
9H=EB5>@)"C>BU0T106 MFDWMEKJ2''% K<&M$94Y,]G%VFA[2-','5(TDC/B\Z8"C=F<-QB M, >8:,6!;5!87FT:C#"2!"/O\V(^">B!>A^^$9,HR!2J%K)&LY8>P1-*DLQ5 M!%$=%ZAH"@O-
IM2H'4E8[G H/8A&7WQ(&,T2[@XX#JB"-&/8)8L$W37/&1TB"0L1#Q?$P\[&#P&?*%AERJ.ZKA 15-8:#:K M1FY(PGK#TZ3Q!) 3(&T\ 00%4!P' "%U'##;(8]#E@%]/#%1?I*^H$*>H ;W
MJ&@Y*EJ!BJ:PT.R+P.@ 25@(".[)@/B<4^Y>\A=A%X/)PD0K4-$4%II]*]?H M!R2L'X1W;E?5G9[KXMU+?AA]*U<0#004F2<,'=.1'5D%"F8C=+5X. ,J,,W?) LSTDL4E9;&S9$&6>L%* M=^S\,.!H\!
()]A1_2"ZKA 15-8:#:K1A<@3TAJV,^D'VV# M 0R!TAJ@ 8 A (8P&Q' -9!@(88B)X\I*Y#00UH$=%RU'1"E0TA85F7P0F MYB?X*0X$R#C(A*MSAAT/IO 0GP6J3X6%9E-C! ;R[3,=PE48/&H!"4)FL;<)
MR%'=%JAH"@O-9MT($.3;)#P07P!@TEUL+H@O4/A6>;@)@^E#37G 0K/I,W((M"6<]8-Q&(D!2@G#OXX7K,7AZ1=4V4-'4GNZPB3*2!7FZ9$&@E (99]X2ARI9 MH*(5![9!87FU$Y&-&$&?
(T;\8SD/1[%A]*'K%X7$")$1(MV[;SFJXP(536&A MV90:,8(.%2/VTPB($90)-_R]H* 8P9+,%2, 0"FU=S>['!0CJ"34F6X59,DR M)G;HY]2($92\8!1&484)5+0<%:U 15-
8:/9%L/4\1EB[>$H41GU=@+#4&S&H MF0X'^2Q0?2HL-)L:HY+0<)[#2T1AX2H,'K5^,D2?/N(EG*-Z+5#1%!::3;I1 M16A8%3E6$$:!= GJI>A1*%G"M4$XJAG!R2(1MV-'AD M
OH(37GJ48LJCZ"B*2PTFUHCCU ,>617ABSU11"2NE(_!300PER*H,P+-THH MPHT9W/7'D#:HD3;H\:4-ZL?R/'7#ZG]!N]94*4-5#2UISMLHHRT09\N;5! M%B!Q$GL-
M,&.FF<11A_\M/#A>1:HC@M4-(6%9E-J MI V&GF?! ,D"RK. [, \"W98G@5@MB// K(,Y%DP(VTPQ%,CX,Z#,B.R5$B6 MN!/6X:9YN-
J#+W!4(0(+S:;,"!'LF2=#P#0!R1&QOG13ER,HB8)E*4E%&#"8056O 0K,)-%H# M^T:'1X3]#AZK0&I"0H3(O T-J@B!BJ:PT&RJC5K!CGF(! -.D6#>,]<,.$>" MB-0E"4J92/WU$?5A$"PT^X K(U+PESI,
(NQHZ,CB@%Y!$NX]RHCJM4!%4UAH M-K5&K.#'/$R" X=))-XY9KYH0:0[]P%((^&&N]V/FI^!BE:@HJEP;]@T&;&#/_TD"0Y)"S*5[E8O[&(P!:@G21S8!H7E
MU:;!2"C\J1D6RSO]^;Y:=+T@I7_]61%N[V!VCJ&)<*.) M\+ FU2Y@P,Y$6F<9(005_! =5R@HBDL-)M2(WCPL. 1/KH%IA$X MBR)APKLQ!=E1*:EW8XK[XD@:$^(-)?#,BHQQEV\%6;*4RAVB/3?J
@^K"\^_ M,<6A9Q+@&U.'F^;A:@^^P%%5 BPTFS*C$O"P2O"T&U/KAI'J[S8+Y010$L-)LO(Q^(L'P03@:".0(3)5(WW+B [%@LN?>NP$P"CT% H8> 'H2 0@\ $ H] +,=H0=D&0@]Q-;;*\1+
M;LMPWU2!B9:CHA6H: H+S;X(3+0NPM'Z4_*%A!\,4SUAN2,&,PD@/\AG@>I3 M8:'9U!AI0& D'CSS]3*H.0C"UQ=D"CWOA^JV0$536&@VZT9=$!@Y",/SA020 MG4"H]Y8+X;L1@ E'3&+#0[)
<$&;5#8J0Q/"%?*.QWZ%B5?E:#3$CJ M;>M1O1:H: H+S6;:2!KRF%D-$LAJB+VT!@F\(T.X*0LY@#5*!'.? 0RW9W#O M'T.CD$:CD,?/;)"^^N"F]5R$JS%T'X.*5J"BJ7!OV#09:4(^/;-!0EI)KVG
MT,,N!E. FMEP8!L4EE>;!J-YR+#F^VB&A!RW< M'=A%V/%@"@_Q6:#Z5%AH-C5&[9#?Z#&+L-_!0Q4X)B&CU+L[C^JU0$536&@V MTT;AD,=\RD+Z.D;"O;M6TI2%_J*8NP
MHZ$#*P6>LHBY=/-9RO:EUW#&MKG7!^*=>LFCKF]O-EZZY>W.B%Z1/3=,Q(=$Y5$+TD[S?[Z,Z04R98H-L7F M)I'LX?@=4)*;064QPYX7STK"JLGBTGRV%HM+?E %J^A:('DH2R(>W]&"/UQ-
M_,G3!Y_9_4[I#V:+RSVYIQNJON[7 NYFK9>3]C?UP-/K M)^\?3/ 0S!V1=,F+OUBN=E>3=()RNB6'0GWF#W_0)B C,..%-'_10V/K35!V MD(J7S6!04+*J_D]^-!-Q,@#\V ?@9@#N#PA'!@3-@,
$6BLS8;TGBBPN!7] M0EN#-WUAYL:,AFA8I9=QHP1\RV"<6BQYE<.BT!S!E>0%RXF"FXV"?[!:2B*^ M14LB=^@#K#AZ];4BAYR!R6LT15\W[]&KWUZCWQ"KT)<=/TA2Y?)RID"8=C_+
M&A'O:A%X1,0<_&\0]G!HT;-\ M_O# (2=H)SDP_H(1?Y_6-Y^OOZQN/Z+KY9?5M]67U&9N1NL@< M%],H"=+T\FF8ZFR&%2WEATQ>]Y"*\D+.S
M6.,VUMBY".\I.,T8T>72%F@].CJ98=\+D]XR6(TB^R(DK;#$*>Q_D!D(2C@K M]X0)765TD2G(':)_']A>?V#3FPREQ'VY0QO/KC5MM:9.K1^!A%JK) 75*O<"
M""K4(X)*YY:;.J348H<6>$3MO%4[=ZK=*)Y]GVJLY2CC);!>FN5']](>^IC:= M\X&*)(C"GE2+492D=K&^U[''<\I=[DAU3S4\MI (Z$B*@YGD#&C X!M(#+B4 M+*=B-
(N;G^CI[\FW&$W]:$S_"3M]=YE[JB:"/Y("DD+0(ZT.UFEN7)U+2(*X MK]1BAN-XI.SYN).*GR>558I"K5&NE&A\G8J8]^NSQ2;T\8C,#I2^$TL&'"3+ M!*U[/-ACI.1"L7_J-(;<8-41U->M"20.])[?
J2)WL#LES0Z"*4;M'4A@F5A\ MHK@)RV+F1\G8_'=]$,W>""PK$UW74.(3G$'AWPG8G\51"_E[3S\#KN^DW2+ MZRSC![UD0"3*CGJ]K#%'EAH_R+RAT33UYR,KU-'2=^-R+2C@*'_:%])D'U<[
M*A"1DBI[5EGXZ(>#\C.TFF(O'"GV?L=1WPW2=E;WY-%L ;-A8/LCJN_'ZR63#SR9VR,IIX WJO,4*IR,*<4=4[":J*3.ZS!]T"W!6 M:50UMA R"J,!26UV<1J'X8CRCJ78=Q;(U>VWF\TSSDC8B>1?
+8LOY>T\ MZ([*V$WE]4$ %"3]-V##0Q!/YVG@]\NFS2Z*P_E(%<(=L[&;V6O!,TISB;:" MEVC3-,KKIE%^@]8%J=0;4YMN7 TS'J*WO[,M)F,M,^[0C-V'U?=,[KED_[;!
M:'[E_*B4S". '\/0+HT]'(^$T2$6_PRQ,+E=&,_J& +3^?]>F4S\CUOI(7& M'76QF[IMP0*]1VCTWR&17+"?%?KE@OY.T\Z([;V,WME90'4F7-,:TL]=%X1^"7T/X@]%<**8Z MD^@3M%'H3[-[ZJ)P?
2\H'4W"(;-#.$_TSZ$6,QQ[WE@-Z,B.W61_7ECT!Q49 MJ\NUU$=MP*O>;_;D'!(^]J(!3X=6.!II X*N#0C<;<#SPKG9K-?6QY!#Q@># M@F QBE)_1'C7!00_.5';RL&651#,S\M!,#P[1UZ4]*?
<8H;C=*P;#SJ8!VZ8 MWVRW-#./LK9<4':OG[HT1SYHP6AS_#-/ODR(NC";"UV=C[!#*OL9([" VQ\L MQ]#('UN-D\?6;K*O*CB)0WLR>Y73^NJU1N*OJ1\B.XKB/A0M5E,_P&-/&H,. M[H$;
[LLQK6_0';UG5:732N.2"L9S:P!#7N,8 -*/8&@6>$DR@O6@PWK@QKHC M *H/J$[IT> A.O2%X2!WAF9^$@7]])F=O&4JJ;@W+]\D,D?0^M5,^VG[@N_: MO-;J??[.OUC6K^DZ-_5;0\
%K(E$!=V"2^]M LI$_2*NOE%\;]YEW7&E>&DN M=Y3D5&@#^'[+N7JZT3_0O@Y=_!]02P,$% @ 4(!F65 ^U 2L!P I!$ M !@ !X;"]W;W)KA4BK276UL.!E5,3;OIM,@*U6+,'&-LGBS=+X6$8]^-0V-
5Z), M0K69+F:SWZ:UT'9T>IS6KOWIL6NCT59=>PIM70M_?ZZ,VYR,YJ-^X:M>59$7 MIJ?'C5BI&Q7_T5Q[/$T'+:6NE0W:6?)J>3(ZF[\[/^+]:<-WK39AZS>Q)X5S
MM_QP59Z,9FR0,DI&UB#PM587RAA6!#-^=#I'PY$LN/V[U_XQ^0Y?"A'4A3-__MZC)6)Z,W(RK54K0F?G6;WU7GSRO6)YT)Z9,VW=[9B&0;HJL[85A0:YN_Q5V' MPW\CL.@$%LGN?
%"R\E)$<7KLW88\[X8V_I%<3=(P3EL.RDWT>*LA%T\_B]AZ M16Y)11OP+@02MJ1EFY<;Y06C%XZG$:>QS%1VFL^SYL4SFM_2'\[&*M '6ZKR ML?P45@ZF+GI3SQ=T:7(9 $&UUX%96-> $?
M156:F'H!HL*S(R!_GE6A.C!K7_M0B@;<+3; M ,ZW=Z$14IV,&C[+K]7H]-=?YK_-WK_@WM'@WM%+VO^GR/Y_--.E"M+KI@

-8?20$3;8T.P6BP^0"X9 M9K>]9!:GDG*V>37=RC%6*]J)![U,?;)%R?+3D,,WI#X]6O>PL/9!_-=JXV?9*H3U MR63BZQ6TTO]IUV#PS-*Z5@8\=/<3OW8@&[\""*V>%-
/I\:25RF2?/VWO=>4F MZ8$-4 =E#3;&AEL%C_[__%0;)17"Z55>)IE_7<-F6B54:UZAF:633/A5_;Q M;^O4LS5!ZGGMK-:S+!].W((+JG[5/(^0-W+A^Y8@%]<206;9\11ON%3.A_Z*
M_OX2&3> %P]'7;!?E [@SF6 K\YV:V7NXVWP*2;)8_1QV'X.03QQOQ)&NURJ M&LYMW;5@PA!'!SH"&K]2:Y\)(UN896=V RX^#_[!13,\6T"H)%+N1.$)=]'T
M>)PHI@'CH1'XS5NM&N1HQ%]22U.#2" + K+8(^1=D4"6!&2Y%\AYQ,&?)I 5 M 5GM$7(4R2,"\FB?D&4">4Q 'O-"7LK0.1!V*1:=5P:\%](T8MD-S0GD>P+R M/2_D7-T;A==*$W
VK&UG LYY8HTQK17X!/(# ?F!%_*+5$YLI.Y M"]AB_^ M((7[2,!]Y(6[,!OPH0<2RHA6N@= ZV@0'NIN-(E/J5E\^KLP(^57,+#!/D_I M2,K.53'[N8*3@>78=IK56*25DF9];,7.H^H5]RV-
DGJ<,X37)* M,#F_86+Z@HFYV\>PMFVKPL_IDE."R=D-H[5<6#><^0,137!8B0W .L6D%),S M.V.:^D@Y65C?@_)V ?SLL5%,VRBPYLUJN,95=5^,@Q-Y.H2B3Y,PJN9)/8N/%
M%;C^Y[$X/%>^UC9.V"DD99*<6247QBOL47'C9!-%=^JRM_'ZP\9/!+IZ>8E%H*9K7L*![$P4T4S0B37, PJX4L M(\:=3AFF8#8,*>HQ)N68@MDQNT3]TNLI)N68@GT=0ZAP'$U*-
P6S;MY2X39_MWJ60E'X*9OV0RZUQ+"D!%TN5-23FHW).##L792HXJN))R4+E7!Z5CLR2WT9@=1&-6*2;EH)+9 M06^ON,7!.<(JG18>)>6@DME!M-%'G4XYJ.1VT"ZC#S-
2BDE9J.3>3]N-^4W) M18I)6:ADMA"Y42 .4DS*0B6SA>CZ*!V;%66ABME";]9'+Z8,:I-B4A:JF"VT M W,>;/UPN$B=7E$6JI@M--K@M-MN_J&EAB4=A< MXE]X;*^EKJ^?P7UB?
+GGV%4YD.=17WAR;V+N=3%>?%/J7FP[FXWH=S&?MU$ZKNS+9N MSV7JENW.->7Z6.Z"T\%@Y-KG&<5B]CRSM[HVX3\3Z^WVL Z?]?K['*KTQV#W M4[?'N \A%;U5V>Y"FA?
N0CR^8.&$#3,'S2"H%'^H#$$C?,'32!HDC]H"D'3_$$R0!D'!$DO6!-H+BOJK01Z*^JM!'HKZJT$>BOJK01Z*^JM!'HKZJT$>AOJ M;01Z&^IM!'H;ZFT$>MO+QQ("O0WU-@*]#?4V
KT-]38"O0WU-@*]#?4V KT- M]38"O3WJ[0GT]JBW)]#;H]Z>0&^/>OMWZAW3]13BH^>^QON_D^K471L>M[\M M[YLOC\H-9P<_?A:_4$L#!!0 (%" 9EFHRH?9JP$ $$: 3 6T-O
M;G1E;G1?5'EP97-=+GAM;,V9S6[",!"$7P7EBHBBQG=(? 9>VUY9#7\!--B0B MB2W;4'C[.N%':D6C(BIU+K$2[\Z,O=)WR?1M9\@-MG75N%E4>&\>&'-I0;5R
ML3;4A)U7T<$A#IU=C2M*XX:A(&)G'=J=GPT. M?:\;LK;,:+!0UK^H.E2Q;<6H?K_=!VU&UL4$L! A0#% @ 4(!F6;W&PO=V]R:W-H965T&UL4$L! A0#% @ M4(!F69O/E2X-!P O"8 !@
("!V18 'AL+W=O !X;"]W;W)K&PO=V]R M:W-H965T&UL4$L! A0#% @ 4(!F65 ^U 2L!P I!$ M !@ ("!'#0 'AL+W=O&PO=V]R:W-H965T&UL4$L! A0#% @ 4(!F61A&64U#!@ @1$!D
("! M3U$ 'AL+W=O&PO=V]R:W-H965T&UL4$L! A0#% M @ 4(!F68;)OUGG!P HQ0 !D ("!Q6 'AL+W=O&PO=V]R:W-H965T&UL4$L! A0#% @ 4(!F63L#*!]J M!P "AD !D ("![WX
'AL+W=O[28$!("0 &0 M@(&0A@ >&PO=V]R:W-H965TV* !X;"]W;W)K&UL4$L! A0#% @ 4(!F68YL"_>&! ;1 !D M ("! HX 'AL+W=O&PO=V]R M:W-H965T&UL M4$L! A0#% @
4(!F6=!),GC_P = L !D ("!"*< M 'AL+W=O&PO=V]R:W-H965T&UL4$L! A0#% @ M4(!F68Y479SB @ H 8 !D ("!7K('AL+W=O&PO=V]R:W-H965T&UL4$L! A0#% @
4(!F65!&%Y27!@ ACH !D M ("!3<8 'AL+W=O&PO=V]R:W-H M965T&UL4$L! M A0#% @ 4(!F65ZHW'8(P *PD !D ("!Y]@ 'AL M+W=O&PO=V]R:W-H965T&UL4$L! A0#% @ 4(!F
M62*CPQM5!@ [#< !D ("!.^('AL+W=O&PO=V]R:W-H965T&UL4$L! A0#% @ 4(!F6:D%J;YZ%@ 46P! M !D ("!\/$ 'AL+W=O$VUAZ,) *AP &0 @(&A" $ M>&PO=V]R:W-
H965T&UL4$L! A0#% @ 4(!F6:;K-!NF P ! !D M ("!;A&PO M 0!?^ , #H= / M " 9\? 0!X;"]W;W)K8F]O:RYX;6Q02P$"% ,4 " !0@&99 M]DG=_YX! (&@ &@ @ '$(P$
>&PO7W)E;',O=V]R:V)O M;VLN>&UL+G)E;'-02P$"% ,4 " !0@&99J,J'V:L! !!&@ $P M @ &:)0$ 6T-O;G1E;G1?5'EP97-=+GAM;%!+!08 ,P S -P- (!V)P$! end XML 57 Show.js IDEA: XBRL DOCUMENT // Edgar(tm) Renderer was created by staff of the U.S. Securities and Exchange Commission. Data and content created by government employees within the scope of their employment are not subject to domestic copyright protection. 17 U.S.C. 105. var Show={};Show.LastAR=null,Show.showAR=function(a,r,w){if(Show.LastAR)Show.hideAR();var e=a;while(e&&e.nodeName!='TABLE')e=e.nextSibling;if(!e||e.nodeName!='TABLE'){var ref=((window)?w.document:document).getElementById(r);if(ref){e=ref.cloneNode(!0); e.removeAttribute('id');a.parentNode.appendChild(e)}}if(e)e.style.display='block';Show.LastAR=e};Show.hideAR=function(){Show.LastAR.style.display='none'};Show.toggleNext=function(a){var e=a;while(e.nodeName!='DIV')e=e.nextSibling;if(!e.style){}else if(!e.style.display){}else{var d,p_;if(e.style.display=='none'){d='block';p='-'}else{d='none';p='+'}e.style.display=d;if(a.textContent){a.textContent=p+a.textContent.substring(1)}else{a.innerText=p+a.innerText.substring(1)}}} XML 58 report.css IDEA: XBRL DOCUMENT /* Updated 2009-11-04 */ /* v2.2.0.24 */ /* DefRef Styles */ .report table.authRefData{ background-color: #def; border: 2px solid #2F4497; font-size: 1em; position: absolute; } .report table.authRefData a { display: block; font-weight: bold; } .report table.authRefData p { margin-top: 0px; } .report table.authRefData .hide { background-color: #2F4497; padding: 1px 3px 0px 0px; text-align: right; } .report table.authRefData .hide a:hover { background-color: #2F4497; } .report table.authRefData .body { height: 150px; overflow: auto; width: 400px; } .report table.authRefData table{ font-size: 1em; } /* Report Styles */ .pl a, .pl a:visited { color: black; text-decoration: none; } /* table */ .report { background-color: white; border: 2px solid #acf; clear: both; color: black; font: normal 8pt Helvetica, Arial, san-serif; margin-bottom: 2em; } .report hr { border: 1px solid #acf; } /* Top labels */ .report th { background-color: #acf; color: black; font-weight: bold; text-align: center; } .report th.void { background-color: transparent; color: #000000; font: bold 10pt Helvetica, Arial, san-serif; text-align: left; } .report .pl { text-align: left; vertical-align: top; white-space: normal; width: 200px; white-space: normal; /* word-wrap: break-word; */ } .report td.pl a.a { cursor: pointer; display: block; width: 200px; overflow: hidden; } .report td.pl div.a { width: 200px; } .report td.pl a:hover { background-color: #ffc; } /* Header rows... */ .report tr.rh { background-color: #acf; color: black; font-weight: bold; } /* Calendars... */ .report .rc { background-color: #f0f0f0; } /* Even rows... */ .report .re, .report .reu { background-color: #def; } .report .reu td { border-bottom: 1px solid black; } /* Odd rows... */ .report .ro, .report .rou { background-color: white; } .report .rou td { border-bottom: 1px solid black; } .report .rou table td, .report .reu table td { border-bottom: 0px solid black; } /* styles for footnote marker */ .report .fn { white-space: nowrap; } /* styles for numeric types */ .report .num, .report .nump { text-align: right; white-space: nowrap; } .report .nump { padding-left: 2em; } .report .nump { padding: 0px 0.4em 0px 2em; } /* styles for text types */ .report .text { text-align: left; white-space: normal; } .report .text .big { margin-bottom: 1em; width: 17em; } .report .text .more { display: none; } .report .text .note { font-style: italic; font-weight: bold; } .report .text .small { width: 10em; } .report sup { font-style: italic; } .report .outerFootnotes { font-size: 1em; } XML 60 FilingSummary.xml IDEA: XBRL DOCUMENT 3.24.3 html 194 216 1 false 59 0 false 8 false false R1.htm 0000001 - Document - Cover Sheet http://arbutusbio.com/role/Cover Cover Cover 1 false false R2.htm 9952151 - Statement - Condensed Consolidated Balance Sheets (Unaudited) Sheet http://arbutusbio.com/role/CondensedConsolidatedBalanceSheetsUnaudited Condensed Consolidated Balance Sheets (Unaudited) Statements 2 false false R3.htm 9952152 - Statement - Condensed Consolidated Balance Sheets (Unaudited) (Parenthetical) Sheet http://arbutusbio.com/role/CondensedConsolidatedBalanceSheetsUnauditedParenthetical Condensed Consolidated Balance Sheets (Unaudited) (Parenthetical) Statements 3 false false R4.htm 9952153 - Statement - Condensed Consolidated Statements of Operations and Comprehensive Loss (Unaudited) Sheet http://arbutusbio.com/role/CondensedConsolidatedStatementsofOperationsandComprehensiveLossUnaudited Condensed Consolidated Statements of Operations and Comprehensive Loss (Unaudited) Statements 4 false false R5.htm 9952154 - Statement - Condensed Consolidated Statement of Stockholders??? 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Performance Disclosure Sheet http://xbrl.sec.gov/ecd/role/PvpDisclosure Pay vs Performance Disclosure Notes 18 false false R19.htm 9954445 - Disclosure - Insider Trading Arrangements Sheet http://xbrl.sec.gov/ecd/role/InsiderTradingArrangements Insider Trading Arrangements Notes 19 false false R20.htm 9954471 - Disclosure - Significant accounting policies (Policies) Sheet http://arbutusbio.com/role/SignificantaccountingpoliciesPolicies Significant accounting policies (Policies) Policies 20 false false R21.htm 9954472 - Disclosure - Fair Value Measures and Disclosures (Policies) Sheet http://arbutusbio.com/role/FairValueMeasuresandDisclosuresPolicies Fair Value Measures and Disclosures (Policies) Policies 21 false false R22.htm 9954473 - Disclosure - Fair value measurements (Tables) Sheet http://arbutusbio.com/role/FairvaluemeasurementsTables Fair value measurements (Tables) Tables http://arbutusbio.com/role/Fairvaluemeasurements 22 false false R23.htm 9954474 - Disclosure - Investments in marketable securities (Tables) Sheet http://arbutusbio.com/role/InvestmentsinmarketablesecuritiesTables Investments in marketable securities (Tables) Tables http://arbutusbio.com/role/Investmentsinmarketablesecurities 23 false false R24.htm 9954475 - 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Assets and Liabilities Measured at Fair Value on Recurring Basis (Details) Details 31 false false R32.htm 9954483 - Disclosure - Fair value measurements - Changes in Fair Value of Contingent Consideration (Details) Sheet http://arbutusbio.com/role/FairvaluemeasurementsChangesinFairValueofContingentConsiderationDetails Fair value measurements - Changes in Fair Value of Contingent Consideration (Details) Details 32 false false R33.htm 9954484 - Disclosure - Investments in marketable securities - Marketable Securities (Details) Sheet http://arbutusbio.com/role/InvestmentsinmarketablesecuritiesMarketableSecuritiesDetails Investments in marketable securities - Marketable Securities (Details) Details 33 false false R34.htm 9954485 - Disclosure - Investments in marketable securities - Narrative (Details) Sheet http://arbutusbio.com/role/InvestmentsinmarketablesecuritiesNarrativeDetails Investments in marketable securities - Narrative (Details) Details 34 false false R35.htm 9954486 - Disclosure - Investment in Genevant (Details) Sheet http://arbutusbio.com/role/InvestmentinGenevantDetails Investment in Genevant (Details) Details http://arbutusbio.com/role/InvestmentinGenevant 35 false false R36.htm 9954487 - Disclosure - Accounts payable and accrued liabilities (Details) Sheet http://arbutusbio.com/role/AccountspayableandaccruedliabilitiesDetails Accounts payable and accrued liabilities (Details) Details http://arbutusbio.com/role/AccountspayableandaccruedliabilitiesTables 36 false false R37.htm 9954488 - Disclosure - Sale of future royalties - Narrative (Details) Sheet http://arbutusbio.com/role/SaleoffutureroyaltiesNarrativeDetails Sale of future royalties - Narrative (Details) Details 37 false false R38.htm 9954489 - Disclosure - Sale of future royalties - Liability Activity (Details) Sheet http://arbutusbio.com/role/SaleoffutureroyaltiesLiabilityActivityDetails Sale of future royalties - Liability Activity (Details) Details 38 false false R39.htm 9954490 - Disclosure - Contingencies and commitments (Details) Sheet http://arbutusbio.com/role/ContingenciesandcommitmentsDetails Contingencies and commitments (Details) Details http://arbutusbio.com/role/Contingenciesandcommitments 39 false false R40.htm 9954491 - 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Used to reflect the current portion of the liabilities (due within one year or within the normal operating cycle if longer)." } } }, "auth_ref": ["r10", "r38"] }, "us-gaap_AccountsReceivableNetCurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AccountsReceivableNetCurrent", "crdr": "debit", "calculation": { "http://arbutusbio.com/role/CondensedConsolidatedBalanceSheetsUnaudited": { "parentTag": "us-gaap_AssetsCurrent", "weight": 1.0, "order": 3.0 } }, "presentation": ["http://arbutusbio.com/role/CondensedConsolidatedBalanceSheetsUnaudited"], "lang": { "en-us": { "role": { "terseLabel": "Accounts receivable", "label": "Accounts Receivable, after Allowance for Credit Loss, Current", "documentation": "Amount, after allowance for credit loss, of right to consideration from customer for product sold and service rendered in normal course of business, classified as current." } } }, "auth_ref": ["r760"] }, "us-gaap_AccretionAmortizationOfDiscountsAndPremiumsInvestments": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AccretionAmortizationOfDiscountsAndPremiumsInvestments", "crdr": "credit", "calculation": { "http://arbutusbio.com/role/CondensedConsolidatedStatementsofCashFlowUnaudited": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": -1.0, "order": 5.0 } }, "presentation": ["http://arbutusbio.com/role/CondensedConsolidatedStatementsofCashFlowUnaudited"], "lang": { "en-us": { "role": { "negatedTerseLabel": "Net accretion and amortization of investments in marketable securities", "label": "Accretion (Amortization) of Discounts and Premiums, Investments", "documentation": "The sum of the periodic adjustments of the differences between securities' face values and purchase prices that are charged against earnings. This is called accretion if the security was purchased at a discount and amortization if it was purchased at premium. As a noncash item, this element is an adjustment to net income when calculating cash provided by or used in operations using

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Used to reflect the current portion of the liabilities (due within one year or within the normal operating cycle if longer)." } } }, "auth_ref": ["r40"] }, "abus_AccruedResearchAndDevelopment": { "xbrltype": "monetaryItemType", "nsuri": "http://arbutusbio.com/20240930", "localname": "AccruedResearchAndDevelopment", "crdr": "credit", "calculation": { "http://arbutusbio.com/role/AccountspayableandaccruedliabilitiesDetails": { "parentTag": "us-gaap_AccountsPayableAndAccruedLiabilitiesCurrent", "weight": 1.0, "order": 5.0 } }, "presentation": ["http://arbutusbio.com/role/AccountspayableandaccruedliabilitiesDetails"], "lang": { "en-us": { "role": { "terseLabel": "Research and development accruals", "label": "Accrued Research And Development", "documentation": "Research and development accruals" } } }, "auth_ref": [] }, "us-gaap_AccumulatedDepreciationDepletionAndAmortizationPropertyPlantAndEquipment": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AccumulatedDepreciationDepletionAndAmortizationPropertyPlantAndEquipment", "crdr": "credit", "presentation": ["http://arbutusbio.com/role/CondensedConsolidatedBalanceSheetsUnauditedParenthetical"], "lang": { "en-us": { "role": { "terseLabel": "Accumulated depreciation of property and equipment", "label": "Accumulated Depreciation, Depletion and Amortization, Property, Plant, and Equipment", "documentation": "Amount of accumulated depreciation, depletion and amortization for physical assets used in the normal conduct of business to produce goods and services." } } }, "auth_ref": ["r22", "r104", "r458"] }, "us-gaap_AccumulatedOtherComprehensiveIncomeLossNetOfTax": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AccumulatedOtherComprehensiveIncomeLossNetOfTax", "crdr": "credit", "calculation": { "http://arbutusbio.com/role/CondensedConsolidatedBalanceSheetsUnaudited": { "parentTag": "us-gaap_StockholdersEquity", "weight": 1.0, "order": 4.0 } }, "presentation": ["http://arbutusbio.com/role/CondensedConsolidatedBalanceSheetsUnaudited"], "lang": { "en-us": { "role": { "terseLabel": "Accumulated other comprehensive loss", "label": "Accumulated Other Comprehensive Income (Loss), Net of Tax", "documentation": "Amount, after tax, of accumulated increase (decrease) in equity from transaction and other event and circumstance from nonowner source." } } }, "auth_ref": ["r11", "r12", "r53", "r109", "r454", "r483", "r484"] }, "us-gaap_AccumulatedOtherComprehensiveIncomeMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AccumulatedOtherComprehensiveIncomeMember", "presentation": ["http://arbutusbio.com/role/CondensedConsolidatedStatementofStockholdersEquityUnaudited"], "lang": { "en-us": { "role": { "terseLabel": "Accumulated Other Comprehensive Loss", "label": "AOCI Attributable to Parent [Member]", "documentation": "Accumulated increase (decrease) in equity from transactions and other events and circumstances from non-owner sources, attributable to the parent. Excludes net income (loss), and accumulated changes in equity from transactions resulting from investments by owners and distributions to owners." } } }, "auth_ref": ["r1", "r6", "r12", "r359", "r362", "r408", "r479", "r480", "r739", "r740", "r741", "r750", "r751", "r752", "r753"] }, "abus_AcuitasTherapeuticsInc.Member": { "xbrltype": "domainItemType", "nsuri": "http://arbutusbio.com/20240930", "localname": "AcuitasTherapeuticsInc.Member", "presentation": ["http://arbutusbio.com/role/CollaborationscontractsandlicensingagreementsDetails"], "lang": { "en-us": { "role": { "terseLabel": "Acuitas Therapeutics, Inc.", "label": "Acuitas Therapeutics Inc. 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Excludes changes in equity resulting from investments by owners and distributions to owners." } } }, "auth_ref": [ "r13", "r115", "r117", "r122", "r446", "r463", "r464" ] }, "us-gaap_ComprehensiveIncomeNetOfTaxAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ComprehensiveIncomeNetOfTaxAbstract", "presentation": [ "http://arbutusbio.com/role/CondensedConsolidatedStatementsofOperationsandComprehensiveLossUnaudited" ], "lang": { "en-us": { "role": { "terseLabel": "Comprehensive loss", "label": "Comprehensive Income (Loss), Net of Tax, Attributable to Parent [Abstract]" } } }, "auth_ref": [] }, "us-gaap_ConsolidationPolicyTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ConsolidationPolicyTextBlock", "presentation": [ "http://arbutusbio.com/role/SignificantaccountingpoliciesPolicies" ], "lang": { "en-us": { "role": { "terseLabel": "Principles of consolidation", "label": "Consolidation, Policy [Policy Text Block]", "documentation": "Disclosure of accounting policy regarding (1) the principles it follows in consolidating or combining the separate financial statements, including the principles followed in determining the inclusion or exclusion of subsidiaries or other entities in the consolidated or combined financial statements and (2) its treatment of interests (for example, common stock, a partnership interest or other means of exerting influence) in other entities, for example consolidation or use of the equity or cost methods of accounting. The accounting policy may also address the accounting treatment for intercompany accounts and transactions, noncontrolling interest, and the income statement treatment in consolidation for issuances of stock by a subsidiary." } } }, "auth_ref": [ "r35", "r580" ] }, "abus_ContingenciesandCommitmentsLineItems": { "xbrltype": "stringItemType", "nsuri": "http://arbutusbio.com/20240930", "localname": "ContingenciesandCommitmentsLineItems", "presentation": [ "http://arbutusbio.com/role/ContingenciesandcommitmentsDetails" ], "lang": { "en-us": { "role": { "terseLabel": "Contingencies and Commitments [Line Items]", "label": "Contingencies and Commitments [Line Items]" } } }, "auth_ref": [] }, "abus_ContingenciesandCommitmentsTable": { "xbrltype": "stringItemType", "nsuri": "http://arbutusbio.com/20240930", "localname": "ContingenciesandCommitmentsTable", "presentation": [ "http://arbutusbio.com/role/ContingenciesandcommitmentsDetails" ], "lang": { "en-us": { "role": { "terseLabel": "Contingencies and Commitments [Table]", "label": "Contingencies and Commitments [Table]" } } }, "auth_ref": [] }, "us-gaap_ContractTerminationMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ContractTerminationMember", "presentation": [ "http://arbutusbio.com/role/RestructuringandRelatedActivitiesDetails" ], "lang": { "en-us": { "role": { "terseLabel": "Contract Termination", "label": "Contract Termination [Member]", "documentation": "Termination of a contract associated with exit from or disposal of business activities or restructurings pursuant to a plan." } } }, "auth_ref": [ "r591", "r592", "r593", "r594" ] }, "us-gaap_ContractWithCustomerAssetAndLiabilityTableTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ContractWithCustomerAssetAndLiabilityTableTextBlock", "presentation": [ "http://arbutusbio.com/role/CollaborationscontractsandlicensingagreementsTables" ], "lang": { "en-us": { "role": { "terseLabel": "Schedule of deferred collaborations and contracts revenue", "label": "Contract with Customer, Contract Asset, Contract Liability, and Receivable [Table Text Block]", "documentation": "Tabular disclosure of receivable, contract asset, and contract liability from contract with customer. 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significant policy factors, including any antidilutive items that have been excluded from the computation and takes into account stock dividends, splits and reverse splits that
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or usage; held in foreign currencies. Excludes amounts for disposal group and discontinued operations. Cash includes, but is not limited to, currency on hand, demand
deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. Cash equivalents include, but are not limited to, short-term,
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interests, if and as stated on cover of related periodic report. Where multiple classes or units exist define each class/interest by adding class of stock items such as Common Class A [Member], Common Class B [Member] or Partnership Interest [Member] onto the Instrument [Domain] of the Entity Listings, Instrument." }] }, "auth_ref": [] }, "dei_EntityCurrentReportingStatus": { "xbrltype": "yesNoItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityCurrentReportingStatus", "presentation": ["http://arbutusbio.com/role/Cover"], "lang": { "en-us": { "role": { "terseLabel": "Entity Current Reporting Status", "label": "Entity Current Reporting Status", "documentation": "Indicate 'Yes' or 'No' whether registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days. This information should be based on the registrant's current or most recent filing containing the related disclosure." } } }, "auth_ref": [] }, "dei_EntityDomain": { "xbrltype": "domainItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityDomain", "presentation": ["http://arbutusbio.com/role/ContingenciesandcommitmentsDetails"], "lang": { "en-us": { "role": { "terseLabel": "Entity [Domain]", "label": "Entity [Domain]", "documentation": "All the names of the entities being reported upon in a document. Any legal structure used to conduct activities or to hold assets. Some examples of such structures are corporations, partnerships, limited liability companies, grantor trusts, and other trusts. 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Equity method investments are investments that give the investor the ability to exercise significant influence over the operating and financial policies of an investee. Joint ventures are entities owned and operated by a small group of businesses as a separate and specific business or project for the mutual benefit of the members of the group." } } }, "auth_ref": ["r93", "r218", "r221", "r725"] }, "ecd_EquityValuationAssumptionDifferenceFnTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "EquityValuationAssumptionDifferenceFnTextBlock", "presentation": ["http://xbrl.sec.gov/ecd/role/PvpDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Equity Valuation Assumption Difference, Footnote", "label": "Equity Valuation Assumption Difference, Footnote [Text Block]" } } }, "auth_ref": ["r686"] }, "ecd_ErrCompAnalysisTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "ErrCompAnalysisTextBlock", "presentation": ["http://xbrl.sec.gov/ecd/role/ErrCompDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Erroneous Compensation Analysis", "label": "Erroneous Compensation Analysis [Text Block]" } } }, "auth_ref": ["r644", "r654", "r664", "r696"] }, "ecd_ErrCompRecoveryTable": { "xbrltype": "stringItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "ErrCompRecoveryTable", "presentation": ["http://xbrl.sec.gov/ecd/role/ErrCompDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Erroneously Awarded Compensation Recovery", "label": "Erroneously Awarded Compensation Recovery [Table]" } } }, "auth_ref": ["r641", "r651", "r661", "r693"] }, "ecd_ExecutiveCategoryAxis": { "xbrltype": "stringItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "ExecutiveCategoryAxis", "presentation": ["http://xbrl.sec.gov/ecd/role/PvpDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Executive Category:", "label": "Executive Category [Axis]" } } }, "auth_ref": ["r692"] }, "us-gaap_FairValueAssetsAndLiabilitiesMeasuredOnRecurringAndNonrecurringBasisLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "FairValueAssetsAndLiabilitiesMeasuredOnRecurringAndNonrecurringBasisLineItems", "presentation": ["http://arbutusbio.com/role/FairvaluemeasurementsAssetsandLiabilitiesMeasuredatFairValueonRecurringBasisDetails"], "lang": { "en-us": { "role": { "terseLabel": "Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]", "label": "Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]", "documentation": "Line items represent financial concepts included in a table. 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Such disclosures about the financial instruments, assets, and liabilities would include: (1) the fair value of the required items together with their carrying amounts (as appropriate); (2) for items for which it is not practicable to estimate fair value, disclosure would include: (a) information pertinent to estimating fair value (including, carrying amount, effective interest rate, and maturity, and (b) the reasons why it is not practicable to estimate fair value; (3) significant concentrations of credit risk including: (a) information about the activity, region, or economic characteristics identifying a concentration, (b) the maximum amount of loss the entity is exposed to based on the gross fair value of the related item, (c) policy for requiring

collateral or other security and information as to accessing such collateral or security, and (d) the nature and brief description of such collateral or security; (4) quantitative information about market risks and how such risks are managed; (5) for items measured on both a recurring and nonrecurring basis information regarding the inputs used to develop the fair value measurement; and (6) for items presented in the financial statement for which fair value measurement is elected: (a) information necessary to understand the reasons for the election, (b) discussion of the effect of fair value changes on earnings, (c) a description of [similar groups] items for which the election is made and the relation thereof to the balance sheet, the aggregate carrying value of items included in the balance sheet that are not eligible for the election; (7) all other required (as defined) and desired information." } } }, "auth_ref": ["r376", "r378", "r379", "r380", "r383", "r384", "r385", "r386", 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convertible to known amounts of cash) and so near their maturity that they present an insignificant risk of changes in value because of changes in interest rates. Generally,
only investments with original maturities of three months or less qualify as cash equivalents by definition. Original maturity means an original maturity to the entity holding
the investment. For example, both a three-month US Treasury bill and a three-year Treasury note purchased three months from maturity qualify as cash equivalents. However,
a Treasury note purchased three-years ago does not become a cash equivalent when its remaining maturity is three months." } } }, "auth_ref": [] }, "us-
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For an entity that has not commenced principal operations, disclosures about the risks and uncertainties related to the activities in which the entity is currently engaged and an understanding of what those activities are being directed toward." } } }, "auth_ref": ["r88", "r92"] }, "us-gaap_NetCashProvidedByUsedInFinancingActivities": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "NetCashProvidedByUsedInFinancingActivities", "crdr": "debit", "calculation": { "http://arbutusbio.com/role/CondensedConsolidatedStatementsofCashFlowUnaudited": { "parentTag": "us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalentsPeriodIncreaseDecreaseIncludingExchangeRateEffect", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://arbutusbio.com/role/CondensedConsolidatedStatementsofCashFlowUnaudited"], "lang": { "en-us": { "role": { "totalLabel": "Net cash provided by financing activities", "label": "Net Cash Provided by (Used in) Financing Activities", "documentation": "Amount of cash inflow (outflow) from financing activities, including discontinued operations. 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Includes, but is not limited to, cost for computer software product to be sold, leased, or otherwise marketed and writeoff of research and development assets acquired in transaction other than business combination or joint venture formation or both. Excludes write-down of intangible asset acquired in business combination or from joint venture formation or both, used in research and development activity." } } }, "auth_ref": [ "r339", "r572", "r586", "r837" ] }, "us-gaap_ResearchAndDevelopmentExpenseMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ResearchAndDevelopmentExpenseMember", "presentation": [
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The disclosures contemplated herein include the fair value measurements at the reporting date by the level within the fair value hierarchy in which the fair value measurements in their entirety fall, segregating fair value measurements using quoted prices in active markets for identical assets (Level 1), significant other observable inputs (Level 2), and significant unobservable inputs (Level 3)." } } }, "auth_ref": ["r821", "r822"] }, "us-gaap_ScheduleOfResearchAndDevelopmentArrangementContractToPerformForOthersTable": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfResearchAndDevelopmentArrangementContractToPerformForOthersTable", "presentation": ["http://arbutusbio.com/role/CollaborationscontractsandlicensingagreementsDetails", "http://arbutusbio.com/role/SaleoffutureroyaltiesLiabilityActivityDetails"], "lang": { "en-us": { "role": { "terseLabel": "Schedule of Research and Development Arrangement, Contract to Perform for Others [Table]", "label": "Research and Development, Contract to Perform for Others [Table]", "documentation": "Disclosure of information about research and development arrangement accounted for as contract to perform research and development for others. 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Excludes expenses related to one-time termination benefits, a discontinued operation or an asset retirement obligation." } } }, "auth_ref": ["r4"] }, "us-gaap_ShareBasedCompensation": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensation", "crdr": "debit", "calculation": { "http://arbutusbio.com/role/CondensedConsolidatedStatementsofCashFlowUnaudited": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": 1.0, "order": 8.0 } }, "presentation": ["http://arbutusbio.com/role/CondensedConsolidatedStatementsofCashFlowUnaudited"], "lang": { "en-us": { "role": { "terseLabel": "Stock-based compensation expense", "label": "Share-Based Payment Arrangement, Noncash Expense", "documentation": "Amount of noncash expense for share-based payment arrangement." } } }, "auth_ref": ["r3"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriod": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriod", "presentation": ["http://arbutusbio.com/role/ShareholdersequityStockbasedCompensationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Restricted stock units granted during period (in shares)", "label": "Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Grants in Period", "documentation": "The number of grants made during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan)." } } }, "auth_ref": ["r324"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValue": { "xbrltype": "perShareItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValue", "presentation": ["http://arbutusbio.com/role/ShareholdersequityStockbasedCompensationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Grant date fair value (in USD per share)", "label": "Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Nonvested, Weighted Average Grant Date Fair Value", "documentation": "Per share or unit weighted-average fair value of nonvested award under share-based payment arrangement. 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< MQ2F8R_))N)K95RGG M3@#<2^%*Y+A*1"^J%(E[*2S($$#GC[O[6_!.OMV"4S)7U\H]D'-'//= N-HX MDMJ0E8405YU[(&<@0Q"IO/[JXE#.?0ZN-HZE-NH+:J/!?8YSD"& U-O_^>WN
MZ]T3=S+.'M.:M$Y;K#PM<'Z@Z7D->L4!5WS2:[[AJ!O&P(+!L6GD& C"WUSA5P_C@\PJ*3 MV)]KO9IP@U.3_4#$\Z[).(QGE0O&",\^"%;O:?4A>-,MEN(,O'JK)LO%'1&G MZ+D>M?
KSNEK299%QN^.K)5$1_^%P3SVF6'2%TBT:A61;F)"DS A>_>6OP.B+O> MGV-E1XI>[(R^;207\M\DT$HU@2,_V-?$7/,GZ MU7#P7/7WZ,RS&[Z/YWW] T_;V>Z('S4]XD?%9@A9;&F-
%:?[M[(.:E.^V1E$Q:H0SR+DRB'8"!I$K;:4A*BN/OSHV@Q1DS;"O$._<5Q*$(T0A M'K&'!_21Q-TF9N3;H8W'C9FQ[;/2YE'R0293'I2;:39HEWP/:
M[TV!>T/ZX>ROQ,C,RSY*I:W715UK[.%2^(I=@JY:H-O?V$+F)RR Y;9"Z!R"G9J6M MB0HS'E.15JVLLBQ]G[S0<(H0M)MR5/-IJC-EFTU&[SX,T@+K1%7 /FD69)]L
MC:@2&,&73'2;+.1]B$Z/B4Y22D%T)^C6>%<>4L7KKZ1:LSXM4CV^->V-8;T3 M:D5C1G6,T611<$F(I6&&:4:CR*$%>189^X!Z6@Z-W_UGL0Y^^IZ;N=? [P[! M7\!HZ(P\@.N?]/-
TU0^.X8;PW6VZ\)P4J^%9NXK8:*A+!"NL+'EC!WD?EHIW MKO)A9;.[?!*LR(56=0E:0DK'X4-S1(',\9'MF4YI 0"?J-OMP))]R0WGK 7 M3JS7]PZ![&6%)X@IBU-7&CK:Z-051TG.-
IL8('9U1T>,^:6- 1'6?U/%E M1)PWB-OOGOOR1/S1',CSJ6-M3FLD,_9 M5QH_XN_H'T4!B0-D/!&QJ_3L@HD!KH7[\IT8 :&0[0Z> T*C%'D9H8$).UD[MK97!4Q
GD:.%$E(3"4F33^OV;"U1T\8Z.GIB)=T=\JHSK/G);B:*DR/929'] MFW7.N!9[R\V?C[C:*O635RYASD>31$V3#QU^9\&)X S%&2IG6BLO0V$^2]-$ M36*?
H<[(K99V]A',M)W7F5'%;CV]!;5:%W[_Q91S3NODQ\:$ MAJ"1N0W3]"-BS:-W'Z_JW)1\UA;/1Y5OV0OP$-,+YJ!C:IG3$+O5K]2E2KLI MUL\I0L2YY%RY9,M.AP-P"59G2*+2W-
LH9K#XEFE5>4,&!#"&:M'$2FK!)Z_$ MCIG;'9,H82[2O5=I:@Y66'IZ>/5EZ=@M2P;G:"BO- MA)?:_;4F.L.[<8]I'MS;6<.BEY:H*\L-#@QVY/ V,%8$\OZ$UZRT%4746KP5 MC 7!/56I
CU"@EA"Z D!H P+%0=1&/E$\+V)X>PLS"_#CEDAKXU^%$QY9O(8 M@_C)PWE.W<$W"M['%+KWGFONQE*M2KLNJC(K9@^WD(\@D(]#63K6B.OUO8T$ M7M%X+OEUN
(6BE8^D&E@6R0^!HE'F'A_&4 MVW?FYX94:;=$565E'BN/0Q_1=#\JHBE+OVZ1Y&<;5 M;I'J>;98HGPISI);=@M6["U',^8FJ5A+KNXSU%.O:=7@4^XA1[+RL MH57:*HX8.7@!/@]?
EXKBM@]?YZ6X.BL+:;"RD";P('B3K67]M/D#!KGTC'R$ M%><:'J0S9M>I=Z>0)-E45YB%?/[0.E)\|Z3;OO9&(Y"I])S;O0Z /.O>(5EG
M'(V=*!QZ/MQ@78%^=.P1GL$L@%;#L8@_;3SH.!3&AB^\XLE6+,@$ULY]W'N MJ=PZQ03,^%#X(,_^,7H$0!0&(?R".Q-66DXQNZ]U8.[NORV=FD9E!56L/?J
M^+W;65+2U))JK3'I"EI8=P:%O*O#;N>6+FI@[,D9J8.,#Q)>6CL@]33$L7(\ M:D[X:\>#?U/*31VY5[<3V3:QX:>ABZU&4]3DY>:XY2&M>\QHO8P4SH: R1S> M=CF/L:G0 4524ZSK/
5XCO2SZ9#//>DG"4@#RRMGUH?"@M>^PHZ%=2)\#4? MPU*JMBN8QM@.#8?G]79N%9_"] % >N=>QP#-RPY:I=T">U=*L)7D8U>>WI"!;=J7UA+]82_I&<#ZX;?W+/!(0@/>9-
T:O@OP M"!:.A:!0SLL-=!2KJFJBI&6<\DH/(WSDXTY,3K^>A?.<"T,EW /4]";N# M)^,M+]>T*FVM)4KZ/I*86[8L$MBVDOC !*93 M,R8@E')["CFKVK0N*-(T3$ MUU6\;3$Z<^?
[247)6V(1LS79=Q2<.=DI!:>5B=HY$T 2; 40W9I[/!E3E@O$C3G(X&V+P'ON-;^ M\D@I[*B# M')Z(Q7SL2^,3/4$SHQQJ[CDF 7#[M"26TO_3]3ZNKJ J^[=B5>3U"<(R[-
X)W3P"X@NN%\/30$\(A0;JS<(2M1<<+ M("9H%'%@NX9KVM1'A0_H>8>UE5M-WJ?584%C+Z!INBLZW\9^)9]_VE8X3)E@ M[JZ$.J39+48?5A"%JV\9&?Z+
[5+*:2R*P)."6'[GKL_]Q,4CE]FZ92F6)IF# MNF5I [VE-R1%:E@-HNM&R]*L_Y7U2GK3T)^%*UY(M>\3X_>J,8 -7AG.3V,2 M(*W/@P5@,H^#[<"WAHR7,'QLP.N;K&X*]\[CU^>GYY[P]:
[[\%OG\4='N.X^ M/G0?.T]WW?N5U#JW%UEA9S/74TZ\GN?$WI3_<$)4TO(*%U '8R$^*'R?#_,? M71R]WV4VJWQX=HW(PM+PC\PO]C7AQG,?O#B1.#6 VZ?
ESS6IUM*ROY)JTC3V%E77&F>^J/5 WQ S6AN=U)GE)W*)3YNQ@<@^?; N2?>AESM'/$09E&'"* MI&C;M%9ML]N+@9BZ+XN=(U X&>U'1F=4UYF]X^1XC7T:=@NAGT-U_+%'6=Q
M1ZK..W&+._AA)8YUSTY.HH?IW@Q!\75UP?U$WD:9,3GM4J[V=A[?CL[I8&< MQL^5QAO;TGB^!%6]TE9%??\QNIP%. L. 2AG/=XUAK(Q@FA]),TJ-N+ZR=,P_UZSO;^7BN3'.Y
M88X/"BD_4UCVS*J&S12'O)O5?RAM:'7?E"B6=D%.5U,-'J5U#? M]D63VX8B_5W)3:VT-;%1+^I$&TYN9T)NAZ$V#:FMKA>57.+4=B;4MG6R,A^Y
MU4&7UD5=W]LS.0:]G5=\+]ORG)ZA)9"W<69!PC$K1XJZOQ3\N,?A&(R!F[4# M$U@HFLO&^2,)B.&;0UH"9($0=;SQB!\9N9];%X.TXUHW,X#>QM(LKW[">8B:
MJ#19.0*0S^$ZKLM6("DUL2A8E!NL9"LY*1W5'2N0DG N8%U4E#.J .24E,/5 M*I"4]$J[WA#E_3-#Y2JA.)W!]RMQP<%RJ+UG6"/;M8/0IW,1> 7%SB9? E3@ MB,X"2'=C"E@?
#8*IK&2^>+KTF$9?T<0D@X@56QHOXSE+8CHN+6'JL2FJ^X=+ M.3&Q2$P;++^BJ4F-J:FY?')&^T($VQ4&AIT^=^ WC3$]>Z@^LIL*_G89W.
MT)MD<8I6::O:WFS"W6T6"6F%.7@80JIC$/",VM8X(6TR!0]#1XU*NWE.[8]G M3D>Y#@=9-@/?G0YR&)+";JJ,*K/S/@GD1#G?T(_,,/)AN3SJMT^B=P9',*W]
ME]SU1[+4PD[RQOXGB'*'FD4*VIS?W4!!_N-6-4_B>]E$8^.13LM158^<_(Y M1_(YO/R1)2Y_SIB -J=R]Y$_LLR:_+FP\WV\[8ME]ZDO/WLVV6#H36N2DT!W M?BFK5-J*
(C:;!^_9*ILO?;DTM\$TW)_F5*"YAJC(!V]MX#17%IH[-,EIE7:C M(>JMHJJ5.%$9&"W7) 2YR(SI&(-D2C"Z,B.C-1869(]MDW-DUMNJ0.XL(:E_:,-+]G
M@AB624;FWG.G9299I*Y5VAD'8!R]:IOW !PXCKP7D=1!'NX3F.%$PB21%$HC M..I,6G8!.9&4G$@VVERYJ*0)DD1>KE;F74)%(_F;Y\.?+EA49MPU_F+8[J.)3(PX
M%=PU/6:4;$^ZT2MM/K.E+'1SD%3]?@2D8HB>@=0J)YYCQL/VI!D,R+,22-U@ MKUEV,':,"2Z4K*:S2[SJ\HZ]\K8I;>!%W[O;P/,^7AQHWW&"F$J/PBK@,$K> M;W
NI+?!C"Z.]%2:;:X7-92+DU[I2>]8E$>/R-+U@Q_(QBFO+)2WP8POCO3J M."VB);/?QLS-_<.8^Z=?(*M7%=G=Q_3HB7L2"I@%R.O![R&>3^@H9DOG_SS0 MYMG628=I:
1ZVKWM0\6LL2XVY7T2Q[EP=**H)>#_NPGY@-?,0+8:XZ^P+\^D8 MF#'QA6!H^'LU"L\A005(6U[4=T@F%MCFE3U.V2ZHY9=#\HB0/%5?=YZE%3J8 M2JDI=98ETE61^;4E9:(+>&
[P(< M@O0Y-S'%3,T-:6IN:-+ZE$W1*Z%4G+4.N=*6:O+R8*^S*-WCK'G^K*D5S!#* MCHRYXSK6B B5LN;RG$K.FIPU2\&:A7.$MB-O%BPBZLB8ZG*E,F=,SIBE8,QZ
MP0S1V)$O=US'&@G1I*S)HLX\^]#=/^D?Q!(,6)+Q0@0W&O6)'Y\7/!H!3="8 MWNJISOL!@SW>/'V\B8.KW/?S0!OO&O^E$HO-]9$@Z;W.3*5Q)Q;&]U06=P>) MZJ1J-.A&81
"P.GHA&W297.*MG6D!2^M-#%"K%LTDVBF9I+XNR%OD@HMADCKVWS::8EU6Q*:T7&7"F>1,F>2$)(<-F2U- M5#2MB#813F&,4EC]A"2&C9>-NBBUZD!FC$W83-^3
A<,],KIW0Y^_UFX?8P$ M9;.[@JZ]T=@G0^(&]BO)[\J3 3S^X]__WD=:9*M!)]=G\ R_B06G74G@!XT M7@W;,?H.J8*2J@:@BH2 F)%OA_9RX#,/+,XMTY*UQ9*:/#L,-+DA_; WI8M.
M2C3?/+\')#.CJW1J4D:]%LN6'#C)4BN*%>:==;1%48U^*8(9&I:UFE*=P9F"&8#@S;#>))C\WY.OZJC=Q*EQU+;"VT3W!0W;W)@'KI,Y'W.=O.V0EB)Y609>ED5=72[J*)-.IC[_IQ#C
M&O"O9;^VO\"/=,4CPW^QW70NP_QC38(GH27$T?[2]_%9R:YW?,H124Q!$NL1 M(A@FT "\>P(P%%POA*>'GA ."5*8A5.'4=RY%. &MI<,;-=P3=MP8+7P 9Z^
M&]16[CQYGX:E[V,OL)$\KGSB&"'0W^>?MA4.T[C5W%T)'4BS6XP^K" *5]\R M!^(&0R!6%B$S_Q,7CZQDZY:E6)ID#NJ6I0WTEMZ0%*EA-8BN&RU+L_X73[E.
M;AI.:Y;&Q@NI]GUB_%XU!K#!*\/Y:4P").EYL !,YG&P'?C64/4ZVCX*X/5- MT2T*]\[CU^>GYY[P]:[[\%OG\4='N.X^/G0?.T]WW?MM^%16V-G,]903K^^?O0A%\ B+0OVYUJL)-
Y[C&'X@XN&+!+435DX*Q@@471CDW],&97+Z MVZBRG,EJJIE-A,$X(%?I+Y_3B=NV2^%(;_J<<%@BX%$BO6^ PO?%7R?"2F_5 MZJTFRJLD,I^\.!%E-<#+I^7/E59-
;]4SOY)J5ZU.K/ZW*C MJ$5)S29CB])A37G??>@UM6I20V=L3;($%,4:H/1:4U?7/FE#>FQM%:.^=%F& M;QI+F..X8:UMLV38.MW;MG5ZRTK."[YL2R(Z:>1B.]K8OF-Z6^>5;5ZXGPX4
MV)H=-N]\4\GS>8". DRX-L9V:#C%BY%2P* #:T5?WG"$!\.VJF!*7S9 ;LC M-NWP0G??,3E4> E+I/:3M(M?#40,5T@C;F\P1W]]\R\@-@
M[U+2V[O_OH'=Q0U=;#6:HB;O7>/'STY@BO+.[.B$/=DM*R?76%]<.R_?8^F> M.P-'#[55-6 QI:B#VSE[L4%IG+TVL5?SX.RE5=HM652:RT5GG+:U3:6DO4,JQ$SF"<
MPP%+W+)4@9*M"M:1&I7AQ5#:3,8W91S'*C8;=4YF MY2"SW:Q(CAV.'8X=CAV6L5.$+W5\!:HPID O(&&UG2M$WHAOV@&]RALC1E:W M16P1MC@C?LKI_RPD?
E>Y0/3+;@SFVP3R5FZ_A];ERDI#;.AG- ?Z0LDLA]^S M@<2HY-Z#PN;$M59I:Z+2.*,#*,Z;NG)5ABTG\]95AAV4SFAQ9BLC=KI]W1@G M,9:] HX=CAV.G2+S7X<7R@U,:&GU,SLUH?
RNVFWOX8'GI@[FF]V.QHXW(3$3 M/42^.30"\N# ZG,[:%BYJ\ABO<'*@;0\JL:(>[:2R+($,1:Q-8OJO.4D='8^ M6"YBTBOM1@''&W R8M*2Y]CAV.'8.9.?E4?PMB1,?;&BQ2\Z[Q6-X?
=7$H2P M$_SVL??,DUV' =*^;8;$HI=U?AJ^14^#^.;Y V*'$7UC/M>J)5?:FBR) M6FNYF9\'O\I% M.'8X=MCVU_++Z(']1JSJG\3WLL2S-B4L1NR""\B1S8Z#%UX,VQ6 7(STQ/@J
MH*X:8!-7,#U._K(R93PNQ;'#L<.QP['#L<.L!:>NM^#H,0T9)\CB40V=5-6# MQ8:=*+VIGI_- YB=-+MLL=4K[7I1/=MBDC>J'/MM!E^C1>LVFJ,I%C<3A[,4&
MI7'VVL1>!S^Y4IRN=)+9U;>;!COW1:'*WHFEC/L!'Y MR5^/QR'XY3C]&QPFD?;J24[6T^O5]JJ*+>*ZHGE),PD"7.QQ''*<@Y^M=Y(:#Y6=L_7T9J7=%%NJ*NK*WI-V>-\,@ZJ
ME;/U=)QRJHAJ7>=D5@XRXQV9'#L<.QP[YX>=(GRIXRM0G3$%>@$)*WZVWE'] MGZ.=K:=($O@]LB*V]+W+ MB4[64R1:F]G0EFT"WL?*&HGQ/E:.'8Z=TV>_#B^453Q93]K_,
(B"J.L"'NLXK8KY\:^K?()8(J\:&A^Q14'7%HJ"+A=-U62VRJNBAI&O-S-?C0 M&CZTILB0TJ&'ABH23N45-4D5596S%V>ORV*O0P\-562ITF[)8K.^=WD&YRVF MR.PB>2N?
(W6TH:&*+-/)U[(FJLIR%H3/-.0\=JX\=K2AH8JLQ$-#I19G,,Y@ M)6:P7/QUZ*&ABJR"ZE(44:NS[WU=0&*?#PWE4[\X3CE.SP:G>;2=5JZAH8JL M8>N+7%C?
*R=A)DF8BR6.4XY3]G&:1]7(&PKPF5,U]=*HFK,JYV!A4L[Y-2]D M%W9H\LDGY*%$EN5@G+I97F[BI!P]H^J.4Q>3U)4K M&[+LOYYJ4HZ,\V=%3=JGNI.3&,NN",
<.QP['3I$NW^&%,BUUK.M%G=]) MJBZ@/XD/'N7CU3AV.'8X=LX#._ER*TN*_A"C"95D*C;\ZR&L^ E3):Z#CKM M1?Y<>$IAA"=+FRA/H:-K"1$,$X?6&NX$8"VX7@A/#STA'!*D/
L'V*+T^+:$3K0Z$-/8".@;MRB>.$=JOY/-/ MVPJ'J?B:NRMA)\7O5 M&,!:KPSGIS$)4/K,[Q"V-P_.[2"Q!DU;X[@PH.F;,E<49IW'K\]/SSWAZUWW MX;?.XX^.<-
U]?.@^=I[NNO?;R$99.08%;+>9ZZGTNYZ7?KVIS,,!!?/ZEN;5 MFY^%6._FYL>#;2^;OC\\NT9DV;"EC\PO]1%\ B+0OVYUJL)-Y[C&'X@ M"N3-
)&@Y8&Y.,$9@@81!_CT=3_A2BV0F,*GY8^)FQ@&Y2G_Y;-G!V#$F5[9+ M 4)O^IRP2B)E49:\LW[H^^*O$S&CMVIR0T5)DV3-DQ2JZ%;1ZR&
M5K5*6ZXW1:U>%]7&\BF\K!UF>+P\|"5G>B\FEZLMG<1;>#*W'A]RW1*;ZG+S M#FPS&SAO<=XJ&6_EJB"LYYK9NQ^78?NIJ$BJV)*6 M;41^D#SGL7/EL:79ZH?
CL5:E79=$K;4\EXDS&&>P\C!8+O[:,%JO +;"GE&U M(;;J"O,6X@5,0J,(K=+C7_%HF>GYKP)YP]_)3C''@B:5G-6QOORH9HY3CE/V M<9I+6Y;L^&U-
HL=OJWN?"LQ)F&42YF*)XY3CE'V(F^(M;P6*IE3:35%35+&A%!6B82#*>:'DEJ5*5HR76D=J M5 <40VES.D*E0U1;#4YF)2$S?HP\QP['#L?.^6&G"%_L^ I48TR!7D#";#M7
MBKP1W[0#>I4W1HQLU3_&9_X7[3]M.*XW=J'HE]T83;<)YJS=ZHM+7ZWE7IG'Q8K%S;]ER20@B)'D^R3^$: MIR&6O0*.'8X=CITB\V>%2-U6I:W4=4;4-T]K);
[8;>_A@2>OF'6^;D=CQYN0 MF,L>(M\<&@%Y<&#UN3TP+"VNRP66%O.P&TLB? \/;"6198CQNE1IJWI1O<&< MA,[."\M%3#*-"NW?0L3IB$E;GV.'8X=CYUB>6"[)JX WIA[."A*
(X=CAV. M'8X=CAWF3;NE$S 733LZ\G1AXNF=:WHC@F-/.ZFI\,WSL2BJ-[439JTM]R3L M#IZ,MRQK3ZVT6W6-D=@[IZHC.@R'I"J-):JZ@(P.X$)PMAN"S-UO'ASAV.'8
MX=@Y8^SD2^YL>X0S:)F9B9"WZ+Z.=;X-4567"SUX4H^# M+G)A[T0AG0.2'FM^_/:#5O/MO9SLEJ7-#G[0!;P!#[I0=5&K<_;B['59['7P M@R[@#>VF)BKJ6.-X!UW
J_"@"T4296VYJ#]W.R/G,3;(MC?/81AX[WD$7*JVIHL-=3G/R1F,,UAY&"P7?QW\H MX0UO65%&7Z\Q;B!=0 M67"0@RZ*/URW_%.-]TJY,#"IFN.4X_02<)I+6Y;LH M8;UL1]
<;>E7NJ(V;U#DE5.DM4=0$YN+UF.%UL8(:'S3AV M.'8X=LX/._GZGHXRPZF);85-4=(+:'GB],.Y^X*QDX^[CS+#J2FSP]UGE3-8 M/\/I;Y%+!%7:8X13\;6SES;"J7',$4Y-A7K6HJXH8C-
C8-K>!; G:B%>0X8' M)#W6W/CM6XCS[;V<[):ES X^PJFITA%.FB;*^MY-Q)R]F*(TSEZ;V.O@(YR: M6J7=;(I@KG#>XKQ5=M[*Y8@UCS?"J4G;+!05&$U=SL+D'JK+>8P-
65&DW5!4K4!CI M[^#$5J3/PLH BI9,"S%T5KJ(.)7Q?E2.'8X=CIV+PTX1CMCQ]:?"EO[D YPN M\JH+R)%NYSW?]AX>>'OV*7SDA>*$56[R[6CL>!-"Z$4/D6\.C8 \.+#ZW XR
M5I"K+;'>XA..RTYI.1SD#51&=?Q*(LO2WUJEK2E[C[CG),1BF>)28GA=F6(1 MQ(0%P1GM8KSSFC4ZXIW7'#L<.Z=/F!8F>1N5-HA?1M3X!>0R^3A=]@0@#U1R
M['#L<.QP['#L'"%"L^(,JB,,/FTU*^UZJZAS"3E5,415FQR&0U)5BR6JNH", M#A^GRX,C'#L<.QP['#OYDSM+ISD<8N!F"QLH)%&6&!BXR>F')L9.+NY?= M@$-PMRZQP]UGE3-
8/TZW1\8A&?6)S]),W1@P2VUM%SQQM]D\XL1='?M0&DVQ MH==%16L6.Y1F+]RR/0^J>+)E+4JPZ[2H_2!33D;.LI.7CITH>I:4'I? :PU1 MD@N>Y)22\.]#S8;5=?H M_.%Z$Y2O5-
AX5,Z]G'LOEGM;QYL>KMMRULUG+K>69I(7 MSK -4+>R+JIJV<-3--;*<12&?C7LE_;7^!'NMR1X;_8+GUO:Y%E3 (0]Q-: M:'_I^_BL9,L[/J4PBI*E322ET$G+A
B&B3.6#7<",!1<+X2G)W.W@*0LG+>, M8LVE #="^&-@NX9KVH8#JX4/Z'RWVLJ=)^_3ZK"@L1?0Z6U7/G&,T'XEGW_: M5CA,Z7ONKH0(I-DM1A]6$(6K;YD#
<8,A$&N+D)G_B8M';K)URU(L33('=-EJ59_ZN =DQN&OKI#L;&"ZGV?6+\7C4&L,$KP_EI3 (D MZ7FP $SF<; =^-90]3K:7@?X[3GD*.C3-R5I*/8ZCU^?GYY[PM>[[L-OG<&Z^_C0?
>P\W77OM]F+K+"SF>LI/U_/\W-ORL4X3.#:"(;"-\?[&:SUF*Q? M@,-E8'C.K5UECV>8Y)NQ?(#];H=B15*THG:;67-QCA!3\U!^4;4Z1V")[UW M'V[1WKO_5>AL1CQ=N
MVVZCVX?;LG9XHK#9=EO+5VEYE$)+;-AKBF!^GK[0LH!"7^ES!>EUCP0X7>'X"\=U^J,/-CNG_3SW,),QR(4:?^2 M;7;4.Z>GU?KPX 2E2E),4&7Q/IGG9H[%A^Y@DP>B]8_0%/*%J
MO/8,HI)-KSBZ_'TD0>A'9D@GW?5(&#HT"P4,%]H/OO=H!O"C(XHVX2X:1 M$147//CD^*(V+^W,"]V!_4:LZI_$]])H2IEVSC)"5R>P:T])));\:MHL2ETY, M!%D[]KTQK&XB&*ZUI]"]#"-
E/>,@>%&I=5V<"=0=/"3@Q4FBX6T*WCP,HQ;& M,-SF+440:#>"6B8<#7-)9Q/S*8M\I96?57KB*AX<,CUR52!O^#OAYNR.DI4V M?7]]?Y)M;G^O7FDW1;7.RN
U;M4>T:HMB(0:2$+UYG)VZ6(,V),%9J^'AOM" M!#!A!^"%"*\XN3T^HLD-82\8/\!::MLB/@_>[B-MOT8!/#X(@%'ZMDMA>3V% M\?4\B#N^CSBA!:XQ>N[!PW=D^2
M\3PA^;4J;;G.0.7 ">SFT^=-?6]B..%$\,DK<:,+,Y;WJZ29.Y(4P(EM!H\Q M,!]C6#YB3Q"QGKS8C_P6A9%/XDMLDK>J0)5H(JZI+@]SR-U.RDUHINAJA0U] M+,*2<4J>V,A(.QR=L"
[)L)Y5KF Q- G"O>(5I;5F"I; =PDP;V-8;N*496:0 M*VU];S^3F\(,$L\68G9OZE$J;4U6&"&?B[)G28A]WSZM4*&9-6.N1@4#%K;[M2N(S(@*,9HSHV?!QK^'F4\RXE;(A>M%)83]?
&M0=W-B!B9YAT'&M!Y^,[&@4 MW,T0D=M44=%443(XC-O Y::N#7'D(Y$7';A5;YZ/)8"5GQO7E,?7EKB33J+1;\CX'W+.E_DHA,\%P&1NVE89_ NJ]>'@. MGF $ 0EW\THNPZ??
68(F0+\A ^+[Q$H.3%+PARX58.CMS4&KJ)'4*6?P@@X?98L!ZX<8Q(U)WB69R"E@\G4H2 M56V?J 6WB'.3!_5AN.E[8(%*H=Q-LR,+=L@R)ZB5MBKQ\L!S(Y[=16LNZL'F
MQ=:9A7Z;M28;,G3%-%Y,@F()8(2]BPMY4(3^Z^YR-8%).4ZW/>W40ZS[HH,5 M+&)]G3P#)H!Q4CQTIFC(;9?4*^VZ)M8S^FIRVR6G/^"G("OXCZ)<517CP8*M0!CXWN@0L[-
*&STH4L0F0/X&,,X8=M1QK5T&:"DZ M:Q/G>$3JB#-?F%6R-[807H<);=GCRQK?Q@XZS.< #]< M>XY#Z N"[F /^T3%\;%24]3K,B]!/$,"RREX#T%A2J7=:HB2LIQF*G6/*[,2
MFCHM,PG-[=\#QQARF2IJI:WS?.NY44S>@,*6+M,6PI6VGTK2/C$JM@S?4B5A MQTG.1>A/$DN8)V(/;!.OR';=I=#?/=NEUD$V9Q[!M9N=PE.P9:?$#6+]@*38 MP,H:L:X5-5:(9U]WE?
7?[NX[]]<\^UK:@-5=$$2&:R83B$".XI]#.+2V;E;:FB;*R][QX'L)BD,+6#6$[&HEA#VT#'*V]TPP\B%6@U"9O MQ#?MN+(F0'0+WIA&+"\KO'6HE$/,0!2@MPFDK=R\(!CWPQ2$QY
MT@O9U+1$,!IF<^O+706E3N?&F&HN5M'V1C:QE#/\/;!>$9P'A_P0N%QMTW2GF^BV% M_NXQ5TT%=I+$>K,H2_7T\?^";-B+)<7=XO]%T*)&PPVMC)E=K-'BN8>/;P<# M8M(#
[P&%\ 6>$9I,(?:-D"03B0,\K9GJ!*RRH;]@J_I.#6YP'U&, M'XFT&D!:W%@_?O=L,N+BTPPO5CI 5;O6'O(HOL) %?J)C1N!?RWYM?X$?Z=4CPP>_ MFI*6NB@_38*'=2>"H?
VE[^.S$JK>\2F%B1=9VB1?%)0O/4+P$"%O!.^>8.C M]4)X>M+! O+%PA,K$(HNY2D\C#RM33$<6"U\0'N1:\L[1TE@ZY:E6)ID#NJ6 MI0WTEMZ0%*EA-
8BN&RU+L_X7)YHM@VM'*)_S;0G>-'1QTI$Y5SZ>#V^_DL_M;2LOSTW-/^'K7??BM_BC(UQW'Q^ZCYVGN^[]L;CHV)N^3P7F]518 M7L\+RV]38=F;"DN&-I7-
:Q^>C'[D&+Y@C.)#YVP7%((7P3.M ",5S[5>3;CQ M'+@&PQ=O)D&K"\N[:81C3/STK_@!']\9?7L2P2)45@:GCD4#WO+/=.6Q M"7P?C> %YG*Z\UTA&$Y-(MU!,G+;PW+=U*Q68ZO?
=B-B=<+D,WP$ 1-\C)#T M(W(J5J#K1O+H1P%\&\0'R0ZB^./I;J;H7(#*O@(1'I9 AKYE!K&J7-GNJ0> M%WWBE1W"Z\SU$)3K. T/L.C;XW36$MI@7Q-0;L,ZNVJ-@X-AK;#I^'V@D$#X
M:GMCD!DC P2H/_9B8A$^X!Q/1?J<7$7_DC\+GB\D7R"0KF,#-OGRHV #Y0DF MO(JZ=&"EOA"AGS[>)!%U]83$[!4< MZ?\8+FKPVR#N "[!184CP+; M?<^-3(?
(@W3MD3!)U9DOK\CB/P!(=D1FB_$)?*CK[GQ4-P8"/58$Q,>P / ML4>CR,5S](*QA^=5U^:W1>>^-C\'PM@>$Z2V>*XDZ!270CK9%H%EX"PSWR:A MX4\H,: *P:UCSIR>@BT\WG?
L>12+\&X+.-*'[SYTOE:;BOY1C(]B!8[U 3H/ M-]7O,CQC:/?MT/-% :Z2);DFW$UO'!J! !M$<0C8'A$#D[:#R)E2K "F@P$+ M'<'NPO0X%I!HL#^L'74!+(#W]_"B0*4\@^L!<_:G\3M)\|&
(XG4PG%\?8 -P M[.%.1.J^7]ZP@.=.*\8"97&O#E=;^@#%0,:XKTN/J!/< GDU7 BNE]XH)$\ M3C8^R?UW3ZD)YROIYIDOU>)!PNXAE@4CXO"X2/C'IE972.C4Q B@DP[>2R6(M'?-
M$/7_G504AQE,X+DO'L+?,7X&$3[3>#%LH"KAAV9X7^>&L?P?AG/$*/W*HCG%3 M#(;I]RCTX3$8F(H0$/'-(+)&L0EEX* !*Q;WF1"W MRPQP=>QQY,1" IL\4:-: O+2;
\QS,*A$0+*_@!&P'4"3X(I["(03900@3D$ MJ>90O4OC5"//HF7RP D&'E<5A:#=78SPXF9-4,F +CJP/44\;B<53_Z;#?".KQ$,I_F@QLQQQMM)H,OV(%TWSMO\^[^V_M]?@P()>D/Z
MB\63@$ 34V(_/=*B#O;<[W2=KWE#2\(+7B88% '804R:]DV.T@$9.$@&H U MA]Y ##;0?B!/S-BL *,]5D8SWSL6#"'X/$804C)Q 0*"K(<<\,A"L?SMK]2 M!V?
1%D$I:I$QBG^76MA>'_4+8BB&$=Z#E@"P$"HV#WZ-50=0"X*Z[Z?N(WR(M=CC]-*;26"Z;0T0@E\!,,"/J7Z M9MJO'(([&KT,A457 1O>,EJ:Z>/FX7 7(BI<+T2;)K#
[L>H'#].R0642FY[Y MBQL&)H+GK[0IR9L=.XY [DD :B4X 40OOH%>NI_YK#D@I5;[E+MB^$R?$%NG MR1O?J7!=&1BR]P4@L?6XOU/&)-P-",=[-<4/H%"@9H%(J
M.3'TU0CLH#MXAYU)_#,#0\TE7# ?QZ?8H_N,3TL]>"&QC0L!QXBZ$#0K4$\ M%RG-%,+W9VUW@9*,7","MRNN)MFVK@2,7#";J*,*L 0//HD@ @7Y%ATO10,*
MSRY],$VQIL%5M&/@.K2JK04>FJ$ C6$:&@8O.?/ML>6&[X(],<)E>=0X26+$ M KR$QAT<+XAPM!5&,FP_\:4-U\7 76:YC!##9.Y5P="+' L3 : ZZ"8!./]. MPNZK0S]S,-T
2=Q+4MX#1A1!"R8Q>"9@%PEQZ"/U_Q,?) YEJ.E^K=3 >;^* M3KS51S+V?&I)D4U9;'UVR4@ V+Y+P&B[T[* 657 >I\R\:BEF7!L M5=J>2Y;=RY_TW54/7R[,UB\N@R*.]XI)OF"
@5PQQ3 F?A+#'?@?3!IF8X"QCNHJ=C)G_A)2F6'[P(J)*,PDGQE&IY',M3XQ?6TV%8F9 M+X!W1TY,$.]\81K,&_HDCO.YF"^*/>&$5F<1O(67QZ]*O:_WKZ.N^,#Q?L[> MD>O)-
:$7H:,R#^@XLVX "P/F' 1ZY%.GTZ5I]]B%+':?\$H4=BDV;9H.LBB6 M7Z>>5_K*]"7H0%)FWX^?!T#$WL\X\ I\17MFUQA$2"_AT O0Q\4<>G\FJQ9*
M&K<7E^\"!%N+L6DYC!',K:5/<#=@:B?N:Q!G9 5, (<8?$VRV8\$W2)A9B$) M#[[GPN]FHCB2'/>R:SEO!IZ)\4##M?DLS.MYBVJE7:F_MRL[0+/4$$AK OJ& M8]"\!V5Q']8?

*B]=Y@X0X|@CC&\2JO<=_45&T7'N_-7R,6&$K>_^+KU9MOR$M_M6_,_*QC?/SP/X*9E5G%\$<2MH?DN6R471F0(;FY@W'Q!@F2B4CB#.=*

M)+B%Z&M3,MA0'!&5!\LS6^=BU_7A!O;H1E&=_E=ED?B4)YE#P;P*'\;BK'\>"L5-J*.M7%N>Q#>%\VK(;@&U'.;F6EL.29]";3V25P*;*:J&R(\L)#C&M{BP0-6:K&_M4MA&5BEL.;18H48]UA58_2]U'Y'CH*GH.E\QG6@\VG.M#P,/;<8+FE;*;W\M6 :17" S\T@38,UfG'f4L^M&QB0-URP8^K3"TP&N]X57[\'D|<)AIBR{!\B=@.M+|C>*SP_$,>T2V;E5GH?W)-B+_&75R2B?7A&?]* 2+2UY,Z]OS<2V8\$N: M+ //D*|_!d8#:\>? Z:;8S&0%]8G[4L:CQ1I_@L7CS)CXYI%E$\@S#V0*^DC MXUX$\,AV?>+(,V9C[^*

*<8(YGS|$R@!AJ)FOET/93OAF\%\%1K&C<1/G1Z MUQ^%)V\,0K,EM<2I-#ZVB,]&PO5LQT!>'=_'@5(+#2TGR>0AU!!<'[$RDB3% ML4FM%XUAT'0SB3\R;5AB.$W4&K--Q+%>]F#'7A"78<\"7P[^#WEWY^(N]A& M3.71W).'3.S'BWQ?:F3"Q1450>'7O/Z MIB6$'T .Z E6H#5 0:M!5T0U:F%E CY21Q5>_$\2Y@)=^H,8&:5F9%R^ M3{GWXQE+N01^]5;D!?T/C5)U(H'W/@$F*G]BT"9JJ@O5E9_9+)"4PX%E- M8UO3%P_C*8/B%M01E.<*C6R@&@CD4T+O.*67%+&4(T :*T"X9@W4+*+P"3'T$ MDQ@*2.8BKJ!$P/P0?8|(THX_X#%?.7XH+ 35-8^[TF)(^H" QN!+ID#Z-W@KW M6@0K:-&RGNXB<3,&8.<2O.SU(%,(=,(5UR4!B*W?C5*G _PV\G\4X3:8=Y M)NQVR7X>6@D!_!8,,:]E.E?2O7.G$ L0+N|LNB&MTZ4?

*8I^&NPK\\ZTWM(@[MH9V8EI8H5!2(02_&O2SK@=]5:.4 PND=4PV+7:.|@M-HS'\|TC:E!C296#7 M4!^,O@'<.77_WHNNI%@JJ?#R?E(.",V7^)ET)O[|=:Y6$*NP#3|./6*8/RE# M3JJ?*>-DO0J["Y.RL0>>L)9-[Z/+B]^3L/@2;=>2.FPW@#L3.VJF.=.KDD8' M=\|7&*T)?V(-BEQCZ&WBJ'F8URVG[8'H$&0ECL)U-VN8D$[!N8=)\|D2FVE% M*9Z_.S+B&,.**U&446)(U j%09)3"S\IS'UXZO3)>/M4/1+_<&VA_\#1 90_F M19] =:(=NU%A89I_6(M!$9S"C07K(""P/,.6-A5)2QXI2.FD M?HJP"G+H>S $A-BE# '/BH"D2RE.6F%C4U+\& #]@|C"PH - BG9RCL(9[\\ M*0>.<4F1&5=U"!FW1C<-FWR .(,?|'$6)&DB?-/?\GS;X\BA^:%M8C9|CG*Y]&OA(RYTF8Y+ MYFIVH&?I MU.4[$>G>N)PB6F_9HQHGDI#;7?Z'@Q7. OD,%5?B$ULV\(0D4'+V;#'SZ!GEU!8E=K8 MS!F\O2$)\R1>RX7QQ;KM.XP?QO[N['Pf)-5 @K$0<*#TW:,1,PE[3-)[@Z$8$C V@503F_+KNEDLU9U$N19;JBL1:H.MK MLML>W6U5Z X& 0F1\DX?Y8PA]C'3G\@B68^N'D: ?K'4E7T$_>4&_(:XJW5@MWM R$H):.1"R>9Q>@O"\|_+5 9Q<%. \B\|+G,=6^H N> M/A)I:O055:DI"JFTF,I*X4.B9%O2QROA;D3",39*3

*'XLNHCY3>>3/7QH O-M2)_],1TX,DT+S!!H>T&R:=ZX2OJ.6QS3=!0!VI@M+"N?1\%QL;X_]NPG:9+.P'BXA&10T#$:L=]"5 MJUYV T=&"?1\8|M9MX4#STZ1/<>SP(U39@1(SMA-IWT3F%Y\,MZ06V)..V19 MG#:[T*GQD4T[@"2A7T#X $P'J//Y71R+_R<6XQ!&?UV-;\ ^- M\K|CWPZP0YL.&;1#R>|\$WFR0UG1:"Y4$W"8S@)AWZV7"8%PCZ MLD!(I$H.OE[#UC'/X?N2SH=IM@0XE"8V$> T3{1\'<=A7B{[=GC&,]ZK&^@)H MF)N4\R5F-R%>B6=@%RWAHN<>G"9@[M)S@>,=U?D$F0"W\7Y-MENH[-K"YX^'1=?BFS<{X1YZ18EW4)Y&?]>R9M;#10 M;%8#ZB7E#&C:@W ;3-%7[BS >E!Yf^J!9KM>+/*+@F3$ZNP"86B#R/7-X21Q M1<815@TF(;@8\+16;78'U1HCX\T>I258R41%KX^)..K*)<|!C,"]E]Z,W.5K MYTW*^!UX0SQ#'^&FP0F M:90^';F3UF1.A[,.RCF2Y{)}1J?$THK0G BRUZ9RCI,(%*ZHS #5,Y?2QL(AH

*ME':RI+TH3%!GAIZ_WV9B^RQN;*1PTYBXM+W)^B=3&&,%1DQ \Y3 2UG3>/S MP=6&J>IS*70\;B@Y"]>*YSY=U:7% ^H*$F>*/; J\JZK2G&;>C\U>M.^U\?ET M.?=%<"EJK8ZP^(Z(§^1Y"OHC\N;*7>*ZH9BM:3V4^5Y>3DNKZ!P+.OK'|ZZI MH.>8/! FE0Q9X*5#QF"=6X3I$Y3Z4G2+"6&.?G^TJ:#D"KT(,A<'?|_/+LN.!O+44O.Q!K78J++[MJE;7LBIJX M68:ONL98;F;>TZ3W<%EX>%FHSLO"+&-QC4Q#0XT&,9*:U[FA,;-114NFU:Q$ M=/I!%E:73FM?4%$I*YS/?O5IK;D,;)?,Z.K'H@M3M,Z[H1 8@J)\)?5[G%<.;'|)\E|

*MF'CL__M0?43H@9A-[Y\M3LMRG<_6Q<3>BVXY%QJT^1GHZ|-MBLNQD'/GJ/FM?24%$I*YS/?O5IK;D,;)?,Z.K'H@M3M,Z[H1 8@J)\)?5[G%<.;'|)\E|MF'CL__M0?43H@9A-[Y\M3LMRG<_6Q<3>BVXY%QJT^1GHZ|-MBLNQD'/GA)XOD-"LFSXIE9\|/* E7 EYV*.1L6O:M(Y=^9X? MQF4_H_^?O3=O;AM)\|H:_"D+/SA-2!,7F?=C/*D*^>C1K6UI+W1/[_K,!$D42 M8Q!@XY#, ^?1O9E854+A(0@1/(6+&;9-$H8|,K#Q_B3A$@A)\0O[)=!@<%!7U

M:/(8Z%9;X4((TU/IX2D%>&)9=Y>4J(-%CRE?@RX28#E'1K >42^&-PR?S++ MG&&./UG|89IM)(#G K|8CY5!^ A\0WU%R(\=E12+GW*&54$QPE5$M<.NXY#] M@>Y":*

*<>F&^*$\6T0906Q%845!O)Q'K\2K024D@O&RR*H_8\=-J?B110I^%^^ MD3fV*"@WP@ 6:Y":?8HO%=L-8!1@9&+_CAF/5E="KO1/6L)>(Q!4X="S[* MQ&Z7W:4^1E#-'\-WQ]*ZO\KK|KMCBP3$+'2+P<7-H-[.|[=8#^O&C9DQZ+-> M<:CZ9EG+5;N; ;,5W9W-,C_O>NAUJ9FW,\,*CF!=A3QT.>B+8:\&F8{\D"Q M99$M^9FCHO!0#C;V\352$$2 R;BW?TCH08*Y?<*-2(=Z^HUC MR5U;JV4IVB.%+|3TWD0D69 M!CE1 T'ND<)-'9),;*.3VDR1:D&7=#3.N_THS:(AW3*4(-VRL=?>.R=_,M[*

MV8S;M.EPZ'WPL07GAQT5R3ZL],+^=?"DS$+'P<|3AL']+ M?]|UOO=5N97C7HS_.\H9K->J_=+S14_N?==C6I_4^JL_KE:QK9"V_#NX;6 M7/CYW>?ESUJ+7_C#M+,Q2>N[I#Q?6/+U0LY(#BJB5V# M$;Y3DRLYP=U15;NS8G?:U>YD[LX3ZNNQO=E00&2L#V0;QL/C,#31723=Y1 M-C?^\"MV7.?,O#M'\RB;353!K_Q/PU?[,5I6((-VR93QF;#)9M?!]4<=P*

*MHI5SXV(#L;!VI>OD1?7|GIXO3+6BT5"":C7\;Q\T\D.1\'JCD2CX8YX//DG4 M1=;?T [*NQLN_3^V6]*Z- +'/*JU%7$I*M^.U78*AQXH0W3#_!S11T:6;*SK*

*M!W;\N#87#C@RH@.Q*O4V5/ MQ29GRR:=G;#)Q/S%C.M_,]?)XI 6S[-HMMY7+%*QR-&S2/< +-*N6*1BD=-A MD=ZAE*W.D2E;),D'3L70NMN@Z7M-XB'E^Y"*

*{4^F;#AQ!EICK2C[O.7%TBWM M8EE!N;NX6#9QC52MZ?+T)(&XC?WL7-L%L;=@85,9TC,,W1?,N32OU**ITU M(:W1#TN62H,CDTIOS/N^F5*(W8^V40PW-1I/G'}6*(92'7OZQ-RYLN=%Y.[P M#-T.%?5LK VNI9[UPG:0N+AIU8:]3D5 YTA :S3 [<3/H%F)G[.FGC5J7QGB MIW5XL/LMB[MKC1V*[V2NF*W MHZ*ZBMW*2%*

(LP&X;+WMDI3>BN,JCCNBA9>,V%DNQW5.B,/(!OV-REWVT?3B M)'|_^XW^^W|_>_U:,<"QW5YI.+;M:E+[G]2PPOVM<'\KW-*|[?"_=TE[]HL*

*M;Z+)SB85[.]^87]ARO,W^KY\|\7|W0'UG@3@[*6O6_NL/MK)-WHG\|=I+EA M]^:*NU!F5Y)E[G?,!3.F*$4M9#LE=@_W#EPY[QU'87W%&Q1DK.&-X ,XH*

M+^6XXHR,W;$&1PYDN[I\,TZ2Z0TP,QA> M%KQ&#IKC?2{DM$9=+Q4J$Z9[<3,!L[$P8G[A"*%=<++_Y, ^'^=!ED6!%JGT2_+U5[T] YA*

*MU+]Z\F^7P\Z3O=;HVN6QU^+BIMGHU1J-8P7*K9BK8[|]VCPEX.-V&]5'OBJ^ M.CB157RUE4U8V]75;" L;@N4POYQ,]>>,'$/5HY1 >*>Y_-O*:/H>(!Q3T/*

*MK[/A=%M6JEP"543_7"ELC?&I-PHK#[;HK#CHK U%N ^X4DIS?,%3; 6:S0] M(CLK(EMG#NV7R#'1%0' _]E6":6.G;#*857OR02{UZ5@E 7%VEJ7G8QP^.MFK9%S5?*

*%96^*R|;EKY7&9:67%5=<<=B3T5G'9U@F%96)N=IK]DM3:BM$J1CO\ MJDO-P"R7T0:GPF@9R+9BRM^.#.1S+F/|I3*9VH//L\A(P,,5!=M 873B>2=!U M+K/@#*

*<],@,R*4U:>$F"$C>@1?02;$?CYCPAP6]RZ7A94W?YIMX53U(;QK5'_MG+ER-@M]RJY'+M-_7NL3F.P[W7K1EQX>G+I$6)^ZGYMMQ8ISV@ZI.$8^"39L M)OGN<3QC1F"Q^XET|-R._PI,?KK>AZ7RKQQWSQ._1%RQC\C|H-++E0%/+G#F M;L"XI%!)6%9<|WHH"<0WS+CUY:>=B\W6OV^R>9HQ$$66Y;S 3FB\H&OA,H_J MO'SXDK;=?^^)A:>#>>^T7+Y5:"CA*

M1SHM^.IVO]VKK 8@WAC+>%_?=(H">|<8/EH)[5Z']A60^GFV3?\1SE(VE MNH.U:8@P+/WJFNYK(P9\,J.0$K)6 6,ZQA'#++Q|LWSZ22$Y+9$ON9[5I:XB- MV<8*.ML&*+*

[9K1"/SZUWIW?X1/L&/YMYVF?;8(;VR!:^@.!N$ 1V9YL WKFU MO,E:XOD4[^^O6_1ZMT"K<0QAY5[^%,.FU. MVMP N+2>/L;M(M:K#@77; X-HV5T&N-)>US*

ZD^%@V&NT&CVCQX9#?6!TC/_M M-"[VT1EZ=Q20"B40!?3JG!/3?Q9+\U" [>]L3VSDW]K&M_!HL=V$OWP,SQ>[M4_"/Z];]Y.I(.QP+(

*MVMVAT8CO3]+59D$!;5M'Q>6H-L;#M&>GJ09740KEY@S]C7Y)&2?M>K?2*BL-IEEL M&I2I4RJ6]6)3]UG3LPEW^#/G J?O,'EEI[V5+X=VDWVZV@[^[CN=I*

*M?]@N&[G@1OX.NH;.ZB?^YMCLZ4P MF*NH^5N)6 S71"R(*KB'Z MLBG?K?]1==PD[0;=^X9@$-]OMUH:=K5N65>&\ MBCE>5SI$8!@5M1W-B5345E%;16WG?O$/C^SB7Z/=RR-3)3E\]);_%6IW<=: M&P$F'I2IRFU =M82L^1.$ZD'],,Z'/D)=I2E+8;98G2'36BW8IV3XEVR]!P]%'@)=6;$A# ^VLV347%.NM!RLRCG MBIS*F>/ZUSYSY[$$WU<$05?XH*KGC[?*

*[UN'=$ M#-&CFWDBX&=M6(YG=MT#7+!{,-N6BA@OSCN{UR-6*AU&_(!%7,3_Y@>Z97 M^1M7=QTVK5.OZR6E4>@XD;D519YC0W M8W=K[TF5RG;4/MK#3_!8?U5J|#N!F39.K',J0G[4MU$*0W&_]AI"9 V[M<&@ M+_3B*COE2*BPXKT=\]ZKC=D.8N6W*GZK^.WT^:U8-&A'#++M2"PBL?Z!?!+=BYN*Y"]2 MVD. O=,K+T=L9T%N>[;G%%=FG*

*[+7.1+ZJI3Q*M)^5!M7**>D.3QR&Z98 MF%V1]&WZ0XLM_GSN1#65 _LQW 8E&6Z%#O%($0 K]GM+[#<<',B]'99AU5;\ M=ER45_';H?*

CMM29_MU%V3GW%C$="EA4S;]E[[MX=TFV6Y [9>]E[15>E2) MT:^!!]XU!ZOZQNZ1'K)Z>1[#$'OU[@30SVMPU:Y<.),.,B+_D0FTZ7$[!>*

*MV"QL"NJ@=FG:!U>:Z6D+%]MD_M)TV\|_NFP!=AS\#'ZD1U>QHX/F'YVN"?F)CT0^T2?U VU4_T*H?:.-4/] R>?V-@76H_4&T"RZJ: M@KZ9WF##O?8&Z[8N;IJ#6J-U1KA0%7.<$G-*

*4;1HK;JNHK;*VX5A4 02F+/Q^1 $_LL[EEMU.62*BP/HZ+Z-XFJU4- BO;K6BWHMV*=Dl0 MQ=E1=\MN]V1TG#>-K51UMSSWY|\>1M#4@0G92.V.;F7V>)F-%51D \[T&CS;*

MRZYV6#[;@]NOWYMV"P+6? $!,F*78YI;?MDETTK7C>OP.N?(>A.Q3^GQ#^%-MH*)WQD#KL**{@XN;3KI2|A1:AU;L<4KLL5/N* O?N3LD0+6S0/Q%HK7/+KBP)*

*MKG73C(M3YY+686V67N/BIM^L-3I;-]BKY*HZ]?P\KTFAI3N">]TS= 2?.<$55"!W1'%K M%4B*T)V%Y_3,Z6FGY%2;_M@'W QIP_ZQ1*^K,ONJ!fVJ04O(ANYA#;5^"PRU*

M88I"]%JL"T",APXKY=LU\K\[_Z,?+R/^I&,ZX2.]M,EQ!0W%''+?64.0@??\; M2[!BMN.BNI?);3MEMM+LSB[#E/W22CTKH(,=_!U8CCVM< [_^/EJ_?]^VJ^O

*M%E2UCM|355)9TE0J.D=03?R?N_BIE=K[\8\EO:;*VBJ?OOH'_!Q4V56'H"Y+13:BJ_,7)_2'?@X$2*%O^OUQ[KZGJ-VY>A MLB*4W^H#1DG&6:%#/-+,M8K]WA+[M-1N#PUBN@V89EFO%<,=>F^3X0]:]3OBN'5F;,"UG5E?\=IQ4=W;Y+42=SP&[9(\COG/;),?Z+_,S7,)\O_A_\(2"9UBW<9B%?SE,W'?;YNT|/)C=,]*

MQOO)7S:OXF>Y9Z9H(5/030"L(^\";0K:EW9IP:=7FNEI"Y===^_HO3;<-_?+ M%F WP<_@1WTGVB./V,N\- $[&H@!E]+S9EHL&_:?Q1X1C/]>GN-M>G%PFDSL7- ML%O/:VD"VV?*

AU&%)2EL-M=E&^&9MQBQ#&RU|[1^!9'1[]>D>/OK(%CZ;CYC+ M!\VTW:E]KT>H@Y5D,Z-2?P2DZ-M.63'?KVNVJAVJQ\>F=QJ9Z4-9&I_>R>W'3 MKJ?S@C5E%Z.Q-?

#'168RZ!%7A=_#X')2Y^':5M%'@]LX01%+|RZ)G;R M$QNK&|EDCSL-I*]5?OQV-V#@9IPYT6HK*D(([.B@-TZ+RQ3\|F;RBE;?X M#?.N$3VBC^#.^OS\1V"GIJ9-EUPO+D#&<*

*4SI?R0&LV$KNE_#ES(PDX9=*C_B&V;<^O+3 MSL5QRMWQ"+)Y,G"R5QWN8&UE/FTU:(5&I&RN8/"T3;IK+S+18)L<6W)H=BK\^*

MZ+;UM,NTB/C#C=E"XA57'DY%Z;CU='O,4$74QBXS3)[^S4!5^", ^ /*>G2ENS'@Z(M2-2K\=#Q.3@\9!!_40W7>T9^_J1,@F7(VRA9L _22%'$8.';_ SP1% ^P[6# MV)CRO3-1@8

*%;9@Z"?OPI#",X-K;QGI4SA>;%32-#9\A7{G0$0P;, MJ?AMB'0, L@*#.[H6+ALH9L&T;:-$@]?$YTS*3\E%(28PRBA MC1;3--?*

*%L8OV1]*D!"OU2Q2:14,9)-]_C;2:AH0+9]4\9I%">G/7;.(NFR\ MMN8PS1F(5!OI_"1C+4;!""Q%?SF:W>\<>/>[17<_0HI7H&3TV M'.H#HV\:P>DQ%$<>;J8D(Z\6^=W8OK/_O?*

*SX;>Y.1W9K-GT(-3,892SC6'-M 6A:AS[%,\V6U0-]MV"C6"\[&H.XO8]^4*EI87VWA2N'=I'94_P/G-"_@BE6MAG,,LD&\MEX9L..3\VDS6:98U3F8 ZX:1[.'=>U M?LB%I?LHUN@1N4Z2?-*

$BP,B\?5N2X)5]9D&+?/O'_ZL@1HYAKMUE#,Q9$&RICP (3H.'H!);- M%X5$$=%!H\\G68P[;<'@!5W"5V@.Z\#FB'->9Q|@3^ 5$\U|@K03>]8QMX%A& M,/;C##UB:#\AN_BF,X7&-T-_)SP.2HLY,?%A&!9^HW.>"TF,/3.R_=$=;=>7-MW/M 3R=FBH1 -P=3:@F#"6\UUUGI5M(C#E":AE@9QPf)C9A+XJf[Y1"0.2Q MH G4-,>EG455%A9HDI"RG!?-

@^$M=FV84],/7H."Q&8^'TRJ$1E[Q9D@&|0^^K(?P=:&V>MV+KO^Q4TK'0G\&UUY1 MN)XQR!-Q(PN]>I%21N$$,47$'8?':2L0,C&%R;H"@=]\/S M6TLN^3Q=^R2<;L-*

*#1.\O.$IXS(=T2OHC!D#HX6D"M[M_$R1=4$;=X$L^4T_M0B_LG&)Y*KB*X69<@W&Q=*+$V"@GV7)!)"GG&,,$0D(6E4$?6-Z4GREZ*D$(-M')H[ASG<*78]W.Y,>5E",!-*

GAN)52#/@>Y2XE&&3G 4=NK)**^9#SN/1TZA M01#>X.GXH%Z@^(5[+7SOU3E?[JHNI(_'3H"V)7&&[T4N6L66P*UA9, D,RI0*

MIJV9F(0@6&0S4O1&AOL%Q\|HTP\/+FT%[_$;3^/*$'"Y M.Z"QF5R >R]N8";TW0"SU]J 10QXSG97")(4^,/F+|XTR4+K ,*7> AB<#4 MX2\RU %[$] L$1-3DCV&SNL 9K8LS4D*

BE%&)]IXCI,&V$\#.1ZX"8< M!<2$P]3=:%L5"WZ3'}ZQ[KI+G-&&#H/8$;|H^[XXN[S"MV++>9[&-SK-AH7 M_ A5=]O2E9 ,B\UM"=2Y170#>[V=0&QMMIQ[>+'KSZ-

*XZD@RG8_2RJ4KRLMV*Y^Q! M7Z*HOK4-$6/[:NHCT^)I.?DNMRZVDVXW."SM,M-O@?CP70GH,C219#3BMZU M,R?0+Y;AR:RW"#T1H=&&164PFV2 MVB%T% >S0;!*

(/<0%4;LYN5M"|>]E)94C$!6W,)C[^1?WLNJ=I.F9=:#^\?P M0L1FI-33"_G70E@,A_5!MXWR0I3,BQ<+45';?DM_7FO5>^W>YE?->K-5,_S*

MAFKVZKUFM]!0^9]WVZWR)M5?.=0:F($5:(C\TDH=C:,HF^J'&X$A9E?)E+&D M0T(\IH/ !5:X#FV0.Z5@LWB14$;=T"OE$SLT&1.1VR?-J3RS T;)CX <4=N RBT<0WHX19=

*M&%.Y6)GGX1;V>DL_7>,95QN)3CZ^JBSVZ#.%L5"WZ3\QO[KI+G-&&#H/8$;|H^[XXN[S"MV++>9[&-SK-AH7 M_ A5=]O2E9 ,B\UM"=2Y170#>[V=0&QMMIQ[>+'KSZ-*N;05OATV0 MS-\X*

>5(U!T0$.80U :E847L5Z">FL'PX#H3YGD\F6+"V':"="!(V=/@@_5Z M-K^NJU?&/_"Y2)-[ECI\|@#(C@U7;JBDDWUSX)4,KRX&1R'Q77V.B88!:Z# M|8Z52KFM2BFV\I6F51/;9-*

>Z@[+0$2M5\C@(9P-5(#%3^D6EC8]J[?,5"=7A<(F/WCM[Y.#2'GWDR\|`M&,/LAZR%2V=B-[.@$/!9.D,=A\/4Y0D-J%37K4Y)S\GJYF_(>&\KMQ2AV=H+

*M,OF&N=_WMO:/P"\J+EY.[Y=GG_[:,/QZN:M@A< M+\#R+'@S+TM4D:,BB&I%Z==4G4HU:#9_-4@.FPMI4?]=1R10#Z6 GE_?>'.MY2>G'_<]05C?*3@\\%;._WR*

;;KF;YN7\'!B9VHD+&'!|O^1%,X!00 M%)!]9"8:!8""":|_BTYSM-1N+7MIZ7/M8:,#S3BF'\-%6]/N[*%=NQ1?7YUG M 3?G1K&)&BR=@SODH9J$N"7+L&Q7]V(EUW(W54ZBT1#0_UJ*

*5D0L6],,*O;] M(CSSQ.@F%PGPYX@#9HZ8_X)((S%4=OA@XL:,*P"IO?M(0_ MRU&"$!DB9$JZPL'P,2V$LP4=(<([*+@%W15;D+'B;_HOZM@)L1"?@>" <&,60K.?&[R0O'5%=6M M%E]I.8 3!+WS2@5('BW]&^%-P86O/"P\5MWS0+WF5>BNZ?TDF""'!4]0K@8+ M?+!,@D???'[FP|[-.M;WZ5),:OG)9T"4@+Z]D:,W)\]9+)\A7#%YGP$MRD3 M&V+2],5$E*

*8+OQ<;0;@I=!9)&Z.NG2=X1HC_NM>3[VS.SW@Z(Z812&]H-L 1 MBX `"\;4R*6E@P#+)7+S3 G4H]5E:#PIR'U)$1I* 0SWF.8'GW&P:?DOPA$*

M](6@P8OV8VCFM^J@W7R$#BPG^T.ZSIKM|'|5$_'0%5&4V ^)#P/2178^0AA M7%>05 1>YWA+#=2>*FX9UP-(GOMGH7L#H,E>N*L)A5NT$8DO.CQ%FE\$MPBG&F"A %*_.1>G*

*M(.6L1(U3@&<(0#"'AR%#(P.M8ZQ[OF*7B^&@ L\$2' -@NO2)SP9 JA/0$GQ MZPMAMCU^Y*9*H(QP71KQ<<=&T%[8QC&U-9.+0E+50_BSB"+BNT+!0P.%KM@Y MXF"!Q!0!*

*7/X)&8PXTRADU+HW^&)XQUJ7\.ASC*HPI+7*L$:I?01@^>^2&,Q M1:[$X9& 1V@"EX$2)0;E(EZ]XCF[)&2*0IR1>$&]5IXY(2?1O>%(_K',29[I MZMH7"=-HV@C?*66B0G+4@,,?*

N4XPS46=3S9;H4L$??$&!V=(DPRET,%KX=A M\GKP@&K@;S$)!"WN:S@N(6N$157'LL!Z@TX\'7!4,XMXC"7I 6]P7(IC5(X)P0P%M&LB%IX07.ME5J9N6,.ITHYSBP!?*

*MC;J!F=W6A. 3'>N^:%/J-G1-+&]TNI!+B4MI/6&DUT?=5O(%,&NDWI[C%U6+RB*H;ZT3 M;5$IH[$B$+,_<"SKB^.^Z*$Z1@ P,6;?PP8Z1%5!YP!<(T8 M#/GO9/VH/EL MDK2-*

>SH1(PT9MF?9N.N-"CI7X,7%O+ ?N'"'@#3K#4Z>1?#"^@C-M11/:V-H M+KA-!H.2\,+:@TYIDQJN?GDY2$HG!9;T'9G@&V>"SVDF UIF*H7,M3Y9Z[@W M;D.XLO6KW0+(;//$MZ/?R[U"FIW6[AP>SVPWJ]\PX_5[[/)6;G8O+SGN6O&T M"Q?:7A#0#KI-.X9],NC:RBHN#6W*U9IR7K'4^KSG=OOBIE<;=@\+!B7.ZHC1 MT2I..0),Z;8.RBH=*A%H'[A4-*

*>*5/>%;'/8NS7%+[A_BXJ#;<%E"2]=B3LHP M&PQ;FQ5F%4QGJ[7;Z>845T7K;/9UH1P4!>.$;*M[>.+"+(Q:+P.O;^_$]2:L MF;SPR?|',DY&42E% N>%B11.Z%_<#+?*

*&&CH>S;VBH)+E[8D+BXZ6#PZ2AH MZ$UHM*_P#C';>(UK*%Z*7%9M_8F8PL46?SZ28Q7(W>YM9*P *@-IO]#I'<@N*

*MJ/BNXKN([P8;*7VI8KQ.X^)F4&LVT\GIQ\9X.1@5242*>&Q7[U9BMK5\+[F M;EH.W.FLK@VNR0;+4>]C7>F>K>DA%@8F.'G!R&-_!?A/492O_(#.YG@\."S&CO(Q+ T8824:+\>-*

BG+4TGRL6\8R1HF0D:Y&$)42 MFS3<72G65LN\S=![NJTL])X#",ILA)M!2;U8E6+?6]OX2-L\9?9X30O63C<- M--/H@%N@/RDJOHA3OKNYJ5>$FS.]A9THCO@%>_S8XW4;U$'Z'W8]_!++56H]FI:,=9N)0_CT12+;/4Y05$]6\YFW(4>*9 MAJF]V,1^_=@(D*;E2[CB!|_DZ|Q-X,]WE%U:XL9ER,/SV*@9C G*3?JFL1 M A)%95A/48V/+/<-1PDG[C$OZ7(<>-!|PUQ-

*50R.FJMCU2"^"6[,@C=1948LK M%*F0P@2&@=+?!<3"#S;%DD3'77XSX7KT'9L]B.(DN'G%$%FW&/8*.K165>J: MMKAR%PE'1[KX>;R+529"3G570.K87AQ%4.0(%XY+|*

<"K9(7!P<+++)KP M$'4DHJY X,F@[AEH527]5$:,YRQQ:X-N+;]\-Z#<6(]$Z_4SUH03%).I",) M0IOSTTJ6C+VB5&/'-"+TM2P.X= S^12"170UA#= #@)54C(&AWV!O0:%0U2]

MD5"2$?1QG (!1@'1\0@%Q"$.G;7:;DRAP$2N.9TWKY_07K#X#R01^A(. M^G*KJN.59=-(O-414_R0J3>$2|9F NYIH MSD)0R

*ZL5[<0C>+28TS[[OA,:U^=/0")LK7BJLH|H?"'"|NMWDXV3-RVGL4-1/9WX&!41KL*XV,2DV|G9;VD(=H_;$!R69@A:ECYR7*HAO''71*T:,_MOS7-.13SEA(ZV0,QO@.*

MG[18S5UYMJ#[;],$B"=H%2!C?C5-|Y3>6BVN(\'B8UY'1<(V.9*K-P(GY/# M(DT0%C&;\P1P9@HTD^L.*S=;N\2OU\+E3@EFSN!CZ6B|\VE@B*,F+9GK$=-%*

MNR&;24UTR&.AL:/WGO#-$!\(-&]0/-":>DF[B4BJV:/M8#6L&3;KX A=+)/C'?=-%NSIG3!#=0O0RH^8E+R>(BL_J5(+!;Q7PZY&TB8EXU-MDPQ,\0KTO/DO2#W0@ZM,83'X?^;!*

{V#R^]?\C(1!&:9<]!:JN(?J?-4TG2J"&\|-MB@(:-Y#0 M"'V+HS6JI"+8R\1;S1GA+B'1J7R&((C/V.#;<6LIKL,?1T=;_&I-4$ T=>'X MA1D&'E->23!MNN?81!=I*

*J_T564#SIVQGYLO@%PZ%HR(^+F*GA ZIL<8R4#$ M](SIWFK_(M!@5=&IH&8*0,VT$[MU,E S9,!FF;7M(P5^X:%AG[$HGP N2F B MTYNQ?,A_8DA2QQW70%*

<7$S+WV81Y$62N>C^G-?ST%/Vp= P0?'#\%5BERF>&2.[@U|+] MN%7GOP+1R:PH/A%9H.MZ'FHWZ\DSLF]B5#X'3EB,!33\)\HH?78K.^*VF M&9SP/GZ7RR.+

*(;/CY*445&0KSM8D$8U.;H,A3"3MJW0A)5[LN%/=EJ<(;U1W MG_$.'56<@(0F'G?"@_"K3T&51'> M.,'7 KLS RX\(B2!?ASR>[)7B-+(P=)?/*E8X1U*(0>,Y$KSEULO-F)MFI8I*

M,$]ZFB2=_@5]N!NKK-" B",ZAOY<36>/Y!2T=N-'-1]-?7&L2G5@S;-N_,\ MD-,;Y;)&H,.N0H_7NOUA;=A-5Z;((TX#@^++9>X#Z!=ZE."P<$T.2OO'XZ?5 M=LD##X0 $ZAP!]T<_"?Y))

*MEM0R\S-3-XO.U&0H$[0 P^1+!-)T7+E7J4LC3]"?LU_Q*>NRU":@O'AA_@^# M W$6Q*YWCQ^U06. C#R*J9*NP#)D_"-L18<>-$&&>A1]X_>82P#RCNBEA3J0 M.8&;$+[&MB?*

R)D3D1U!:_SDS"=D;,PB4@C;?[X_H]2[-.NLCM<_.M-@_]A,/6@\A"']8@%,P'^<%YP&DJRJ7(^ MRIS?P1RNI#=M#:C#E@9EZ-J]\H-FJ845O>W2A.D:,C"5ZK^2T?01 MO\C2PVGD;

[&?W4>#)&X+@<R'>/PZ9X.1/B30LH?,#CFB)M+>#RT>8,#L&(6J!0I$,;86\0CI@1$L*T-$!C^92\AD;=;DG5T8%D*(G7(6Q&D"(,[/(3*)=2?-V8!X<]O'Y!R8>,.HI6(KG<:9NB-.\ T0]DT""*

*[+D4P7 M):4]%LDD#8F#)N3$+7D$@H?#E-SBG*78!F5GAQX&T6=+-"-"$2U;6H7%%V@" M6QDR"K9"=JOCC,_-EC=5F'Q*H;9Q,]X&$*#ZVI\NPX6.JPFG .D#(AN*T*[*

MX$H2MG&!#0TU8!'K!E;VJ M$73';P#17@+80^TEMTL?!H9NSE6M'#"X?.RD9&U?;EM^\3 ^,=XUW21? C T1U M&]Y#M++XKI4:80|C5/CU'!^*YF M&9SP/GZ7RR.+

{874.IUC MP=FN,.DK'EGARLE!ZEQE;"IP8(!I/I2F%FZ%S?M?JW;V#LV463'+$1!4Q2R2 M67]'N% PIZ55&PS2CN(*YG979/$5@YMA3B-!BVS2?.Q5N/RG_GS55V#]-8I7*

M).9=W$\^F2X;^Q^Q[]*P),#\K-JPGR[ZKUH'[("GK!^#E-#N/=!(O6M:^&R M+7K\]3^_?K]%M#"QR.ZCN_A!)#IDPHG2Q M+QB%7Y,I(;31S,2((8*QYH?<*9A7<#:;Y9QDS::?P-
EDY)1 R&ZW4E"3- M$&EYE!+N,A[$W*1/=4WB#IC/S!(!^H+[-7S]?C7!:JYGU!:_O0ZC=?/!H&(M&ZN0B%Z]S>WX-I]Q"L#M*K FGF$BPN8R:2-/+WD%=%5[#735:]/%^FVT7%
-](RTR#C"9]8S@R;9X1U<7GGGR48E$\HVN-9V.- M9I)>6)>$0O[1]ZL2BH-*5Q71LB*Z<\(5T1GY2/!IYT@KHE6]S>2%G(610M8$ MI>X1=%2&O$EN_(X55UD\UD.U*=VD4E6;8)
(NR3A=XC@@O&[(V9#,O]]E5$"/ M]06!?_V;UT=P;%99PRI!=S%5DKY0/M#GF"?Y;UXXQTM*'5N(VRFS,>>0_\X MJC,Q?Y%2)$1_/EX ;7N!BYF*H2P7VK):^+0F@SI5;B>U;3$_3I'RK3
F80Z_ MHM-)Z>_;^QD;Y67PNT@SWD&_)2M7?4+^]@[.8UR*<]S#:F&JOB MNK5*/.4=SAK3^W7;LLZ,"L%-: .RUQW3]=JOT=USLK&W6M]@L>'25IQH?&5G
MK+W'8S,_5Z7*$OX7&$RMI&R:,>B!FC$HKN&.J+XIC=9RD3IS+HN+E9Q4]RX ML1 6=;53W)-YI77M$1,_93]O2&Q';92KHOR+$ R H^HC,EB'4@@/\(P'Y;"X\YAF<)ES%.
M2HD6.2MW4;L,O[XB^$:P5^#5?X*5:6(1)OZFAK0;%FJHB%28]\Z]2>$HH@91 M^_/IX;K=:*#'AUH R 855/XX,<<=8L!W88C["=384P?YR@[&%G.\2__*-)@H M[VH1 1_BUR%.%>BQ
)6.(87H/:"E8ER2WP7]\D(9V'.Q:T (+>=%\T0$ 9R M%.336*.*"&1+=^O,L!<648?FB:7+?K&7GXZ$+$ 2[0#]]OO-_) MO#?DB:O3%GR;&TMI:#D87Y]R(P2^?
2#0@A8A]CF3;_@?:#E8D94@_1A&'_I8 M/"PCLJ]> :P6(5C%:L!#% DB%07$0H6Q"ED_;D#$OA+]M,1)@)=C6+4.0YFN MXKL \-Y466OM[!,7P':R_)@Q?
>@KL5F]$I#M+,F9$U](Q]@M[8A.C#?\WX" M]C1+8:1>>2LZR[Q"L5WCE"HZ0^J8UU]I+PM+PPLA29,7@*=U&W^3H#<'#!]T M^N7N#>_&5^KI;>+H*####I]>"F]'T<-(V%WI
W'9Q!)*.+5X"?TG*#MT%XLB M29.-O,WKFG"<.$!+KO*:C8PO;@]GO$7SY+=!6OH\@=HNFYHA MA:SH_7C2&[6QLH! A+FB1ERF*S,K%' WM3NI2G*Q;
J8]!@S*EX2],X]ML=E9L4:*AJD@,(EC?#>4KWXPAG,8LSATW,+\B2&5*.9ES,*!4%TLI*X2A.%]U&&F9#AET6N R6 M1(#'"\9Z,!=0-(C]QW@R!*O[+S1;;_^@?>XR#K=%NK3Q?F)
[8@=6?P#N+B M 11!"N7>01@W$63@ET'81".VQ*0K<(E]]BR.2D,;05A\O)&J^F83V>ENQ6GQ M$_2NU^3G$7Q#]F(1#3\?...50GF&'8S1[_G7./@F=BJ%$W/%],CTY#Y/"HQ
MY7V,N"^'8Y!BSE%=^R*]0R%$4':W])GK!--9?A(7SFLZQ;ZV"]GH$1(Y0LB M[B3\+48?WQW[H^[-!)F$B5L$P+D/,(\[R=?Z!1"49%%1&ULV;(;F6HW7M/6
M1CJE=B"7+;T\ZC9"0)0<%E]W1:=&Z;+U9NM3(C@U:J\T#T/O+>]W+U% M'7A)CCE'3'Z*02BR?0IG<;1RLCB*:;_#_FKMMP;BWYQ2DU9I(B%=^_)BBG>6
M4*#A4K:;L&"Y0TK6T0(GKVUPI4E)># M3C<<)"H5F2.BAS1PY#%CO"^$/19,'@Q&2"9!SQFH].WLE]WR^\W+!?"W;; M1='ENLWZ8- M!3-M6.\/BXVT L=MV#_;.6&F_* L%+Y!IQS
.]RHU2!\VV!N M#4\4[XXBB]]X0/%S.K]]+7Y;M"VO@5$XOOWZCO'7#;>K'/C$W"K5C$+5X]X[M]!IL4F6^R8*W O$8W?9IN7EQ_]7K9+$VO#,Q1K M*^ I=[-
#9[,]F934ZIPJZDKV^B4F+CE#8@G@/'I*^%B\(CQ6" :G7^]WCV-/ MLB%'\C.ML!.C'(E84F5@$56 MD?GYDOE:9+4\,N\U&AL]6IY-1>TP# '+DC'?
_#!27!9YZ*O4(0(_&"!^VC4Z]I7WTC9;(4 9(\ M<[C(),1?(>6'P+?2]T44N>&!YNU*5SH$N M-K:\TG0QN+CI5Q;Y>=)%;UO5X: MT>DH#:^SL!]XOZ@8;[N]M=>EZ-D<
M:4"XXJTWR%L;9\<5Y*W6Q4VGUNL.*MY:/?\WS5AGRU4[8JHV,E5WN+6V6NA< M*HZJ..KP'+5Q>FM!ED*XW&YM.-S.<;!SGMJH^^=O,; "CGF 2S6'AM$R.HWQ
MI&L8GT6/#H3XP.L;_=@<^7^\#A.3]\GFS\W69#X)"D_RP(".$[MXY^(L,)<[_-?@>DOOSL^^V1Z8\OQ C<-[]!#6D\T^X+/<.0XZ,,CHFN+D67? M!49O2)%!*
<>4C3$AI18QX=;ANI/1B)N#+=\&_LSAR!0$62Z;>>7N6R;RR!]E M9Q)B*L11U7-6@N?CF1Z'VM91UEKFW$2 .@Y\Q 'YYG,X5GJ.%Y$M7-E_AG_(M092<@)!T-
&P)PC@&>*XHY\]MBD(L>>9!OI>8A^CD7-XZB18B/S4%-4[KTC);:+?Z5X+B^.W7$Q\U^;EA+_+(E?WD; M3(\'(M#X!2C8X5GSLEVWYRV_4G]!#/VQJE]$\.)ATG!RN:B#6$(PZW?
MQKB/R MIQ?P9@IP&E9#>5@ZK+0]+W:^)B;C<.NP.L[#- MS%2TM<0-DTTA$-#O"\AY[?&Z'>%&/[)QX)H$*XE;_?F7:*]&B+B>AR-_B)MO7K7:WU^]
<\:9OXS&?"DIZY!]$1:7&%H$GFWLB:!Q<*I:. M^$Q M]JY!&VP81]'$17.8/UTY,LT+%@N)#NC@7O)-Q=-][7;V]]=!#3^VMV,*VZ+ MP/4"W?8E(!>5U=TG'[8PUZ-
1RI5U;\=5Q^W$(!^*5-"]2L'>=KN?WN!F MCJ#3RI%Q&Y HET]K-G2UB&O2^S[C_EXYK+6'FVYC*MC@A^H= MI?Q>:&Z$I)7_ZLC)TFJ5I(;T]GI%]1M[);LN-43:W1WU3KLTKS8UR=
[#_MC\6O-[BMWA,+PQ/BD4VD0 U7P@6.8UO+C9\#83C73<02)+&48**]%<(J-WBS M=\ZM$')"P <,]]X\C4_)=L=K6TZK,M0P#="LI'-_6=#7IKQ]LW[7\5YB\-+"
ML=5FO[DFNLK;6Y%$_4[!7_@'#75'+[RSE18416.M+8RU]F]=X, V"#83]PMM M'W7_#BR*QH*"CFU]PJZ#&,7&I]*_8!X^ \%6\-)IKKYTU.;)N"NZ/::.'N%5
ME'6U]"]N.IUZ&A,DZA:9(L8-&Z&WRR&,O":#>R&,P<5-K]VN#5OIBL_7I! T M^^N2"':ZFN'%S; VZ OJC6&&OZ,PE2LMU5?2?$$]7Q,2VH#*BVE7[0;VY\I# MDI2Z%9YVP86L"
<:\AEW;33 P>BN\5?&#.>=>=;=$6[D-&;$+)"-[=2N1NV70 M)7V "%;77=U],<&)7*FE!GS/NFE1ER%3;3<9-4[664.U%%MOHE:?MC%;,&(MSO(;W1_4<'S!0-KB=I26C?B:KER?
YPO+63+VR-QG<\R(U#[@%#*\J,[RU+(?W M*[^?_&!C9V]C6^T!WN3 [SS?2R=MMMNIGES'R.KH&.7=M4;,,_(7 M]B2B1YC".@2ZX>;+EF'8-1._BBC M$;.K*9,G=-
>1*',63&#AO\L7VXK)U,TQ'_?TTKLM?!+IWH?AU1*[+3ZDA3 M=8\$$(?OC5=K%)]!0U?/I?[[4]FE'7I)^S^E7F]JZ[4?Y M<0OR@;P*$7/3MB,G5*B>%YKHK@M-
9'N=HB;P'Y;13Q[]T)7YT^Z*]ACB5W_%0 M0@N>:Z1^=QTOD0@Q,7\OX_K?S'4R@A?MSL4-7-[X^DST>99E=%@D2"O4.3 MX/H@6KM[<=.?=&]MSK'TFZGHL'0Z])\"?805]?9:V?
6AQ\3)6Y(<&^!K@8G M0%<(<%UK#%]U7E$)=U2-LXY<4_TG_0-376%6^A2#1\P=FY1T;8XW1QC=%$KW MZ#9@<_2HK"6>]%P(/(S'$@NOQ@MM%98,7B'1(,GOEE/?
9T%\#TA[193R06E* M^?% 6%>\=O:\UCD>7DOSU/#BIE5O=2N&]ACJ9!CJB/FI@O74];/I4E;Q4\5/ MZ_FI>\P,A3G(]?[6(-E5]XE-@W,_F.?#8?"408S3(0UYVN6/QS^\]YVE E7/
M%\S8V&T_NB,7X3DT6EXD[@R;!N6X"=?6"+W62\B1?.]L.*F KHE]K])XFNEV MYKU0P!'0:9VA(Z BRWRC^43(LEV1Y;F3Y5%2Y?HX2Z=#?9R:O5IK^_C=3HFS MHL&U-
+BSU)E=$V&7B+#3]76]QT*$;RE?C4Z/8)VUB6X*4/9MHO;GYN(]6N)Q MBPZA;AQ3 D:I'8PJ:CNFM5745E';$:A%*US96Z8UO%HQ^HZ=4#R?);W;=.5^ M@AOW"URX!&N9I1?
U*&9T>GEUF^;2G0S;G#EW#+:,G!Z(/?K('AD80]>0'GC_M@1Y>A15#]!"@$E5)UAD]_Y9,W!_,8X1*A$66!GMFEK.(M>N]K-PSTP33:>_# MU6U0!7 1,[*ON\]< F;T0>T,+FX&G;(:"U?
F4,4$NV."0:,<)BC6*;@S1 =O MHY&&KZQXY&CHJ.(1R2-K6M#OAD>ZC8L;K*(I]GNDLO;/:PG%"+MU$,+&1,W:
MHDL';7O<=OD)6#>_,YNYNL7[IQASTQ;PJ<_Y!OL;BYAGLD/[(.S0XAD7Z<9$ MQY1M4:4"O9:H.@0!M"OB.HWO/1D541TE4O8,0 M51>)]M\]J V>1)Y7LUWO=X]<57QR?%
4O8TC/.OV(1>7L9&-9CQMD]"$]9^1 MZ#B,XHS9$#60$24Y2#8^N2/U,%:<]P8Y[S#6!29:@'6QMX@1O@GO>'),D:/#8?ZP.@8_]MK7AQ' M#]WL9F?-9IV?
5_K/8]W*]/H_&/M4Y7\W7^BF2[FHMD&)[[?8CY :FW\RO;'E M>('+TMW(>@U.W'! S+CUQ6?XLGB/LMC+TL> M5OT?
@;746L,.KKQA[J0/CNX:V&SLD^FRL>^XHCWB,V^Z;NEV36.3">\?]=T& M4UB3U@Q'=&!5+M/G^'H:WW&GNFW^FV]2?#UQQH%'3F MZ"$[AH>1A=5D0.I[ZS$4*H]Y\A?O-
#@:K6WS&SH'Z*!9M,-MK7=RT MZ[W5#69KHN$]((5&&R]MJ6#X>HU/3+,]K?'C-;3S)ISFU+\5[V:V@;(>-QJO7W:-G3+U\%9&EH+)VHROXL7T9UQ6PVRX;(=1LR5N M*
:4VO)^C!^OE+TGW5-VY4V\66-B_*,0^:SI)ATC:DRZ=Y]9%OGTD'S2LD@E M'WT\=I&%$\(7*9)3$,P+G\LF)22*2"B$5"CD&K5$A1> I4RR84G-2NG&$&^U
M3'UD6C16HO%PN0K\L9%-^1PAAN]@9&PA5(5W+]H1<"6+]JW"X%2>$DW2&M$C M^@@,M<#/?T1I2MO+:4]]YQTEZT9K]A,$I/Q9P(;KA#;>U
M/H$EOM.M%WWIH2FJ;@SLBGH*FVW@H;9+RJMJ%D%/_%S/JP9>_?T^9O6JFO? M;K_?_QIYV^?O3\+@>=0^W3>U_/Q\>[^NW;[_1/_;K_SS>/6KW7[0O=]]O
MOW^\N_VJ?:S__NGN2?[FQ^?'/IX^T4_N'S[_N.4O'C=IR+SW3:$1LU].9Q_P M_SB!YLV^)8EO.^ATO\<#SI&JCV]JU]$Q/&RTU)W UF(_:TZI M5S5\,@&+ \PZN-*EI* 'N6]?Z&@M%
(Q_"3. :Q@XB!X8H_LBQV-K'3(YF.3 M#02ZI \;13*&$]RUX:*PM!]LX>"'MO8%U':MV;C^K[#O]Y+I MKFCS_8F-U?N:&]V\N3<.%MC*5+..>6=.NE!_<4TJ"77M/G W&'VF/V-+=&:#
M@<9@Y='MZAIT^]V_V'3M!_O.4\;:6C*C;%(C/D=4SXC'#5CTVP:?E^8SM$ M&-KC:BZ_A]L:X9V$/<3=[.!01]OY!3]/@N\&PL/SE\[_^/E1>[K7 M;G]\^./ICT?MP]W]P]IO?
WR[!2GSX^&>BY.S5'Y;HG&U$TQGJ!."?>YI_]W- M0O.:@>'DQ/5:#SR; G2!IQ 2T#Z:S --U MKFL?'7?A<"%'KT*+-\;X7C#R3,/4W64M,9<,9YR<';V0+#>RT.V/_]&^WS]]ANOZ]]L?
G^Z^_ZY]N? Q3_CK]=?]_M^__"?S[^W3Z1-I!_>Y_0;N3Q&S!9Q%!(Q;H)]ZT@,[A_$ [BVG(<\G-&EX0D?XSWB?"^S9ENXZ_07EPL0 $A0RY^UR"]?P2] <@?-H:- MP9
D$]'27SSM\@69SK*XKQD$1,AEW!D+ \T]O-(W7 %PJOQ0M^DO%]]S M+WQ %:2>"22,&M,OU H\TNS\F>[3]H]2IHW(/P^R$,@2!!4Y?";H*B]2/P0 MGC5,
[@XF5V,PY"7X4O]>C(%)3);/2$"UTS1EDCN.U@@]#43?FM@2^RI]Z] MTL6.8FP@H(@(FEYC=/Y=NY=I??"/3%19_7?7:*(<2%(1'?7"R/#^IQ#?KF:G
MWL6]P(N8PA1L"C>TH+_(<,'8!PMJEYX/Y *LE?!FTJ\7T MOCK8_1TLG0'8B2!M40B!E,&CAG/",)"22U6@%^F,')EV=XIY/D=]<9&]]&#/$6.#2*KB@1#<%@(WH7S(H"]DX!ZGGR,.-
\CDUJ8"/_'8:<= T43*X;P/92UL)+E'=LDR,,H B99EC9GMTEE.7<;NX)C4T#O^W5]F*3'RAX%#XQYE4 M1+!G:Y@3@3@G$*YP8TH5V6?CF0W3FR[%D0.ID,.N.L?C.T?5=G?1HQ9PC4?
4 M&VL3"W-[HM#%-# I:E@=U'$PG,)";-W8MA/P^Q(T7)T+8WS:L:<.Y6?%K=OJ M%(_C%"FG&=T0.AHM:& N AD;P2RW*3U1G=;A3HO[#FSF\]S9$2@^H[//X+YA7 M\1^]=CSAM],G
A4=YY7B0H'K" M3\?<&0!F/<_CB>4DB0#[!+X =31>2M"KG6_46 <%G%D61E=YP$H]9_$$4;Q_ M')[FE0Z)*]E?S*4@,28:.6I*&"9)F=RK%H5&T =/KXN%^5'.1<+3-&"'E!$ M^-EC4O
Q'M;3T#?D6RQ,M7C E+"[FG8'8VK-ZR_A'!^CUUS^(=.[KK(R1V)# MM*Z_A1&=L+#]4SQ[[E9FS\'THA=^E)M"Q_D1.;_OP\VMB[=72;TYI-L:R8!X&*N/64M3$/3/7PU074M[IF>,QF:[
PXU83FCR4 /E-D0[$(R[_6R M(B-T8M.C?]8M!#67M1 MXE2-,!DT"?]O2:F(C* >:9G0]C*--A2EPQ<'] BQ*Y(XO7'Y^5M)9I.!E,^]MP:\QI.R;T*R M65>DI&52E2$+/?F!94#
MHS,70V%"[KK$W%ZH74]HWV1-X&.4QXJ, M>>")4ST3SA<]((9PE\E;BZ?T\0,# \."&5/I^@]*HZ3D9THC8TNB5]$%IQB(M5."[@"D(RU MVS'56S2'P^Y9GW;\\K \)\]UC5(N-
9$T&>H?7'-0.1Z>]%C2X\ZB"Q8&";' MDUDK*H"Y4 6U\R>3-9="4(D$A5CR"OD#XWY#,25,V?RWD)]XQ8LA(Q\]EGL8 M3)9O@S1^UBWZ)\;
(Q3OGF*ZIVG0>0B=$2R(Y@95",OE3V9 HO53=FY]82!0> M@B7*Y-(Y@D:&&6@RF245<@0MF\M55TNK:8)/4PDC^FF>XXF&/8'[4@9*2T M8D;B7]\Q"NEWR1\.;MV.$F/L-
5,\Z2G:^K<.TW M]@K7XRIRN?_S\X_[S[_WQOU-6F%S5E?)?QBB]AQF75B(5?A<5@R4^4Q^,%6+)N M!.\8/8R?78/D!G5V).[#+>R#P$5-VO3F'@=A\!54F#$<4)CV M!K?
+2";E<<42LY[@&D^EKW%H%(H\R/U;M-^=JOG(!DO6/ :#?A9^K4&9\'M@$*;2 ZPON)]JR79@+1D!/"$&%TM7F)AU?&-[@L+D+UV0^ M*O=(PCR&/I4\"K5?GR_-
=63K2E@5I>W'Z[[K:%P,BK]DR='YR",!B%5_[%T1YFF#S;BN=Z)0+3=;'6 M^ CAE- [3.0!KPNAFOJOS5'2?P8Y-WV,-]-?O+R\9\L!%,2'(ZFF^BB.F'" M'8<42R5T]/@BH8+
<68904AZW\83.+))E9;X %N$%*,#T*5HQOO;-,9#ZM2=% M1-5 T1_7M4OQ^6>OAPFLP^7?X+]A'_N$%)C_($*6DKR9^^IO\Q95T$]]N M+/+FC_%V*C1/VRP)8W]9MA[L"+:9=?
OW^<*4F'G'C% ;X>/_GW:?KYE!]UL=C M5*1!7]&_0V(5-@(N7RY+K+& .(4@]+(N#T&]S XG65\GQ\^3T+<90P.< 0#X,P$JHZ M9=49$6I""+@_YN#K N=91D#\#ES)+^NG/0+M_>P?
=4S2 ;M$>.F;/!\]0TX M;ODY2BT+R]KHS6(G:^000IBV1]\<8.]M\'5]QIO0T) -A LH^OY* 96BS2*C M$8NMJ0LY"BY]SATE8V1Z;SP#067QI.PQYOL[,8>=$_B4SBV1*S@P%5E,\L"Y
MB;M8-W4-:5N\/X0]Q"EEOUK;R/ B-]OB$C_;"PCG.3U.K^0DT>+^[2[..0)U MP.W&3VN]\1KN0QA %!Y 1#Y:UFF>@F!#_DSP$K*WY&6B$>X#10;35]$WWBN$ M&2'7:= STE6O-
26MGX-LS=:N'T6]WSFL,/OVN%>]&ND>< 0*)^-YG)&(SRJ> MX'JB(]$M40!F*:<\@0(=RT)G3MST$X5*%5!;LA$=%Q1R MSW=LQC746&40,=52G"YZB!4; 2L<7.0)"G7BMI.#
<^PEC*P48*GQ.*#.W2K+-Z MC1?4B8^0Z7TX%AW(<@9KG,BE1':G(IM(H0,S2?#]$QP]*FS-$I97)(4H:$M M&1Y]#&(KC0>PT7*KG,'M-;R.N* ^I*V?OC\Y!TK1C=P/\AC)1)@L=A-
4H#';#ZL%L"AHGS'A=\EVH70I!]RT]3)* !IG()^<13 UL!!0]K6YC)<]TFSG00:AH4:>@:0WX&(,G1%Y//Q9X&D3W26%U9MA@D[T)KXG M$9X+Q3'Q?7CY7?N.Q0>AW41-'J4Q-\]P,HK
"MTA)"OEE1!>1&DE^"A8]A;W M[BP9-?(-);@TTV_&60T))%X73 3.6:*8 C1:RL&);/%MV?Z]-?XI- M1O-*NK5D,O,.7#S(U2GYE+&TX!_KJTQ4!X,"0 M%KNF'\WAPD?DOFO=&S-N&-.6(:
<2<8,!;/FS990#0D.OO* Q[143G-P*LW 2 M2V6VBSX?!/T%:YX?P-B9 MJC!D^6-,&_WQ*$B>>+:03L*""45((;BJ\B'<2'!E\Z>11PX6)<.3MR%!2AN^"HAM"65V1EG
M4A.R320\ZG4FJ*DP16LBTMF[)V] 9=BTH1\LH:=' MDD#5V-5;F_!((RV;=EJ<0)BE#B9M> I]\&6]91R:$I' P.2)0'1.B'G*$S8S MGU7<]N#FBS(G3NR46B0=4QZ3(_"M0>N
3Y]=3]+0(EY)WMO"T66'710(P(@O MDUY<"],@R%-&T082H'/0@;@>!S8CLMO+,U7H7!L]0RIL333YPY[',^$O9; M3OIH-:KD]Z.)W.>4UG#7PI^<,\B9FS3PS0FEY,'<5#Y0&4
^6Y/]JA*@:JWC M1/I":C&)!?.[(4IZ,GPUY^T&C+1<#!7*=::N/L^QU'/%G%\)(F.?6N8?*,<5_> PTM11"+PIM MW=##%]=BT8RH)7596#9=TIXS9^$R:\(?R,/]JN3PL5 #-
REZ"67Q98F9T+E* MEXI0#_R$EQ3#PZG5R+%)%/*$:![3YKG_>EA.(#CP.EB(C$)4YBC 0-<9H\@G MOEP*ASA?(^#!4P)IW-[^_CUDW9-.M)70O#ZQL1$;>T[*.P\+K=
(W(]2O6;>)I2QVTCBG7'8PNA64/^-#&I<$O0)6*KS,R= 'D&,2Z,1%4H M&V-2#Q<7TD1X2X-@P.@Y&%"P#.'-@/%M\QGT^;D^TB[O%\#%SO_]/U^YSVY M3Z)
(_\.GZR:V7G#&%LU/A'Z6D3\I1T"I1G9*7D:IVK3*]/]%1;H?N77Z*EN] MCV4V5/XN^E82,,3A^U;B-';0M_*%)=I5=A]KH_XXGUT?7QAY35[3+1);-=[M$]!C74?
%5GWXFFZ&2XEN]MJ.AHEI-.JM&,1(ZNOND;7V6TN>_Q3O\.(4B!*1 M2@6]L)HXQ"[-+ .EPY"814UQ>1)"KRA0Q$VH\;W G:62)3%GTWX&*@H1WWGU
M"\7(E/X#B,J/\2,%,>1U$"%G(8=3.5+-KC"='T1H\V.8&G0.Z\UW%83Q>TR< M,ST>OT!E(PM@5G8S0+3PJY?O MH"ELEK2Y"\^<@Z;KCO_S0A\%WC6*TL;PW?C?:;/^K\7T
NXI_S\O8%\?Q'[\ M[W-;NVPT6E?\Z]@SMM7K+7Z]%_;2+<6B/S/\!JUFP;\6KL9.O['X1,W;SXZ8 M$LG;:[(,L5 /@OS HB=$%F@+HXT-Y%(+32_]3H*DQW.LX2FH4XLA Y"Q?+KUY
MSWNS\KP?WO-.(V8U/.SIR);.U;D,E76]N,&ZG(PDM+,10\GU>PK@1CPM4,W; MP[(N-YBJP]>2GL"4]PW+:PM!SU8!Y4=ZT]T?P;D+KM$C9EE<:O$Y"7E:"E0
M/TEA3:L&!1I(UXAGP[L0@G S96\A0D$8.P9IU5E)FAD56&%-NGHJQ^YB-6&PF%HAQG1&Z]41#DX7NDDC@XL2@IE,2W"%8",^QA$GBLZ7),:*_@8C- MX&NESQ-(&-
-1*4D*2!U3E21.3#Q5,RLM4SOOBS%75<@1,E$(+]P3V$)G0H$ MQ&Q9^"M(U"P4]CSIC5UG^%!:G @. L7R[$"I6.@:])'AS&%(HX:.%AO=9,RJ
M<<[F*O[F)\"]/81(%,NM%+76HNA"FD[+E+Q(G=0&L5DU6A0/#G7:&'@9P47Q M_?8ZS/\V, C%;J=AY\(:=QR:KCMS*(%\90HF!@.X(Q;AQ?XE/-PRIB*VH92,
MK_1*O3##RXD2O'@O,]6IQ'-=8FGHK\YZB8VRG_R76XI]M3K7LG8H)]YVF9:W M-:W#KZ*KFG*.C*IF))US)Z+#(08FA,R/=;VDVF$F+-N$ZA96X&61';H.F$G* M:
].%R7,32X]Y6$^^H&OE!3#0YB7GV\?OUXA]/4%: A_T N#^O0H_[RB4A] M1KQ8)M9EFLL^;MY-&<)9DU6UB;S1 ^@FSF!#WDZ*H"IA*.-*(D^-#)C@<) M1?
ROE.]D]:RK,_]:?.,ERK[QZ='+F[:[;\A@ZJY(A]Y=L1MDZ2ON J-4)+& M=;7,[]WA'1>A M9Z(O-\K+#U>]4\Y?F;%6T>WKZ%8A!+*L)8&0+R)VY+U^G,*)%*4*+HO9FS58
M@';WQV_SKTA8")@IZH4C=GAE3F)UP]\[8>!^Q^?H%)[Y2SD_52BM%"F7]G]V MHN-[K]G_V0K_V;K28*;@A]H8#I42*[(]T+>Y?.$ T[*"#6E-9@MR=1KGEA8H M,]W(T%N%ZH\:?
@C\]JCC2,0@:"&.L(/26<4Q*?(2S: M41>#QBK7]_$-$X'MI%A%0/3/.FC-8,S@BA<@@>$KA4'42<4F5& :9ZD<2=!I MC\7T(K9!\GD"9R1^UZPD[;2BG%%D3-,2M3]#Z/@GTP)0)4J\8]-
F1?0)#!ES51%N4P M-R%,1;'S5'$L@(I$8H57*7F6,16\HZ9RC VJL0)HQ%H8Y&1"".1];Z2F[F M"+9'Q%"1->Q.C2#^@B7O^DPC?(V%@65-POOH!Y50H0FK/-Y*X&9>!O!&&,;
M!F1XR"01<9#:KHQS4,B!2D0BYW#\'/#HA(FE! R48@UL5Q0/;7 5.1X#4]]I M\A21UK"KU,C1B.-Q)CWQ,/R]W2#CD/I>&22"*C1\A)9,42"0>B8'DXGKR"PY M-
]V540SQ:#PR!'L$SX<1C8T]3DU.%=[1;,>\P13+00YP9E^#&57N 7-QI MQ+R6<8LK5;0GA+=+39<\;JP]NR_R>C$:EU5?5RM.Y 0&&/D5)>61Y,@F/Q$M
ME%1XJ40LW/E5@BK 2<,*LD2*S$;9@?^%X5-4SZ]SV2E6UI=;IGBY0"1]#>Z M5W&_6Q1VX4)3]NF-[R8L!+TR70Y7+9<#G_2N8 5W$;77&IT%>>(XM+CKX$# M8[!0RR#[&"?
5C!QXVR /A?O,3%-0M7]]Q&A&7AR)G!G;+]91K?->UW5S<8 MHA.Y0#L)R]=QDQ:UIQD\EU-WV?<(G6I/R40;%AL0))#=-*DIB2\E4Z(N8PI)$+[UV6\ M(V< L;B6SW9B3S"!,PJR
OITUM8B)IO6516ZF'F$B6JR.A+K)A;E*P^!'!! MZW:(S1]:Y]R_@V@@P#N'8L]9'_MJHE_2G4;YBJD<9@XA*#C4]A(V/);S7W* MR6PX,;)O0.J@ <**RF$,%OC@C("S,M&\7GB,
(@RO1;;>^ *159YK%;MBC M6V7+XF_BZ:ZI+;Z<+=Q[PBQJRO;/B]3'X*CNF:@%;ACN!Q'Y MFIBMBS>2,>&@N+.&+A)A7^H(8=-JW4^>/ D?\.KV7@5]!'*R*%TTL<>Y*
MPPZJS(_A&$?WUSFS1 @4_13:!RUK%!:<+1RTNJVM_AJEC M"]3(IQ8K2G^ZYB5]HIZ/^DW%]M/0D92H=],B-U=HAM@ZZ!IE LU'ECE15(L< MMF%SZ\S7\M[8RNRH+9O
>.'ZZ!37;"U%G95L7&RZP'Z$13Q>HNBAI-^$K_@> M5D%B2!_/.KIFGPY#P$UZY(-+.@ZK%#D.HUI2R\F611<6 2>BB7MY[16D\O# M4Q-OQ HR^FX\8^.?(D>"VIF#O,
(7_"8F8:$#5]44UXDZB)NVVNB-/!O,U@7" ML7@YOP4DW D\R&? KX S+D6C0/0.]"%O#A1W/8<=&F,S]"3R> +N_R5RJL2 MJJ.!Q$%98"(B_!"=IS:RG/%/=,EP6P[MP;GY[_"6)OX"(A'Y
*;G!8@YL5R(MCO.>.KU$.!=PS&AR(;(5%Q*\]U6TWK!LC6O%1,-9N%A98T>4&%WJVF5TD7.? MF^+$D%_!-\#1.K9],ZDTERHG-0Q5N]@R<49FW1P'IVH(]((<1!8R1W<2D#ZH
MA\N>E^%=;X3%/UC,C V)1)K/C+OOQFB-2MMC.!KF!$RL2=8&$Y::RR?2*U MPT9I(&N4#2!%5ZH*G'MX\TA%?<.!8O(BY@4PV-35C4A_POI%+ Y3Y:3GOFX MFH2"1G[^5]#\
(G0K" MCX_X5&"NZ\?M1E>EKB6L.4ZO4?7/"IZ"#.!U8IS'?M_>!6>=6Z]2+M*%3E\ M]]LC*F7*C)V);U3]4/1F$;20;F$4]#2.OHL*Z8;PEDWOK5$1$*%TB50[5&,Q#
MY6*>I^91UH'V[6-[H/G!'&Z\N8,7R]PQ&$>BPX#:8D; =#5.@;=;]1@6'>% M)+\^/#MHW>U6ER$X.Y(3*B!+_1*P/>(D4=0]]S*_9(+1S"[#[<)S'U"[(O
ME"%)EU5:+8M'L>1.^%N:INN9>CVM]@E8-V4M?BX8]%6D[+% YUH]/C]B0V MN>LU]G3%C>.;#OP2SR.6X!MN%%?EI;XEU 2AL-*T]6'3Q'3)Q]N YI .&K.G
M$D).7+^2)NO:1]5VBL??%#KF]]SFX^'X'.@!6.;'U\MNML7.,G%#R?9JAF*! MY%U3H0'#7"W=D&XI?9PBM<7$9DC/#L<(4,]'YHH*D O;+*0P*F4B_02_1FP
ML2IQ*2FK&TJ2DVV(P:>.Y,V$T:M@"M&O&D]MA(0K1+# MI/$OGVZE-'!!184B\KGW!9('-74@WW]C2 M7>L0(]OZ *6\$?BJ,#Y?&3N-)?
8&)36QK_E[<6X_T[U_X5MTFWMF[],6';,_MN8^S$!#_7U(,;9W2-,S9]AE-2D 0$Q2!"%W[*XX_*'W$+ M.0#0U6AP77"(08F.,%E4YZUM92H21ZU-
$:#1HS\QZ.P#14/KBBHF(4P'F% M U8E=%M+;@M^C^C'3V_S'=PIE_ ZT.;[%HC]Q,N@W\&?H[E]HE(6VTU7$H02W M&5^;2AN7'Y]NKT2OX9R#QA";\G;\K0].^Z)FH;$HC!].
"PD,2VXZ$"66/.:VEOUUB)]06X:5BP3A*T5CYL& M:&2S-(W5'T_,VBP89%]!-Z1&DG*#) __]=O#)^4R5;N\G?0^KHLXQ7M9"9<+ M-WQEH#C>_#%KBR,1$-

*LXKF1''V1$j%6;.M(;V.J(5GA8&?A1V4WRHH(%]?(T MC-8 9(_RE0WTT!)J#|_A7WC8\"R,Y?QT#)FF&*82D*.R F'<\SMX1?/*PG1-ML39XDL<>*

BL$XJ,W)_"UUJ5M'6G_%93'F9*F(0K@)M)^DRI:EF|T8TN*)">33U;@ 9*X!@$&BV3E MU[^]G TD)&R+"[''U"2Q2)GZ|-[/PUV&T+ZY)@4@MA1"?SL2R_]/SO-?|9WHWIA6PE3|M' =Q-Y.-, -B>'"*F=18-+Y3-)Y?!?IE%K1CB;EPD+_ MQS#,"5'.;P,+4/^4L!'E(UGSCC9\DZ)fY/|QC%>PLXOQ#;?EYHK&,VE>1X"PI4! *$>+, M#3#H939(RF>C)!,];V03(#R"MZVZ[A$46;\#Z.(;lU+-130@9&9P;6[YO&ZVV[|44^304DAZZQ4@Y<7|@BD4^$[D2HDI+6S>MC)(+:)OD;IO<& 4 &&/$?..k'&@(//(MQ09T"VOR8KBZH/0%XR 3l'Y8{((FL;6 M >T_HD_A@F+L6R2 TB+<*,+;BTM-W; $7[I N +N1@U#AJYf{3T:)R">EVW4T MN#^2^>H+0HZJ.(. U5(=X2PK7B0B=HHD[=(MSN\PE{@~$44B_4%WQOOT%,7";$P M0XRG!!NI^C-/ M0?+#;+1H1@Z')_^-+^06307)$?G4,2]A;X?<*+$=)>(L Z+X0/,=]H&RF6%)>8&GN^F:>[@ _)S M? 6^DSB2O0I5A-;_X0]S,S-TP5(LWZN)ZA67.,)D.{ :*QL^Q;8?/TH^$$ M#0%+,,+1X"X3f]"HOKLO7.;9? $C M(*26$_ M$1M-\HP"-G%R6&9^F3_KVDAGM67XJQ3C&>+ U.;+J[EXCM5^.:8_MWY2T46O_J7Q?,+Z.';19F(H|WO!>AWU*;|*

(R,MYM#K&FA.YUS!H%= MYQM$R50-[%TCV#?%,['H'0Q'ZI M7-1Q& _F;;N+ +|\O^S|T\YH-HU)U&F7!9=*&QV!''42$XAL;^[_O0A MS44YE+CY!/"'+^>7Y5VRY@]

*(`H9^SI+L)S5\\#J#TBW9P(1](#V,7$&)WO MH]*552<#F1@%:QQ3QN;!Z=?^H1F"*>D^[70YC "#A&X.@18'D;MD,C_V+1@Y M/Y1ZZXMJXSC&74X$_/%Q:'C]U!9 QDX8@8FR3QY<$P0P_H6.5=4!X=&/$H#$A|:)D<6J{6GX$W!#VCG&%H|&J9_)9B(X/2R#('39@!,Z!9: !#7O M/G$'V'+[;,NND\K(9)43I9H9?!NA;!G2Z2+*$"-8^HJYB\$,WGH*.F!\[\-;*

*MK_P,M%0BUVNN0SRX^!Z=7UHMH!G 2UE{G6"=WKLSWS,T$(6#F-.R ZX8[OK MW08IJMXC'X^:\F#S0. 3T.D83$?HZ$%6U+#?:@N#*6^139A?1.A<8*4AXXW] M,=^/7L.*

<5.H'CU3,$;%9V.24DY]P7GD^%5EN29!^)S===3&YKP^_7+"@A8M % MVB*:D>0N(FHN@1#!7$&M'$N|//&#Z8 :V_!$ A+ZL+-N$++!2!.@;$^]+2N, M2+5K9P_L"Z\UY<7:\@

HIU"UR&%J"H7_F4A6^R-QM((QC+ MC"I9'^9GDE:+5HA$)X8ND\|4A#M-3VBJVL;Y:E1@V@N@Y96F-!4#M-3VBJVL;+_YD8^%HJ;U,.!LCU0$8??X4AGU

TZW1$-<@*F|BH|" M%HDPM?CXD#.8"14';B#9A!@LPH /O{U}$ONL^F&,7#7.%P#)+8]>C^$B>\ M.N\?<9#&*%M)10==(G&I_7%8>,QJ[6C56[)\2MPA<>F\.9BAQ|\T"]T,\QGI*

M$44VJ%OHN1H*;B'M^J\?_V%C*!?!;)0!3(@L,N@C9H.E$&X(G,:[YTNMIHOS M"0,5DNE9Y1\#&HVPKLD70R"'[@+H$IRM0\N$Y<&$]HG^:(5\/DMM*EFBM$

*M,=1>7&/G[W6Z@,.("]5Y .KL@%HUP2#OSM.B'%8:&0B4,$1.6E^&8:EV$4NX JP@'Y@N)X*T*,/"K#5],P4P@,%59/W(C0D4=-DE+U0!!3*

!E)&TC=OVPI>F"H5G1MWD^?!M'12'-9?D+.\0.K})= -D) M9RPMKZ'++#CO7FF+]HGZ5=1#4_)IM1>YWWS,^/RQLCVJG:-978'G%(%=E@$ZK M9+0!_!;,6,^?0P(GQBI?

O\]7K%AC'A2@[E30X;RO4^C){E\BB$9HD+,T0B2Z MZ'Z. PI'P"-7T.#9=*ONJ.!P4]O;&$'>ZI&%\8(5?(:!R%MHBY!F6H%¥MV] M8O#+8O#M@;_Y3%X=4F?*

*@6V+*S!%0Y*Y!D215FOC_'XS+1IGBTI92@1UY M>RE2CRI,L<]W&=V:E1{UFVEF0/;<6=D\Z#?0AV>]#_ -#"*2X8R!H"4.6Z+0C6\OE1.Z36UDYL$S-*

*R'"46B3%TY)^??;POOK2RTPLG.6SA]@?.,FW"% M(5%RRVK3)36"KJ0[*4]2JK9<-$P;8.1+YOHAY).YMX3{52[UD(*XYI,88D'0Z2OZ*.M>*0@(J.^%$R)FR3DS\%* E\K#8K<@L@@2F*

G _$1(>,"2F0Z2@SE>]VA29Q* MJH^D,>7/Y%9'WV!PF%+1H3]-[@<_-2B|H;%;(0Y#U1F"PJF.65QE9X%%MPD8/. 5OZXH[= MJK=LIW',C@G!$_!O_L$AU5]A@I&.1 M%

(2K>%SC4>.)9HF;(9G\!{OT(K:6 @FUXAQ59 O)[Y#21VRF2#VE7YD=0 M6QT+6#+&GQ4>&"),:C5D8?^63)&@.GO<-PRI@/'\V|^/^&?S.INRVO^A^01^!.1 M$BBL,@.VMG

Z2XY&;7G'V'(VD1<^-D.MU,X&H$'N. M5]QBMP)0SWY(9O;M6G]VR/LJRPVP^H!4?D8(8JDI<@-H$:I!SR%@X YX-UX3I MO[457I1G+$@*@:^/>(\2]"6E&L)TC-@-EF$E1"*

*MI"K!O[`1%9%QV<9).!N11U?8,79Z2:1%QQ.%78Q50-6Z*OGOL^\17.E)D& 4 MBU#+^A!(N\A\|ZFF+#DZXK5B016F]DFBE6H^QVR3P1T N=|KQEDX838I-2H83*

*M0\DB$\|*B5WN.=P5F0:.##H,9>:B&PC4FN$$14PT]DE@^"$C3Y7_1'94HXDH MBT6L3PBGN%;N/OS"[QP]'5F_@"(9!+;[@,@$& .(:'M8859;YK! M9>4FI$75[*DUZ+YB*LA$-:*H2-*

&B/#&QV!"VT"ZKV@+O+B\+DELH7~B1T% M|'C43RBE2#2>SUB= QF,\#4]N1>;]+E>O%,6584'62O\$#Y11$@S,T|9Q& M%*Z4#^G>)YM(.81O9T8+M(+^\1#PXS(YO\)*

(/COD'HG:'7V[^& &!A+ DO'X>),4-PQH"Q-U,$+;37)X2 M/L(=5#>(3K8'0K)3NHQ\;5'Q#L]'+O!#, $UI-&P!1RTG|Z_5)IWB74TP1= M.M,@38EBS:HA7)@1RL)9>'0[^OD8F-

*B"K,M*63?_,%YD+T$+#M:S<$HVZC;2 M#/!EJE%H':"N=Z@HDW4_I0R[D)4-%J22PPB@QD7;K]0!DA3X=>D$HN3?+72 M26NDC9>EPEBR,[B"PI4Q6TX7-#/8\F+B8[XT=>Y5&JU?-*

JKC04L;8W3NR) K|SY>?> T(Z@UI&:4#3GV,@7#@Y7<4 MP,&]#"98EN%#%?6>E2DV%6VN_(2@M]84/,"&J1 MC,0U-H>5B\DXQ6M@,IC., FN76_#?

*SH|&_[9ZC7L9IO^V87U=CJP\I[=[+3L5K.,_VS76W:G+9"O M'<=V6H|=/.[*A9OU\@Q>'9+0_HKIQ. FO:"7^_6'0ZE%#ZY^,?9IR,7;6\4 M*Y'(&'A1]>U,. 1+/(".PF 6B(RY82BR-?*

FS6S^ECPH:&?5/D&8ZX5+YH.(+ ML@HN09 GBIW,'Y[''B-5%77/6ZBN M@I>:QM=!)N%2K,9[,3A&_4/K .Q438_,2(Y995(E7MAN@P++)1\NA2_87?@*

*MB*JU.1CG0\'B4*8UNUSP2DL+":RJO*/:GQ$N.,V#JY1N!)E0_2N]\ M561^@B 9V/2.5G6"",A@$8AHQC|+&1)2@WD)PM&9KRA4^8L ![YOXBOUQ)%B; MBLS;?#PNR5-*

^1TX]U&XS"HG)+\]D&=.<%5\8H6..P)LK'59GLK5PXC-ZYDD< M41P.>_U12JM HULX#YN@8+VR86+\7KD/1<|RR\50FS+%+T6$!^T9$.\T0S72

*ME)BC'[:IL,B*C'8!O(^,,.PF^D@IPG[B[?HY3\MWT9I.V.X*P|%.%%[+@QO MD.!L*.PJ7'&*-;A(?(1,BIRHE&-:-VB^>.EQ65?88=#IF-.,JO.RI44NO%7. MXFNTT\%8'UTN)6$*_AE,HY3=E+*

+N;N'33.GBI2I.(.DQC'*_3,1:5LH2X\\1 M7AUUE,'I0NAW62)2I"FJ1+Z)&\FCBC\PW;[2%E?DV%6VN_(2@M]84/,"&J1 MC,0U-H>5B\DXQ6M@,IC.,GCN526"N36*$=B1:3^.,;1-*

*(#Y0_%ZH'0V$%7.)0J M!-Z?]!9!<*CG@F@^<+>@F9MW"_7Q2I_YTR+50V'LP0E\/B&"9_R[E.'?48:D; M,M(+'HA@_"/L206$(1FTEOX<'Q-5N*QQ(]*YRKIF@<:.26,=Q,I73P)Y3*

*M.>*4^6IV^C'"*2J,DK:D/UL.S3$>,3=HH*H! 4.))D2N@\^!U&HF2B U-T8+9T9 M\POVQRN/YIQA@NC?L<025I:%C*C:D CU9K.C4+Y2XUR[P)$NA"A:,6AI9BEW1-R+T6 MT-*

*IN*G"N9Z88_PL:.HX9QT_$;&?=@<O4NV#3KTSNJ,_KOS5%=P ER.8@=W M*X%_8.CYW>H=4"Z:UE4;^?>.?@/"\'1=&_5PX!L<&<4L9_'!;VV|H^M0|D M*T!T 2BS_H+V*

*7PPK'OZ=Z/7M9O "J7EWW2Z=KWWJ.6/LET97\@/C|"7)ZRP M|,F&/AOLADU?,+5M7?IK6OHPG9(+ MH((?;,&4,))"3,XMF,1#:.1++U"'F*8,"Z1CZ%S;D.;$5#N?!JPC6=,X^%K)5F*

*M,*9SE)HW!2U?!LQ%A%S7;!3-G"_ZR-.%&H^H 9\BH>Y*N22P5,M1A1<"-3O/AK';'-M MM-!9%UY/8*3 X8&5O0G6O^?>F.4SL]6=WH_'A+!P0BBGO-R0>>DK9:C C5%7 M?P6I?*

W,#AA_M"">_Q4GWU&1_ZI,;U::8Z[&H^BX/)0_Y%P2RE18C);S_=> MKW?LEG,\YX87!2D%CSS\$_:D<=Q8<,Y[.5=G"3V@C-DN]>O:\,G7, ^#P-_^2 MA:HYLUBV;H1P%AD@LI>$0EM*

(#D)_2//BO@=%'6(@"$W3)6V4"LFH=.'02H. MX'(P4)4@:!>/S/=:5,9ZOTUO#X2[BR#66/6'9RP;$9JEM LNJ Q5Q"S=7@%

MTF$D1(27^PP,_PN>*;9U?)'G@2I%QB.&>EGXA*&\MDAKZIR L;E!1Q7>0%, MGA<@W*PVI0QELHAA(PR6+.MYR S+?)E911W&3:>&5"4_&-Y ^=XIJG#BB?O%1\AWJ10S*

*M5(.46U&^*5!, ^:.*O'2&2RR,#T^LJA%MK0P?FU.&%*/WH5I%_3,CA'RDP4>QKR\L6&Z1/7D))D/Z3>B(13J4W=!@G" MSR!^ K8?I&Y++"R^<4Z.*OHR#3S7KO/9[!= B-*

*RH|P"K(.V7K'-K 7GFJ.:^H MZ-,@8!)1KPMRA3(EX@6N,*SDK$Q_RCJ3R7\%/<3UB#'! M~R@65QELCZLL78KC75-C?6Y*3'P_OPFZ'E>PVO5AZ.VY[5&O6ZO4V_4.UF'*

*M[_7W_!?I]4_H[]PW! MOLP(TL!>PHXZTB_-)5Y/*ISIO:*@QR>N8DH;Q\.PH#GCT%"*VB3!XV0(.4$$?N442E41YW4/#=>I<:M,,^0S2HF*

M)K3&M,;_O;_LX9^FVD3E4>H>1G$A;6,&5*Q4S_ZFI([[WT7DRH[IB2^CG+)<C MC2+FOG[J6F35*73 1/(\F6XGXY^#V"LP32I,5U4\NHV9QDW6/538-?8M0L1/*

*M(ZZ0+J[=M*BFTGZ"(\'AF^8D6IFG6\4VI-04P[*85 5 W?12/,I1T7^-YI3 M/K3MFRO1/;C_#M7K[S|&Q\.9I1YA5AX)8-'X\CS/?:LBBVC44KD<F$#%B#'F*

MG=D6L63G2)FM7[LX%ODYAYJ7H<&6R5;6[+1OPMWBP>G(!Y4OQ0FE88-5'6&'E%;MQ;4VY[_>T+&"\7GZV+R],K_LW9Q?GSL=A-62B^ 1Z%

MA>]@OOI'3^<53Z0+X^)+B8W"+V8RI9/X+GJ_=",T[^]Q O"F<++T8+1E2-" MA>_|^B&@I]- '\7;AG<$!"$\)7]",Q"(W"7POO1]7VN|:OGG[>;Q M]DVJV5WO33NW4ZW&@Z]Z1Y3%U*

7TBS?CSV^.;;1OS<-@POO&(?E%.]$Z(\6 M23B>Q;SL(0}?Q>G!&6>-<45]599$=_R^37QC7SN974?X<5UYGN(7{T5?C=)K5,R M.0R:\&EY+_P#B&

<%U^S5YO;_%FVL=J^+=^TG=NQGR++#YZ#!/=K+YE/8<^G6 M-1R]=^[P.P,.'8F5C.C_]NCB'E!Z1IS#[ST<)U-7-R^7ZS)H4:ZVUVN6<-M]*

*[^A3/93T=HNT!IF^7MUF=SG;>SG'3;K8;FSF=9_+4T+C'M>/VEDO1+W$[MVOCJJ/R3Y*C0AI6[>3M"B@<-QVZUZH?K:G@K>#4W84N\]C-MM{O5F3X:K=B5 M*

*^TTI&:W\WP'6IWF0!D*S?0SB?YM.\U68TPPJ$ WCZ4+P9L_53<<+';E2VP-8> M3>]@YG.P^?S=ZZ\9NJL-YH<-IVEUG0>[!O36BEV0{^ID5@B'I;S26;0OE ME._!V|&*

*<%1>_,+7=L2,MTE5?(,Y8D>W.DVVC;COU5D6V%=GN%-FB M9Z#[C(Z[BFPKLGT)LFW:[>8V*0FDG[^CJL<*1*M0/OK"AAJ#:/6V!$2K(}RV MN(RZF&F^B9/;[,8I#RY-*

*[\"X#?JAZ;D\W(9*UWI1%TO?+MV)YT;9>X8M7;;>< MJKI5YZU.K=-K/4_9KU-KUDHMW/FS:4K5\R___#,E)JT19WTA&B^/;%_%]VY(M$+-$Y=BFD+%"SR_[-*

*S=7%S\3YE[9@;K1'5C=@5JVQ$<]A!M=6Z?UHGD^8[V[-MDDJRT:-IO6B2ST:7^J#0O MBH^T1=RHHHS'$Z\;#:>ZMMMY.)W7>F\?T2)D;#V*HPMZR_==<\+6/UT54J722EW*O;L+(*

MVP;=I"'-1_V1E0-@6X[F,72W?;FUSQEU=II;HT4L26I\$JJY6/"/(2=MW5ZL M'?A9??W;0O_E"R<\| T5&CS06';9MG\' E;_(1LLR15KU<$M>E+>/%@?R40 M]D,@4-.'ZOY6*

*J$2'"LL$%ZP3/K%"R#;'>U3:^OK(BQ^YUUTT)K@[+MC7]9E*BZK[OE?&AAK MANH5&|K.PWE9I/XM8D//FI>|¥=RE*F[4>|%=FQ=5N8W;RHOV);>Q(HU'2:-N M-UN;*

*((-]XJYP.IUU01++VY>)6Y8U5>6-5WOD:GW]-9D15VSC?P;.YB6J<2B59 MX7":ZX+'[8M*4I'&X_[(3N>XNK?;>3C.)DYF&^YM5=_XT^G?6QWW^=6U+-L9 M$5I6R-*

+N'>]1W<&NQ:E^X@9M'S'M5PG+=@NR;2]HK'3 C0@-IVWW>]WJWE8B MH!{(^R<''7KG3ZPN>=V//>K&\]?YCX;NH[UMMFK6G[>&$01Y0?_A#9[JE/1G%" M72PSZEB'WT=8NC6-

J73+7RS=LK[''R8:\TID_Q++;TX;T-EWPZ"1]1N MDJK@\A!QGL"+XC%,(H6_[IP$AN%QLR =N4/,ADF3^<1'!@8YA>_HJT MK.63?.U-CYOUXM9438\?X^ZT;1=PL8%X[ZV:%BI>-

$/C^]C|>W.A5.R'O M4B/D;JW=[#X!!Z#1Z#U;(;FS;A7[TO:^K?6>]";U++)-ZN?RIG X)9579!+ M3)@MWKFl,8&\L1W=_['FZ34_6Q^O&V4NI6=CZ>!YX5^!0VP)<'[*S_UW60X*

*M(:^"Y[_Z83Q#7\/Y"V\'+#X-;3P['6*94M\U(VYT;4Y+;MQ_*+8YV*YNY(;MM-'3Z6SB9+8A-^@92*/B0[O$AQIUVWG9F$5'UJC/<:+YBAN$1 ;KZJ=A7_MYD=^XH:DU[G>-(B"-*

*$LH/O*D\H:?0@;8Z-&WI'9S74+_*7" !5G01F$;-BP@-M-G RV\"""*M)X;+_:=K>U.M.UZMZ^U+W=Q.ELP[U#3ZADXD;C2D?9>0&B77K-MAKF/L8A/ EKP$P6^&*

<:>#Z#2+Y\O>1&";+9:E46S78>S8LVZ=PBKE11QN. MYHMB>U27=@UG]2N]M*_!"W'EIUF2#[,\@1F_,L=#T^XTUF4ZE0'S4DQG7<2+ M?3%@*M)XO RFVW :'ZJ;6QW/-*

*JSW%*IUH[;6Z,/ 2P$" -VU!567$F2ML7 M(HB?K,1=;:<@V69 TVI./C76HCO=;F!X!E=R5MANEIMVJ%H/+U0+E;8O MD!E4B8"=%P$=N^'L$MA"|0*R7%YO"HJ$;#I$_AIL(4=Z?*

*M<;W:>JV"P<_QPP>#J-MGS]C-^-J4JM/ZN%FU,*ZEU_*V]*F>ON?JG)\Q3[[=46T.]U)>V<+:.)^C)O$Y M&Q5O6S5BM9U5 ^UMI,OMZYY=ER^: M$%FU-E^C=&$3)[,-*

/@BC54N[O&ZU6C5Q?VIB[N)D]F&B_L:O$+;,?R2[6<6Y MN8E>VI5-LXK0>*4F3449C^W7@=/N'E87=MN.Y6D5+_MR;5^#)V+!#9;*;[7#] MTF6RE0F5AG?*

ZE5HP%67|&[%4?=R|/YMN+!/6B7IN.[P"U:=KL^=D;D=,.,WP=@LO3#ARF@\5%=>_1WS5VZ9-5&EV+*:68T18|'M6)Z1QE'DA^IWMC2]RX=WT.8"[P-Z*

*'$R=]/@/Z*Q.0Z'@>O$'686 MK"+'ANAY]^U:<1\2MUYZ7=3-X/%.'*D3#TZ:OXFSB8V_X(/%@Z"2[U^_& M2.3Y;!8G&75850/"QV:)K__&!O%!%N 2W-2Z\\,0_]>U\%'1HCW-XN'WHP'U*

*MJL?.YC "K8->-A9)?3'NO4 MC4]&<<)-[:D-*WX?82WI-*9;4G^QEI3:R|M(5C,?3\X/|^U"MWE\6^I.?:31 M(/92T9*^6;-NX!LY,3SHQ*=N|JPQ=->D')_1>Y*_B *BI,XR[*\|*

M9H@4,@0U5H[G7ZDVT"$A^0K MAP+|`L1'-#R*AS >?C@+9CZ>A853@K]#1+6_?OP'S@#?9 UA5H$'HP#QG45X M5R?|N 9T!K\-%6+6'<<7N4XZ661[/=_4- M2]-X&-!GQ*

Y=S8!Q&,V7@T76B=."T>,$|(3_%(0"\5_)<F! O9$/X.H!1P7^^?]5!M26MD$3AV>#&%AX^+&A?X8 M9DQ*73P:I< 8@"?>,=JJ6Q_AL&F>(-=!Y6L:Y--?(0T$;<076<6IP%,YSU- M!

J9:@.JPI6,^)0K0Z_H1=P!V7)XM?T2 ^:#5URDKL-[0O6TZQ:TQ_WNB0%YF MP->/!G:[OA^Y(YCL>S>|<^]3=#^82X3UF?NYVE8\<$X[PO2=Q1_DVNZ=#A9 MLF(K0!LI#-Q!*

,SC7NFWP'&0+[K#?^18,0>]! MBX8UW.6+818STW1:1+P^OSH>2C@=VWW>]WJWE8B MH!{(^R<''7KG3ZPN>=V//>K&\]?YCX;NH[UMMFK6G[>&$01Y0?_A#9[JE/1G%" M72PSZEB'WT=8NC6-

*{Q3M$IAW"08 MCWU;L3+?/7/O48M*+38HX?U#/\F ^0.?1IL73M$'BS/RU>M'09+BG*93/P$9 M%BJ5'Z7"$&10S;+ZH+I/O3P-@,LJC9PV1DT69'%NPEZN?!5 TD+:#'G0[0U>,[$^C/?*

*ME*4\(T$=ZB-W"B-. E"4:5"YI4N.2Q$?K'ZG+^":S*D|=\\7%_[@,C_1^M91 M)H%8AZP3EINV9'TIXQZO'1#SV=>CRZN+?YQ:9V=G<_1//J0,2'!*ZAW.Q/1B M%U*

MZG\|ZF(XA[LX^0ZS&|VH2R[HQ'JLF(\>E=,WU6)8CK{_N U\"UH.*GC>> M233,DX2F$2.^(?+GQ"!*Y\/O3/.3MW$] I<.FDI*('8@;7_D> #CZ8 MZ-*

MFK2/M",D'8@PIY#Q%G_;'Q(^)?==&*EL+^L8DKO(I^R,)Q3Q7A!JH#L MB(IH*=A6X"QT*&+6R%1#=Q##1L1((2#)U'*-3:->;Q2<6PM?MQ=FJ;@_4,\M MT'*"27V2(%-TXYG3_@R'J*

XO?#0[,0W"!^W@%P_(-"16?R'G78D;>,PC. ^(:: C M_OW2%1O]_UQKATVAIH)4]NSF;(.;&]S6^NU'P;+7!EWLU7K==<%_5P.!MK: MXTDYM9ZSE9-Z&(%U10BW%3-7?*

D$V9V^E>&]YR%LMJ+>#4*0WI"]NB$7Z! "^ MG]B3?Q;#QA"ZXX3]PI EB59"%M,^3)++)VNN]B>0._$U^;.C[P"A5G"G%9[Q MKZ6[7XT8^Z3VM1K0V-

*<'$'N&Y^&GF3#E*ES87<9C=.SCUNI"PE:TMENTUNJM-MBQ%5T5I%:T^]Y++>=QB:0?RI:>WVTUK(;C>9F:.TUH,4H?5.D=+TRP)B#1F|U MD*H*

*<.*E3J75J4YE^T[%J]17Q[)Q])RVB|^-+*_!%?,Y3N#/"/L6<<[HV VB M=W/I:,\#@;7"7]W2@ZF;?6SIP1PX.Z@PU:F\E)-L0UZ+9[(D&4,L=M5>&LGY*

*M()*8D9*VKG[R.@%DUEO\MERU}9 ?]G%CER#$UMK|#5DRU:W-9_UO3:K>]6V|=.MFNK6K+'JEMWK=.M;4]V;ZM:LL>]FW75ZU:V9L|>>RFK:LF2S75SZHS53]N0X MP*+*PL*?*

B%6U$CB5=>>>FBQ@G IQ#S<-WDX@+Q@G+"-L)&5KC%KZE"L6!&V(! M)++\+WN"]"D]S83#"=P+Z$>]-&#/JG[@H(/I@AL7:KH)8=L+_&@Z]3T$5)E#*

*M>9)CA_'=G,F2R>\T63[U1LZ'XW=QI6NMJ*EW$'](JTR@&1+VE8%G]*]' MW2DB=_VG6%R+J$!$JVF;4WTQ(?S- TP@>_.5", ^C?UV<7_9O;JXNK"2^=\/L M7M,N/'GQ]?*

3J&NGZJQRFT]@O2]0'>)<LS WD,7AA-)8W1@(BY)&8ON\I-/&7 MO"S+G@N\/[\)>I[7\%KUX;CM>:,U1K|OKU!OUCM?Q>SVWZ[6_^LYWE3H0.^'

M#M0H;DV%#O28!DS;]N7LI[_/IW=_,OJGW^R3OJ79S?]+],5Z?7%MZN3T^O] M9;XWBW7@NE(\U6)\!+\P00LDC|8ZC@>;:-#"P5U!%WN[6'?\][7+D+NUXV[S*

*MF6JCNXWUWO3@!!XNLWX=Y:.[6!M=%0%71;3L@Y[CS]?56[^ M7\K@KUG]BA[-\U,'TI.:Q M\^(\YS[!)WFUC"")7YQ9 1H!>0\(R!K7]#*6C^C@ZSLNMLZHESBP&NWP"1=*

*MHZ!XW7W8 65B[\ZTT[4[K=9VG>ESEL3M#AN:)?%MX'$70,Z/>P96M LBL'Q? M>NC^VKT4YHW^M6T>C:[=8.EG1LB7*V)243%FDKFO3:0PSF+(@)MIC.*

M$_PJD^F0%S_.LKYR5O UYF#VQXE/C7)>F0NGU;*=QHNB.U:>G-5/H&QO88#-MG,YK\..+OILGS'VG6[?=S>(=UZK4/8 15GKZ@)E!|@=:!4UO;A*ME$@K5/J M/(H6W&@>>)9'Z

8MF')1M@%=;7<0X7Y$ZC04W\A(MPS MGVS,H1|E*EMN|UQ*I%.*6C/$OUSFG.C|8P1 MW5U1D#;OLRICTKZ3^.M;8D&6-V?UW%_G&.[W=PG\^C9=.Z=QC9\$-#F.J"$DISQYI-*

9G!#.EVW=^=;$ MO?5%1 A1ZN W(@DXCE)$&XOS\80@OE*4O2B/LWO;|OQ!9LN*H=0.)?$4_DI] M-QFR[/;@JS">$;

[=$#%|K%*7XM:HY2ZR{0\:#2XGDW#C6,X^DA,)LH2=XCZQ#AQ0:.^@ M'V3N#VN8^%Z0l;7!!3;Z+ '"5+H&.LZVW[5:M;<$T0H'I1AH9 C8^E"Y>@'U

MV^G6.NH5#SXV6GUN33A46< "TWKKM&J.'(1\Y,27I>"217S'I40K@/<(1X M,_[Z\1_6+)CYN+OXXC@)%&X>O$|/EF#WB+80MB^82I/6OG*0U M:[=1')^1Y[)54X'I;_-V-($B-*

TKSD'ZF5YL8T]3-\H2?@@/0O"'5L)H,L>4/ MC=^]=>K=6EV_'EE3X(;$FSA*89XP,Q0[>/*$,[KB:WO=6E-3ZQK;TUQ[>QI= M]2 0?

R9S:IV_D5>]3NZ(E7_/BANU&6R\&'WZYKUBL/_0YVYP MMX=AYZ(SX4K)S]ZO_PDV&0 MTB_3+!\Y^|OE"RL2S7#>E>=]CHU+KS>PB:1YCCD_AM_=GV;,>1?!]$DKP&P3GD MS?*

@2@-8)#.%^U9;?]O[M%!%26SNZ&M,C>[M^P%]<<-/1C$]I9U_1)..;X MY@5E2S-X%5(TZBJ6^Y#<]IM#DMO7!U#>H6L^5W/??+AOQE/Q\#,5G'=':?KQ#"

*MOVS*7WXEPZ9%/W2L ST/NT3^'-I"- E- 82I2VHRU"YOBAR/0J<9!FK&K Z8(YT#G G^_HC*U MKH^:3#=T*

*9)R/K=D\:C3;G>/6(6VX.R1+.KIGP/,4K74!.$8#.M3.1ARV1>B;.^0!.F28=&B&.5H'.=9 M$'*S@IPF@&N]6Y3A-.H/.IR+J*@\K7L3.8\SCB)<%PR@OGK)&I?"*

M1ME:UUMZH1S:#/FR[M.VX[CV.@N{/>%/X]O66^M M@^!P517C _Q8_'H'%QO"!%@%B$=6IH4,;5\)<-8[^^Y6?@TLX!:4U90_T/MO1 M9Y&Y]TU|U=-0^AK1YMM&3T?

1X!4NZX51G&DA5BH%G'+RM:W0=V^1,16E#Q\+ MA094@H%^[V.78H&"5R&%/3[|3ZQ6K!RNN,@$7SK=.Q6KV?W>KWUF(0."H-. MAM$?%;3!CG4S^.M',

*(6=A[M:B(&M&UC2,^W9W5;7KO?]:TW47FNF&'EB'[Z: M|B-1]2$X(2(^5>U:RU%[D\A\MVFTUS6C!UH.H_0OG3)[UIEGHH7:E_-+*_'DP@6,IXG6:O'^@?W2W4;CK0?F);_XB33!A M=)%*CZ<8@ADWO#?*

+WVYUA=LDF)FE< 5U%(TP>9&#?:@R8M[XQQ_2)7U\J$B M@0V30#2.\0"7G[)YS%H31:*8/^KJ,%_P,(N>#T.E0.X_=,_[96;#7)E@N/OZ M2E./9= %-*

B%@^_;@^$F"A:JJ(-3U;EU9JKTX8$5"'+TA"'IS:?2K-W96(MA6J-44&$$;!@ 0O+\,75P;WDP>'9>/XP2!G!((8C/)(>6;1$AL3.355?ZN9V

*MV9FBDTN[;M"6,6BA.M@7/EAW$(3H#D1>F1&. ZM+' KW-*DQ(.FX25$2#%(M=(N\M.4$3B3A#+8XCQ;N/SX'(;IIX3CNS \H:(Z&R*(;NEK*(BG!J.0GAH*

M5PM&'YG9,+GJ0=A"2"L%\<451"4D%##8 M9I0]$@\#,K')[X]\R_XP9|P3C.]&IJL-Y16D\N@J1S!- M,PPH&8)E<-]PP&00R4=--@E1P'609PYA2282D'^3P'>H1&DEB>8#L(5IQNBO0 M2N_!4,V61B[P""+RD72^_UVYNLFU$E#I'F'Y80JK715)<5[P:I€Y&Q4=6*] E M#'\IA=TYO!W$V:, [0N%>| 512M^> 7V.Y/EQ$VF M[M#/J62=P,"B0/ 7 X,,P!Y3B&24&0);:lW*

EC#E$,>5');0-I)W(O9)1"9VN MZ6+Q(Z75((4.,0N!/L_\9$I&$!#Z-, W)'0/Q.Z:]JRIY<+-@ E.T_T)5F2 M3#"70#20*

J1&QMPCHW;5UO6P<^%@$B_PX@!2!$B"3]$S8&2MA;5_[=Q=^(MQQ72V#R+PV&(U8RYVR1-#4=8Z@(205)02B^ M^#ZQ0LPAH#0YV#/X()W*

8E(R]{C$=$TBZ8/3PA9D:4.9&VX2!CX&K%T&:ILS MSX!20IK4IBU.RJ#6"3P.^WX7YZ%GY)(1NPA&!!5>DX&?87@0E^U[$&8S0I$;.MT@<71GD24Q_38.!@!;>1 L0W!

(8X%KEP_*5>:$J @Z.BBA<8ELA\A,5ZYTW1 MLNJ.P/OSFZ#G>0VO51^.VH7&O6ZO4Z]4>]X';_7<[M>R_N_;OO-;M_$\LC| MQ>?/1Q_[7_KG)Z?6I5]/3V^L_M55__RWTZ^GYS?

*7^\N!X!H[,3$<@!M' M S!LO)!5W4S K!^$]2*7O/B.WX&/LH3?H?\'/X4DIRSQ3'J#;=:)\ZR$8U0B<[*#2M>N>Y.5^ZEK(|9S>E7 M2]>L,\9]P+R09?]MOGL^N3+ MQ?6W#]-KJ__OXMN-*

*];5_]3=@/E=GUW_;7Z9S0UGK&*9B75<6^L"-"S)_*E4@ M4]L9^ 6XO'0*>@"F4_M4!D'^*Z'EEB*9KG;1>LY>RC:ZH*W:LNNQ40"KEYS" MDIR]B_.;]XLOUW0Y+Z\N3DX_X7WLU6*

260 !?,7QW:9+VFQ;FQ1+8,!8)"UE\SVHTF@B> MGP+|L "0'=1V7 HRM1(P)^W%,ZC/^J9(&OI5W$$z@=/LT'Z%O2BRVL,$5A 5=,90-*

LTU3_&>;3Q&'F&K#":&+Q>N#S$@%8QPNY!4AM\XVP4VA4IZ3.@8!#VX M*\?1@7E2!9^YU@"=L\-\FG.^EBRUR#%^9R1PF=2NG8I_3=VRPA5^|*-1+0)H M4UB1 6L-*

*[XW,!1U34]>CJ=0V4H;Q*5T4R]N%>\113Z39_9U3J>&75[3-"MS% MJ1_]G4K+!CY'2'S"[J]97\7RZ?3&$1R4.'FDKB67Q$;G)>PS^F4FL*@[!(U4 M!A2^8AGC]Z.65)(6%E*%O6-*

*_R>2--44"/6%R3T-MR->' \LP9QW,53LR(? M*8V1KF+0ZJ! >K)(_?&LHY(\!]Y=QAI.!H JQEAY8R1MD4AXSA~$G>JC,+F3+"'DO,+*

*MT0>V\f]D)2JL=IB;*_N;SS9WF6=G7^^N/K:OSF[,'^RY^?X13P_V\=""_ 8.4L]1@7G MZI?3W_I?V"%R^NGL_+?KW1:T:X+Q7'*2QUDT0K[.6M\7G;AQ"RK9Y0A&8,7H M8Q"?*

*W_C#R4[OT*XKJ# ^A0+KD5&I<.F_@4I[ZU)8E%'_0OO_MJZM\SG$>;R0T^BX8UZX# ,"QL-YAIUH\ MXY"'"N-25PIVZ8!V*S /$(;AZ8C#/8_A%'MVN]ZR.VWG@|6U6|V&W6SW/EB.*

M8SLMQVX>=^G?C5]7;H(ISRH!?.X@"E=7KG$>*$&"$Z(U>)0_4P'^'WG$P+(RAJ_#XQ@K MF\|V!CCM<<(U%B(B8!LXT$$N39/'-N'0\1WBPS#\$67LN6)E'&VAD'#X[)5! M,I

^C#7B5\|;Y7P$60,'X;18K\3&/$K$!{ RU7R@W*Y&<<@61_%9K2YL7-M-W_YHD2D7D5>254%,P@-QE$>$N0MX3XY"M^MA)&(V\2#P;5%B!E1P8R[$V(V*

*MDXV*7T"N!RH0'HE,#W(ZY"C&.46-=;7SC)X@*;; ^)C&OON M6#R(B#@TC@"ZX!=X#*!UK5!QPGN&>]11$Y)(EN1,QA.!B(+3$Q/WR9&CT5X$ M(FP+WJA71K:K0MT9(MZL*-*

K2#AM!*44 ^1GJ(S;NG0=P^L9L4-<(S>R$-'G M>S^ ^3SC ?'85HA=0LZU,\S%4=P%T2P.9$9#"':D#"0$B/4VB!G2W,7F>7RQ_*

MC3VT@'9Z5QX3Q9_]0<+P,UT#=_LYN=EMUJMFTMQFTI MHX7\?DQ&?T4&[C2.FVJV2J0(EDZ3E0S_R4;/IOU4_J(_&/DP7134Y*G!9DM M#@9$P,N+;K4O*TOI^>U[*8D\/ZZ2S?*

*+\5I#(7]U[JR.ODB1KA6,M(^JFL<21 M@\V:@AC30B>5P1[VDW 6X/S$B.2$N _.6//&X/PO3]>*4"X#5??U-Y?;61*C(M,N'7&W+BBS(V$M+5\QDX?7Y*O*1;X77"*

*[6P$>C@[A=4D1.IBM"[3E95.O1+ M%HYN7OW0D&P.3XJF]MB?HZP1S=LPRI!)GO((?IA|SHFG'+2055 P(T?NG,W>$H +UTZDX MJ"7;**(3;4&+8MZ+HUBMW+*

[3NJW<5KCBILX+2@&(YO+"$9HUK:+YXZ7&1CQ>^ M+U=?191'OD906[/L2A761Y=+21A29R5SDKJK^:OV8,N$|@^7O+N\@"=]/18]JQ|6C*7>KLA1:<3*[&\:8,_%#<'#*

MBF=!Q+%>DX5$-3;"%=.AYP6X'#^%]PM>3PD+)PN+K3K28Q)_>(0$>\!H5@]H MHSH?0%@F$ID.<\K1YT;Z&F% MB/DK)1,$3@L'(_1G^4G;JB$*OC&[TVCHSM(5)%3--[5'$!W*

*ME'-8X!XT)W0=S@U+"22L&/']3]9[_2??:YS@##R@5U=3I+'$'F/"@)Q&(#M.M^6IV^C""*2J,D+<[7>((IB+$Y\)23 1M_]JD02G7:MHVF9P%!=*Z:F=EGK&W@ M$)MZ*

*(P5QE1GES$VT4;'<2!:@IG<&Y4)OQ$=!IR!8H< $%EDM9)(+]1V+0^L M;9#19FLQ:7S*94B&50ND2,?0E]B.U%M)3SF)??8EED0 M>,&GL"-F^N-1[&61[.ZJZ-W+9KP|*

M!%W%PQ_9?)WM;K!#S3[%A9772"0'RZ,/CDIN6R8?6;"P12+>)1FYNE"C9=>X M4!PB((.6Q0!%K.9608RVL(KE!*

%/AB:)Y]7\SK,+BOA(>XC,XXYK'].E2EZ3TQ5AF2_M+2I[F.,2%^&;L%G M1(%V%BTLZ9>L1TU>B+TZCW?|4)9*"0T"%VZ(SQQ:,Z.A5I:JBR/!J)&QU_4 M&>RX^?+/"<;_4;\0LE-*

8$>@6DPK$$H_DPDD+=8/SI&5B"L_]D/-6>FV-VAZ1 M747TK[0;;K7@RZ1IE6(K+C5,XQ^9CZI(5_41U_XUZ]6G5!1_"5Y/Y^|]^F M: H&VH/H-@YOI>|+L^MCH V,PH1"

4KG6W;$F&Z,.D+W[I =)@2V_G=?UW\Q M*P]FY)XD5/=3?R(":X;X)@)^.F#|\^@F7$P>R3=F$D-7PUQ'E'WB]E3+*-2 M25UOJJH:#"0AM,410\A# EP8LZ),8?0-*

*\P.'2>2_UOAO'$+#3PFZ4<>A;[P M.^O2(4P_PAJ84$*FC8'S2O3N/W(O&,IXD>M-L7@BDSTMJ,.&VF/>"E;-6X[% MZ.D?VH6>*QI\CSJUW'!*#F+&4$#: .P#.D8^U9M8,4Y;,Q!*

<)"D$RC#F^,"F M@[D>HDTO9>'ZLV&@.*AJ!3,]'>4H>D'!AQM%P*1=ZL'L. 6+E#&H=(/2UT M7"?.-/$;+:#>@VTZ@M2S?'5?9#G]BB#=V9/6.!MY#|4>W(%@"Q7.,/D)1:%/HW&;30. M30B??

GE9>-839@'QZ7FK=]!M69C:OD/H[+SU=7+3/FG|\OG=NT_;+=_OWB| MLZY\.UQ@RJU+AA''CO5, ^-SB+=ONS%+OTERM&9G-N M],O]HZ19\BTf0R"VT:ECMYV3#^CXZ,-1O]

<[_7EV M9I_VCPX_?CQJG]]?ONH?X3;TX_],MMQ#IW>R7%WBOJN!'T)S@)|CA?(M-H M#Y\,#G\TZ_6ZWU_G]_FXLF[;BMAZAWS9:OTR9E[0_M{(BOIRC 2?,I#=?

*@B$U#'@93XA_8]CC.V>'G:3M@*5& 3&G!$13;X.S- M5TL<](CD:@HX$]$$,#*)P'2S12K@A+*X0P%F(*8^@*?$, MHHL6DI*AWC9#",P5X\KU/T:V,M -*

XFR,/$BTHAR(^2ODZ9-4+*!DI9],\0%' M9&5Q(19"-8@%V%2(+ =3D>* 4\(8+P@W6/"K)2,'&XSLH$F)TD&KU&T>!Z- M^O&^P(9183DE,|>Y,)!!$5B#&'B$#(F%-@1Z<$]P=\448Y[*

*M;MN_(=^@H.[^C';=8 M&].C9LB<+IB2NUS6)DL#$MP*L.42DT%O+G^YVLM$[O9?4;R) 90\Y7*YDA*. M]3Y";|(SRB*,"4NZ8$K&62^^VTBR?GMK-'D*Y-6TI5[O52^*

*M6XB+1HOO.|&@$2#>_MZB)WA*ZG(OGW1?IEOO8QU-8K)ROVS$H1.2BKV3W*LJ MY<.|{@:05;Ks!;._(2-6-.#4M*6JY>4[>7$,H@"+!,..I6V79< MJ7 03PLC/GT4NR1'+Q*

3&;GF^A6.D6Q:680K>(NB(CSA&=85C[UORYZ6LR+@X%$B=>|\U[O03LH4WJ-=F$(LNA(MO2@^9+W#7;\7Y-9&)QK)LH"T'WZ;)P^,_-5VE0.L1N=:>VM59JC3/UJ!\>*

MD.=GM^S!"%;)=:X\IRBK$38^0A0.>[#16 QL&!OY_/8>ED$HN M#=YN7C4Q!E8SF MRD.5C$IE;:G-RJIK),$;!TPA9#UB3_PX,,XA3'+3$COC.1

*MMQ9%5_GQY*MI=$_)>=2*6A*.%RTKNOHH>K+P M*7@ 6]W"-P)\24=,;E V5NZ!N&TC7KGO\6(JKDA:#'T'4\6@#$E&)>YTPDM:T M;VQYIGC+Q"A&L8! >(' 1$AJVf+BMO6PHQ,"CX*

*@?H*1__?KE\|#,M>*J0N M6NK$KT0U&9DMCW;Pl.T<^C*ES MO!+UK09%JM]|4*1S[WM.-$%?.5_>=@78#'R/^ G3$%O7T22 _]A.02K:Y0=,=_&V ENF+\0CB]4IA%2S!/3R:4[8%V'*-*

:HYKE M"7[A%QZ8],PW3:#>,G/AB9I]#L,C\)0W/GM&S)$'1_L8T5!P[E?]R,BJ+[,J M3+6-IBA_#=/?-:A76H\'JL4 B)Q:.7,GY!.L ^|#T-^NNJ:>DJJ2.Z>]GN37/+

MY.30V'80ZL$UXT@)2]HUA'L!:V0MMPE;PWC;23LMFU1GYZ5,ZJ0VG>"DS%L M&:G1L S"]|HA#MZHH&K8H1[2|!TS1M%1Z(><8 1L^<#ZEP!$9Z_K-S|:3]*

*M6CR/NSU'"*P:L7"K>&I2TKJMQP_OKQW%U--EH4HNX,>1SS#()_SJ6WQ&*!4!0 M:HR.Z/?>&\25M:2*%,__Y&.IZZG$:A({P*V1%P?NR1RZ)EY>E\^GDN:UK2<"_M4A!D"UU;M(RKK-*

43KFLQK"S]^B%+,)%6]2|'_?=%N-H.-E5.7(U1\X'X$B(& M(1V+#"P]^Z;1:>B*UV-"QIT=14>F54:ES>]Z(DY@S /H/H!>^@%7%|U+S36% MJ;LK7!LN%H=.4A&HY*I"|+W3M2T"4U7-*

=M?[,$_MN#[&GN&#Z/!9/(X_,+YH/ A>]FG M$6R1!B^|%[7CZS.D^VE\#-XU0JN3V9_"S^4K$N']MS.[>O8UA9670%^#_M.?8\D.D>,ZUF4$NT%D0.HE=,(T.]DTJ:%@+*

RH\2KD3UI[_A%65/K6)P'B MO4"F<#001V|GXFB]SU;W'|(%AP@%:6:2+L<0%5%W?RJ6DG>@XGQDO.6HYBJ MJ.DH7B!P6CX/%?$OUZP6H2(.81?$7T(X7B#Q3D

*KZ!5*U,,D.R0750O4PS*,K#RU&"O2Y?!TBK2]#BV*1)>E5@MC!OY'#X3Y.4"=_EAOPJ1NA9_1@PO M2 @"EYXOWB_*0XDC!FM;Q9G&XZP]^O! MV'<)4AQR-*HP^\T3*RK@17R*H[*

GN,%^OSN_U!+ P04 "!0@&99A^). MZRH3 "&J@ %0 &%B=7,M,C R-# Y,S!?8V%L+GAM;-U=67,;1Y)^]Z_@ M:E!WS;H/A^T)'=:$(F13H6-WWA!9EX@P"'"

*[04F<7SI9#9+3$9 MI=$_)>=2*6A*.%RTKNOHH>K+P M*7@ 6]W"-P)\24=,;E V5NZ!N&TC7KGO\6(JKDA:#'T'4\6@#$E&)>YTPDM:T M;VQYIGC+Q"A&L8! >(' 1$AJVf+BMO6PHQ,"CX*

*/A]^+?GB\/C;OIQ?IDCF%"GMYW^M?L%G6'"N@3>10/*F0+H4X3D#&IE ME.#<_|_'7Z(72EJKP$$ONIN?JW_^^4OH9C\ONH^[@C&Y>WKWDY/;OURY_[_<[N;>^]WA*

MKV>W]M/K;J3'\MU__?GZ7=S/!PC3>;_$>:POZ*>_],/UXN(RT'J=]*U<^,= M}1N_/[3SLY*'-UBEM_FLE-_?GC[ZNR5V(6CY5$?IHN? MX^)@M_YY]_EBGO\SXE^Z1>S::IJ?*

H:S2O^[_9R7_8V^]R^>T)AJ,>]MZ9EZP2]=_W>?SN5PXBSN+1;!#8;_I^\D M\#G,Y_ +3/^Z$N(1$;-%O'#3K*IPT9W^YPQ#G@U?)\3U3#R>LIANELNISF M?H(EJED *=X ;64!,>*

HQ8O"LYR1@N2]\RUA:G@\X+]F%0_FS=ZM8=_-L MV9]>&00|"/F:UZ^$^?7!.]@YS1^*??WR="GJG#S[^,S&/1UI"%F&2E)2%15V'ML*E.097T$$4KDC'5B3$VL]$^\; J09T?]=)[[

M_OGB($SG@T!HT%4ZB:0Z_*9IH+L,X*LDER(BLSE"\#]!DLR#DUJ #Y+,HH4R M/C4&ST8$KP,L\9T!Z_$TN#'HJE\YX_OX;9Y5N_Y^\0YG>;.^\)#?0Y;>+8YQ5

MF9RCT67'D_<2@HLT,#(B>)\"?4T8N'-%E3L=V,-->O0Y'=TEt<0?C.K=(]7 MYR=T:$=1G,T%F"@$5.6(96O'1O/#Si?'P_J.\%#(UDWT_FIY2+^ MO;^8D1#[/_[_B# Z,;:@+\)E#-

HZ2#%\T$!@M;,V4I63"!<4;Z_P[%9OR17;Y M8#$?GON_,#O$Q4X.D;&UBC%0"5.8\MR3TP$)Y2+4IO67%VF89L"K WU?AG. M&XF[&9B?)LLB'>C5_CH?3)XY<)VE A_S0L)1$RIH0*

ZP6),-L 'LF3<\8H2|&B>?-2U04"MBE]>H!FKR#X MP<)MAL^+1;&W56Y[Y4.?!](F/@O!4S!0O,^@0A'@E;<@ YHGTEG# QEI:RLP%1;P,7FP"8T1 M.4HC3>O$_RH9VQ0.-

=#]HD\N0$VW8@\N#Q^,\/YN&\5<]6.DAQSF[<&S0 M(H*)PH**RH"+,.:(H,M%HO-C55_&W%,TTP$ ST3<.5TX]4M3SIT_H/"#_3Z\M?ZHHOV$LSK,GBZ?8]<=D]E=E2=$

*M*495_DL/SZ[50,65EO8S; I&6@#' .2$;@Q&"Y,>BM5*V' MQ_U(W+YXJ06$QM13RU+"XHB0_3;'3"@G:LFHGU(D%$7VD7+/E)&E9P&;Y,"*

MC<%$EF1%>/NZP8WT;%]HU00FK330,-3*ASA-?WPYK+TU9-6'NL5%CA4R;@W% M$]Y5C@L&<$9ET(5%7Y C$E%K/LJU!UO8%7BT0TEH?8\Z^HH!"8H$I;(4#NI

MN4$F!YD2]H\-CXW3\+NF'U[N%%\@\=U/)+$Z4IWE--U4Z#,9@>5!I<(5"- MDD(,.N(ALY)] FQ>?'Y/GG;%)OMB);;[&9K)8U4LSIK#BE26HK) U:(&\/ M|AZC "P^ (_9*X?*

*(‘&L]4FZG:)NBL,98::B*9O!XD4NFUZ>W^5,>'^536HSU-M47]30 1.*86,%GQ)'H3'HE,..I;6D_[74])-T59C.#00_1@^E$S8-7-/'$LP M(@3(1I%G9Y, :5.IC388";7*QQ$]ZK4T-*

*>1YHD(0*5;AQY(I<#$!T'L.UEG. M"F:5Y8CM6EO]'S='PBW-6_<2^9A=6X&&*#*T$(HPQ ^3$+QP((O1"HT5VL1'M[MK;&]_7'@$;*N 2$'!=O2ROU_2!X9*4=TOZ'.8,%N7$?=-?*

*<9XNS)_7F?/V MZU4»]NZ1%K-L+(9&*UW.(JBO'0L3S[F4D2LHP5)4[9.A[).BZDC B3K*[']5K MTWT-&9QW70U!0#_)QO67+ /,:ZTE" 88A*

*D)D2.V9YPQT|>!1G(P>V3P)A0PK2]/(GHZ&VE,b[NETX+M2 M^&8B;Z;YO_+R'$,E*$G84U+ >*B MGDZD.PE:<:\HAK.)/A2K/?A22K",8@7NI43?.HJZD9AMLF,/U_]E0+>1?7N3*

*M=HX]YE!9%20-+D&I*XL(KB[6,A3]6&GI-A^M ^HFD',-6+]=^C>5]XB^S'F6-ML)-WE2@0E"RO+K.W@#)ZU*BUU*T;>^_P9>MS-2PS(Y%VM23W(]]^OIJ_Q&DW M3*

[OE;M6)TZ\IWRHA P!3"-M"L#'4TW#)11]IL?4QHT7%'7.%D.7TJFQ=D(P3+X J;F5H&VREFUPTUX/S:#QSSPG#F=UEB@=3.?3?EGY_73FR8G+[-+4!@G

*M3UZR(G;9@)@C*USKQ+"U);V#I&VJOI>%1TM=M+0=R^XH+H\Z8O^/G8?ZW9*

*M%1.E.Y2C!EVA2@X_%,I;8Y1DT9QS0HI@.J[0L4UM#@J7@V:*KO24>A#$V*F>3,*UMXWUIW*88K!62KLY:CJBW MD7;QEACX>+A$F^G]!LK M)#R(9!(9;^5E3;RE [2Z@-/%1><-*

[ZKURHPU[U/WYY)&&N%DOFH7B,?O.YSW M&*OF3X?1,MVV0]QX%)$RTTQ,3][2>PQH)&&V5\R\:)NGSIY6SQ>=P6B:MO>81FB#M8:]3V4)=BT(O> M=(M/4WK:L^,/1-
*K^5D2_)1L>>]:G;W#)=+@9?Z]&<%.NXDI1G,#:,-PHY Z^38HF2$$8)?<'6TY!W$K55 M8KD\-Y/!'K-@G*0E14$=FV@]G)#*KPNE,)"\<&8!=P[*=RF*O\C@6M$%;;9
M>)9"O2]"U2:GQR=V_9]4"=9,9XSXY#\L'E@(EDHQB"G&)QU7A])=P5:#WWY M/:<'1@[&QP71HRBHY>KJ;F4[SQG.O?)BVJ_6KA'FWW3Y8'ITT)_?8,5P;84E
M6DD.E%ZD8L!Y)FKUMEA&:4MH[@@?1NDZR-,_"/(>4:?M9KU/:EU[\]6@N+"3 MR]DV+A.=DG&2&RB:>U N),"Z5EEH*04EM#*(UK6%]2A,!U_F!\/7"#IK6*"Z
MG%U([.9UZIH@K6VK3>@O)Z2==#B M?]RXO(%*OL%I(T^[#NGJX&2?[]=?7U7/3!B_NTN13[QAQM]L &7=V#7E"%A- M:2WS]XQU=X[6BT$>B;5U .Q_+ !O(V@>P?
7>M@'&)$E;8EV<$(2G[!DS![04 M>PH4G@8U2]M:;^'T,$K7[M6R'PNPCZ#3D?IZ?',U'"H!TM0)L&3]CAGH@!OE M.2895?/SG.[=U\-_L-
+^PS70M"QV:5[TCK*+B(5S1QFO2;5(7"E$KAWDX$7D M6HE<+JV[N[TN=J^WKX62'Z1T_S@J&M&=#9N:?=VHYYR]L]II%;*&B(*@;NC#
M2Z*R^.R9\X&,GQ[=A]U(WEH@^]%*&-J;T1XG6RB=SH;>NUF>A-?]$$>95V+ MDBC?7X1X4)>]?U1 M/;6YYM]GY[*1 9G_B=W?>5DCEZ0*,10*Q'B2Y M%>LN;SQS0U#Y4
J^@Y:05]AY/$VU/"KB(L#W#H==D_[XDKLX)>E,I$.;%$M@ M2BU=PDD9NO2KB3].^@$V1T2[21HMHM!236+VW\/_2L3"-E M42<' UR\<.[.-[F;+M+54"7.CM*P:C(.]
<:WE)']44].2PJ)G"I4%(&SQA./ M]?2X.J=',0I7TM,8P3$.=G@\#D>*I5:SZQ?1B%EP=]G5?3X(C24.$^P1(CDV M[UG2V+S*Y8W"OGV=Z;:R3@20F^KH.RX*TA1CC/X!6W
MH(UUR=JBN&]]FIH(;&Q3Q/4= ?Y: VILPWU=V4K[5$QV"5@E!R+R*MC49 H M"HTTK)G7(ZQC?]#BGF^[/UP.6A5%T4YD6+>WHS0I#8L=
MN>0:"Q'Y2/"\,^Q]0#]/QT.CQOO%TTA8Z?+YMEHD/F-=B>DEA7TJN@+>*0,Z M%*O]-*);KXU])G;% X_%MA&5N9H MJ+NT+.#"L B&@A\M%$0FZC[KDD13MQ9"%:)+,4AMVQ_-
MS9YVQ2L?B.4M5+> MB#M+U*U>/I6M7@\H C_J5IVR]_ETG)]O1OQS]?>$R[/=81?SMW67LKJZ\QGV MT_Y%7N)TUE^D>KVM)\8@8_.]*4873]/-*\Y13P\4]\U(FCG*\;#NAF 5
MH*G1A- 49'@5HVD])[@1P=LTF] 0:0]OZM]4]2..T].V[L-56S=9"5RU=<^^ M"FX#,WF?QV)N_A[,3".S=I^*#/TM0WAF10*.F8$UK3_I7'HS1RDMST5X M\.FL&TOB?8?
I[###Y%7@/DD((2<*6(("D6"#)A%1]4];]UA=0LYVV2LQL+/ M'0?4/E@[;9]M3G@D8DA8L].33U/A2:94]?/J@7+1@Y?>0W 8@ZK]D>COLCXW M/WZ;9A3'UGHC(3?
=>]*2TBT*>4^2#\Y>Y]\L6I/K]K\:8I;#8RR .,I:15$Z M9>2Z>4_][11M4_7A$2U$*QVU.V1FZ)R^B5T2Q;GH*A?O$RL6R\I%4)0#@R_# M:D@?K79"HVE^E-
KZY&U3I>&Q$#66]IKZH.N/!ZFQ>HG>,TC,&_*)WH)+0M4C M8X*0,1BA]'U\T?6ON>>6-=\U*AH+?1Z_0C8Y]]_^@]02P,$% @ M4(!F646<]T%B0@ IL8" !4
!A8G5S+3(P,C0P.3,P7V1E9BYX,6SMO5MS M&TF2)OH"OT);YW6C%/=+V-2L22I5K<:DDHZDFM[S!(N+!XEM$*G&127.KS]> M"8!7@$P0D0)5IMUE42BD%^X?QGN'N&7?
_]?/\Y&+[[#9#ILQG__B?U,?WH! MX]BDX?CD[S_]\?578G_Z7__Q;__V[_^#D/_S^O/[%[\T<7X&X[E+-Q/P,T@O M_AS.3E_,3N'%/YK)/X??_8M/(S_+S>2,D/]H_[,WS;?SR?#D=/:"4RY7"UO]
M=O(W;S7EQB;B;-1$6IV)=RF29+574DO.F/N?)W^+CDMAC"0N,DXDET""X92D M)!*SB@;/<_NEH^'XGW\K_PA^"B[P>>-I^]>__W0ZFWW[V\N7?_[YY\[_PF3T MIN'9
MR^5G7OK1"!&WWS [_P9__VDZ//LV@M7/3B>0-Z)?+:F 4@7._U.^]>7.F$X1 MR"3. Q#*8P+Q2MB7/?MNV.<V^"Z2(/QY:%81\>WOKH]W.?/#F@*^]=45T+9? M1,
[@+,"D)M1KWWL%YPKD381^$N:S^30,FY]C<_:R!?>F&2=<,"3\P[09#5/9 M7[_,\)]EPYTV^2,2KMT'IGZ,'SK[-H'3(]'O\+Z93O\8^WD:XG]R_[I\F$]I
MV8VI$[1=0+5G7UD[DFPX'L_YCW^=0F@K/0 4H ?,\#O76QT*X"C)E[IT*AL ML\T%+T8^P*C]Z0#%=>+]M\$%#EP1O,_3@?!!MHEHE;4:Q$'N%=7WU800#;Z+A M7&NB V-
$&A/1ZF8@.E]:&4],LMS7FEH$U]=S2:17D]7*EF_T5H8I3Y]SJO]< M-=7$N- 4@O[I13-),$%?#'_5;C-_BZ,&WX>__S2;S.'RA\UXAJQ^.VH?B.\Y MG)0_/)0)T\EL\&G2I'FY@Q0/4V%04YSI.
[*]>Z;MQ6B*: M_M+:K4Z@!C?\D=UU?1M(185O]*,NU5U'1[<57DG >]-^B"HI'1Q1-GDBLW7$ M4FI)3-1FYO$WD3X]K5_S1@^B]&WD6E'9Q;D;O&E&^*-FX2B]*G[2>#;Q"/-#
MZZ(,,A?6.:H(!Y.)U$(3)[TDPECNO7+4&'6?S]CE035UN\YW7Z087771]"3(MVT]F.RGY]V:\QD]//S?G?C0[7P*R/.@HN$2'Q08B/5@2+%]K0*7!529!.>ND MV77?_N35N;/(*KZH*W?
C,WR'\1RFK*TI=; N\RC$8QP*Y%3S /QAE$"VJOL MG?'H>%1VOV]BV)^B>W+%=Q)]Q1?U)IY!3FA)A,1MHE@7Z60B'D"2)#+(+"2@ MD]F3QU-VTL$&E6XFPA_=U>0
(G/GXULY],A"\"2=HBT,2LR*GZ^WT'H/WSH)+B;KW]M:3> R5^@S&N>8387J4S M%'!9[VSX'5;P6+3)EGU*"88>A@N"V$ C\30@.I7 :U&%9%/= .A9:U)3\;6+P MG?SS=%,X
3^%7V#Q]W?C7_UP\E]^-(>/N002* SD<#GH'J,EH?;[H0_#T?!V M/G"I>RY(R(K0634@OC D-<.3(PZYZ!-)T=^)QA/G2=[5L1M"HD*YF8VP3!H M/D&4;T[]Y 1=(.ZTU]HE]'D"15%X=
(&DUX0KFV-OJS3C]:W,+1Q/G1W59'Q; M[[*ZFSE0FE(FK" Q6E_B5FL,H8EL!('R+EL6_W\E@TOIMT;ZM;55,W;E;- M67N7.9 BL2P -YU4EB6-(2Z (IES]ZAA&"_YOA1^">-
X(HD'BK:B7["""]&I\ M'> MO-ZK"+D'B[[']"L=QZ?F_&S8]AN%[#!4A+ CB)ZPV.V,PU\=8"@53P=?>X^^ M"@ M19 171$KVA,O1SS#> 948C%PEXRH?:BP!;PGSY*^5-
&#FW"5P8M=;17I:@QI MM8J2:(=>BPR9$B\]KW")BQ/7N-5A'Q;^;:V M\E_[Z3 .@/Q@,HTD.HN@T-(0G[W%H!3CE!B!9UO;'5P+9/]]KZ.G>Y2_O9![
MN#RX">]7X6@^@S3PY2*3!TE\R B+ D>6.T6\YM::X 45M:/_#5".5/L/$73M M.X)_0"F-@O3].WH;)_#[O,BE'$]?G37C%N7E>1=N=M89DW#;DP9Y*AEQBD$Y
MB'9&)H0&IUN!+9XZ)/=[WN5[FT6N%UW@0U0%R_SF>E@*Q4Y2VVK&P\[E-9 MDF "0T_%.A*2E$0HYCG+EHE@*^\-6P'<'VWZU7.S+R7U8%KF%+B,^+5544U*?
MP#!B9(@@DE-0W1FZ \[Q<:66[#?:HG]_>4-6N%O^LX\BZB9_F37QGZ?-"!_M??NO^7!VWF/=]-V/Z[E4>HNU]E<='4V@U!E?RC,\D1HYX[RC!) W+CK&G']R MU=$Y*VY$-
H0B]XG,%$A0S!'+C<672;B8:U_1/YK]Z&WT>4]U]#9B/'1U]*TE M+%ZGLC$VX]*6H"TA#&-MZ"(DG+B@S&>V!(Q+][D[/0N7:6[YV 'DG]]%:*
MWL29G07>Q\'M=4RKVK0.H+8IIM[F^'8=H/T65?>@N)NGN-6DOC=*,/2(7/88 M[2&,98LK00,ZT-HEY5(*U7N$[]$*&R]M#\6$;83=3Z!23H>*Z[4L+Q4]. LL M0*(R?!!
;!ON$F:"*N7&C.:B?OW)Q@!N N) Z).J;8W<">@8Z! /8GW M4AG;GEA ?Q>?*+N<:3?;JD!^_CBCMT^X]0)6! ?0$352F(0L!(! S! M6: .I$6FU\X8O O/_KG1]S(W.Z:[::
('I^3V]@=,*J,30E"FU#T(M)/!1T]B MH)%2%HVFLOHQU4T4Q\V(':7>AXN2_N]\40LU_=IL<*-;\I;NT&U;5;29;2'T M9\ %3(]IN/FZ*-B1$4/]TW=:
<?V;C]=0_JE+>I>8%QLS[_#G^VOIA]Q21_\ MY)\P*Y?>KTXFT+H3@PS14LDC>H0<]VPA!0DY<0+1F,Q=U5.Q<.\NY"WC[P7.!,8:+]& >,8W0B?T3C'4P%@U>D>9L5:*77C5"<7S
MHU5]Y?10V'?G*]'^\N.WMNOYVQ\PB4/M,2,1$B]$R.%>R#S4!SI(P M,B?M:[>2VQ[E=<=)M3UKKH8#PKG=D/>"HP*K2%).F $0:ITB@W)6L9N- 2,]S MI?
2]K4$^2Y95TED/E8QWOA9OS[Z-FG-8(/]TG\13%-^GD1]/'T]3(-#8$4$I MPG99$B^3(I]D)R'546?K:5V4/A/HL"5=5?SW44-[UGFQ$/4A!*&4Q%&BK4UW#*"5C^F9.]95LZXO(^R*-UFB]
MM3897Q?.2AOQA/LU^](N,Q>]-<'RVADBM; ?-RT/HN$^RC*N=SJ((N"&;,K% M" *100#&.0G?F^BEH(%ZH6KS[<"-(_9)FH?+>HWFZUP!;#+F;>?#86P3Q_%C MK\K:6\ZB'#
(,9W/\S*!D:8:0*+J/+] LD:5NY\(7&7O>^T %]NZFT.A)=^\I(;3C#DL<1ZSJQ-P4*H/Z1L-\S/DI/] M:'0-)7?.R;CS'M=ZQUW9NT"*TFQ4!.)B!!(">(HA-9?
5AW)TOU&OT,46.C$)O03?:^Z%"Q:$?1F>C(=Y&/UXYF-LYFVSYV_- M:!C13_NEJ).-I@^]_.KTO3N7>&V/OE(MU]I.->\O\FRXX!PX;A%49-PG$@O$ M@Z+$QI U-
UFKZGEL=R/:^7V(IY#F(_B8US[G]?GB97PS\M/IH]R% 02TDKA' MQ9)]!"(3%Y)"MP[RYBX\;7S.K<&N:]*L8ILN655>E7,8RDL>X4O=BK]'C# MO
PCW_Z(HSF^R[^BP$L,.I^U]^]K1'&^_@O:$@N%T8=V' B5UI:N=A2ECS:= M>H5&363T FOWD>IQ.03,QX)'WK(2%N/[!=_!LO\WR[X>BJ@NP_;
M86KI'@T9.I%T1TT>@G$!,M/49V*\-QCUR$ "3YD(7X)AB"[KVIV/#L?.TKU MGBS1ME%@'U6?5^\G%G>QRRH#SG*DRDABA%!$.N$QFO6*.%"<\VB=3=7[=VX"
ML__3A]IZNUG]647H?90%[O86O3HK8=[QL0\C9&XC*^*-&41/*B&74Q:HB> MUSYOJ +\\+U"*P8?^U?E1CY6/!(IPZ^^EU.Y_#3^:2-9*:OIE.83?TXK09? MX4(_+'Z?
_.QB7E;)_D4Y3)9-#GD#QLX'+KW+IM+YS,5#%]A>K<7V\1(0 M?N#W9CRYAN_R'7$)7XN 6Z2&,OO(0BP%5(QHEQ00:[B_F?"\^WR)F@O8>19' M!3"+H$^%4CY(.7':E,N^4HWNA2/
&(I1"1-4[5.A:N#W=5IT..]>&OQQ$+]T_MED.GB]6_/O]PN=O].H%_S':4N62=]SV MU6\'6(>HB(+B"N [AT_KM [.FU](E .5B4#25SRG'AA.0T^VJ'JCT$]&'7N.;MY#,S91AU[8LST8B]>
MM0IA.7/-@5@?$&,L_6%TT(2# 069.W9SK'(OE+F):_]AU1-XUVVK.KJVI?EVP@Z!!5] M,!@LBU(_'57;-@_#YNRL0-Q.L=II) 8^ 6]WII\=!K6VTU">EWHV_S6?35@)L M:;6I8\F'F]&%-
+E,SA6X:0=+"BRMI/&T^G2/.^ \#M>IDB(W469'+?3I.UV! MQE>=&-%?C#F4;L]EHAIX2BR-&8V\D(9]5H9&[($@_'D2Y"%:V-,.(E9^OS:0 M>'8D@B[CDHPDGE%-7*19 [,N5\\UO@/.G
MN/SRKU)/\-V/KKU8EX 'N/>5Z7R6F*B+(X?19SL0IVT?F9WP5M7.S.D,[@"9 M.G45>[-!8B]:Z<%DO1M_AV5/M'7HDF3HY\=(HG04/2Y\B3QSG$1-$Q,Y,/32
[MKI9s$25TV)%MARZA60ZQ$O F"]9I917UM;G1#]IR] MV!YTUX,O\GH^Q=5.IV^:LS 15]E MFZ%&"VF\U 1]X%AHY;$6EZ:Z"<:8S")IMI-VW8"O'\^]L&"YE][(%_=\MG
MD(1(P#.@- +NOUE;XH7+Q"2CC'4VYES;%[X;T5$R]*(2]C%]]8]_-AR?M4U6 MRRWOI")U_L/%SR[3Z7=((=_I>3OGBM=;;:T!K!]G_*5[44P[KC" M,DE)+EN[S*"(SRD1R TI0R"52^96
_E4$E E?1\\]ZB@KQ[\(:^3OQXFF%2 MXI,%V /TXC[F-6BG7_$KI^M_M;S/Z;*6GI)\:]C0#E -0C2/#+M/G;&1N9] MSEH057+U)"W3TH3%T,1 "MD$E7+MK-
G'S]3[,HH>.U&W46H//W0C.%]841^ MG8_3:I:CM4H(03/!_VLB36#$*X.NA[-,F<2%,K4+G]3CMWG3A=E=- M#>Y[?WSY.FG/"<]?#T>C2Z=CB2]IF&-VFJC$3>D%C0NFVA.NN#):
<>9D[8:0 M=R-ZQ@2]J*J*.T(])..;/+[\UWV$R;O?CDU+L\+JYI#AZJ$$:"R18+XEDFA+' MF"1:LN2TC19N#D[<,*+GSL<\0V94EGW%Z]TELC?-Y%LS\3.X"LFGY(56F;M;:\D^YO??5S5?
MN,JX]RNWJ9G054]EF(M-HG"0+1$H. MQ$<7B6+**2ZE%#?G@70P 7]IOXJ\>QB\]MJ/<*GPY11@]KY\N]BBQ&D92;@4 MQFF&^=)&BA5<"#-
IG0S7)CM;^X1O$Y;C.N*K(O$>\KO6X5]2O@NRGD[L-],Z MS/E;'>UUH,0.HN\C'6,S0@=@]:>*!)9P V,YD! 3)SP+';U63D#M+@3(]L4] M1UW[YL0V$N^!"^OSF9?
F#&-7:VG&8#8%45R:3+S3L0P*,%1R)F*J/BC@#CS[M]S9]Z:U3$OD#A%[Q9*KU:ZZD ;P:K[.8;Q8)/2MW!Q<*Z-J@_\3PE> 8Y8.8 M,Q&&@?3H\3">.
[F7VSWWR?.@;UG7/F>Z%^IE]M>J;RG$S***Q&HHV3Q.$0_& M$^&=SS&:3!6MPXR;CWXFY-A)XCTXG.NWM(O$,0FPF4\=E!E%HH&8G3DI9(7A)OK"/:2N>B M*!XW[O5@X_-
_KUH,X^.L\\L3.! M0UOA'@DGKP'_BY,[]W.O+MOUY0RLE=XYKTAD^))(R0)F3FB?%!*&R>8VI_C M=AW;T3.KBE)Z;$?0%>>5\F+&5?(A(@ %PR04L,AC*$B4Z<8;RT)RX,CT\
M!\&HTPE\]59:]X(ZZD"RJD9Z<*^N4_GS%0^P6-PR-!ZH*ZV]VGEHU EB74I$ M&HW9'$MF+VR(V; T"'S0+10@,86X=ML M#(DR>0VY[EZ5YT' 7T^O,I#3*&?
=L_,/,#MMKEB=*T0]G1E9%I% +MYO*$=,H!/A60LMA&#!LLHO9'=T MN^Y1]SYID1&,J+7;4JB,1@^0@@DN)"(L-P%),Y =:O6#=G^.TQ4Y#FJ2R6G(8=21:8$]G;.< C),N&_/?'RI5M-
%$[M[W7EFGZ)0QA'F*XJ/5&.JZ(_Q2&9K$E4S&(0D"EQ!IT!22.+(5#G;G;UWY!S M U59*TYM$;Z>_?YF'[\-87I3QR6?X#N,Y?$+SC,SW)S!P0FEE.;IV
MJ1U=D2RQ*0=C#AEH]^+L5I9L;9V_;L;^UV&"-\T(?]7D MXA5LVAL1)+0D4H-+]AXW."4T28*)"$$G>K.'RP;MW_.@X]13>GVD-"Q?N$?
M_QS#9'HZ_'85*/(3RBV8H66ZIU&)>*G0SGF7N,Y"R50]).X,[NBHTZ]Z>K@E MV"""%@1;!A,_,\:ID5*H%QB T$*)6)8F:8AN+')=S+1'1Y6]01V/$/B_@.-X[MQ
M;B9GK6E<^D:_XMOT%]4W&?O1F_ETUISACO?Z_-.D2?,XN^Q]L6IAD)0/P>A(M(I3BP. 9\;1<@CD;P:$/!;K'0^MZ"^G[?+<72MUQ]GL@%3^&0^ WS1R_<_+- M3V;G%V<$5%-
O%0O$1(_0DY#$9XVO'LLI1]HR\$ZU7?<Y!R+)-G*O?5K[\_)"$=*1;+S^%,KP>M.HY3O>VM7#_S+)WBX_"N>HER M6"*Q"XR:IO[RT?
LWY@\4_DWU[2"YVC;Z"AQ*M432>4*]>R(UE\0E&XD+ -X(MIA2OD-P"KK[0-*ZFO^MNHFDZ3)UJT)"7K.EO O031@$A1 MNA#!T$X5%?=H[MI#]VQ?'RKVIH;*IO0#_J'%2"6"]IE-
"1+7=R\4I%HOH@ M95 .?V%I#3-Z[:%/4'D/EEEMQ_5S>YQZ_]XX=S"=+:\U5G\=;%P.Y8P3$]HF M4C$1&XTD0F1F.!/6V&Y]W.I^SOXTV.LI7&V)UKYO?C4>S_UHZ>)]17U-3YM1
M&GC#.*2@249_';T'T\0G%TEP0AC'G.'0K5/S^N_)N56D&#U1*%2C(N.>01(MT^*WWR#@EP*0!:&RLIP(Y] ^H'- K-29!%GV'I&<[?@>=WG:,2F\NG1K-R=:
M@V=I73ZO;LI^;2:OY^>EO:?BRF41" 9K&FG*#7$2+.%<2\[16!FF'[*;W_70 M8R)#7[*N/81AB?.WN9]XQ%I2W<[.AHO+Z2N)"$C[F= S++?>N&LQD4O'>%L\ M$&TA.?
0@NR40=GO>$3*AIH1KSV580OSDS]L3&I_P?U0H@IXJAHA*.!(8NB$T M-DFYB=IMU'V\GN/4*D/D5C%@O$62CMJPL?%]/!L/H9VL8;7YN2"O$Q_]]F M0EQL.H-D!!H<-
#LI,E823M#_L,@X9M"KE"*A'>]6*+C=>LSQ)+YLO!&5^;H,^+]F)B>L)*^R)G"L*4T M;Q8.(L>E8*#:B1\/>/@QL:1OV=_FBMV)*Q>,+5'-6GC+%:WX_O;'-QA/88 "
MDIYJ0?"M0(*K0(G#.)=0$:3E'!E_LUOA!L(\%,$QL68O6KA-;>?'-.+U;T] M^R?^NW:NZ<8')-SVFT]E1H'?(8IH,Y*Z]U?<#<9-<=_:>8^323F 7MS]C]M.
M2E\;##G*#2X&GRU9KZ0W)YY-=A#0:Y6E,BXX8B-R)2-'5++:,U^[=J &[GJI MKCN@68[H"J"9RXIP4WH<*^U*Y9D@4BHEC*?@;>V>\/70[ZMIP=ZYNCGQ=:* M?
[39KCDY2(I10B5SI5^Z($ZC>T&33Z%D8VC7].OAD\QVW2\%[DMQW485!TM: M[+R&:>X;]7#!V4O/D0!AV,+.IC& 4:VQALBRW!A]U@FBM(H>#(47Y:GSY)M M4USW0)(MY%X]Q?
7W3Z^^?OW]\;=1$_SH=Y@5#WDU."X8XZS+B5#].2Z=EO$< M&8AFD085K,Z4=8H)[WK*8TV"W4HK31\BK9TH<#4[%Z2V&4(LYYM0QLDKX]+$ MD--
:AXNV/HMNRT1()WYX9\H,WG,[#$N"TI9(GEE9*2<0 :T;GG+@ M]\;ACR]=Y^#Q1VVI[RGEQR&CLS>2V+9?]0N>>!HEX/+334O2:6624*C!V AX(;5;8]X_,>[CX,\>]'4 MQK2CBD?
14I#E-@X(F8_3O$R)V*'<]\.W[KS8>^VR&MT%[CYS"L9))>DTH)3 M]Y- T\%Q!\D<\$\V$P,IMN^W27I^TV)&_S Y8E0HDF"SD21T49$LL= M<4X;W!%--*Z,K='=.B7<]Z2]%/)7U]
[UR7@UA?EHSR@99XE:!20#ND12H$OD M4LB$^1"3=%XH'ZXSXLF>4?:@U?N.';>1[L$.DK] ?,;'CEOI\$$G2@]1P,'8 MHI@'=* SB:6GL#048^Q2=.HAFB""4R'5:.'QQ(X=^R?)-
G*O'<>\'7O<-7'3 MG'Z!$7[BY,NIGT.)KJ#[7I5A6; R\$A8*7?EBX]'+DB$0TP&!E1/-W2'SL\ M[+$>76VEHZ9' 5<\P4@P'+R'$S\:E*HO2EU%I%08($8;M)%@2LP]S8]5*P7* L6*O1UP=/
M[M?NU:?NU\CO+/ZFHNPJ[M*W\#A)ONXFXJ2:?BM9P=5KY>CX=CF$Z?17_-1].%_(K3(S1)X5<)(*7 M#DM.P]RW=;#*']%57-*^"\!M M-NP=R7$-
W'[M;U55=J#'!GKHH>GX_4!9X-HE[8GGM'1R8KA%6I:)YDX&3YFZ M=>+\5(FRP<@?EB?;B/\0H;;-$2VF+L:N#,;P:$%M0CFPF!B50F43N]T./[I0 MNR?];!MF;R/<'AR+7_UP\E]^-(?
7YQ_EP*78CU_G<"_YFA5%^XN$]EDC^YN M:HU'CEG7=$0*FG5=$2]]0B41GA;*"N8SNXIT"= M>UR2Q\"<;=2Q)\9,/YM*(T+6H=<8KAN8+: M(PFZX-]_/U-
=H1T(LY,V:J<_+@9_75Z>+-OU7,WR&J?/<#(?E6\Y_S KMF4T<1Z*P@+CGGM!=KT;B/8ZF':Z6,54/TU^,VUU5/1[K MH'S"<.P736R6HBO)]],A/L/O!R9]KB@K4YIMZ4+A$O&X
M81,GF/?<"BMS;7.Y$^!C(>'^M;>?+. KXQ:G<9DY700W6DWA]*LW;K>\X <\ MIT*F*ZK>TS=(8)B-G-:?#^#VQ;G&5GK%;&,.DN11CK6GA%X9-TALE202F&'
M%,7#U4&2$+@F1B@-RG"C;[;4_*L[1/\<[;$]Q#8*?[29UU0:FX6.I26E)M(; M@]DC*0$TN](EHO5&([P&#*O#TV!>P>@;:&*PPU ZP#R&:=I;Z7#APU >X_"
M#L86RS'VL;@U)X%N]619$<=B)F"E3M*S'.\?99L/0"M=YL(_?:=\>O_01E M=3!?767&2)FF41#F%"U7F64TB6 D1&,T+VON6&!\XXL?:_KU5K)O*@FNS[8/ MI80 W2I#I(N(0R)3
P>!-B]IF402T'6P\>-O^_!@Y3U48#WE<+X>-M]._>3, MOVDFWU;=**)6#/<=PF*I00>EB;/*$.&48#;D($WHI,?-SS@ZM5829^U1#Z_B M?#CSTZ_HB?IO,)\-
X]6L5,TH]4PE8E/I66;0+0[@*$%K8Y/(GMO4K2WKG8\Y M/EU7$VKM*0ZO1N/SD3_[U%(PMM#\]{!;8O-*1@99$@HEHUE]3ZP$370P 4&7
MY7?;H>]YT/&IO*)@:TJM^'^H_EU8&^;]U]_6?6$LMI8$\]DL(".)'A);,3- M2$M<,W0K=+OS,4>G\'T'K3WGXQXBDW5'NZ3U1)IQ;$--Z9U>NIEDNC8.YF14<,'.W)[F-#[G"_< <81SA?
>1OB;Y@L_0'(]SA?V$BAC5]-GB"&Z5#Z3 MD(OIL"8SG5+IP/\4%-AMOG %_6TCL%[G"ZN<4V*6DFA+H.X#AG!41:*449SB M1A)#IP]7IS%?>"NQ;YPOO(W,>ITOC!&89]&BLT8MH
'/EGA=N](&_#%G/!I; MHV?0(YDQ_&#E/5AFE=^\3Y,FS>/LX^0+3+X/XV(WB3E151PZ&7(Y0\$@RQF7 MB$E!>B?P?
[1&;_IUSWI&KM#.]]AXOG$%SQ0%L40T7=5*=@!5T4?:"&3_'M/N M.K]M\$H"[F=C6 ..*8/1'BABN4VE]W6Y^Y"*T,RR<49S\#5R$_:L]3O'WTW>]F!&,#FCDG-
@#Z+@+]#Z^4),9&KZ)/P=IN]1+KOOTI MZZ^.R'IX1;_BYS[F*Z[(8B>BP8;@/8*2H=QF!F]*CG.RFH1K1>J=H[H6B#/ MU'6KIYP>2H"OP"DO!Y+;7_[DRD3=B^2&#G![*@?
>$NIA2H,K*+G9OX9ZV(]V MA2U<29_*G$_]^[WC@2#P2[%S=ASX45BZ1@)=4_!\.'YM(UB]D\]&L-7%-4? MWU
PN#FCN5U6;]U.5[0)*E*TM*S\0Z(9#S1PPG";UC%'S;SLY*'<\Z#]U_WV MJ]6F)Q'WT-'DR\S/%I9YY*?3C_G+K(G_7+P#W!D)P1#F72@]W$I;CD)50"6
M&:ERKMWF:".89^[9U%%2Q9OY%;"K>%8G)QT0]>3 W$9S&!^EDK]:7F3=@RNR M!IDP4FN/VYA)%LUFX FW2XSZ0!L$:+6VKO9(X'U[_QZ'8F_*WT;$?2B].3MK
MQBV@E26CV;$RX5V$8B*-<^@'!4NTC,P:DP54'Z1]"\3^'8E=-7-3T3N)M?+% MXL<_QVB_3H??%OSU(C/]3+G3!@0B'?$<@&1=:26QWPS3_I!Q\[7'OL#?]N
MPJ^/ETX_'[OW+:01'KU+F#%"O?,-V9W069>L7L'1#Q>A=YQF]2//K<17NTP_N[L7;0> !HD85G],K(U$,'2?K=$Y^W$5WUI)[_VTS>S*>SY@Q7NJB/M$;Z)(!H ME5@IHK*E-
SLG++"3T*)2VP<2.0_9OG7374]"7>RM9Z,SAC,_2(!@BSB\T/XXT8"&X*R:#.V"2-;+% M]]SS.RSX7E2^C53W:]"%EFB5-"6I';AN"(AXX*%%0&X-L'H;M-"I%!KZ2' MJ[9]&R*V<.
[^:=)$@#0M$XTO.V8UD^D@99-83IDP2M&!$282Z\LQ$0W,)">:*#IG=IA%1';7SASXU,US[T(]NM5@<*.:!12]-!H7FX"3X#@C MRBE<:8H)0YA.N\'F9SPC&M24=@^GKN_&$;?
&K_X'3#_Y84*X&E>H+8DE^)%< MM'U<&0:STN'NIB7/G4*"+3:+&Q">$3=J**%BX=R:(^-V8L;TW70ZAS1(QB?. M!24] >Y7.AKBF,.(5@9@@4A/$..U%!*#^.P6BR?]L,(\= T8@1
M<6G?4')*/K:[1,^3>!L.$=NOADUI1=K M2]$%+..%%H#[F/;98PR%T93#W:QD/$*] M OAA.&XFP]GYN]*U!..GB\L:E=$?D3>-WV9R"^:MI1;XN/#+@O4>6(8N&2
M5_H*!19T";ZOQ%PGXT1EACT8[#-DWGX4>YN1=E=&?D9QC>?P&8]<$=52/.V; M$T;#D]97_< 9&74,C(5%D6C&?&2HH$645.9DE.]IO[6"=@S9%]A=UFE=N=
M5;'Y#I/SC_F7X00B"F4ZFPX82RF"X831*(E4I5BM\!UR3D$%#]G6#KO7 GF6 MK-E5(6N.['8^ZE^M^A_#V>G]N-B3,D%T6-S,A[^-Z2!-HXI%Q+A*&.!]G MCHMM(C
PF1":SC9VR<+8ZMMD&X3,D5H\]7,.XG4^)?X$,DPFD);(WRSDX:&B5 MA>")4K(TV=:&..49X1$HM9^FZ!DRI9Z"UM!GY^KV=]6KK:WUMGZ;--/I0%"1 ME/"41%?"/?P \<)[8]A4)GC+
]U=_K,!RC.D3 VEK"'+SL6"+:Y79\UD-OSO M-GY#-WV%\M1/3G [=-PZ#DP2Y4N69M:9^$P9R5G;[*17@=6^D[H?U7.E4#U5 MK6'3SL?5+<3";A32VQ_?2I^?C]_:
(9#CDP$3R8+B&.VQ DXI3KO5":UL\,Y3 M$:BN[>G>A>>Y,]B&>M9PY\$'U.TMS+*AT-OO;#A;3)&;#HR+($I"%^Z'I8ND M 5+.!8B3- 4I#!C9+:-RS9<_(^57D>\A3_X_/O77 PU
M2927H^D427 9@W7'@%.K?6)Q&]UO>,XSI4$-J:]AQ(//;A?C+<;CN1\M@I"O MJ-3I:3-*@\ADE 'C\-+I'C;2M)WSU O4&3;\4A,5W$8R7"49EW$5$K\9*HXDQ K10 H3N-IFMR].>&RNJ

*M;V -1W8KOE@#;-DM>O&;(4Q1(*_GYVW+?4V3|FP5Q%93G("VC(4_[(<8W#0 MY+UCNK=|Z'-C3%_Z6$;,,=FVIU>}XSI4M-+:QARFZ#RY88/_GSMCC5 H^!^DBB MD4"DCY%X;0U!/YD"!*]RZC;&Z/KW/E/-/T2J:S2\6YKM]>ZU%U>$(S^#]+4I M Y<^YE_GL_D$+C:Q@;#>"UX")%##E2(4EXH.C1 1/K4]*VXY1Z ,>_MRXTK=^ MUA!JYP/4&W>(5T1U*1!%P5K&!7$<^2X3^MF6@B(<=SEM%&71\JZ@ZP"KOY6_M/B|=//Y${"*JY8?C3;_4,7Y M<<\==@4MK*N&>E$6GV9_BZ-F"NGO/ATF<[C\(>X)\&/V=G&P|/>?IG!R=BNA MH#N_-HXB1^N?T4VHHR,1H3N?30N$A=*(@<[C5WSE=:?Q@G2#_5ZUE[212>,61H MQPG9V';D!M1H\D31,EG.VAQNW@55;5M;S5^^,)S5?N_K_8I"PNN6/")<4ZX M\(`(&##WQDCMB? *010Y,FV#E-=X!9U^^\>[ZOE7/6TG&ZQR;1^$#!VY_EN(JN#>;Y=0!|>\]U'C[G===CL_M2P$'8XL"XRU818#]TAY)6.(89X0S]CRS-EA>HPO=@5ER1U>Z Y%D&[G7|E/W MGY#1^QI"]/WI-\LH2KH 61A*P!B%OK:5Q#L:B48/7)Y=OQ7=TFEN?_>>IPSW-MHX&FGOCV.P[&2I&,R"1YQ"0M5<3K8(EGX$JKW91%)V1@&[?Q\0)8Z#}>_>>7V ZVE'UL|P: |/$#6^YGODAAN1VVC,R48D9*5X;LL$A,2B&2M-M<;&3L7^$VG_X?)>ZRM|&Q'N9|Y*#"4HQ4;P86N;G&A*H\T1(-+X(-.3A9OS#Y M,9@.T]!/SA>7WI=\YC:!%MX0!YZ5.V|#++)6<> 3K M.:Y2W/3D=K?XF\ PEFT9+XR"W%)_RX(>_(!D=W((^@CCIO MDJ0?7?!\@+++#H@E=)X+ITKZ5?M|#-/@H",?TU&9V6HI%H|6;E9=479R9+/%: R"8@M44I|#.@B O&$Y6Y2[C4 M,ENGDX;7?/EQZ757Z56?$1UG=_,45BMI28%'Y'>48*((O$)0E:R-,CO."'Z MKL<MZ$]WH|+?(/OA)0?9ITDR_09S-IU_FW[XM(I1O;C|E:&E*(1/O$AH3 MRQ@)*0N@:YQ"2S&/[IR3XKL_!A8T).L;_<&QXV100H=R'[RY"!GS1@E7'%6 M)"(=0$]BPA!9I;3%=VV@4Z/.RXBU)=P[=,@'-T!-N+C=-+3UEXP@6;*(;N MB+4*.8IA2^0L&.=HH!T9I.%QZ7_VM*MV?\:E!Q!IK$M#$ CC 5@=CK*$&8F@_3%$!|.):YQI(M1@>59NVY!|-)[_<ZKCT7E>R%7MC+THFK_FERYNM|BQ* C6A7&UXE021E&MB M+5HC+[@5*N30-6#?^(AC.=.O*,C:#MU:5"M&=|"U_AA_&T4?XE2^ID+NU?$. MTJQ|4G,7OLR5-X73N?1=DF50F571D<)I^""5O(\0]'Z `-M&9*@Z#.*P(DTC!*?A2,V:Q<"$|1VS;I{' ?H=56QQ;'Y%G*L?6Q+'&@ 4TB0Z1S-LDXK&2>,(UYXQ9RERG?2\",Y;.U/P-[O 3X:IPVQ Y,+\Z"_M\ L$).0@-*Q%!,4L2!*ME 4E+>>Z6YR]Y8,/@05]RKJ'3,M/DV4=XY61D;_F ML]-FTDX4B"9+'SFBDZY<.&F&8D@H$*H-#YGJI&H7;=V-Z+")6.^K5'!5E'D/ MB5FW)HB6O($X&7XK8IX.&'#PEN+&58X,9!*XCT"'P(5K!,@RC]5'9=V-Z!@8 M45'FM6W"6C_Y4=SN(;L[8]O0^3Q0"IGDBN=SU*I,:'>H?\K*0'&+,,*)7-S M@M4&@]'E:4]9X?V(M >[A_JEO5O@>]J$Z5T/]>1RWC\HDFL0.@5&1)E!+.&TSXK,$9 R MB.1I;<-9W:UX=:,]^_L:DI^XZE@KPTD6IS3\L,B;/2P+UUF:MVD[E{3\VT MEMAB397Z3+087M|\XK7F2I3/VP.I-/_TDO;_2O<3P&$M"*,VZ3%K@I;PP M$Y5CMN"9E;GV,(/=45?L8'$?ENDF,(LC_<@<\"@)6YU0N>M$N4 PZH\'P M4RGT/J/6)G-I=?49?5>? _PCNY/,)@)MF^Z&:Z*&D8H5E>0|6!4U/13?7D1RF MP.;AFMF@XAW$VK^RJ;%)8WA)LC&XEZ+#27S&?_!@0\HZ4R5|S]W;AY+O]8OI M2\?,2+/V]C#_=X,4QCA#? 2D!D&@*O<[$,A%*'U.GA-%9J-JCF0!D'N<@\/P8QO1\"+_M12,2EN,4EV:2&Z#MM@F>H\D-$HB+CA%K'-&6X9Q6&KBG,>PVXMMK8UB=&$O(98R^,!FD*#-&7XR5K&K-@M;' MV>J-G1YQ8[@#'H75T5'%&K1U"3,+5Z,+HF?,1G8K==W?2?0ALMY/&UG-A&), M>.)R1+:IF(E7%LX5-'RX$30M2/21]|&MK;RMQ#Q7MK(1L%%EA)MF."V')6@ MSZ.Y(SRFZ#ES4/LHWL5IJYMXWL-F+=:QM9#TF(X]XDP2CRN30U#"$3 MP:(4P;HL8^TQZ8 M"H=@|T;G,.V,_@'#Dl,9I%??8>)/X.T/=!B'4_@T&488 '4AM44QK.U%FU"T M.3&"+[-A"2/P^GF<>US>7V_#/(2%,'T>V#Y7TVI9]PIQFK5Y%Y*/LU.8?#WU MX[4R&'CE9'+*$>ZHP'46$RID)K%4"GB^.>N>%,^OM?WU?CP&TO31ZJFW=?I> MC+_ #%>_&>&M#N_Y? T/G\U0\G;0NL@4R2FL@B<:H4,B@MB0?!2O-<;U(4H&/U M%E*/8-U_O52/G6P]],=Z-6H_VF|,)8E&P,3I(,10RR$X;,!@.SP!S'<*S$ M8\" V=I!1C=DSXZT/2AL'[VU/D-Y6>)L/AF.3_PX? 8916<2K.!M^QZ^&Z0Y- MM3I_]\[=M!ZVBDIMM*X]_$TSG;T] *8P^0Z7U&(Q$*O+U80&9(6F?! M#4-+SEU.E5_4+KC[M<*Z]K17%RHHSUW.KTA12YET&2,BBG!? +G^L%Z1DAU,O MG Rl>FC8'=Z^VEE59\OFAE5U57+HEE1M>4/9R]MS9@:2.1\I <,ID8Y[-_ M210Q)06,2M=I/Q]A3NK!Q[^BJVR-IM=I5J[9JN 6-63=(!1LX;O\M'[K])[MH/!OJF\'R? 6H2!LRTE (X@Q%.#!Q8FDL,BKD+&$K39W];PPZM#L*Z.KJ;QN! M5=,;!Y34V?QL'<0;DX*1C((Z [;8F-&/|H.+3T+LD<:FCNVD/W7"KW4+$W M-616\9B_!>)_7 &2M=:,"BM(+WF.0 5(2RP{EVC]/#(U>5*EJO?;0)ZB\|\!\NL MGW8|F|S"14DNCU(+tVXE-3&#+<&#QOEB4BI/'.!98L-Y6=YWL@'!M'U(=&>CB1 M_8[?NR&"50%^!\ )E2-L\'68*H2]*FSZE'\/.\IF@)$%t@NB(- %'D1)?#2\|7 M&Z9Q02J95.V]9_,$N*?@X#"!V$;L/?#A[=FW47,.\ 7*F?W >[_"< M5Y.#/C735N;3MZ-A"Q[2(A4!_QEA/!MD9@QP]M T.F1R*+5YR6D2.'/".Q95 M]? S&"K#W3ZW>#_SWKOYU-41DT&-YG.(_:+0L\H2<MK>7C,T)-8^]L@'A2C&O5>@>E7IN+)Y**)E+F:D@A7>/\U:!=4"'"F M2\Q\>,E(L:*1=L!_8D)9_BPDG*XYE$?KG%L: [*<^\6I%%,^FTS@.WXDC. 7 M@%1:!:,RGLX_YPS">>ACI\'\J?FCST]VK^\ 17UA&D(.;(27IB7Q/@1@>_ZGO\;RK8WX=]D?UW^>,WUWA1,X3;IT7 M^,HCZKRXM[!P|[XVZWB5G)1*1DJ,XQ'MA?8D1+1'ADDG8G(>;+=)[H_B!=RH M@>LM:'85Q,:H:<,+MOQQ^4<9"OP?_:_ U|+ P04 " !0@&99GWN7R*9J M OI0 % &%B=7,M,C R- # Y,S!?9%&N:G!G[+1'7)--MR_Z(%T41$5Z MD2)(E=Z)B'0!Z0@"(KUW"#* DHO DJ5WD&$@)30]TCOO8.40&@AM.3F?;^R M[!W?M_>|[2]S^^X^^UD9K)FUJR9>6;]U\P#9@JS!- Q245!6 '!P<(!8[!^M6;YU+ ^VM0(-36 $P (@ /1Q*XADV18C,J8;8 'C:-@TT:I*7_\0W0 <"M MH6TZ@!!;=@.;EP'^*-S^L^YO^DV_Z3?]IM_TF_XO)44'9S=;,Z;GMN8VMK8 M@[^+^R>>N(O%#'FQ>']/U\?"_9G&%10%@/CX'TG_"]8@2OFCO=_8XC?]IM_T MFW[3;_]_FP0>"0A)\/-+//)B>B0F(2@D(2S^3\NP* 1P)P!-\ 6_.8@.?8 M,W/ !ON)120 9IF$R<;+#PT6"C_)G=?,POFU):^YLR,?V,R%CY_W$1\@!0*[MF)G;6WHPO;:TMG629M!O:&9GLK609M<75GNDYB)G:6.KY.MF]>VKKF/N:V\N M;L$.DKEY70HL 79T<;3T,&,".SHXN4N I9G_;%T"F_ZCF(]91LK-PDI"ZZG" M7R6P.6GFO_;%V]N;UUN0U]G-FH]?7%R<[Y$ GX #U:"Q]W'R<,,S./DSO+7 M!IY:NIN[%IXV#HI,?V1- WQM[.DAS>SI:6LA865F)?S:PD*8Y[69H 4//[^% M&8^9A2 _CX6@H(6H,+^8@1? ;^: ;JK;AC M1X.?CYGO?ZY.[!#]7>D_'7ZLC5@9"3DW2S,/RZ=8EOECBK&M\CP2TOG;%/,* MB@I(;? TK.2F^:?]71_X31DI&R,)9C:,AUS<7#1,?\O \LG+K'_34 ^SN 1XY_ ^SZ_ M+,$=33-"9M>[F_CLHA8GE2Y4F@-(U@%7IL%$5^_1TE%30L(BH ME+B%W-Y\44E915M'5T]? 8,7AN86EE;6-K9V[AZ>7MY@'] @=R&A8>[_A,T=G5W=/[X^1T;'QBf|8_$R&CL M!W[$ 1"M6 M'[\>U14Z \'.-?_I+1N>_[2L4AA'[@ESTIOK'-E_8.XWDS+\-C2@IW1>DM*@ M%Y/.#EW.E(K?1$GL=QK7S.D/TCQV.MW0W >>|YM=H-#'K.WD2EN;1@*OMZS@ M$0^S1#Y& .$7S8$[:N"&35?;E>O^+X1|UYBD?&THG]BOVO6MC0K0?S& I>T\.':A=?FJP]^.KGX)[YMHV=8V:\,$T*H7S>2G5EQF7D1RJ008;+.FF1WV+!6K[AP#$-5SC"N@/.UTG#,[^1QXC$[P_9^MI8 MT_Q9_T>F&!'=TFT- W*P>%HIA2)M.%L2RKPCB.+OX*E2.KM;47N.AG:?660O+ M4 HPFETT94|C5?+:V0.F.((FEWW6P!F*]@s51IFC)8+UJN+OR\&NZ4)36CS-XJL6.O4O\H]3AH(3@ MUJ4A_.V_K9M_PAR:\G?3S!}JPC. MP\CBW=HDB_'>U02\YC=':NSV==4.IC?WMX)$YZFV1C/++!%LS1!EXFR;*0MY6 M2^A.3I_ZS%XN&#A=Y#!Z%TC[3],[2X(R1?9+7!"R% Y% [>%QBUN*UYETG=_M\A8A-3@X+@QDW.%;-B9 M4WO5^8U9DVYKRP.KF:,5RDL6R'1I4H4G3ZYAX^PY?3,N=[MX"64G\'HL;&@ZP$PWRTJ\E#;VXDY$:UN^/R5>!-_M;348>L11W? YVS5IEKXR5>S3+)AV\0FOR$11W*5\{(IS.983^,?81T,-8^JL@-79*ZZ6^@Q8"\UKL,]_+JDBVM5A4L;C*5% M5_0#C\<\[[[F@?[L\49E9%X8TL/5 9]@>_,WH;8 J]RHZY9CGM\9T@C2RBG,.M)IZ;"FUL@&&)?H9:\$ZH[HHE[EWX$40&RS-;/[#5K?9ML:UK_Z$]PFK-IX/ M'!]MPV?E-_M'@TM7.1?/?$R:N$@PW?[E\FG+1V=XNPSQD- 72BS"S03ON2>XL)2 A] M+GD-/"BW9W.EL$,8Y#P=*-_!N]! MXE5D;0V"BL>Q^@3"^4CNQOK9K_YNJ5H3KDB4?#8X1Q.AW9\%;KY@F(4[Y<]> M"'!%UHSW.9EQ@%=G;RSX2V9&=:6G)YWXWWW9WN,,\/0(J;T8-\ [5W0]UMS MT+K(_@WKZV4-8HP+QW #!%U4I?-*#)=5,>+VY83OS#Z2^54#;&@MY;(," "Y# M 56GSVD0% .@%"'6_8$;(IT=YY%)0^,EI^'WX_8(5E&Z:NI7E[*Y8!GD:+LO M,M-U^?3:[@JRI?UN5H_U\^F]SC<#8N:&?D1'RD:|U!<^:IV+_1EU*WP,_?G@ M;#Y2&QJZ^H5BQ- G^[3EN8AJ_AFN":)8,NQK8 DF;Y8 4 MO>/ Z1+XZD)=D8[.7==?=^E"XZX|\0HC"3C*_^8V,Z^<|%!6+S+|QTO<1'P- MDW<,LA72!Z/+A)WP4EV2VT"\Q[M:E;)7?(X&]M[3T7>8VE58[IT M7*#).DE*3]1]#2]9)6!OA8,'J=[<*1@@O+DFRP:9:SH]/+OK<+5;U+1: MZ3>6\>C ,2S8\2;5TC??_K]#6.*+7!;S+;?]1;>@6'[X^:=HF&O+!|)W]GC MH1ZL6Y$_4(="LA>W!&TERMF[P\#3\8,4CN.[20OHN>K[KIE?B)N2&%OA]+R= M#/K&G+EC M !FH22FD+_/LY,OU8TUYX"Z671<$#\8G0X7[V95'/33@!C!M\ >9":96/-?X M7/<,5'&*1LSQ-K42W]H];'(EPWDEHP)6Z<5PA@$CZ ML!(1$[3H4'D F3I>_&8LBO1&6FCY9^7.-9E)-KTF'G2XT"4)L%,313I#OU;?M.$V!SB6Y*KQ)>F7!|H7PY=M:-!YG.E7-R+[S$UT? UK0&T[%C#1S_YQHTVY/W M;F_QY:O$DKP7'6P>B/$BOLBA5ZPPM4O50X5X4X;O-8*6,TG5RDU>*+_V,*^_M/F@%ENX1NJZY=OIT:M3>> [O*1V2'K">%YLP8M*58SM4G)L=^R^=/6PL5X^V6 MNLRNQP!48#&9RD)45>L"FS&?7FWD525>5HY;R3 &[?3W5)4Y_!8RO.SP0"/ MHI2_SYQ7(P? 4';8EQ'*#3N#ENG2]TYL(Z]UK;CB=!QU$?/^]FZ-]]=.(,;J M5M14|@Q,,,!U#/"ZK7)/&5)M_GUA^N^[9ERW.++B_@'?>R@C%8JOU3"DUTCU M3-C]G7I<4$,PP'H=#%+_3 !+:/? 5@^639**4_!OZC68<#R%#YC6'KFE7!4?6 M+!7/_9TWIG=3#S97!SC35L7WX,7."WZ,+X_@>NKI"PL/D6L3T'EMG|ZJ7SM MI**Z&!$%TA#24=H(4'1"E^G,<]4"U? S%K02B\K)19/3%IQ|> MC0E3+7|=:.E1F^,"H'+NQ(+Z@TTIUO>.5-2HLSP5$N.D(ZLQ@'W+2H^T;2QW\ M/#[E Y5R=WATZ2- UWI_O"V'>LB|[C=KNYXDG>0\XB#\ADT8Z'IKQ[^A\;._X4 M!ABO&-(NJL0):9?"I[_N=MCF7#0A/A)A.1N<(7S=WH23_^+J4F'YE*/3&^ M;@1=O(^C$ASO'>D73TI4X*]1,]KH>F"_W&B8D>EZE5D|*ZALZT9#?:VV'UJ3 M5D1G3= 4G/U&QA&5@UAM6R X\'YCB'"(OI#7]?!9V]?.G><"?.%0_@'88'C- NNUE188#\'"%,]X<=4&3<1NR9W$";6,)\W(Y(F:7&N.S M\Z\U5DV.#BC5QTT9@3;]RTP3$1_\)V1ZN1KZJFE!00L%[C]*S,"L.KGQ,& M^2NC(+9+S4&U>]H^KH7SVX9CE**G52ZGMQO3TDB#9^>.,])H>VDA0AC3*+GTN-MQ;*;4&*4I(5SLX:[KUELQDWC|=Y[NU&R$]W#/,Y1>' W7B8U.9,Y[_Z7_? M4CCYG3- WV4KU8#?^'@>< ?R8=_;+9:I=HW91V%#A0GU1 MT4^5!Z0XNE$[*6;\|):SG[_79=#WN:Y^DB!=CTV4%RZ)Z'M)MH_,"FTP'M MQU>ZP=>(]H@(ZO9O^G.,2$FN4 GWGAB[&X]YOK8ILYYP;AIR3 PE4B<0(&;\ M\(6,%V$59YV#_N&.BE%&3?DE,T,#0B(U:#-.^QEGPF_-_^!D)+@'U$!+>?X=]VV7@N]ZD1?#F/X$U\6XSSY:QA^HQ_27[__X7C8K-SP MJGA*B97\+#+ST0"I3O#<1/I=[09HB*7?YQ31,*$*LE!PN7S\],RYN73K$75M MW?]1G6@#_Z5,F*G;61ZT5 F^9,PR5MWCZ 5S0TE8J9-+T5N,)Y?OIJ\C(_)M*26KHSU%^? &LY!6GH\@>?OR 320?)=-=%JK5N.X"E8V]0$JPR&'7R,BFO&)H M_PV70/3SGKP(QSE.5]K/T<1B_9[5SPLX=EO;!..I3!$A8 ^PE2G9@^3;MNZW M1HRZ?C;TO&I) (G05UOSPT[W)OASV3HA'[Z;JRHA41(;,|> ?*L9)98<<<(@ M/_T7\B!,2<,5I MLUWHGY5[ZBO3#XWF]1;A(_"K&+\'2N7I8051->_%F]< MLBU?F=!K*(T$#0FO0]/..5O^X\'ZHWO$ K6OREPCGYX2_>!XX2%5T'"XS-"%(#!_\U%?9 M#?D8>?S+C4L]W+9Z[]V(W4\NP<>(O<3E**$I&Z]FRQH!ZAN!Y[*?K@E)K$B* M GE*KZ\O3#;Y*-LAUV7S90NZ<]_:XB_.LKR? 4WF<"CB).X&!5VM^>@N5.5,[M,\ _.K+DW 67RUPU?9>F"B-9P.XVS4S^F-KQ^'JZGM%:!'6O1Y_L M>^_^@+UO>.!(0.?N\M2&!U^@"05B(E_XYAW5"^&1++%GV&;9 ,LW0UYR;[R_O M9Z%JQ%@.\&-E)N:JGDI-JN6N@CQ#?4FA4'FZPV:A$U*EV:09NH$0[-)HIAGK MRL]VA5C5ZW"P7CRM:-U^]%/>8TQ31? R4=91.7%N"NMF00+24:KRDI4OJ),8Z$>J!TDQ@G!S)FA<]+:!&8.Y MZ(^U)-H/\WFBS#K63!NNTA%7BG-*]T1"UN'CX/WR25Q=7XUVA 'CC(2AXQFZG&#+<+Z. M1BLC<%R% (AIP<9D>X1V,3;Z0O^X6_5.=/.E7Z_@EV7*_MVKU*%2;5YQ[MWEU M@6I^Q0#534N4# 9NR:!%Y,W5&A*D(Y7S8_]CM;\R]TC!]R M 9^YUSSZ;BM?]MEH]:HK3<%KT>=E15B01_'T$.I3D&T&N65<_O1I<%]4_ M_J/L?\3O2OWE5]KJ'\-A M_0=2RG89L>)0%9P\F-8^(BD-"ONC?>E=+)%+>VSO+!^41S4:+7<&&;=VT!B$ M+|7=*$5*? XMU>9)V-$BG_PDEAU8EZ]X7UH>O ;;M,#]$,!L<[&>][&T9%&\-H55\Y1U28,\/:8M1X=@W^I]A=PS_? M'TS?,/02C-&?#.NQG24N',4S9{(!$EV&68B &ZC?JOTS^1C+!ENR/% MW_6^[WLQ?6M+[T5W$U<#=**Z84>YO!3*)9GJY_9T5$ZB7N%QI[PW9EI:UC4,[MUAI?Z3 X6_$LV/W'O8<62ZP\'Q7;G#5_X5\'SW.VMTON&&%!$[OLW?V#' MDP3/!SBND,:*A#M4\5I/*.MGYU!53%[#XCOOC&3;8OI?KXIE<9*Y?-8W.T4V%3NP<2U.VS;3/H!35DCM- MV$;<[_9R;4:0"Q8&3G1UU]\K#'5'NA R'1@>H((5DB;\/D'I" (/FD6]<G0ZB.0=07>?39O. ^T;1:V,L-0\KP6Q8?\^Q'Y[O5=R/MB+1_9$ M6I:&8[^UO^XRZGZ\+71>0"5[8SL+,,U,2W:<>/"&M,1D!-AW MYD+A*OLX0G?6D>#'BKWX/; 0A46(8B(+\,,7]",W^M.,[Y&6OR2B*ZK"3D8F M]<7H,BR>I$CKCL#>X2FU@(X7B&.SXJX$OV%M7O**L(G&4VC#)9EW$+C\E7)9 MGG)VK"5K5# 7V7-%PR/3<,.!'+[P1]YE-1KT1I>.R]Z])T]I&>U[65S:C\&1 MSF(8P$(;8KV5FI[PW,)+/%U6@>>Y_%P,)V?V9I >Y1NXBO.11-0BDO3C=_$[8!,-U?C&J=SZ0[O M^BME:(;I0 ^I^MZ&XK(S? >]ROI0TU)/FME3+1XW/H9%)7%H48LZ]+@RE'4, M%-WH8H-V4;@XIJPIS5.CEW]^^B&'V_/ M,D#! MAYZ.[LI^T.%21$KCX*@3&55BEV*@A$LM-)O)EOF^.;I),W,17MR+$?8?& I[WO,U5;>[(>1?H^-W*/UP@\QMU(_93,O_:EBX1>E5W% M@"Y9FE^C1\[\,VOW#P,1_:,T?D!_D6*]2:N@\&.3**7MC630RB]!1WMU-Z.MVFK5)"]Q7'9W#EQ64MC.D+\@!B .O8A!/8- \12X'#EXE;EI+[0Z;E[TL[?WK1E:.^)=>OE%"^VO#[22$:#&:GQ^>-W MP124(3*4!C:@FWS'TG:O1K8UD\=X*,[>6HW*/7BWD[#/(/O,NNVC!?O3DCILG M#^'..96[O-I3>IR"1^E70I#0#_(DSF&F9CU0H6%,?*#N[/T'>,E70S X]ME3NH"):2,R^<@YC;D2*4.[XK9?;TH1W"KFYCZY3M'EKX#HQ A,@RSOPY1 M(\9;$R]RU$ J1CH*9FEK7]D^*SI-=SKZVU3[\86@[XZ^[!S4%SFX3Q_>[@-B M#/T629?C5&O*0OFP\,<5-IH:.BQ/T>+[MT@2_]_U<5CFEL?V2F^,0<_1(##)8!^MGA'._P]=V(=N3OQZ._37R+? Q;.2[-8)LO M6VAEX79-DHGQ7GZ#T_K1RI.<7^]$2_AREDL0TBTT91T"GI'&,E(>05UVN47K MZF"]P?/=@YI,+C>0Z077G#)O'CV._&4]33<[I3_M_I,Y;JL1,=?AZ<)$9G>VK/37; <#YBWT2 6/Q0QN.(A7%R78)36C!*LBA\ M[\)I2$A*]@UBRK1R%0<]Q1@"YU5R5@A^>8 -F[+Q06YB:UCT2(GHPR/C734'6W6N65>P^+,;O: ITH4O[C\]Y6REF#8.OIPZRZ: MWP?Y K$K*;*9>;;G M;4\XW=X%C_K<2^L>N=DDN*],@-+)8^WDMTE=-M-MMP5G9\7%<[RKM/C\0 .4]>OZ!D:?ZTW>B]49>'"D/&D&Q+K%>$0=F@WT*] MCW@dMWE(L,,NQ|[%\%=<2K ZW'?,M0'THME=HOK9Z*8'(.;.:S^T)3JWN$W1 M.B0O]J-I6NQ%K;?TMC%?2P;-L(?>/)_J2$YM=7-DIT?67'6AK!9)0D.6-*K? M.58-&6&0/UO[4|!?6JRG7UE[4+[_BY+.MH M_6HV7EFRUN*P.TC#<'CR4C07G*-Q00HSIX=_=]PN5^*(S8 (^N*08QVV9 M:%3ETMR':CXB^RW)6_1_G;0!5GH1*XT!T.K858^5]|8 8\W8"LW8"AF_*_Q7 MK?!2(SK5W!+K&KW%]Y'[Z$E-#-"VCP&*(!B '7)A[*-]%V*U#$D^@&PPSH"; M-R\ISQ@],0!),SH/ URF8S;.G):*G M&C_X38)-.?1++!\5140T_AJ5D1.78H*,93>^[SQC;&N> <#+,8;>5MQQGR"07= MDZO*3_P$QPNSPQ$Q_G^[]^#LOL0^(9F&%7[@]<'+\R%\W__*0IO7VY4U&*N M#*_P)?Y2W'W@??E!8OJN!QT;*37.8YJ0#]-=T>W3C*>\Y2HF';$% N67(K[M"[ZG<)2W=T .GUU28P#GQ7,Q_=D!_V_A>W"4Z#DC,9&[@L:WYI7D==C_6K_ M9[\"8E\,5KS_@P(;">",ZA3.![CTO6$IE#]H+Q>EG."'/.BSK3XRB5 Z&+1X}(M38^HXY:N $68FR)5.IF]HQ_$Q#]O5@5K+4QVKQ)\LY'DZ)D))5#*N-0<#@S\BU(%RRCZFS7]1V7^LI\C;'5OD5CEL M?) \&R9 S]Y^"KEWTOO45377- NG05(A_]6N=PILO7[12;*M+0D\'0N%Y5$18 MJW*X]7,J +2[M4YU4;@+!,E1K;L)"I*^,SX,F"K]+(/A%|]UK,20"S[IF=6A M:0* [%V>9CW6X+Q%J]\V^'N\'7WAVG]==2S)MH4===#E*WKRM3-H\)5[Z;1Q?]*.6I:C Z18OTX9C1?:5G6O%S4J6E2L=1[MJ>R)6-7YCI@5W\ZUFYT._?F5(R^FO]MW5JV*M+- O8+4H^N1E@$8H/]+=CB7]J-_&\L/I*#TUU0Z+]<; 09^C^%C?`MVO2L;5GGC!*O7;!D)BH4EG@Y+RCFC*.QYF\CH96M@X,>YB0CUC6C#]-4J9FF3N MSD2U0B,D/OW'K? 2IU=HQ6G4"$G=^ M6\IDAWLO.:@V$P95,ITUFI=^G,/D1P\4A>6]FR2'FZ97&&]O/UEU1KI4,1@\M.VNRL(.Y\4=.%ZSK.%Y>MTJAN'#XQK7%ORW/_>?CD9V=<2XS$=OLH1_6K']*

M_E`:M)QPI9)T+SLU4A<#+,]'3-\+PTP?QK:KC8*I:6MK:L:PWM[X^O[7+VHKRV%5E3K2DRG<'7A_MK=[?)R35^2.QEF"O7$I0KH_BG_)\=9B.4,6VW<^
MJK[@86UXFG'&K8%_%!]/W.O/JB_3D/FG:_[\THA9$*5$-@PJ5%WN%O36/P\T\K37(44["FI>]\1Z1KCNPY3=$CQ9VQ!*MJQ\&?TX1_VCTC-9;H[6"-/)[S?%T=-2:VTTCG/7UQ":[F@[Q2)
F=H6=3_M!/Z'T64KXZ0@-Y6;'=:G=>S?-V]$KW!5&@X(,A]\-G?$&>7CAN_#XX5)N+7>_M3UNP9)U[CD4H]_2;GWR?%[E%0R_ZFP]X]C,FT,ES/O(4D]L,M)47@7F00E.(
MU;1(!4]BO:P#:^L-95:GYX5?"E?9AUQU/3/O['R=OIY;1@INU]Z2HYT/B)Y/_M>[(G6!N)_*4NN&6D_!/-^VD95@BM[-_M43QV3ONAQ?>*N!_M'N9"R)YGBXIH\XT)LY!S=?1PG.'X-
"==I?!V"O=N[RK3FNA1>_QM>NY]PWUM%_.T9^)X)/3(N.7WB9^6D67S'^\DV_JVF"_MC;'W\G'D.KN^>U'21)^5ZX1<^SIV@_MH\J=WT&-:XTRXW]F$;3S[A7&]$HU_Y!>Z6-
M6NT7&*%KCNLE_M4BLH[7Q![Z&9NZH]>B016Y;S;_(T&_]NU28PG/7_M!CKWGI7&B7#W+&*H9W931G:]B8OZH+YC_)EBV'.$!@@-9#.IUK_UTL80EM,!_M\V]3O:8:I/-
V],;WV;%K7!)\N+;/MZ\9+5+^*LO+<;(*W?38"_X:>2,4%"V]_M\R$[RVR=,53#'I2\;7-_GMR)-[[7%"!-6M_1R!>@VKTXB\2)X\F+G,EQ#7EF
M#GIY6Q'E$2@S[F$@1+R"@*_=]6D&\SGI/<#KR+]['^XH,KXXG>-_$6IY1+V1I_MIA'2LORI^:,*LY%8^X?SR,&I="))?8I_MY.,TMSRE19\?R8I_K;N#UR6#)*0>9)1[H:/;EO!N5D-
A_S6[GF"0ND2>?7K8_MNWU'QT;*E2E>7K-P^PB;I_R]3'[QH0XAA!7++P/NZG9=%_C8@_$2WRNI-%'6O]*G_M>M(?KG;",<)5P9/CW6-A->7[D-877\]SW"0\68';"&*45#)F:'H^
MM>/4:'\OI]!>P'3+LDS89NG%_=!-\ZYA_.L_UC7H&*YGP,_;DOL44W8TB64=_M*5(36]:V%+#:;>?/;&^Z.DI*$]6CQ;7_/33!Y9_MZ_NMAC4E;/DX4!B>'Y+$U6@?$KW%45?
\]=1E%.WFVO\T@S=RIWX=WADL1/-#_MRJV3H[N71>_5U_N13/7_EXPJ&S999EMY%LUEH%[<#ETG._8PQ_"I$GTQ-$].MGR'K7P21Y\N@DTBEL^NA*?
EVO.53P]4:61L"MX1ET[]45+-9(OX&%/RXQS+1'_MZL5EP'5(F?Z-O-_MG:@V)R>%0:'03)1BHZ)U)1FCS85@TF'M[GRLXDLZS^/28LXTYE$UY^8UE2+6
M40W"9@%T1(E&EKW(3&)VC]K3]/55SI8@(IF.VUS>3\8*_X"$WE@<2/+]N,I_M+_;V;K8\)GUR@S/D)08@[Z6C0[CW#FM+:*9?CH>'O'@RGU_W!\[?IL4_9+U8
MUU6+_.A]WR%^4L]OKB/P+&!$Z6[_'%T1>RW%@.WYX)00O:G:H=0@G/6#?S_]_M$*G$F"\^P#^FIWLW2UY!]L(D)]WZH3N/4&7%BK0[^O9-%1)HT09_M]*JA38]+QK0V-(P6-
SS@*W&UW_?,QJOSZX+4E$^HM"0Sn5-"PIL1FZ,R5^T_M6S=3LE8@\6*_L&<)=S5E.O7O5>*FM4>/6*;!=EY0_FC:H'<>>\+4VSA:Q_*
M"R[4UD:ALQL]@[?B7>]N>L+&>@&OX;R\>L(>H6*/(V^)9./3*V]>*QPV/"R9_MZ_X\G6.!#GV*Z,[(Q%-XR.-L>,"KI^ZF_P#=5%WN*0M-J_1I^(4=<4&$W^+N_MQ#?
E[+2*9!9^Z\^!+X/<7_2[-!Y\#^=Z:+;5.U^QE:I(KL?9B[P4$5T_<#PY_M#>,]+K,RBE+]XW8WZG=U^>DX[49+W7O_XRHUU8[!74U#!?*0,\V/!0]G/\]Q_M9.=#H1G(;4E[I13;O%=%-
#>2A-5F]534&IC^H7P/C8N@8Z"$4N]_M1IG,TT_M?Z]X]G^>><0PF:W$!FXP9F^"GZB0&>F_?9YPWW?:,M#05C.F^,)T?14%_*>M]3/(-Y.)BLXS2"LV\&QTG_F?_?
Y]N*N@$]IG\AER>CH(0=O^\E^39L(9_:/Y?Z__[H\HX[0G*.$$N<3ML*IS^=>/_MH/T?K3N@^6W=/[7NE!4QV59UYUZFZOP_;,4!]S#G?Z=U;YG)W,(_?Q31S_HQ0.?P585*_M0)7F%(*#
(B4CF8DH:;FRBZ\8N'K*$[.7Q)^\6&TFI>32)^_?\Z$;T_M&IECQRJBK/ZHLBZBO.[A%N//XZ_B=E_,MNUY,V3E[^K'^_T=G?]GO*##\A2G_MUBW__2_Z(NA.]7VC$N9ZR2VW._M4G-
B4'G\CMEDX>F>IQM!5L,#+4]CIL9@=:9S%L/&&I%2PE>9*_0O_M;45">4#]]!_V_M9]_LRK^_3=/)DO]1P"*_M):2YZ*]WBV1I#B[?M)M_3<\9M=.W$=BRV"\/BR^)K,X4[6F,O-
I&]7]2'B(F%@.QO+J:NE8@M\3^GZ5-'"?RD""%ML92N_%_M,]E/#2FZY&4E/8PW6_.6EH<263_]%*?*=;;Q3D+"EFK!5K)O[K=.,^(4I6S;SW*_%T<(@?9C0679%_M><=A[ZS:CX]ZZ05A4-
4=L?*RLEI9[AB:GA'.&[FA;FX*=Z\)=*\S5)])"99T_M%QJ^B-_0L1^NGVOE5(F/C%?R9'-YY.,>)>"J.O,$6<\U/3!9)6!3!D')0]T]
MZ8B=Z4*5##V3)#\M,/*X44=FU0!$K;VK,9K;M6&LU<-0Y1,2^QB9,:-JK58A_M-8)IXK58=<3CI7P%V7X-:!ADQ^R",[VY["<-EQMV0ZC?^XS?45NC2E7S_(@I
M0\1#RX7JR^M9]T6]0L@RU3@&]_J<1VJN^S#:3F^RIZY:,U@GIE_X[+-;A5F[6O'A^]DB6@@:!PP&LU0RL!H56;(_M"Q4OHR>:%9]!4PI>HY"N[!>9;=.K_C.H*?7SCS_C\
[E9'_=UEC4\LH,\;:UR_M9]AOPM2@P'ZQV-2WKF)\VV3BU^+84ZRO._=)2VB\A@E@H6\(_)*N6_M?7,15X^]CZANA4/FG\M>WO2I[-!%TD5=3,_NL9V%Q_M#7W4+QPA-
KMN^!XD2)]_YGYR962'I/U8O@"(BSL.$I?9>*$WG/_J82%:\^]_M_EA!)VZR!3POAH^U.\OM*U'8\)=86#[YXHDSMT$W+>_\9OF*>%D%OEK>K(V,_M8*)C_6Q4BTHIU/HP-
TY4%#]9#*2R4Z)GT[VZ]-&9$QW>S'HZ_C!.Q40=KYI_M4X62;91?]BN9""+NH!0Y7?.;$FO%!TLK;L(-;Q=X6@UB@&*I11?3VG<,FOQYFVZ0\\U5(W3@;4:@2]N_ZKT]SWMJ5YAH2
M-M9OGPA\A-B56(A,>#9O[T*8,+V2U(V2_VH$9Y-]#_V6O6:PP_9)W791MOL*V'A0G"]7O#;A:W)6W*/_M<+RK\#AT(-]ON]^_35Q.^2_,2;I?DGN8>7\;F/G,[H*Q="H._RM)75)U2=
M9?*U(VVYNB@;[$UYP[0=E]AHPMX?^TWGH<="'9N&K9A9++;%Q?$LUBA;\%XE_M3'R3HEY&7;]N&)0ZI:]4Z_B46T2^Z0D7C(OU6_+8-X[YX*]!FGA0/G-(C1/Z
M4I'>HP71$@F:Q*G+W+7M0F4MV[9<)1Z*NEIKZ+X-I?QB3V8:(=$ULLV[IN%U:_MD?1&(LP+LF'+>;&@3]Y3?\<73I3.[W40M#]]I=7Y2WM[N^VDDD&R;4]%KX(+F
M6T6""WF\C+F):UR_J^%_L7#$LIO0!>T-)@W.+A8:NCL#_CZ;QO0P!A^=Q'V+_M"W28M)/22%295T-@?G+8)[WKL1ZWDN0W4E^O3HG3_M]HF:13*A>1_63_/&QHV\
(;$M)6FOS,57)ZK_N-9E9H\"[4R071$?S51_MU-_;@)U@@&\G*34K],2D-9X9LGN6QU6I[^]9"5;_@O;T_MKI/@3]:1=X_$[YB.)FM7&7.]K#WD.?[$PTHY08H\-
;)+4C0N;;_$PUW<(&A$_MY]=_O\.^&_F)L7W_?%0C%ELE0]_.;'YY4+#]535_QC@>O]8_4<#^K>%D;Q$B_M^"W_NGUBHAY:'@_'KTY)S*T9_E8W%Q<,>RO.9+%VS3V(4[#X5W*@R
%!EJL4_MWDN?LH*7QK/57TN2EE.D^>;>N?><=9YOGI%0Y_MYH_U3_+;Z]U[K[7W_]TW*VO;##,-*)MHWPG_=[,9.?5D_<[Z*>]3GP(FKB6SC\4_M@2.2]IS7D>6"*M9':8_U-
SJTSIVAT8_N!&NVY:K["V2&$6_E]J4C3MZ<(M#._M0#N@._BC69VO09LCI!+)]R.>"I1F+]#7[XHM"+9V_GMGBP@L!5WF]$3<6RE]
M"G7QD(NU9LVX);4\6T4[MH4_[MM;B!*5!AD&H_$D_HZIQ-B6.48V#YR0T9Z!_M2&Q'D1^XDRV_5#6)DCGG?NU"*;BJZH37;Y,EGE2HK5#P$[*Y?_,2Z^>Q8_JE_M?
R1)_0E]E)CT*0^F/+N&X7B&]UEF:]O]YG)F=59]_M+YGD>K#SZ[CX'6HHF[N7_U=':D*YP*;%!;[TJG$'!P(G.TA%5R,O].''/G5T)
M^DKHQ+SP/)@ZC3BM0=%I_R,1#(1QT5\Z&+--YM:BSPS,R:]_M#Q#0R/".AC1]G+KY08G6G$]"WY7A'_];FAD_NAHGVK:$ABY_5DM!A*(B2-
MCGR5N((BR*49*>_&#?]P>Q];Y2&N5MV%K#42[S@I[A8U&KBU__)5W>08#M,_M3*%0[Q-:X[D.(Y6];V>L<=),4U6B1%"[;V^D]_MG%N2E54?1%F_YC/43(+5.9A4;-!HD&LSWVF
M9T[;7_W2\R6>E#1C@NI&;$RWA.4;7Y@+O9#V<')QT31U46>-\4S!,@0&X_M#YUW-I(VIH-RN6TINS5QO8/IGRE?]_U:G,[2+\7-I5Q9$K#DL;WX_M]$!IZEO_!F3Y4$G+1&-
O9B>RH#7O]^\K\(1RHRW"B]\C*/_M2W,4OC2@?[ZUOXUM<5A3@\W&[-ZOF=ZXGGDJA2.,D$M!?ZHPV+;G-M[8:KAB_M(7"^]XW2W-G#?=&51>+Q63N^7<8H9]LRDT:!C;W)@X
XGF(-CZ*PE],W69P'_MS=/AK7C]>^/;8U]D7E^7N+%\VB\8SASN+](ORH8]/9XD:7]I5M)0ADCK]VK4_M5OXPF>.A&24@)V\]F2^HZ:BBEZZ5F3(ZQGF25PB&/)?AR0*F]KT]D7/CG"=_
M08.5FI-:(1?]IC(MF@@2W+V2+;#Q^D(5M+P5[FD?&]WJS\1NG)O+4;Z"&S.,_?GEUDC0V7B%QLF:.^)Q7GN#8J=N('R'1+K\?"_M+$:QAQ5Q#'VT@5INR*2"+QIVO4MB(,@7#L,:
RB>R[.QEJT5.'ZVKBA-_!)C_M+=G?3]XIMONQ<_DQO/OZH2+;M^ZWX0>3V$"!U&M]M405^@C!'?A#'>+_R.Z_MIPK[R98[_;OX>:]FEMY>569?
Z$1(1JC/%W]WZ=)M&MZ"V6ZL'VIQ1_MO/""+-8S_31T6-'22;(H=64=8D@I6=LS+/U&W!7R.+_Y'KIQ,=LO(&7=_@'(M$Q-&N%737?LXR:AY5]ACT?>2;!S?!2.L:P@WKFJI3R
MX(/6"RI^%Y>7&@.M.(ZDA9]97:=*PMEWY)H=\/!H5O+64QF2U*K'J)?U>*#%_MW*DX-3&:M0)7SX^8*P6>1R-+-U.?K,(\M^"PP2,Q-@VR4]#.R5639O]>:T2:
MMV>>5(&5_3QBU*>&]P.<3H]/GFF_Z/.K$5L>(37\#>&3SO8-#H]R68@C9RX_M%T#[,SGE7>S#MXO3#>P_,LT5:7-(U@U%N[J\;=SFTA].+]3%G$-Q',?\G
MMW]E[.3@KLA64YW,\GD:+'=5ZKS+)A&1KU)%WI2TA0$8D,I5O&#Y47E@-'I5_MY.)E'Y!IW)5ALS*9(BPNF]3Y2:'KM"0LU;G%=WB.P#5=4D2N;$P"F#UCS>6&_M:N=7$6I)E?
6H7T$5/"2L6N[T>_M3M,@8;3!FY^*=PCF[E/5U%#>1.V.%X?T$_M);V+B\2<12'*HT"WM#P4A=K69B!B<_L6C@&TK1PL<>H!YYB]1EQL-G?]>_>O_M>L-M]+V;_@\P_-
[V;3L$EVCV7E&(C]2X36U$U@.?#I_F+_@@N/T._UHB\8C,]G+2@O65TAR^ZW7)9)9;"4+2ALH[3(<+B87-V'C;V;!_M4#H@X(QP[3>HW?
>K\GRBKN(6R&X/6F>*0+&/FU.VS6L17'5)-1PJJA%6>>+&>ZZSR%/D_;/[9H08KFH1V-%'3;&C>7_H+O%-R=:MH_=6H4_M/4NC]CXB.5V>)V?/]$Q+[3AGCY$G&^HXY_T-
WF/KKFE1L_MN:&(R%?_M)3P?X@$O=@]?'NRW7L6W-EN1<5;;&+U+/:0N^MO,7+X6KJ>$_N_2\2+RW+_MSE0&L8(-^3=_B_=.N>)2#C\N816U8UC
5'27*A=08WS7U9,1L][]@6.Y/;JS_M-!,R@1]Z)[)9,TNN\%UR6E%Q15,V9T6>$K>LEU4=^D*6BCV]3I7A;S/-X(/X_M9Z#+#OU?
*\]IG_Y"N4/A4\][+!48^7<_;?P_="1.3VSM.&E=:ALN:@'TDMOY_MX9UXR#^Y_-$PZJR);;SY+=W3P\'YJS:9H2T?R:PND^R..L'E,]?KU'7\.Y!7
MH5S+YFQL[C7'I:&ARQ$MLD^TOCSY<\6RWX3TSTG^.G\](V)UI^'?\"KM[];"_MT'S?_E:X*&\#?QPT3D"9Z2QFID0X#!?#%B4YEY^,6L_MPHO_-?P+[_1_Y'H.+;FAN%R6*MLF-
LE,09@FXL!S"O_QFY#K!CP=5F#'^_9_M*:SK7-L+B"@%]Y_Q'A!Q_6_[\..]&F3'_(*>8@":>#>*L)->X+]L9!SZ!VB_M%B+/?3SZXV4,8(IK?"WC4IGT"AV(_3#<_&B%L?WV9Z7!O[N-
#?6]G5)3IE=_M]3%-6X-A4NMH;^2/I=UTM[X&$1F<"H."_MA5U^O?E(1_R?_MMO]&XKK]#YW77]0AA$I=VA7D^D;;#=LU+*!K1PH_*6P(9(:6*W@'_?]57HJ8_M8?_XT]G]?
3.U/;\3,B^]L"H=VZ;6G6JU/GX,_"U7>$6+-*\[@^99N?\DKZ56_MME_SRG_8X7SV$7Q&J+V';B.$;$^XHA]Z9*@C?8"^OFZ=[$=U1Z],-[_%=KII_M_,^OA%@@#]BZ-
]R+;^Y541+;U(S[FZXGU>WLZ4RNODG+'+SVGG0L+&#!?@=14_M.SF!H8-Y;:12?M[0"]8H7]4>"\ZH;PH8??LC*^]3MIXS\3XTI>_[N3T5)5]\;\GY_0#_Y_M4>T1G@8M[KT3]-
A4ODD0SL'M;@]]LL*G;(NU.5L7B>LC/(H_WYVTIF,J+1DO_M8K!FL4B=,=?].:"@TA;@GX%^LME+:'-Q6ITK9UW_DZ(=X@/Y;DTGNI>&&LC@_M[@]"/%>C^FE$S#H?
F&S/E=*BE/JQ"/+Y3-Z7)W[OL=$8=P1K!:1G42JLI(!X_M=SX_M@K[G$=L&,Q_=C7-F_94WW;?1%&=].8_Y;#-Q@-N;-6ED)48-E1U7*=K/U'(A_MB0%L+?H6S>K+"A>(J:E!C9YSEBDU
ZX=7CF)T22N90PS[CP[HT0%65R&>SVP-92]4"?PW.#?^_MO^34_TC^>845_M\]\H\?\K_W_N^QAWR_=@(!3=X\X8R[=,,Z:VOYRJRK@5U
MXE=4+J3STQT86#4;KH:N(1KXKV07@&1P9$'!RY.J3<("_YOG>_O$<+E6?9&?!K0\O$+[BB]HK#;7/V*I/80ES#I:8TOO7<)QF(ID2)ZG-O_M9&(_CW[9[U3%49M+]DN]]5?
B*6+Y)E.D]L38+.Y@B-E#>_"E@_>-\YNY\=VA_M"L%M^QQU64N29\/B<43;2DBNFIN^.@,,]2E%UR.DLW82$(/W;FOM'R]]E19K&P@\J-:KA_UD%R6\GD$:_N=;<]T7.A(7[+=4L@-
NU_J,ZJG@S+E+_MZ0?VGAG*LR+OOJW>#'3LV9HIHALV[C*3]1SXND#_4#AG_H&*\(N5T]9A]9%-_M7S]]O7NZ(9:Q/'S55"M6#Y7\-[QA\;G(_9"<$VML?F8#
<^%BHC>&V571(2H$3G^!ZX]RF?S_M90YB!-J^Q%U4_9VQ\U/@K;4*21T-981GHB.4_F+]VG8[R!:7$L@N,8?U/MJX_M?RODY+/[V!$55]BX!.PZLMA@_11YX73?/KW"*C@7[D;P
8O!GY$/F),54O;B46)UTM^A[UM@=&CI(9/^E\MG(H+;QT:_M5L[FO!AXCAX":9QIZB'&79/"F8PK$1]UDE48?"5Z!-GZM,3I^Q\D\B]F3L1_M'#S3;R3_'X=O%'JQP#:U3&
!SHM:4>4MPQ;K^DL=/V$(@D=?8W>(P(7FA3&_MBUUB_',I9.&9]#5]H9NSYS?O@>=<(K<;A?SX_M/M5E))@56&B".$6F6B7R$FY"%L%G"BQ(EQ-"^\]P^UI(6"LSK_^L9]MA^&37
MI5!&D17]E_A*.!#ED]95-^Q>U3>S>]*,K,;)S/6?EW"R6U,KM=[SL_M!N2+Q+7B_0@NM3^&PAO153[S@WY5!TZ:<"[\T;_M@EDZRPNY]Q'E<,9ZD82*N9LJ+-T?
C0[(?.$*\/;SA.Z%,HM^[]1Q%XV"ZZ;-FZVN#?'ZIQVR/O_V!-Y"8%_MQ"#%=RT.W5I;%'O2!R."1/W4-5(ZO&=9>CC[WP"59L%*4N]L:+O$(?_M2D@6VDK_^K!6.L/
\&5IMPBBT_1#G;"Z'LUFKAM[7^+024;,^=VMNE'L?/<_M@YZL1
JAZN^C*TAR':O&MEI0E$*1>B8ZL(;&1)I"/087WR.RK6$W"^*HC0JV75.!SC9=VVN\/U*_O,2S@UFWOGTP:^$!N'>WP:QY;#])[#6\3W+:US8_0AZPUA^
M40%;@CD+7B#I;SL=T1BZ]/N+Y_+^&YP>68(!##0>N1[I//V#)0SYS>[??"'$_MMTXN#Y9UHM^K\+G%2]==?4W"_#YE_'7??$%-MT;[^!^CWN6)#L>M>O%6^B/R
M6_76_Z3>TD/FYC9@/^?^_IU9)W2]LKK;_LD#;N*^[-L^]P_-=Y;_;/_NOLN_M^7U%Z#DP^LEB]_/)'DU]KPXQXA[(/\-\,;+=(9L,=@Y7I<)B]\D1B;/V#LU8\)_A=WI[]3(
MGKT]C8ACVR3]H9OI#4INPJG[!DP,.!SJG&-SL;'3U>IYPF.@KD>R*N[6DD%+_MR'C';SD!/YR87$%X=
[7#V>2;)H3NEHULIRZXK=HL7N@_L>''+34UU#:B<3:ZVDZ.REI,@*[/,&^3K>:2[9>XK36_V_M,H.9WO"HR^>H2T@DI)[?>U[E%;6DG_)SC!69*Y^H.;XB10]VVI>CA0*43(+<
M19ED\KDA/)T_[WV4BWX_M[NEKYP^\S2VKJ7>WI&,[8I+>L'<!=-PC53(XK_MU;8<)5?.7XN:FF'4_W"YKP54ZUY7U:,79]Q8"VG&.I*^IN:]#8H_^O.P3I;@__M,2V=
(TG^XQ2W0;5(IFV2?'[ZU]9VM'_/%8=B;D%I]X*\YOTNK&]D\^^B^'W_MCRY!8F2%U+;<3_[=>D;NEN[:A!-G^<$U\\AXU1'6$9?G+SI0$S!*0]K[FU571:35[/.8-
:S&B+Z=BK)'NIN5J!3\;^F;/_MB^A(IEKOOGDUY_DVI?FI=+U#5"<,FHU>=I0GYM_?A!V6MJD;8>NMC_@_(6MV_MM+RF8TP!JYZ?[0EIPEZ^_6!S-H1L#A#=L1+CM*F5RN"B&%]
(1+*XR5F_^7MC_M]M]"U>!)EB*+41VL:'E3R2])BJXZ?.Q%D<9['=FQUJY"<;D3<'/?$^H@")0=_MC[.=5#Q"OKNMBJEZI5!^/G=7@O?[K#Z\T-E039#T?*$4UW^G-
[7*&AK[YLWKS9H2QBO:15+$AK-L7JL,(<+>3_M+;),\XK3IA[;8B8LB5$./J'T?OZXK"ZBXAV*B#PX?$MX+5_Y)IB2B=>>C_-_1_M_%Q(FYH1UVYF60B4&L&8)7L04$K;EP>
BB3A3SA04Q!P&FM=M_O)T$F4@<$@E",2=ZX_O*_*R,//Z@ETV.^7@607B%^H*B%_FG]$-_C'?F>B\[FSN]7T@2CU2<#-F<"KC8L$$\O[GHR#K/_MJY4/%LB?]*-_5CK,6/9V):QXPGB-
^5=<5W,:(!ZC;1WH,PPM.(^YW\1]_QYV/X2V]9L!KQR=9Y?=-\KM9GRM#Q52@3++/;"EI_MB?"CA]X;?3T-$BR_V[?V*=;4A"EFL4R'G-B-*/G\B]Y3X]MQZV$1_+2T"'4;_M-\=-C$K3IU2*
<%R>U5=1S_4;IN1,L1:1FFB;LBFY"%M6^P#/_LA#&@(R_FN:1_MVN%^@7/$"_3;7!MCE'BH><:E%E5*;Q5T>EQP@0!'W$4U]2+G<]@^W=X25[6_M^F7WT1507>,TT[<#4\E*Z9>V-
=O#^SNT9=!]_]$="_?7M7T>V+TIS(T_M2?07%1?XKG*Z"(7=L])7_RU+GS.G(LD]HG8YT_MR/7+F27,^[M^O@!)@4-)YS_?F@LS48N>X]>9^MD]">D%WNTZ%KS
=Q@D9:WL;7UX>4%+WV"NL(M_MHXKE@-Y3G%TSAJY[BRV/.BQ:AZB;,*+[OJF)?.BJHQ_M.S$B:V]>T2T_PWF#%[&]_N5^H&3=Q..,;?:.[&W7K,J1]?;G+>BKRFB-
P2Y*0]NGI3V2R/E]_IE9CXXVBX4Q_$/UXDUW/T;DCI#X0:/+DD_!]1:6/U[)G7"R_M0^6RVNCC%)8*A02^T@=QIR'O?'X"5I/"O>,;UH<8:D#*]-H?F%!/[_N&$>;_MY9]E;T$I)T.^95]T
K9P%6B6QNA)S1.D6(SG4^YRW?./$,:B2@7.O;X1(O[L_M8Y9UE@DWJ_"$\WXE$:RY=8:TQRU&*+VL^D^"S!S0^IX[0;_.N9]P*RE/(A_MF)Q1GSM5R4UH1"AC06-]AE=1>279XF]<.R,-
C;P9L^^:WH,+1+<_M_>1>]JMZ,C)H36)(D03A8Z_]HY?-!S^$K>AB_*5>HQB_16'IPCW>*V7G@K,T_MM9OQ2U7E5[$(@_A%"R_9P!\ZLL_[&0%I:%W21A^,&ME_H<0-()%5Y>?]W]NI
MW?RG200\5U%%3U951@VKRL;7IY!+JHF1'?&$+6AWQ3\MA%IZX-]1OI+M+9*9?#O4\/[@O0>:$5-K;=GV%$=H(!_M,#X5TW@?=.Z]5H#"_%9<_;C:E??IE.5,1,GNM#B:9X3\Q?
9(3;C&PL"F1IR=0/ND_M?]6P04)8W0O_5?L=)D*8U?IF9K[2?IE?6H:H376M.J)HHG@C[(NZK"O-I]_H_MK,Y1N.GJZJH2C2[3:0E>?"'7G6NXVG*A_OLENO-E<4%50H=TQD-0:J5/:QUT_
MFM\=].XZLBW9*WK((CV"\[W39*W/@+6\TW95A.LWXUIE//(WB9W+14\3CU-U_M-/H0V=L_)QV()&?7C_EU-8R:CLZ5598@(BS2>]H$'HX\)'?DV?(B,'NQ]6_,M.\(P:AY.\0R$VIFYL\%A\]
[;(R6$WW]_<5HSMH9;MK3[W9CEEX![DHIN/T*R6%?E!')]9C?KEEJ_MFN"MZZ_^F-B#9U#GECV%V%5P$&Y.,T^\$3L7-N43+@_\R+";O;S>8
MH*\2,CE,!975UF_YUM'^/36BQLCK6%,3=Q)$9O^*9X#21PQ_+!#_X\P,]7WD_M>_K..K'""0KW0XV$)UA&XH_OO-OY;Y$M;5T_;I8\\&.Q+7M_#Z2NYN_M^W[5KD)SYQV38"?/E?
*CF<>7[KJUE2.KH?<8%@GT>.FM=..32[&+)(,@7B#W_M8QCL"IM'/Z_6G;9U!/6,%%4/-\4:C6OW=1(/K*MV39_1G.-G]6KD13-74;R_ML(P*7I(IM.O[Q"@^-NR8+BO.#%XR97..W=
(C[:L,;3=&5E_;S^:W8GM-9\I_M\1>&/J-XFVL8D1.6.$)'$#JE/'6"L;N/N+QRL<'O4X51F:]Q\3-!71.Y8_M,BGL6=>>=X*L1:X];^(Y^A>F/O?PPA_NEUR3Q3S]\\'JC(5.T8%:&05.+UJ8
M'3@NH.$\1]5O(Z@?4!(6_&)GK!WU[6Z3KPX1%MW6_56XV&&K>GU2$5*8YJU_M,10T=<1/_W]W:G8V@&_#>U;^NB,^;I=H$Z*?\5E-S%F6L?'G
MTV>Z.VW8R55OY*5_B>P0B9K65:8AV[Q.@W(CN"I*RU3.!_MCY+\Y'M':+#4^_MTKT2(>U"+=Z.VREN]21PGP:WE-#6N=]ICZVSYW^?'-HU?M22"9;\WEA5%R?_M+KZ;!
(L..S#'BU?"K,L@LC2IS*@[%H[C=@D#!^3E;^8YS_D^E@\U89I"E!D2_M?B_]G^HS3*TF6(W_O\4]>*JZ;^P9VU9P^./_MKUE.B:?&O)LV+Z"[8@WN'26SF_K94]1&\]JIYSMO#;XS?
F&V>X8O4/6#U(G(_MBXB+WT>&[43)^M#Z1#.34=V..7<9WI[FP=O_?I"AQ)28L70M7=#D2@OOJF?_M6C646KG'EU$"\(_CO-=M#N337="OBHJZ@4I$HQ,#<0:=_\K4^/*RP1FNC",
MN=;,@_'1'@5)5F[SC>2[81Q['?1^4_MQDP^S-=8H;ZBE'>@1"PW^(V8Y_N?5GA-;%,Z=Y]/&UP$EGW:)S9:;]5E<-_M'A\L]2";WP4)_S)EQA1"FC#\[O53X/SMYX&][TM]]=$*?
QBRV7+0+[]>7_M]9B(,5ME)7SK;_;@::&JRU&YOWVLF'H7#_T5LD'^?:T(]Z-IC.<-@S@L?P5_MHQ0S!O_=IGU+]#F_9XF7,(C:>?1>:F_,05-U5WHEV"ZIN"C_?PW8OB"LE6E!
[8+\&'QU)Q8#",E_C=Z\H_L?U&\$@MO@DER+_M7_4/Q6B5&:Q;M<43$:2+V\+IX,&8_8=#2E#]\C4)[+&(7VJC"*QNRC^K)1O_M>V05DM,;;?#%BBUN39&=$[SL-HF=J_-4#A>M\2(?
E#CS;9AIM,)(]%@6,2A4_MSMWSV=H!FXLPQRDFWX/3Z[!?Y_!FQH;DUZ^QA^B;^P6N4W7&!FNR%-)OO_M4_5O]?U-
=U4$,6_!F!04CK@>+#]_@O=E^OG'<)N(+'7[F*N[:/KY,2.=Z.-M[XU_%JBD]"E3.)=_)3Y._=SF[DH?0R&%9^7:+3S1.X<'1S(UO%2]%EGV"#5_M(#21N>(]-#4H;I0L%RLYS8Y,1
8%K;7/8T]+L]P-_1LIO2!$WP?^^D9PHI)O_MLZ^:=(1-VM_.X=\8:VB>'W>ZW@>M-W>(O-E/UD\9]SP%RB_MLS1O'4>G'7B$-88![!&I[67+;L#9S??C
M[,XL7*^^7EI7&57NGETT+H1\VIHC2SXDY6[/I[^9?$B4)9$9]20]F#G553:9_M$?$C@Q@9&8__^;_^>ERA9U&4R\WZ7_[F_^3]#8DUV_#E^OY?_Q;;W2><_>U
M_>M_^2_|__!^/^\^_89?=BP[:-85^A](4@E;/IS63V@ZD&@?]L4_U@^$W2[_M(I7<%(8_VM\V-O-TTNQO^H4._%47=9]]OB[R1+O"#-,XSEN_H2R0F.6>8_M9PF)HR0*?#^_NO\
[RX,H3-,(Y\P/SV*,DD/6B]^7Z'W_7_M?U!2"]3$6Y?U/__E;P[5]?3WGW_^\\|_?_J+%]N?-L7]SX'GA3]W5_^MO?RO_MH^O-#_NK_3S/?ZY_N[NT7)ZZ4"WK__Q_?
OW\G3V(1X*7Z[(B:Z8)E,N_E_4/_M/V\8]6K41_E"9Z_0_\+=95C_""MT0O^GOTK^MW_]+P@UW;_MS5F2^<_ZBI_7XEX_VUM1+#?\>T6*ZC.A8]6XKU>K7I[$O_RM7#X^K43WLX="
MR-/+KHKB8\\Y-Y7\[!/-Y7\]1"SG"\AWQ&]US*L#YFIQO[CB<0C3+\]8O5,6_M0DS/<(_,Q2PW+]3'-9_KW=V1NICUZ3EV]5IL*K*:X;78D^FQO-(_^*S^UI+1_M"PT8TYL:
[I[K(]_*K'FHK&6!TNC)?^7OZF_+;8EOB?D:?%!2%$4@G\3SV*]_M%==%0=;W0G\-W[W_*4-.Z"WTF["IG@M[8;92;W7Q5*)
M78LL24EKN=L%?]9^VL]B597=3[#^2:V0,)H_'SW^ZZ*3CA1LY_FT5_S,-LIS_M>]KPP<.0Q>;Q_ABJS05O3O-@%'M_0YN"BT+YS2=$W;WI95$MONGE?A6/5!0+_M3@@E&0FQ)V(?

1V&48R)XAM,DR9*(9NK_C4[_J9+%=:Q3YMBN]D)3X(6GT7;%LLJZ4HKYG:]K5I'BU=VGWBETCEP!-SS-ZBHXA?&U
M*^%V<9@]Y6*Y>+]Y%L4U+:N"L&I$)8^NGTZM:C+HCXZ0@X_L6>9/O-BE8#_=_M;YY_5O_V(/V![ZI5_NC_ME$*]>]2G,H]$C],X")2C]_;$62XY)DDF11;XFT0B%.]G0#YUBB/G
M8V;F9_52WN,!O'9GWH@+N-]S5Q"]YO>71]I9+5(J8BF"&"<]3G!$PA03KO;"_M)"&Q[ZE]8NJE)D&6HY4G#K.TM%!#S,SH'TL_[O59RP0SE8;B@'R^DZQ;^7R'_M*\WF\YT4H._SG;[
SN?3VEB]_"]J!ZV(STI3=:SKZY]K]6X^+)^4AC+U;W(O_M%CX)N/+(4IQG5*F,R#Q,>1CC5')?4":8S_+(P84QY8E5:D=1^5?]=L6'=K1$_MS1UZK-
E3/^CX0S^0$A'TM,/N1YCG98ZWF=,T"8HP)6Y80_T/:_$%=I#N^?#_MG6<"%MV14V%.=U9_-S'ZT\Y?.&8R1&,+ZY7]]9ZI'8E_M-16OTTGCZ^$]^'[S^'3-]BU9K5YNR9+_7GX1E?*Y-
X_B3OQ5O5/L_L-4%4W6_MFE@E-0MB7=:YW#2QZBI;^,O'KX"OYZ%(_MXRIH+0U,USI''\/3W)OI2^*\VF&"<%Z&O_Z0O@K_]W[4KX'HU]]:6\YING_M2O!/*W)O^M*?
N7WJE!E%%6FRV.][5:CEP%PKSDD_KA\.!(=IRHC,Z_]-WI'Z_MC_AGI4CGUIQ-I4:$ZBO7V*46N[<_2<'+]ZM-*>XVOZZ?EA^6)6LR,$WW;F=7_MF'KG5A-&-64=W[E;*L^GV]!?O]S>
(.V$^L56W0_8R9T'PV_?YP0'X".[.$_)W_M*;AFDMIMZ3R@&TYL>*VT<5]!-9%O+6*+H*$ME-+/6\77(4-BT'M-%9R%O+3\SQ_2_M+5]KI^GE_F+7GY79]RZH)'7>"WM]*?EVMQ4XG'L3?
1<)7IWDA%'#V7]$>^_M]ZU_?V@.4,V"H^\%0%BK#X?)^K-]00#"]C\ED-LL7EHABE^*S?:IK]OZ_D_*_M\;!9]7N_5>OKQ\K4U1M99N+/AJ-:O*HIH]Z#*!OHMH6:W3]N-F:?D],@#'0
M9'>8_+7X(%^9)BM5_&(]B5._\R_,<1;[P21_E/(IA91_F9(U>[4NJ'#J2]-C1A'F*_M1N"9N8W._+'2]1/I@G]]MP/HVSA_8*<2(K$C#].(Y*SN)@2$U[XGZ%Z8=2!T
M6RZ:_+GEL[A>K[=D==.FNNC4N]_RV^;%K*]7STM"EROE_B^2B.FLGA#')..X_MXM+#N>_%F*E91*3@<1A%)GS_G/34N[F.%T1]9O8Y/X5.GMVL4=$PA%8=1V96_MQ_+D85LR+73
7>D.M88/U#'2I!Q_E.CE!7V>'#7>=IBI#S;?"+T#'MX$16,#_M;0]$8Z;U_;7M]?+0]^VOQ8]S6&%[23M;?,$*EI$[4]R7ZWN]E:M=P=O-:LE>_M]CD&H1]EPO,"+%.:M2F7
168^1ZG+$N3Q#,RPX,TIC]N%15:Z5I(4E7%DFXK_M_4W3_6BV>7Q4EK?<>\.E3K!L?@_,]XT@:ACV/"X^SS*]R0T.'L5'L_A_%_BQL(_M8,IK(+W3\^UQ&6US1=[\E'MV"YU6
M^%Z94WU9?;RG/G%?Y:=-(<6RTD>IBY1RCY*,8A+Y%$>I'V)"\Q#[,D@#07,I_MHPSR!;^8HXDM@&:M/B/8R(//>HFV3^KO^DQ%)Q&KWW[[_ANP:/7RIV'V]9\5_M8YB)]6FBAC?4,-
<6B5XU[L]AF6ES>;@.?W_&F2,/XW)^9O5!_MG,'WVDMQM["=?U$EL?O9+7MG5"5O>V-2-.4!+HQ]53&T9.)IK]DF(LD]H3P_M4AY(B'$Z]4E:ZFA'WIUQ,);4D8$8_MIS>KD3
6_[6A,+_1SEC4[L:65;4?4G>%J-M<7>M@:][R]PI%7B]Z=[L_Q;:_M=BY-TI<]%TYI6EG+[NA=-Z<]ZSL/AN/UNP]?P#)Y_N[Q7G^]/P.R_T]>-]T[
M79/3N>'ZE3YPY3Z]3O4;E,P^*_OHQ7D3PL\)=)0+?O9"B^/]7KKJS?I74OQ#_MU*B>$1]5GK].@'GTD!.AS5Y8]1@.M[C0V<&/>Z!*GN-35G#S'A1_MX\70_<[TIX/0[E_?!*6CXWP[#
;/\X%+SG>@;R?KP8F^Y1+P+N[']0-"?"&/_MHND;OLB#+(K],,&IER0-[X_[YE^K!U'H:H]V_MV3^@QN'$K1/K7DWQH!]G)7T%+FK-M
M0@:$Z6]!ABZS;!]=QT+KT%%SP/1U6^FY=KJ#T8)%C&1)S+!/T@BK[V"$\RA)_M,(U2+B(_SGG$(6<]0\0F5L'W_9CO51?]W>SIHQ^6W:^!W0$'(]-@]'_M1&1Z,(S_>4Y"[.>A#"B5C/-\]?
1]3MYL0+XF;_SG.W&_7.M<*D3)]M;Q:>!+_M4E]0HMY_$0@?1RP-.;4\PR3A,B-1DB8);>'K1K7-#-[I871#Z8+-ZS8M;F;1_M6%=
(P+X/K2K69/<9$#W2#OM@&PCHJFOU$*EY>TP;""W4$=KD'KOS%>E)T0G_M$'W6)3*[+.PO2IAF"[<@,O#\C">89+[_4>9SG$F68A;[&?%9EC!AU-?9F.+$_MWYJ:[+X6Y0]M-
VL]%DVPQ,Y,T9TB_O0&.]*HIGVUKY-0>[$=?7K\AN+_]H"F-]HF98I[O4&_)MXVA2:3)-[_3K5/\ACX:T7-<;(AVI'.90&D%G9@F<_P*S!AT6,_KS_ME$]
I':5SFA$<]Z410@,1VF)H)MMTPW]49TZF^]9ET?WO[;LGIXORVKS:/Q_M!"S@:E.F&C0S8^L_I<"=E<)7O=KCXO,EM)P4[RF0!?15\9M#'=:7\UCORUPU7_MGZNE7++:Y?
]RK4^M]=@Z&M,4!TGHX2AE.GU=_#@OZ_M6CM'KK;3R2^BTI-;XO-\Y(+_N[EMU+PF_4N;KS/NU^D7I:*,_IPQ*3Z3("=3EV/<1YJQC0]:.;W>D&V?$_4VH
MK&;*/@U8,:7-:63D3LN$'U!/_S6@/8CVI\)78^C!C8*<_<&0H_X5F-!QR0_MUP;%8H6ICI"F6ON=Q$H4R]'WCXJU+.)G86)G5V5#^C,G"U!\9&X+;C;($O/91#-9#]R>X2V6
MB>"Z>.G]]RNU_SC7WK.M=AYZHLP2W-?AAG6L4$1[G.(FSW/1L(?93B;7+/91ELUW\MRX7(/>ES%F_BTUSVU^'S9:Y]:9>Y:C8*9=MK*!G0P3,6RSEKK\^\X9ZU>
M^DTRUOI"G7S:K'7GB_H]"]7@/"$!IC3,<12I_M;R2)2(B#1/H>\?TTD]"&]X/4ILY::R:E[FE:]=DP7F9ZYPP%F"*"_;#HZFP@_MF+..S4.T9N[&;"#V<:=EDYOLN\8U?
2_V)3]0>>O'MT^=C-,O(=>0!LY5/R'Q_M#(Z$A:F@B?D=-SQV$"LBQKEO5YS]E9Y9X0ZU2SOW*46H;%>C7(=AON^I24K_MEEW#TZ=E(?@BRP,1!93B/-;Y)TG",-4-
C.,X]W,_3:C/S<]93"A.OIGL%\NW_M(>8#/E#+""_Z9(2D0;S,-3XP17X[:_#A,]<0V071'$_%BZ-!Q!Z,IADM-%],_M#2+7060-=*.%_M;M;\KA[B;;AW.G7OQ/:H)=D?'5=>Z>0S17_YO.1;LC+?
2)V4?7P7=:G8,.MC_M(+':4FD>'.VFAL2SVD]=7'"V?=20./U-U.!U#@8ZM&B>&ZBUB')_41X_M.1.A'B*>QA1G(0UQ$&0RC_,T%](HP<"0WL2)>3CKX4Y=;A5P'/-+.3H$_J8
MNL)1N&RVO7G9IAH<8+:V\VO."_ZX/2*@=LL*VF?R7*ES<6G3:%SD_8U>A\$_MK?;_6A#?IZF4/B:4!SCB>:#'N<584DI$@A_2>_FHHM:0\,2*OY]L!]R>-<4M
MRQG)=%]PWXL]'#$>8Q(F7/>MDC2.,IFQ##8C:PKD]$9E&77'E]O9>1,A;&94_MIT_-9ETUG8,ZY1U+6&X*K)ER6*P,%-=5T;(IV7F+EX%@'!4Q0^^_<)[FNY=?
M]U,F/Q7BGUNQ9B^U!T&2/,UR':R.=%N2).(X5Z87QX+E/_AHSD)]-57S/,V)_M+7"/+-K1M?*^3/_S,Q:.48'9"2M_[*=LCHOH>M;F_,6WF;@Y#L'N9N9L&MUH$_M:,_7:[4U;GN*W2G\RX?-
BB\$B4@0$(9YGB0XDH)C0OP<>UF<$E[0P]U/0!W%"\7%A"+O5QHNQ_L6'A8]'58K,&@ZYE;YXNU#O-^_M$&(=N=2V-]I@YWC!4\%2CV!?9,H3B;U(;6P$P5)M%#/?
RZ(L-,]Q8D9N8KO4_M-@D[U7'>].&\##I#IL@]+#"K="DB%MW3+)OPF]90>_O&^S!1CYNI3=!\?T>/_M;];E4EW9!I'K1KU],Z.G!G\&3#(U6&6ZM]4ECKH#AXY\75-0SS[F$XTY!8AM
M=0!ALOYLYQ$_8?O'$Y#;[+.][:E6]DLK]D_M\MRJ5V0^]^%Z+K9I6>&>TS_,M<9B0&$U9_IY/I3@ECES#=7VB^+.D3
M[!^D1I_ZO4TT:;5^69"6^4R/A(FMM62D55YLV9MRA8+O#C(:8QCX5&UD^,,_M$\%"S&,FI$^YC*C1Z%H38E-K5D,=O2)_A10#/T$"*B.0F821W_$!5+X!#&PR
M_L:P@$29W&%B&6X:P,95R,E,QN'8T\@:,P:AS*0YC$89WF-CRA@KMJ+.?U_W_M/ERO^0?Q+%;:]]I[4)]I22R)CD%E$D=
<9RN$7H1%$.8)\P))$Z/#L7%2TZ1G:0EIH%XKGH&#%":MX7_N,A"04,;H'OF7NQY&^";9Y%!0+<09]?8>+/_M)62#"9%[?#OM1F28.O9HHH[H='OL<0FM=MP#R\ZV_QX7K;\;-[C:
(E!U?U^]_M?UC?WZ[+]>]D=;/^OGU\,!8N]_4=77W:%-=/*[KZOT6[VS*-9D$7GGIC?G]?_MB'M2"?3^09>"Z(316W6]]E[]1!]=Z]&LV?9QV[3#>B?60BXK)#<%NEZMT*UZ
MN_6[K=NIE.U8T*:UOL,O%:!N@0"$$4#/P>#4-N4CP#H2]\%^@['>%PIUU_M$$QMOK"A+1_'I47K16R32;X_DM6J"_HO,M^C0OH1CE+.U58]5EOU1&_5DR2-
MXS"281+!LD<.U[\G7:0FB3];T.200T"&]8D#,6$6_R:A1;+'23DNR.XX7&_F_M=(Z3PASG;YR^S+)PAS'MY)7M9]#;"PC>3637V>G+4K="W19BWV@G$9)%$4]Q
MR"*I@_T1)GX<8R],@C@E+(\34.\]2SZF=C=:KM!3PU:]=25M1&FUYPQ8DF*)_MN=G>?@8DP1&X!L3;'HA=6*[%-ISY;A!DB-H7!6W6'(Q;ZW+95_=E;Y?I#(EDY\R<7G,U?'Q*G[Y(/7F?
1'(-0M9DK/B_+]MZ.@;L+GEU@8HUJZ2)-_M^_]ZD3\O];@].1$8ID]]6=M.&,AYB\%1N>PZ8YQ==;[V&&.'"?3(&+W8XCSZ_M?Y.U_L6[+3;EDU+=;?E]^_2T$KU^2"F1$?
7#')/((S@BJ8_SA&984+5;$GD^_M)=SX3'J4W,2]]>@CS0#:5H^O,M^!M;%$!X?6YG==6)E^LW[:5N5G?2>MJE[G'B_M2RIQ2O,01Y&?8DHBCKTT"9(T#6DL08U!!FA-;-
UJ4BBT+#H_8W9OM^1P#_#_MMN]]HG/?--TKU,H_P?AM_O%=%YF?H/0VQ>7G13Y;5#YPB^7@_%TM]HZ4@O>/_M;7I=V=Z]I"]IN_/5C9D_[PK_>!Y$-(L9)EFB^]AD$N>Z$U
:^T(PD]6^6<#>_M'4L36X.:NC)E>B]LX>GZGD?=R]Y_7==7LVD=;E1L-M7S,K,]\SX%F(E]@'UG_M^_#>V3X_^._$9YBYF]YP.4/SCF!P!N#1G_9W*]L9VEY+K.LUU[U.%X*'+*"<_M89]E
8YB93T)#2A.YE_M^F!C4$PB03@OB2.E/T%@5B4^+^!KI1RX$A[5_/C/ZN7ZSX*7[E*E_$O.EB3U_M2Z$'8'_0?]U[ZCI)YT+U'S?F]"[^VPH".CC8=6)(5I^]30.DYULD#,*H0+_MH3-;4-
="^'Z8U^9VB\!O=_SY\]T9WWFWT8T'O\I/VVI,B*;-U5*47Y2\VZ+0_M92:)E],XH0QS0I0?X!&*"8\"+&0>1X)G(DTSXT-PF/S4H9..G_XXTU(/,E>*_M)6NF4-%Q!8B*PF&63"A_BU,
<\%#@*(P(GG_L_R]3#V_,"4Q6SS5,[J_5Z2H_MWAKLUZP80_Y%5+M,%B/8$494W"_7:YTX3HE:C!E^$RP?!>';N,=UM\./CT^KS8L0]46WZAU\(*6H*Y(6_MN4QY+$F(4QJE6%F?
$.>4)%BHK54>I@G/S3HC7\C'Q(9),Z0]1NU6LJ8Q9]ET_MY'S:%OI7=:NEC]IO;]$/R^YW/T)G9ML]_4-#-3VNP$,F30LU'*&&)=3PU'4[_MO4(=7TT75-1QUA3#N1S(?
1$VSD9UVW$Q\Q#OBZ_Z'N]IV7*6%3SK:LF7JVVU_M?.Y9TH]_L=66"_Y)":U#5]O&W?\]/Y)"]IQ+Q5O-6!.A7&YI$J.44/DBD?<,?G*$H]64Z3?&L3(BNF25AVI54$S
MM2F5K13%P3WVMM+-$S2SG+,_%V!\Q<=>SP5$'P\>1X_%.N+,]DM;F-M1_L?_MPDN"7.+F]I#("4_SEA6YA/&HR,CIXG;66)]+ZQ_I4Z!GY=NN]I*>O+;4!1GZ
M%\W8M=X/>EZN["7YIBP6&"A?IQ&+(@#2LVCSDYXFB4(70_,_MU:?G3/]%[*E?]6+-2M,;_C#K>MD3D:%/%I_M9!I\?]/G_8Y%#SP-L>9O\QS,OFZS(0O[]FE"5\U4Z(]]-/>LH.82#?]K'_;O
MO7T7(AEDV'3_MS('V>$:*_ZPLGA<'X)2G-&08YHS]9M,)F8=_0=HS9U^EF??).IM6=@='JT_M!7@+&1V8N(0%;I(O0@)W%_SNLA\YS*F\AP.)WH&8>%MP8O>UY\[8?\00Z:"<=?
TT_CQZ3VKE9&LRC!3?\L'DZ_MACOZZ<"V;KC;@/M#GZ,?-;0[HM]!.@U;NG1HQYC3;A\7_..NV8<-$W/W^K@_M].M/BY9S<*/T6=(U_>%Z%>YYE1$ODPC'-!8S[C,E>N29
G.LV%TMHET!@^4IAO_M-2#)H#MUZK[Y/*@!K@^93B+8SV#DDE,_M1.!AF6:QE\]<$B]G>%.GFG_MZ!\^*)(KQ^_DC7F_^T-B'GW6!R^V^&]W,YP_ZI:&38^!NC]82:;V(S)6G^XH
MSCBF81]@&621%P28Y%&,8Y;YD@0L(KDPMAVG*$QM/#9K7!^X_M=+:C'6,/T*F3N!C8C4NEA1D.+6A]LM&ID\&X*2D_/-Q]<1V]N.UY(YLOY_P
M@\,CY(WS68\AO@_,Q^"%EU3=Z9R_<^GP/8HW:[9Y%_L1ISZ)N,!>*@B.TM!7_M&X9,8C].8Y;$7DY3T45+#6R,'1<64=+9]9_EO@:6:D+,+]PTT@P-U\,@_Z/7
M<#8]]#951Y.!>VGID6.0+2N0K._Q*T."+?T&M4A6LI\N2+);"M]KX9.2>+,6_MW;2=#UMQM_FP+/^Y):NE7+(V/GU'_FJGE92_3M$V:T_L1]8L[6;AH_M'9@E*HM]<5ML^);51V#?1?
&\9*)L9M0OB!_I_G<1SC(=@0XDP9F79YBF+))9_M2)D(C0]/'JE,;'A:NO71;DL8_=%0-MS:#6,T;#F<20XS#U9"&ZN^D5!#_6FU_M0"\8K?ZUU_+AM6=192/O.GTUN]CN6.B@..?KDU;[-
]80A"3-_]%V>F&2XXC*_M#&QPC(-C*)*HY0F5LY7Q6<-9=@AT7F0S_Z*G(@-T\Z3/1WW;?RN_M6APF:%4[*]RC8Z3S=&8]2AH5]_5QTO@--HD@6_]9V81U60_7K*,6MT*]&6K#
M>2\6,I2YEV2!_I&$.B4DP"1-_BS\(-8-?O+<[)1WG-34R2%;BE<=\2X\HW/R_M6_*01(I!Q_P",LYP_"KV20ANW4,_R2IQ!85E?HDM),",$Q,IAW-/!E>8,0O%_M1)+#?!2C.R[LC;\?
@P6=ZCZTQ(0;Y'WWPQ[=2?(R3_1TW0#^%*FWZ0_(/39_M%O!#]]B]IXT"B"[-DD2Q3%F,,^YG.$I\CJGO4>Q'D8R%('D82(A[?+#ZQ)_1_M5H/;"N_-2O&Q*6J;VZ0G-
]84FNM]B(^9XEI+#3VL]E,X.V>%,"I)AZN/:O]_MG13KM:Z=OLBR>GCS^%2(]_V%>19-X/N+].H(U(D<21$+G#(i5>]?)E.E>EG0.4YBW<'!?Y_MJ"S3X!;;/>I0DY@OXL_Z5^77)
[^M2X\.LB!7G@IC7*/2QS'61.$PD22!_34_&Q@0W;G2_DTS3$AC31^39"!U0-W:>(#]+WO'_M[^R"LZCKF#B=$HY>9UE]I*KU-B'55\G;S(3C5NB\V3**H7W?"R_MNEYSW<'F27_-
U)9]D2=>DDN/X(30'$=IEN(\23W,E7WQFV2:S[NP52TW6FXB82.%'Z0_MU*SX;R+T:W-@=(]%0$3WB]C68Q25!*NVP'01TB3F-(AQ'C$?1P'CF_:^AW6%_M5RR3G(6Y^;S[DR2FM@0-
L;K7S).L(*61IQ$Q"'Q<+"?PN]N0OYVH[\%#5$Y+_M"MC57RRQW6X=*CELZSTHU."6^O2=\VV5!SD_V_(/7VE[--E4%BQ%N?;_MI/L_(_"<6%Z8_'.B5N;C7T_I=6HK9&X48;7ZDK6E??
BK^]=DNH?EG5T9HM/_M;"=>5WY=H1Y;6CM>,V9=.6>(Y:!1F05&F(D!(XC^T%RAFBU'0Y_O@L1%Z9PA_MQ;>]G8,!,E_\!US(SF/Y)DJA;M(ML3^(9[':U!$(15]G8"W2T/>\7'GY-$N5
MTY]P@3./1UCF6>P+F8"S.ZS_2T)&_,4QK5D_#2.S7/H;939>.#]U/PNNR+>W3]*5KL]*KW"K?_MO>RO;2N[FO.*NORM<;C4MU!.?Y4;]N",_"W@W<%5V24X5\V-1,?2&54
M"'WNWHDMXYX8TM3,MVHGY1S?B5T]LS_W!6$ZXS!WH-'IA*#=E-#8EEMEDXN_M.-M>:$B<_E9G\#H[9^>+]'23H]MB\]SD@K]I^4TIZ,VZ:8FOGN6UVCT]UT'>_M?
2@VI5&8T@OS'OHXRBC!69]G_2>\$(2DSP%M;F&LS"QDMY\^?WC]]N;+]^@_MZ_=W-[_?W-U_YS/BQ0-?,RIL4*INTZ.%NW.>NXT>["#YHAM%S_B'8\H3U3
MDT1K[3%QY!]8,#"K(V/T.LQ_@4KV9FGKTI"FIKU_6>A/(==S[9=>H;(*(UC_M@:6GZSZ)%#@/O$QML&A.O$Q&(O(@IFB8W.1FIZ:Y.W%]N4(,DLA@B)B9F7&'_M\RD[.BBFO
5^KQ'PUER_TQ(1S9BA-BL]L!,\->Z;WB7A0NO,PW]W<'#9]5N_M^5:M_:T/3]\]L:HVR1$]]NB;]+;%&MR]\(SL!H]]Q6(#77M+B6%N_:!0=H[]
MZ27G<^T'13IP]H>OM$AL_.W[+_I(9%UOMO7,OY=WFS4OVYX_*?LHI#>,<^SSQ_M\<2D$F>Z;SW/:)\<"BR.B48IS4Q,KXVW=TOR..2$T=44T>D_(XC-6P/KI%_M
*:72O@]7=001C5EFW]VPR@_$B*=H6&7&'D)*K_D22-!!Y,EAU>8+VG22)*#_MY$FS.ZQSPAXWZ[I"L:E':.H4%WZ4RYC*0)DIHHLTPA1G2>#A-/.\/.=>E,5&_M'4I'Z$R?
^[4O);_]2L]73=DMN%Q\##,SG]\!$C#3U8)04]Q7%S=4G>9R#8GE_M+G_K))6Y<[:&1#V1I55XN?TPK5OR4I^VTK%=2F0S*ZFZ9?4;6*UY/C<=Z?0F\P+\>_ML/72]LL6(?=
(SA),0L9P1$F(U;Z#ZX8QS[/*"*0>-2WL]R\]4E=30K8.?Q(_M*&&UOT0DF,Z;2@,]V3_%NE6[_L%"LY7HGV*_7Y]_\O?P\-;'?U8OUW\6O+SF_M_Y]#4Y)/G/U&_/[?Z:F/Z$ND2&_;
=E7Z--F4ZTWD+/K:I$OS3BMR;]M_H0E.?13?T49=:T7%1IZ-J5@2O^]RV')DKY3A"X^KI%!R8_MH@)Q07]H=AR]I'85HH[OOIL*FPL:%^9S6^R;&^S;U[QH=>[0OU])>]LLS6_M?
MP4U?(_ZI^?[1>P2#U):^3BG),59%L1>G&09"XT<4]>,36Q1_MK@>:?SR=[!L"[-#CZOF8A:W>_G68]>H#WF?Q"NV8K/'NLWF%7C4?N3KL/N*P_MM9!C_%QU)7+%UKP-
C1R#>=0+R?7ZEA420XT#>Z-4RH]_B8(M2!$75##A)]+'_M0NH!1D$2X3RD'N9)Y*>@1K@(X*#^Q7_M@F\E=4=&KA9BVVKY++Y*N63*.EA$LI)R4/E_MI.1IC'-"F!^9(2SG!
[D)5P[AH[-T!M$)?E5WG-F$Y;UUL':1^:?[<>Z^A_ME\09UY&*E*5ZRI6',YKID00B]GT9IS(!A2O,R$YL)&HFFC!OG1M#X,.7#>$_M>PZNFH.D%_1'^U^GNP_[P1TY!H9$9_4-8$"\=@^
=UM6(%8/_MHCC1TDYW*+Q^)LN5SI7ZM"GT<)1VF(,N?]QE#NQ&PODLH%'"E7>1BP!'E*8X_MRX,,+-=('W9TW&&Y*7"IQP:5
M.P:!U8ZNGHZ9Q7H+S&$V]>Q[&WVN1"NTIW^%K@\0U]Q=H5_TT^@:;1*I'FTO_MWZ7>(BE&'59;.H;.55VF*[;FK>!T#.91K:?K]>UL[[^)Y?U#)?CULRC(Q?BR
MU0[@5_EAN=]JGS;AWJ_;JJS4VZK,_T(95BI:P_4A4Z@8KMTT2_M/Y4^J#,%D/]$EK0E.W>!(73S"9.'!+,]'6,]D)83U+"RZW95HAX;RD@V#+]S_M<)9
.#)D4.]SVBM+:%Z;)=MEK"/&5;%E57W"]'Y35N5"D-"GA/F8AE*HO:&(_M,8F]%(<1XU)$<>P1H^Y3YTE,'P_>$T0U17_H^#4HQI'?"T0%!WJ-I;0)Z9X1
MQ%T$]S6!N0.V9P0\$9\]=R7\G/77]=/RP]D=\M'P95OH=V/W\D*D]P[L,3$_M>O7KE]L;I$FO-]4N"*LY0,K9/LQ94,QL:>L0Y_;YU#-&"]!P"'-5*N@;16
MYZI#7\YVHFH@7/\LU>3R"S*_FOX495,KL1!!E-&8Y#BA&<.XEW)_23%E/D>_MD5$4R#"%C+@Y)@'27=M)-V6/[^__KUG@I_^CSH_UI:<_@%"0\"!+8P]+$GC*
M:R#Z7(E+G*0Y3;@D&1=R\=2DL%2Q]Z;_Z34Y\Z"IN%^NU_J[2LE*)[Q=#@_Q_MI!_K#1N)4AS1E."Z0P/RI<"<%/)G]=OI*V\8:*_7/C6[E]2QZ.93[_M;_;^&"
<2B8P($S@17M)62.0>QSSUO9BH#4^2@"HD_+0G]M=ZG-29H>]YU>T*_MF_]AU9+I]D?29=*-.PDW_0$R)M0?_MF1=X24!I:-8D9(S0Y(?K-
5E4TT4=X;%)X#"HS"R%"P!@9D&YD55C!C82?5]N_M%?FED#XF[L,S]#-D9CXU'Q;V^)Q\Y'H[C;Y9*S41_M99>/]V6SWG0M0I7G0.-0!B%.I(AQ%,5,;7F4^Y_)ZL=Y'+(P\A9K<:\KF>[,
M=7N_I-';G3=O]Q%AXS>]8P")D>D_8,3,=/M2_"QKK5NA6ZI?]$_7G1(;",=(_MCXZ[=VL,\;UZK-H4RC#S8+U_72)*#I%VS.^P=1]7L892SARF_IH^5+'#&F=A:I]S#=8U\D'I.I
M"";"Q.BDQ_BMM1@WH<17&9NB&L]08&9,4V].D*[0CN@$Q3L0*1TY)D8D9_50_M(""]=E5_]UIW@I)OWI5L7S6_6D]HZ0==D%D#'WB9SCT)%<&(_PP99QC7_"_M$SV"D63
#B]GB4VL\QUI5.QH@]NRG_?*3.M=B0_3]IWD>[*[?-75:O-G'4^H_M#Y@+P97>^3\]Z3F[F/H^-&3PW9;!M!_"+_MNK_J;]9-NX!?"O6F+-(T#-)0!C@+LAA"O-
QGG"JMC>I2%@6,!Z"AC5/P,/$_MJ]4EC.XU9+T4JDF,;@Y!+^A.,L*#,K-3;_P(@+%93A_U-&L;WS4WT3Q3S#@]F_MIT/6US0\'<1'9\L3DK(T*2>]O/O'4_B*_R3I$H";N;7#4=E5F0
M!B+W0QSP-_13]1^+F&YH:Q:_;8!N!F:_M3]=H_"TA#_BX\3*6S94M&BZ@<^E3SD7@0Q_M'/W%)[8,FA16]STBKHC!S,(!!F9Z;RL93+%KH329NF#9G=*>XMZ15AXL/:O:
MG1+]M5Z=O_9>B7.[+M?7_-_+VZ+X_LS>E]V1GF$5SIG;)]:06YVQ];?-^YD-_MZ%;M2PKT713/2R;J.C#SVIMS(_PKD"/Y87ID)KK#_Q(#*:UJ;%]U6MPNR=N
M_@4:!V+^=)3:RKYVH'K&+!_X"9;?["

,"FU027#P@\?V#/F_BMT(4QQ2;[9-%:_V!)296_MW98RT]113=NFG?X0!.-?6D?2PS1V2/_)FN<;R&CUO1U:=[;/K8%P_,^MR>66_MV71E*;KRFI9U,>PB2&+*LB#"?N
S'(6IP#0*D4QQ3SO*,^U%_0+DQA\M/]0#7_MQ(!)F1@1REKIZ^R#^<_MJ5L7-Q#?QYF).IR072GL2I3U9%F/I[&DW/>RU*B'].N%YPK4;%KPR$PMNGDP_M!BJ09?QE4!:K@$N?
!8MB+/5"LX=5^NR?BJ0<_-[N".'=6E:60Z_/W#[3$<([_ML19R65T\]_H<"&9"'!?*;W>$,"SZ!'[=B*36QPBGUISU&&%J-?'"$.7PE6O_M;F=5Y^TU;6.^5>O?
RYVO"%9%P^4F5LVF1U>/#?1-5-MBC7XO>SL0<]4T!6E<_M52?_!Z:Z9M',H+I_R:U4V93&;*H-%+]OZM!;+>.EVW*Y%F7Y?O-(E^LZ0O-^_M4T]'4+9<_;T>SEW_N,NR>?
FBQ&X+@7BD'%,2O#B2H?]#Q2$F]2]QK"M2<%&'*]"/;DYQ$3L8]%Z/E8X4PP_MI1''+!,R2KV4Q+"TI-D0M[#C=>GF<]W\LYZ3^_;H1S+*A,@DID*_]F&N)_U(_MB;TXXY*D@0Q)"&_..-
LSL.[CN*.+2(7HK]FC>BK5@VB+?^9\#F$>BR1C#(=<_MI#C*P@@3ZA.<^#]W],]$S"2T"^3,3P'<,/+@&8@U?SOTS2)=L^$)\X_ZME"/_MKRO4,^T'K%WM,H5?
ZD8VS'6EJ!.47!TU7<3+O*=1+F_[.K!RLJAE,/W5H!2=_ME=D;EO*X*2HI%DGGYM63K!9AE#$;4H99I,O5*8EPEBYIK?TPS1]]&$1U=>*.14"'+.MG,6S"9D,8&$AN.4);D5_?ZH:KIKKS
MZAA:,B>T@.9D9KP+)_A]!#7@H>)/Q7?V8/@VZ8LG0LIU+:_]V]&OW=\W3!^WSZ^$,]B;3KC_MYQ+PS1SI?>XT\7F\6/3LK1]<]YR]P$ZQ].4R[9$A&XHB2/8>C7T<29'CW),4_MI[XG?
1+$G#/0[,MQDE,GNHV'7$R2+6WQM(M078:2]YC4--FHQC)/%(_Z0?!-_M0T[G_1@+,@W?S,32KAS\>HV,OR5EBX<=IWI*=UO(\DG-#%WM-Z[V]V$IE28Q9%%/B]LU8D5NV$&
[,A!>W;0GA^;_MA%\@>,-Z/RUN,"_A6R";$,[**R2#H@D9LL]M(.@GX)HN8)E,\\V>/95=]?P_MUTS1;RIZRW58>'Z*!R"7E*0!].NG_M,]YF#$&RNO"O;O_K)TBD<_G_S'R:-WH,,./7?P*
[5*,^G[H]<^_?YU./)@U;_M3H"EJSZH#CF;MV&]>TB/.JM.0,(R!*16Y\M5W<-COVW\^!=;;;G@^CA*=XG>_M-H>47^5'4NB$T?)6%$V3Z)?3"]2#*WDBXBB2_?82&N!(2(KS*,VQ#&1$:1
_M/X(5$D_'Z]1)4W"U-O=B*U9S0*9"8873]^=S@-ESRT<*[V--#XZK^>$G,X;_R?_M(#^N&T*E=E\M+]\<@@/P<=9@/10/-#=V/"(1M?&?K1O*$%$[F#P.3%=U>1V?*C*?
MR^WUW=VWK[^L-I2LOC3)85VS1C^*91[E.4XYBY5^T0QGA$58"Q>E@K'8-_]_M':(TL:)U_$IHH.X#*N<4VEANM=1O4+W-5VT%A4J-66;0;V#&_!285UA89?N_M>AX31VFL)N(-
]JH.+C!?.]])'_UOD_M.-)=Q_)_XU'PF>IGPO8'#YCRA/;K%[%\V-O"NKEHWM/PVCF14P"#LS$[8?X_MHAX35XW7_X+^,/\[2:@4+/Z$TWU/TWWS$;^#<>C,^1U>_-Y:K9T@VG3X_K^"
M%!_7_.IQ")G/@E%1)3A_B.!%'[ALCGV(^C(,A"WX^XT9#?(2(3VXB6;-RBLS5P&Q.KW\QM]%KK_MP%*Q%?QF_2R:%F$W:[9Y%/OT_$7BQ0&+L@Q3ZB4XDKZ/:2_(CHGZ]Y>&3*8I

M]JH(=XKU'.L#.3 MU%W<;H3>W.$[_%/1/$,:X174WS3Z0CU<1%E,J:^5&K.8H]CD">81#3!OHR4 MXYYE*;7T1H 9!.8T M"LZ-00&(SSF$Q"Y$=Q$TL&"=H:R#\,JQ->8+V1E*B8?
LFO7([E=8[Z>R(=,'_1 M?O4K^!O[9;/^MET)7Y-0]RX1A)\!A(,:UP D&,+TP$Q_]H;EP5$78P#5PT$A;=7P]*)S:N&@6*^4YE?\TM>=$_N_Z3%+S^0T_^4.[DK7!!]%>Y'1T[J:V9
M@/[4\=W5"M7ZTQP,/92? VB_Z^-=3 @/$.X0FF-TX)A:LZF"E8G+<@9D*0 MCRICJ1E$>3]W(2Y=@W7VO8K'\2S6&V>;N)K_DW<;U?Z37WY=;D29;59BY8S MG?'],?-
"5M7+0F8T"2.2XTSJ(VN:)9CD08!YZ"51D,3]_XW:)#CF:V(CV^.H MCAL6.Y[08\=4B9X:MG0/=%0T?%VA1TC#(]=/RR 8^3;/ &9]6Q[W/4Q1UWZI
M_V"NZSYKNP>SXQ1UK.H9]JAE]FV>!R B^C;/Q2YX:O5\6NZZIU-KS=C#@05: MW4,X&)-U2&Z^]*U[C XBO1,L#]_=?]U69:7,]G)]_TVPC=HDOMRL.21.?'Z% MJ7?
XH+#Q@*#C6WX\FZHA>(45V^;SD6[6'=Q=Y'A?:ML^L.QL&_=Q MT?I:=X.KX2I6;_]9I1[9ZN66+/GOY?O-=[$2K!*\/=N'3T8'K#GYT7$_E-3R MA#13Z+G\J8XTD?4+ZKCKTAD
4]0A^(WK\E30P;3;$K4I1K!;X&$WDQU";+XA M[1;B'TQMM[G?+@+XJ_KXOS0]PC]MU[R\KMZ3HGA1QJK.TEYXH2 M\L YI]F,<"8"1D6>Y\P'M>D;H3>Q7:FI=PWN:_I7>IY6QT)39
+Z8T!:!:= MYLEB:QWW&1Q MH&:4(W:A4/;'9^[RG 9$N.QP:,[TI@$A3AZ%:,<[E[O2I_+D]TV^BN[MB,+$$YYDF&6^P%%$"*,QE^%ASV!#;H<)0EX\]RFV/?*Z-]QC;5C] M3F-
EKWOSV*!#&RC-/H3NX('I98_N%>H5'.YIN_L(FLGHZ!LX0FS63Z"9X*^_M@(9W618H<5YW3",K[6C?K-^3IV5%5NV'@_XI#3*<>9G*8YD[F$B::90%@E+ MPBA/&*B7Y""U]0^N=
[3K+2&^6:.6/+_<:1 Q.RUWA@-,R5]#L-Q!X/!;#)+1 M5072(*UY]X],Q#Z]/#*Z">[B-L>[C_>WA>!5\;@&)7]>O'E]D6WR'I:/=5BT >UO\YH;/=%YNA!]H6 M=B'R!07&%Y&?
K2:9!4C],F8GZ]EY#U_$G[U:H<5FK?[*FPQ$+TRVJ[HAW+(IB*5/7]?:^L M_FA'H10TYAG.!?5PQ$*&LX2&.&5Q(E(OD((S4+G+.4HS[VTL!@B.>_;,2N2H%.4MGWGJ.,7&/BC)&;
[!3U]=M\3_HAOB"+T22)4D29S@3 M.E.%AKY2VU!B0H+(IVI#DS-0([$S="96U98*^F&Y1K]]_U!G:9>;_(\P?3V' MDIFV.I
=I]L=P;IDH"9YA5]B[C1V1"I^G].RJS:.B+].UT=N]RBWY=X4H_Z M@?1RT=_K+[HHGDA1O?3*%UD:\U@(B1-!M-YZ*2:1H[S]*/,($4GLT3;;?-8%>,%"([%B;!!?@UAD,"ZSP&%?
&2SF3&M.;K7 85_Z"S&?CF MBZ9Y-)-NCH?2OMZ?BB1A7LP]G(42F,151"/JBP\A/OO>O MF4'Z,2)VOE5:_8\/W6CI2^:'F,)NYB).!R;,KAS@>'H"];0A 3L@W$XO,27^ M%K--@,"*]
FUD/*U'JW3&PM8'5I?5&&M?D"*6!JVM6;N"LP.\&V MU7%^?YW9#O%/,-_NC.U:W@?_(_K:EF]W.CON-*:Y;/X0"K2-OI>Y&&2Y$GH M8>;13,_9##'1!_?C40'E(&; MXW&TS#Q8)QC
1-52?+!/.BJ:(_?S/)U9/,WP/U'O5H;!?ZP$>67 M3?5-_'.[+$17]0TNR#9? I :]UZG 0FZ M!]WCHYE B@OT[14^$Y19PV6W\I !9&9SH.&B]_UKB[LMVH#]]OT7O=A:DWFW
M6?.N3[NHX]J^S4_/K_F6]KNHJI5H>T]> M/#Z19:'_<5MLGI>EYF$1TI0*DC,<<9U?F\04YY':""E!F'J^[WD,%M6$D9_8 M?G]>Z.S3-
5KN2&M]5>PBO=6L>W%>8!O'P;4P@TXAN\#B7:$]\]7UV_.'ILQ, M9-;09C"@HT3?SMC90S,H%TR?\6VH8^>67I'_A*E[B6P"%..YG'(<.Q1@],@
M5(X;2WU,E8D)0Y;+@(*2B%ZM/[$1::?D5IH<4E@9M@$X!X:93;A 1)C2M]+5 ME.J.'"Y[]R4P5E3G1UQ&?B:B#*)R -H3 MJV/+"1)_L8=Z)/"]8N#G'U:*!6!^/@1/,ZV=""681FM2Z =-
[.H'Z<<^ JRVK677G_KEG>=5F*]E3N]N.Q MS3#D7]??=-]'[9F_(^6RO-.]/?G[REC(@N"_>IKW;H6A=SCS(L8C_R=?^[MD!AERT["W<0*W##6)N/O6$./+6^Z3;+4C2*?ZT:1;]=/4-
%QBZAF%UABZ_3) MF3D-9;_8\8!:G8U-'4/;-.:]0]Q'UN.T:VW/I4'8,HYIC]$?-\S2E).@Z:J. MV"EO\Y8>3P'K4;GR)$0L2YP?
GU:;%R&^"SU@56'4)@L$J4=0'Q4O/T)G8KG94T8XLL+3Y##IF%L^!S##;=2SN!,U&1Z1R M5=I\ALJ\I"_?;\KZD_= MR[OE:O5]UQN^M;5I1&7*"R=X21IHSVI"?X3)E)Z4CG1XC-
]NUF@K_6 M<\.[+#]A)X] MAC#55!'K3T43?^F_ QW.,T@9?MXOEA_X0=?T<$UP-^]U-PG["GU1;RPI'J#' M$2@0_P6CSLQ_KX:OME/>VV# A>*G+XK\3O6M5/WD21?6BIYCK
MH_6/79+)0OA)'@@N,>5"ZB::%%/* YSFTO-BR7+U)T2C ;0G5O..DZ;Y@^:E M3HEKN;E"-3]7=7CHHUW.#01G,WLP$7HP(^$4.+"AL(#_D?6 4)[5I%A \MK.
MV"QA9WP^"%KMG9%O@]R6_R%X=Q:XR%:T"R7.*>1K_8<.1>0\^;\+Q"TT:&Q M44,0,W(3FYB.7'W27RJ8D#[L%\ MP@AB9L#^0XP8Z'HK8%5VB'2>^TWYUU M.!/3D4$8(3:K#3
3_+7:&]YE.1WKF2Q7.K+],5-HF[G=$BVZY.1<4K\S%.Z M'D0IC]*88Q)[GL9=)+',/):"7 T@_X/*A7/O5[M"^7]E11*8E]M2%[1C!]!0 $P-C,QPYP1R8/CL:@100L-Y_!A,MX8$\M
M;K<'P3/3:7>0P!3[$C3@(UF-A'0UFW68V+Q#6HT$/YK6:G:7 M[4S$2]]?US]SP=^]_%8*?K-N8HVZCX/N,5N'4!9YZJDM4)#CE,KH:D(#G'L9 MQSQ.?3](./]#/3=-B8]\8=
<.8+JG(2GEA5$7]07O64#D1T?T(&(QM ;?O G M 0SH 0AM%Q16MSVL?M".*.1^1#M>T/4X:A;C#Z$.!M\.$QXYI&'4$".AQV" M5[S-%\/'9;ZX#$A ?=$2K#'X@1'09!@0]1R*"
(J"8E#F60,8E%.T)C8=-1= M5NHLAM8A&VH,8HR+F3FX4%I@V/7([7=\[CH@C2,E/D5A5FT=$/&U6@Y=:J=_ MO2*BZS6O,Q0?-BMU?]E,7%XD61[[N>0XYHE21H^L;GP?1QPDJF?
LSB$*>,8 MP5EVY_W*29U.5/;8^._-0O\]'_4_9 JP_[1QFB:J;!+C&#Z./D5,!^'00"K MLZEDCG1[E-RLBFX]_&NM-[J/HCW\=B5\C\;^=5'<%8_KBG]:D7OC5O G[YXZ MJTE7W&]JV.^G$*,
[4;2]XP !WT^+/ZRE;B2'Z>5EX7T,@/S8&K%NZ#XMFU:S^] MY'RMV0=%.FC#/GPE7,FN5ZMK_N]W&YUIW9[E&"K8\9T3*Y)"].H$4D=EAD-2V:E3">6FTV1SHO25Z*!JRQ;?77U[^]>
M=G_]?Y?*'2[8P\MG\:SDU3UI/$]0+^09SFF2XR@3!!/) QR$:9@2+FB8)] N M7T9D)];*?7,)M*-=NV=?KG\'-?(!@FGFK;]""*;)EZ #[^4%$M95&R\SHO-V M\ (!
<=2\"W:W96Q)G\%V0VIUO^'RET+'461$$)%#CG4)$HYXF&$2LACGN1>Q MF*?4AS?7/$-G8]-04T6\F\&KVY^75^A>4P:&FL[9!ANNEQX8,BIEGLW>_A] M(_H-DILMV MC!B]
[7GSMO?9 211U4QTE<)-<*;),2$U!^ .O#9PFUF$"2&T[>=;\X%^Z#CZ M41=*=)"VW-2(-K,E>AA1FZZ_%P#BKCFP#1-S]Q"^ *@3K88O6GVQC?
K]^1I69'5(O%I%H>3@*R(S7UUKFEFX>'Y=-"%9]A]]OUOIT6ZR9+M5;EFRUT7TM@;WK0&M.]W;V MV*B=RP-
&T)Z32;K966'@*K<21'O>5$L;6(XR+ZT6@>D'%\O%9[537'U4JUMN9OU^Q4IF];(BU2P.$A9A/,T4"H54HKSD(8X(TFF=FQ, M>(%1Q;8U!Q,K7K]%><>1'L"
(:IZNZN[C[$HGZS:,H9]S*YW-M]IR[57=_;EI M?HA^%=7#AK>MRH$'3O G8_:IGQ1OF"VPAA>#X+V@_3L0(NR#9EW?5^:9-";M;(/ZB>+RMQJ(<4R])U28V\G 6!OQSDOI1'DB>
MI3ELMMQI0A.;KHZ,51'E67!,0]B7BPP-4G<4VTQ];20:HBX#T<-B,0LUGR$S M3 MYFLFK57*[\C2LZ7_FHG83P4VO,/"O;HMQ.-R6V'J-I6>XJU+8^K%%WJ<+_.J MQ!
[532DH\7&6D@"3- XH9S((8Z--T B>?6Y).PGQK&&=%.JAI]J=_@'4B*" MGIHWV'#4[QAP!KZ2&SA@^MQ#HJ6*:K*--KL1'>#=N(' MJ&6%10PIV5U MW/
ZU;].)%@RY<_75UW_20K^1>C!89M"B]5V[ULSX &!&8Q[L+482N@';V;C""]F9>92A&_":QQPZ6M\%]025.1E3GMA0]OAH$_8/.$&?P150YIB:&;I)D()9M.NO[V_0=:7>1KIM
MID%4&W1+"].VQ?#D9:C KM*9C>G,F^ ,A>,HY1F\@$7TY+I0K\:V5,O]U+[= M$1,R]O1DE,1/<12$'&_G,@TC9M[C &CY]Z272OUMW+)V^9VW3G-RX)&
(N&"1#AC1)D0+Z*8AD&*4Y+E M099G >Z A:"+ =6_JO>]X *GO9$S P7[/A M"@W="!=[WJQ1K[_#5[G/H]_0 7]HQ^!L2 ,.Z6R(VQG=J9&'F6DG8 V:].LH MS&?
^G2!Q*EPLR+LLU(6E9X#RK>L^EI\%\7SDHDZ:ASX,@^9OH$%-=;X,6F& M=HKJWMXN4?UKOT,\N^PLRCLF5*>2H]?'BX;:8@K.U?,LOZOO@/A:U&V<%<.+ M/$]"(/=]"L1PY&?
Y)AP+\%9*+,\S3R1,:/ZUC%"$RM>6W#3TKY"-74]!;>C M;UY<-C7L!ZZ! &FC_;R@XJ03(2S]D@:7'BV\B03\?]U2D;7VYZ5]=6TV_9Y MN18WZJ_E0H@D#+-:5;,<1SD+<98%&0ZI(-
PG,G@$$M3B%.B<+,[.=8X(S'Q27#%MU)N MBK!Z(Y7W+UX2!5F<*#5,.]T!7@N MV,>B/LBY7I/52[GLE5489H6=NWJ];LH-FNQV9:'#9(]-LQSQL[*/ZSVKD0'
M^MC#4IL5W8!2S,9DM$HV.[OH;&EG8V+U$]!&K[7.F=ALE1+?DA=]%'Y7$"[: MT>^+($CSW-.=V$+AXXAYZF\^"7'(9$;TB6<>@S[K [0FUM.;%"(M??34,_#. MA#B+E-
G'V9'\,&7MB**6ZA6JZ5ZAEK+33(YARC^ @CF.?9]E,":C#XEE*$ZOQ?]16 MU^S5]'3PP?3>$KD)?&\]1*P\]U;>"VF8H5,$&>SA MF$!#DU.DE;5%_2@3H)ZZ7D9H*%Z)="W+Q'2/P_;
<&SKXRJOA$7[$_^I*71 M(Z<]=IK4]8*Z?A2%Q ->MOP 0ADVY U!BXI,@%Y&ZDJY M8?WV_8-H$F#50D+)-@$_$G"RUT(_*L&+YP$ZZCA_20BW1L'FKY9_>E MBMT[57\+:NNG-
EQ4JY/URMI+>V7MY+4Z@:WV1R9$[B6':KS9^H$^H:X[LQ]! MI&5OXWX$B2_=_U(O*GMSU/3H/?A/L]FL1M$*>(I*4-^0&V4NCX1?4!=%O&_MM3T"V4-
E"1O>YTY'E"\UNQT81C6!%FS'&)[E;B2R"A5VH?'N[Q-WA8(!?<^ M,RK,E "4A;X4T[93;GF_ZUL_R[5FC<;*U8YE'/<1C*& N0'T<^BED:HX2F MCH.3%--
RO^6(6;87@CJ5L;)6Z1/WSHP "@8FL)MW#;H1@-F#Q8% E ;I1$0 MM>]G&<# "ILD)1TM79I:8[GB)$EICLJ/9-^!%QA]R8O\>?O.G04)C.\HR4&8TF 7#AJM?]9,7UG/3'K[IE5;OF;FR
MBK) 9"*-6!?D.@>46.VE<%]5_OAAY"]XG]Z\O[.!,2>W8/6]8 M)^[QF_7:S,#DYO\9<^1ZDZ[E=60OW,1F] @&TX=1F?0-[!P21DD3]HLL]OL_ M9;O_JS_[.X43]*^L8*^XV'PG.>/,U#=E]=
(%CW=-+2.?>ZE)ACQ,8WZ2=@A* M4^:C* WLS!?],C*\>F556D]=I2<)0GYM?;+RZ5P=!X"#Y#1*$@=IK9+#]&Q' MVMK1MGK$57]?2OQLY$_86H%1.VG/!
AV\I:6=_0$/KW*KM2B9RYIAKZ/?C6/':I/STF.V[\Y>63M^ MF[;H+<<6_T>;$%G/"7(^^TO*!0+>Y_N [S$&/\?L3S"C;8HNM+2W59G-V#NU M7=$%Z.6V+-
HHS"P[_RR:IGX3&9YWV6\UNZYKMEDY),7,QQF*;2=$OAO'8M)& MA,*49#Y.X]!+0)'246]F;W.$-6%'MS6SL""H6'X^B)2<7=,F/QA4'F,Q8T+.Z<5TO.#2 M?
9@&Q1GHP33\G$+LY@;73R)Q^16OQ4W;O@SB$$);X=B)(^K:*(I#%_D.LU'L MV@YB3IC1R'-Q+#>I2I*>8345#%@]#]JZ??2AP5!9""4B.WJ!@:GPNV "".[H MQ48MNC,7(UAX1U[BT?
B.Q#++!7CD93]*\ !>4VB \U0\WA:?Q(K7[5WV>[TI M'C]P]^6^JOY9??ROS=OUGQ6M^7^FM\7-.T7_676A2=E6.(KKFS:"^_$XO1\Q MKL7!XG=6-
TYV4T7*-_V^ROFI_Y_\>+B31L'=:E@*M_0L23% NGHL 1*FG>RU&+Z M-"Q"7TLN/*$8(!2AQFM"JBVCO0+.KNGE=4%[67Y.P$)F.S%RF"C,MK&#L\)F MB-C4MQW"(;$GI4$*M VK6-
M.HF/%ZO$"C"$"P)2,*)]!"!A?!*,#CRK"Y=05 M8P107C;B(?D+/ZHL(2:&6D&B&_)IADL?OO\PEVYYY9$Q\,F?VTS+_=GDT/C M1^+;D1,Y#DI2QT8^]BG"A,:
()DD61,3Q,MN%V)4YS)B^I>BS=F4=F+MJ[AEW MFK9C$!QBT/([Y$S34BC#;)4ZP)]I<^]$29.IF\7*HK9/!VBGQE#+FJIYX1^V M;>8-+"=\]Y9AH]3/E]Z1A*;%[P6"G(IQG?
Y\]H3HPCFO3;5USA^1#HXCWK,I+VD1]/CZ_K,LWQHGIOE'?<(U MN^>?=!7XV/&3R$%!$OO(]UF*$AH(+\%)[8#A- LL;*:< A>&E5"PTZ1H-[.X MGY_+HNU[6%LOVTK\59-
O]/"[_3UT%)T*XG(N@'$<80K?D+).?]R6(:OEZ*J- M*UY9.ZZL]MD=7Y9@3.?DNQFX:!N.J\+#PO/S9L!T/F)OSF+ZK5GS=UV/O5VH MBZZ2!(=.G"8H"4)AR3!&V(\
(BB/BQQX6=\:@AMU@#OY_;.6&D9YOP6;CH]UZ MM8]T+.T#]'09PS4*QP)&:YC^#V.P1N&!&*OQA688]N&ND#:S610X(4IL%R/? MH3Y*_9"B+$NR- GCR,M
0=UWZZ_9)SRGG^;L#IKOT3.SI7-E76\V59YNVVX M(C\=5VUO#_V],Q?KEOFC],>$=\34W@-SM_"7?=A%#ENXUK7JMR^-)YY57^"#_@;6<*P]@G*5D/:ZFA? M69_*9]4
M88WEM"U#H1#]@,Z9TQCM6XRNI% *:UEX57:9@QC@*@GD(;&FJE% H_"5CU MA)1\HX43XRLL5S,A)07CIVS^DACO MV%"Q7?!!2W-Y[V$$B6GG00\
(T'.VA/P&G(AI695\B)%E%W,AID7K>Q 23ROD M]*_7MP7-7W.ZQ>L.5I8TI*[I])NU&*^ZIPE(\[^24N1-*QY'0^MRW7@PCJP ?!! MY3"4\,BU(P-3V&E05#QT.70 GKIVE-
0\JAD_(9CG#I)WU(.76VDY3QXDV9%' M#WM3)2!8PKR'_0NF@WT?[R QO5+:-U 2 !BO^WBGV0DX8UHQ %%T\Q,!SK/-3Q]0S7KJYI#<91]2>B36,O<3.XSI*3.KS\"_
MF1R/"Q):6[:/#,V%$W(.,)SG $%>5CBJ?2QPL+C/->$_E>V:&V'Z*S\CUK\5%\%\K M/PL2F]_18YGL# U M\.5\L4AA9EAJ9%B/2ZM0?BOK+1AU>*\FILZ-@LZ0X/(U'AZU]EDLV"
<&EW=-K+]L0R\Y8<^Z M?$F^IN@WB2[D0UU#]Z$1G+I!0C!%?N!&W!-*$Y22($!NANV$ADG"2"HWG$J: M)N17KS2?]N4 Z.1,(B7IP.B4']CS#>D+K7F-!(^DA=7E3DS26]95D!7_S
V0 M?A&^Q>]:[8=-0MZE^W::QY:%:*O9O,W]:%V_]=K2;)[P1KZZ;:92QC77]\K+.2;-] M[MK8"NGRMG2[*^]6:P^LZ2-..RG+?S^83?M1/IWFZTR]L"LY4)I86,S'T@M9
MWPW3O+*:IR8:O5\75&)T0)A1FMJIAU(O%6Z;YZ,8NS8*4DI2SV..$V8PCTV: MMG'/K9DS()KX$?$'=F &YLS)@RGGU!D!"&8(]\@L-HI!67A-SIX\W46=/C < MI\X?? '%LQ\AY9:O?(_?
Q$;'25YL$]ORXSBPW4#,AK-CY(=1@,1,3A00'+ L MRUS;@47&Y6F;#A)UG%@O+2N-#N&NS_%:M0LT!-O Q@E)PQ@ED9<@GU(/)21,M$,FUB'Q\KB]@& MN.RGX1W/P+M^%D
!XN_',DN$VI7%!>KP3$EA$?1!H=2"Y<=++1<7'Q3A* 0^ M_(2&#O4W92T:/XOAO-4K^YP7['.#GNM5:!,WC4(^5&&11,6'R5.:"/L1F'] MDRCQ?9"K(T/4L (>L6)'IK-I>/"^D/P836,-
LJ20$JMP?KA@FFN#H0FM<6 M?D)D$^W?+Y%\OS;O$R",MG.?>E>I"44A3F&W!=^8LEC+%:A7@P*PXW9D$;A@1H5STT9C=OQ8'4-6QY'U4%J" M)^LNLUJNK#U;IM$$-
<0PBZI]GPP3Z$);;:@C,]%A0V'A)1MO],MJTHJCQD[P MBTY9OOK,/^?Z_HEJYE^WS0489I3%L1TC;-O<6*E9+4,YD#.(P;EOG2@TY M08@I\V+YK@#3!
VK5CLAJL?"49X,^+0D#:.$AZ,9')AFOAO%1; @P M&R=@7P!YH<>[DBLLV!/'FICCL"-Z;%6_]6F[^R38?&+(5@03N_A.O?
*Y58@9X8;1$#WR^)H6NL^]GZRPYOOR3>V8CVBPJ>"B],0BWQ=#PDL.\]UU+QXSY M=I1X*+2S#/E.9B,.<8C\D"5>Q(*$4]EYA&KDC4=)^4^W&<4Q.$\'L/W"@97P M4HS"!=-
TZ=$M'3\]'47@&+\&:-8]CDW4$PU^3C*2(PZ//!5E_-"E"4^2Q#ULBS#?D9]/P6- M4I4B.UB/=TST:BL/OKSS=0&,TK"*]?O^L&";?\E;/1/;81)]]LMHQS19?LR M@H
X:\P(>UOA./9WEF6LXJ[#Y\\WW=Z%0YHZV$XYP"$W4D!K6Z(4I^19"]GFP$1 <>7>:*JG4_D M/B;L\'%9CM'3Q4PE4L,/$]IETV3@ V-43+_9UIN[[$M. MGC!;__UOW\LLQX!8 F
]@V&$ Q>68*,=J,09$7_H6+'^_C>K848IA@"!#1(^ M,2?8N0 J.NL($" N,1 \B""P8+%.0\CA.H+*!V[#AI 'C2'O#0 /"SN,0I MZZ9!29OS=Y?M_KU>93XF)DQBF(O0KZ?!"C&A**0.
(F=>4%*B%1-@E:N##L] M32O.?I@-'[7BK)M6G-M#X\UU=@S#3C9ZOIST_0NKF:(;PO" MR=3UOLK^UN\$N^P>M](T""<4RCU!.]=Q+DIU&(4M\6+1-IEB78QX$7
M0:RM/&G#)O4VKUAL]ARL>FY:AA]OO7.14_CO:/ +PE+.?!E#""W]&UM*V?=E5\ M+) Z7*)WG!AIM@@'0).Y A!>U*;! 3DU/ HK*$T8:]])@"T<3EXSK/IB8E>; M]#*K<\.IK..J/5-
.F.Z]20@=4C8DB^JHLJ.UEAQ8-B3$R=BRP4?4=MY?MG5> ML+K^^%>^$47>M;,BF9WX=DA0FH5\FXV=%.'825"RPYZ3,*Q_M34]G5&XW%K<=^6M;)(GOGFR7EE!2]GQ-
2,0R6V:\P2'*=B.EB6(-3T6-+KQ MEP71M,D-$%AT,[LLX.FF-?*DLNM;/K/]$"M17"A,X_5?>;VR$TSC./$1Q1G7 M1$RY3I(T08&3A3Y.G32C4KGN$K0,JV1+V3I,6=O1YLX:IPZ\UQS#3-J?
U8$$ M3$>/9LQUB.PH7UF_8/XP85. J'BN4Z+]<9G7Q%L;=L^?R< MMQ>>HO%D60@'EQ7D]'CN4+%E8\RH[6!$O.!&?L*/MFD61(C@) M)@D-L@Z*)
M,/*F=^8^^;;5[($]8)=9&*QR9L$<6#!+T>.C;3M[A%N_WE5K+=P\&'1UGH41 M7[;]K!(P9SUHU591-5]ET4S&[*[MW"BPDSAR4.*D#/F.$Z.$!CYR<>)1-_#\
MR)&:57F1@G$C(NBU@P45C,8Q&)V05E$N.H+Z00M]F-%R71]+W'ZR^NH[(B M#>G@\(/P&-,7AIOQ(<+]E(PO]5XQK"T=)8;7V!<M*5;47V>Q.-$ _T8T=!?*V;F"BM[7^6$K4*?
9B%$"/*:5MJ)&.#!!A1AQ\GX ML92?5\V09W8VK *-(2L%T)^BDOK-^^?!>6&75XK__#$RI> AMW6H20D\ M6#8"-D0T9I&>.;XKT_6P\++9K&
<"G66LGC^AIC7W""E658PV&TSKJ5QO-T]E M)6Y25]2/(]*U!@5))"XR?1LE/J.(1G%(&2$.82!-&B=G^O)B1]RJ!?6K5]WX MN67/0*-T[7\%:ML$CG(:J_!=X)W"ICO+3 M:>M
6Y^RRLFH28$GB"VJU"*" MGRJZY%L*>:?WY8:?ZW*_I*O&5>(@MWCM^:HM_(H#1F),N3Z+$!^'+LH"?CA MBX9)"0IL:-0[GIE@HYI==\1MIYWE,4$"D $9PJG<.W6*#U0G?>"
[XE:]UH% M!^33Z@% +7OV&WOA?]O$IC9/_../_" LW%SP_DU3#NVTU*,9LR.O+YS:(]QE'XNLY!]>T D3 "6-&R@.DZL M'2L6W3;#EW<-C$69W8&?*W"6!02\Z>.S(=Q@IDTS9+!AC'
U"8N N@L-U81 M+OS1[$2%U^%]G3]R^]-Y^_C,JL>\>/RU^Q @3&J:E1Q/]#$\8\6BYL1IVK#X_UHXA44:Q9^F0I&<< M2D# PS2D6D(AQRJHH7^&OB?^0[3]$O9=$5P!E
M#HJCH16EA9<+NLR1^R#<,VLAU:/7#5^EPNO:@K*_E_VMG+CO W2,$&O+SI) M1BE#*<8!2AACQ&-L;'O 0(<)A66.6QU1JZ%]<:+0@]8I+K)'K!G2*AVNY 55
M.%9=$&;&@>ITQ86/4A<$.C]$77I0[?CT*RL87TT,$J;/>9&+RK--_LJZ>,JN MY85'PR".4ZYZ+$,^(3""Q&7(I2SQ:>8Z'K4A-[=25 VK8\=#.S_\B O8"4L.
M0;F#EG9<8(K;A^28@7U,5']J'DAF3>QF OJUF*"]W.._V_MEWFQ^9W_RU;<\).JK(&K&MRT+O8@%-K0,&/MN#%2;JV(A":-@%)?5#<4H3$5 M$M5EX#>-7\OB5TZQRT?
\P&I2Y2_BB 4>YS2]DNG(0UF@7Z^O[ZU=,FJ/!_G; M0PE IB\-]6(!,P]C,!@8S20Q]M*MH,3RBUT&RHO:OP,$O*6KCW93]H*28HC M<8V0I4Z3#IPBG 04D3"D 8VRR/-
!28P7Z!C6:OYT68G?WYO%N%5\;,3,AGKI=U2>>=6VD>B3G?2/GY<35GY M@HR_],2W\@_LE:W+Y@=]756BKY#XHZ@V$WOZ0WG/JJRLGC^55<-*_7D_$32+
M<10PQT<)#ESD,\]#:>]GB-(T(I95 MZ]H*][6?/%6O(?<%_Y<_;YSXO!?W&'K?KQM\X2^B\%X-UFR56-DEB MDJ0!\IB?(9\&"<)VXB'/R3R:$3NU;;QZ955:2MWCZN,.HOE]_]0-
0%_GA0VH MJEP=THOK77YQ4\6U;CEK6@F\E%O^3MVTD;ZRGELQ ;>8&C^AQ#7Q^WP6F$'N M"%A]\]V.RV/KS%$_;#]0("_;M-6M]3]? W#7_#[?1>T&^NS[7 U^(*SE \$N
MF_7#.'H%K9'<E5]9>?WZV#2MX^<=O%Z_W>.< BH, M)I99(/HGFAA^Y?]WS7_^/.Z6YT]N.>CW]_*N&-=IP-7!Q) M0"7<2?T@ <_N'3H"]Q^'ZM]@^@ G#O]*&E)'QD?UJZ4@%A.
(QZ7I)++>=5 MP60[\IB K\X==WA-B-@:.^YPB:;[(F^!D&K+:"^MO!F3=K@>=(@7^$X6H"2) M$^0S9],TL%V$B4]#/XQ##TME_^E@QK#3U1^-B#OFQ-F_&=S3I"NU_%GK X.J
M$Q(5OH1VSAC346[*+IQ/)5K,D;=YJA\+3=LJ)UGE*:8D2!MI=P_S*+,Y0ZGHT< MRHU@&*9Q$H)F.$M3-FWQ1"N2CH__^W_%KA/J\V\]$8R.1].I*01,X$/S&)U M>6EF.IZ"Y=-
E;J3I+FM7H"'<&1'P KH&\D8K97MD=2FF8,\S^F_^,8I3@B MR&$X\),@BG,AU)CP[MN3:B,2DB+F=FS.,(LSD71@].DPFQP!@#$VBDB* MB7<>2P!:GI$$@UU1R>MIW'7?
8AKQAIQTRL2) &$<$!L@GSD$^P@]*4Q,@) M:$BST(G\"#3W;)"*\2R;KK\,/W30AJI%1O/- /C(&9C94@-#8CV!6X*Z$^Q& M!=*69C)$8^&\D1$QSQ-
!QAZ&7V!=_XDK^O#\^!_EGU^*E_RF]"G_=V@"^_@] MIGT!0=QZR)_SXO!*XBQ87]I>WXI$[CKG((RTHH2B,7U3I0(F#).8F @5U. M5J4+]HFE%]N?DA.O?STE^<:USMMA*1WZ
Q(K% M9A%,=<$W&& M?)L?PM.$ABABL<-/Z:X3>E+1;B;H&%;-0_4 UFER6:78))33PW"PQ1416ZP MBDY(I4E)+U%95$TG1#U5U*G'U53UFOYKVU6$?N5LX_JH28U^*(5?SV
M:>>EB9G@#^4-?^2^*E^Y%T5_>?NM9K0WRO=Z/X)S7Q@MVG$;N1[C1]F$;\8. MC5#*_Q_RPLPA3A2E<0K2>=_,+Y!:)IA6FO1M_&/)69X?Z1,_3P4'S]^LCO>V M=N1*E)?L^;?
$?/9N:./0H:?Q5\+,:R=%;Z9OTD1+'RXN?>7/*#.$;]Y92" M7I.A-<[NHA9[*?!/3?]B=!7")93F(A4*KWW;?1VZOU9IM^F AP2(I.=2$#MXV403 1,9"55BYE,KKYV=V0O#DK'":AYS&&XL
3 MZ<%1C!(_)LCVG!0[(/K&)2^72@Q?F*)G2BG&+4?BDC$3;7Y?FS;_96:1/6?B MCP?6U$;9F_Z^C+@L#*!T/QXS;>4?V@O0IA#A&S;3P-F>S'Q@U7!-O_S/G/2?N8= M[[.5)>=P
4SD6NI#RAWS?]0/I.3-[2P>A)<'<9K;ZPCCOI=!_AQ\/!I6TG$ M9]WTZM4^#T1#M\M\#4Z/?TN3GQU)?"@/OJLH0[LM;O!+ MOL'K)N,UY7LA[1<-?A-
)KW6^8=]9]H3=L^]O*3B;/M8-*LT??97-LX<2FP; MV33S1"21HM0-?!2Q[C.(C"+%&,)!IAV'3VL,BZ1 UO33>$?0DF:]M?*H<6 MS7P]<&CQW;|)\.A\?WO33?U$OS0?
I:NK/NYFLW<+10L;D:MB[5@T$B8TBJ/^ M,*$9=M\K3&@4_)$PH5FZJKWMOS^Q]7HW(\MQ M]W4ANQ..7F//,P2M+01=B) MLRR+D\C)I'(N!$N?O5V4U*V8H0D(?9"A(GH6I]R
M#RGQ71!2F5Z/TEE&T(Q:NVJDU5K.#-HQ8@A.H_HW#**N0VL!1 MTM!9N"@HKI2T.S1Y?/V%55M*V'-=EWL-?M7V4%'N2MX6]"'?K)GLO=KQ6X:U MM;$A?
UMV(M'TU9BZ,##M>J@P;2[SCUUWFK_F=(O7UKB^"&^(]:5VP,S"$^@D#MCJPL(4R)YV10]>(=$T%:F>]3XPK6X0X*=%]P. M/@53I[K:K]-B54ON-]\?<7/K,W2)6&LUD4T,SQ

*MXEA&H2X1,*Q2?9*6H G*S;V(RKANZ9 5IEU@,;65;$]6,37C[_94G/_,0;TN M+KN(@DT)M5.QR>;<4,^)WTV*[T0U"">3]5[+^VK"!O754&2S,:V4&$ NPSY$>N*

*M@W#BV\@)_3ACV(X<%H*RXZ=I&E;%P_#B*ZO'A+7G0K&J109-N;U0,T8P%5;$ M!)Y3+R^DKOQZ"8K+YMK+0W"6=P]X5=&AS1^+/,L)+C9=Q3D_>]R7ZYR(GCO[*

*MS$&;I2PF+$0DX,:|OYC;AR@(4);&3AC:@1LP]<.C*OI[_C Q*[KESAXO71L M -UA.2 EW63M\ #=YQXR!P;L'0>F>N, 1-;E<382]5SZ+4Q80C-+0%66P#D-)[#LHD@RWV8^(2[_8IR<*

M83MQ_?A8L4<1W:SOFED54ZZ##K'E%4W#%G;@]<4<\U//,:F(6$PFX)SDD85NVY\I4^QOXL@+BBW|[^1N4Q5Y+2(=]7-XK_@.M.B>?!V."CBGD'L.(:I'F4C9BM'V1.(.IJO>,2/8&>

*<7*F[X(ZXLWX@H;\ ME=4P<"6*L3H-N%GCNF[R+-;,)H;[\&?9_L?=E%/UR4T38,M9""T0 F^,%D0/ M7IDO!8]N$OUQ8LO6ZDL)?E:T+_ <6_(+Y)M^\?5<,-U>@=+AP$=AK9R&,9/W"X*

*M7HQBUV4H(&GJA,0F?B*5V"^ZL.D H+@8%;2 M)'LH_K\AR)@/NZG#"@]PA MSI?N;(\66NQR=HC]_BWLX-^K|:Z|/F\WVZH2)?>[4NDL\|,TC!ER_0 CW\D2 MKAR)CT+FV"Y;*

*<4"9#=E9+Y.RK2XMM7Z32&!9^@A*67M,#!1 ML3TMG*9M;830HEO:M,"GVYG$&ZHGY&X((*N>N\SY+-P?Y=4]28.4QT&(:(I3 MY),,"\BQXFP(^6@0@D;UND=)O\N)FP5*

*M#2]GX2[.:T{JN-J;Q(KF|78P|0,1-:R8=UEN]-LRXG,KCX,8;@32-,,*BBW|QM:8 MDWXHOV,Q$^33=K.M6/N(Z.ONN,QUW,1&<<4@#Y$<903A@%!'FVV'L1AES10'X M8[.&I-E5X$-*,?*

8EW2?<2"O'OE/7;EI7U?(&L"$]&+\N,)ED09(AYL<_/E*7CGM+UX)V09"VPG(@ERL,N!|2?P4!Q0BF*/!*D, M\'&$I?+:EL!5K,-2DOP)?,'EC-KSYIAY"@\"L-XPCR+ M'QA@*MA&%(UE\,*

(M# W9 8NH^Z(RKK+N24SI#YR3^:,L Z]YN6T[%3Q4=)<\ M<5^5Y&NYN:,E2[.O)O,22]HV%IW?%B[2I-]6H^8+B-88G0KSBZ<,ZMC3;ZN-M1AZU<HI)5:?TS)L-1I2EJ.8+3T

*MC5R(6Y\;*W>X^L3GX#L5X)$77G1@]0>I^K3;G\:,[F-YFAEL<.RIR\&WX0KUBD MNPC'#65@"ZDC+,0T5FE"F(*V9/:W_!K|+ WQKZLITM':RW8P&A+KK-W0X$,S M;*

*[KO,G&Z_+0N_X1.)1A;PJ3HWQ4YB_Z0(K#1$##9D^:^?.O|CS3&L>=1CQ\R_)#;?M'3*O7=!'FN&_I\4_"|<%;F|4)WSV)^ M@/7"#]O-S=^\|&B@*

NN0&:|YRG11O1V2C!#:T*!"@R[+CLD"C=Q<#KRUW-7&9 MYZ,;AY''5&=O;W!>,+HS0=>$?\YMQ(HN2U>K_@P2[.C;>UW_9]ZY*V._L\Z MIW7+"JMM=/,L"<#|46_I-*

Q<(4P=)VES6QH:YAB$L9J9GKH83X&?)9 MG* 4<\U//,:F(6$PFX)SDD85NVY\I4^QOXL@+BBW|[^1N4Q5Y+2(=]7-XK_@.M.B>?!V."CBGD'L.(:I'F4C9BM'V1.(.IJO>,2/8&>

%_2;/N=%+MS]3?[/K9MZUS>W-MI"[7.6VGE13TGO]F=@>HNVP_XG@?P(,&@;70,]<&??::240'!KMDE@.+8G\[MC-P^<&DD1*45-TV:I8>G1?5/*XRG6JIW<=7^T]\9V5;M]-*

C'Q^M7G^OGS>P M9M2#2YB.H.W[!S4$1=]4:.) J8;9W]. ^BIE<4#L,$)\U;Q]\A!<:>!0Q#Q"&&5!QC)08H\|:<-9/YP1 MJRG%>NE8$;V@LAT;%M[S 3NM J"5\^O-*

;3:H%5D^%QW\[J)&(E1<_6WM> MK;MIU, ,,AP 35XX@("BKC#I-/MAJ0U+-.6MWA2-*7]^_*JB^WBDX+U M]_+IA|5VI-OBE74>UVWQ@:4;?*

*C+^@JO_9!MQOFF|LQZ|@MZP2EPT=8>E-J'Q M0UZ3=2DZ?1_*I B.:!*E,2*N9R.?)AV*H]A%F#H!"R/&W0+0-; 11@W;A:[;_M8C#V\YYGJP::",-?3,ZM^!&^>*

*\Q0G7P"P?,3.3QPO:L_Z%FPG\03'>O[*K]6 M^9^M _N&6HJ;!EF3HV.,S47=(M-@GS1IQNF|[00?6,;]BM&N/GE7E)!D'@M9 M|(@)82[R4Q(BG*4,V9BFE/AQEL"2=*

(?)E$_A:8A;ZYR(ZYE=^XRK7?4&S 1? M@$K.@,X' &;^]K)_YV\FLO:1C7"1-QN8"D45-Q;B@IXH^\;06->T%JS_ONVK'M!#L9HP"']>\@WI9CE(A:C5E&LB"":29=$>(;.#M%

<2H%WO2]Z/,SH3BX#I]6 MSX5HGHK#T9FK\F/RFM'_08KO:0S&()BP#.OPCN27_.%;#-S:8T?5WY P]2/ M Q1%"3^(N0%#"0XR1/TLDD2R+8D/UK9]/7CCI8EB,GW)#^6?EQ[9\D$*

M#)?(B0/J2C{NE);\N.5%NM+/BA OS'Y\ -PE6C'3'|CCTVB3K$1,PI7/DG3 M,(Y2Q&A&^3.9.BAULQ#%,9:E;12Z(0;.?3\F8/[*L)UG?]#9S+2$CG0_P61: M7^9"KP?A FL,)]6)(9*

]E/%EQX ONP..^&'X]1+$'4C[H<CAH^2D!\H?3L+4B=TG2P%G27F MR!I60\&&)?]^BA9I92:N!1LFM_+4]A=2V5P\/.=6/$RM%&X!^$AS\+'#Z MD-

*ZSY[Q=J4EFC9>O_QSOK*_T_PP8JZ35++] M5);;HMP DNG&D9&X'=0%"M#EA>%AH &=E.!]JX>C*R]WAR@CX-$]HM0+,QI2*

*M7;^\5(SDS:?!)MIRU]^OOWV73[.37LRP,K=U4GT&K)8#ZR?.0WVYZ%$1&KF] M7"LJ,&V> L1 ASEL75V!AJEMWSS+AGO![_MW2,VH&H,^+,W_O&9=2OWU-1Z ,+T$"S!&*R*

*MD6:].$!#S0?J5];>?ENEUN- 9Z197EYMH68)D@O'FN5!. \V]Y53-?[5002 M/N -Vf>[:"7KG;]N6),/G5(MW)1%-QQ8@@5?PMZ Y!(.^7RA@:YXDZOW$-(Z M * Q2^^R1.HY>@-*

*K+INA=UFHL_R\D4<5)>KFI-ULY[NA-NTXF]NZWHK,VP=. ML18IV%S]2"|1$% 40GI9MUXI#,/7V4-?6WBW>[0ZB<.I@XFR+/C"/E1X*4MD,@VD4M:1IY"04V\.WYD*

MEWEEIQY^85CDBS:)I_O_^!\Y]_B23V^[EDY!$L1AG"%/>!GR/6)SC?9]9-LN MC1P6AU$ &O(+HKZ=R7]W%<^NKOJ5X)\UIEG"<5!Z8 M16"QTS9$W/[1&_2>0FODO^." MHV;?

D8WXG^N"?BU?^9^<70;-^"%|WSQO=AT6G-#/6(8]1$2]N^]Y+C^'NP3A M,$QCWW'BR"72?9.!Q WOH)P;2_!A<7[:/S0;0OD]_L6Q^DQ9#5> KL10F,?M

*MB&GP8#8%C)M*6VSP.1<5&L(.0!06--H141&.U-HMMK^L65/20?J_$?ZC0$F9SOUP0#U\'I4Q5E-T+7^Z/I7B%&3$57", Q4LL. M*

Y00^FPLH,P[<[V\;ZS>5%NRV5:B56A!OJ%F!&AK3L3.M@HB-^#G(/:"T"/(M#P(7I82&"<.H8GG$D>NZY$"[04]L2->FLV^X\9JV.FV>>"1#P(SU,72"AXP M GZ$E;.X"*

<\,UT=;4.W.S#3E=W)/I"&Y[#(+/Z&2UEGOAJ*)XK8FSB%9W3GP MJF$CT*-H?6!\@>>>|Z'(U^7_^=_GJSB&IQY5:@\!PQ;TLJ[:8581WZ&(CB8G $]I44= M$9139T!U&?*

*AE;S>>X,UQTP>18;(*RIFO6'W PNT-8Q2E(G0RR@3AQ!HM&J MJ!?O2<%C5!#0YP8'>GI.?=") W^0O=,S#&K<5<$6&F "H=Z-+VDAA*5[5G MBRUV07*MC);E1DU,5G5 -*

*RS\|BVYF?_-N6(8395$OM&*5!)*//8K2A"4H#F+;, MCVR7)++I2:<$#"M1UT9 ;"_E=L,]ID),*OEWRXF3*]^+KQPOL'ZP$AC>"S/ MN1)Y~A[_^S"YBL/HRG=\8,>&,P1EHW+]N$*

*W84%IUWAA5VW=X*0S]C8LCK9X MV\GR"\?8AH4[CZM=>$XA; 2;,/,-KA^X6X1?V';3D_JV(' K_, TBXD;>3[" M3I @W^,'FB2*$A01_FLF;F#;1,H=GR9E6%\[VE:?*

*N.@%0/X&R&T$;V56*KL9! *1T:@-#+8GS(BB:QLX M"|PPR +;QS#W0H:JZ>B!|/X0'D=3S,0.; =")2D);T+W; 78X=(LT?>AQ< M65C,86Z9T-7U34EH78Z)%,UEO14(#&=1-*

4A>+ODZA(SH$90$4802YN&,8NRS)(%U<57@POJI MY>,%GO59/"(15^]-.[VR|EPV=V701K J7'[_,!C%F:.FD&KW_NX|3A"65DA MP=,IEDU=W11(1H4.LC-*

PT=925H6'A7O,SH#IO.GLG,7@=Y0W3\)7G;?%)=+2Y MR^ZVFYHIVUZ"_%;_UAG|\K\W;]9\5K7^MB@V1+>ZKZL_5+K@O>9.13,"P\?HG MPQ42_4^0^)-U\R0BOL,]?*

HWB4XV[83CIHE-W3:";?L^WE=Y65GB7>\X[9NL4\!LW6+?@6-O2RTP^ET :Q.=;%KXMG M]"^3YR^FYO9]91OA5MY7Y6M.&?WE[;=:] ?]E!>XC")7A&SRU]9(IZ(-!]FL

*MLBB+'9Q%R&$^1GZ2)"@-N0O('-O#@8M=+?1EA,)9/BS%3^J-+CKEKS0V 'DU&.Q^R12[\=7_B M5A.],5P*9'84VAX+4>9A#_E9&(T#6+DA0ZUL]BF 06-]3/(]^D*

[/;Y&5=O M,0'3GK=RI'AG\8\%C=N^ZR> WOS,'O38\&IFLO@"F&]/_^OG|)WBU<8@OOSO M-D=2<0OHNK.(-N6'[(>Y5_>#H_@2V,FG<>A;^*

M"KKVH:787G936OACG.U02]-7"&K=E(6X& %X;,=1Q > HY[B800=F6;H@<,M$ M?UA)XZW\OGO A*MG3-AVDQ.|OBD_/WSHLL$]XE!"7"9:2"\)B&1'*&8T0EDD!IY[=A+!*

*MI6),DS)L1@1MZY@XWW&O+$[_;X#HYSA:$F%/;1C G,68"IU|,X # +EM.&A ME@^G]+. 17ZE)P-*8ZOL%RL5TJ2HR"OW\OP !A#1:,KZH%5SWG1*1 "J(*

MRAI\;#YZ5%KBE7D3T?#HDX?@69+"3,P#Q5NQC[V+[&EA08=9T8%4S]S#^X MV,%D5*#^Z6A!P1D=^/AIL]KD_1V=8CZPC%45HS=<<<1!9O;)M-TV=S$-QR/C1-MPH\P2AF.D.-*

E;D18&+E9 CE:3),TK(Q]VN+X73:Y$[3CP2(M$[CA@2.C E/@4F#:I9$?>NID 1]V1H92L.AL9CA-$5HDOK,]5'LAN+"-(A1&B0.2FG],0>[A+D1:/#]&0G#BM\2%+]L

*MJ[SD!:O;LW+63!]JVP A]V?(R6GZO/DAZGV0?0#-4.A@,MBZ9HW?TY@V7GR M%P4\FQ=_-^4DUK=P7>[1U?M<%:CZN#M4?,2IP=51$0!=-%4>*I/M>[*]G/T'0J*

M,]4SO2\VY<="WIZ\OT<&SPC8&JRE7IY6]3,&H'UU$*,(:)FW^+Q5U9L^4DA M76IYRJ<@" M,SJ38H-0"G/FG1\O^RB:GDJS*E&G?V!PJ7$'=EP:>UOI#$726'"<_]^>=ZU*

*M1'8#W_43S)",Q1EW6^P,83]C"'MV%C&'L'#(I"\E1DD95AA.VQ+$K3YU2Y ' MA,+'L9*XDM"& $5-+@NOJB-.6;N4]= M%\6.':&,N+*

*[#7:RP3.K68H2&80O54K4ZLE>6(.QAL01I.>TRKER+ OPF$8B85&^ M9>?1ZB!C . /UX)+\79>).UD4)MY(.(#U\N[=! -.$QAD9M$?I:E M>/7*JK24OJ551:!/95D,,)M1GP8H*

*N!6CK63X+2S];U9E/EZ7;3=,;;.E-RDZ^W4/BB8KJOG MH[67O74>$NOLPGGP(94$RR:=C^^RUW_EM7QF9?\MPYHRD"X[Y"TRB,!QU5F MGFPP?1E*I/Q#D-*

34F'Q8#L6\R:.E%DR8'!+A.%-R\ DU!Z-?>\'270WIYNV[MN 1L[(@F!31'D%S3W, ^OQ<&4)+O8USILWZ\"(D?8);^[>7DP[6DH>;LQ=-W_?(@-^NU%L]=

*ME=4SYK^"7A7WE=7P(G_>,1=[^L@S2V+@!<^YL"9:9X]*I?0&.E|ML6/014'Z M)Z'+#ZGY?[HTA1.]E+- 9IZ%/LNC1#-8AOY<6"C..#[&&8298YV+!-//9HO MT#&L0 -=5.W\HWO&*

*[^]C 2Y&2#**,1 Y)4.JE&/FV-M&,,1T00Y=I"P*$N]"$LE3FCBQ[#]IV<=BVIYKR(04K6LBBCUYHE9!3O,4'UK M^OI^ECCAN4=/@', /4K.CKFK(?2$NQ9=YG5,FCM M.;2^]48203P%*

(]@#LDN7_09J:ASOH6F)%5],(UFLFH@LURZJSY,CG)B-2ZK ML$W]|OVFK%Y$'A'H2QHW>5K!PY_U/6;O<83WY-)2/E'?Q81XH?36 M,TS#\';RVW>+[*A:]2 -+L$D74)&P|?-*

EA=EM+N:>H-505$G>OR OP*L,EUO- M5I[+K\D"C@LT:M4NO+]*;Z.DU)D2X'<&]$Q=2CZL;$9[\ - MTX=?2NNIZF[S5'VLBL?ZGMX5>P.;1_ _[/^E!V]ZP60O2W-WJ#S67M50:*

*M2!DV71_X)9HRX2V45==EZ".N"]YB!:]_(E_,ES)6S@=GVG:Y"W\A6 V<.F/H|E,.L16R6[JH+ ^8 M(=4(5M^RZEQ6M1SS4[YF7[>-0HI\X"1./40RZB#?C1*$P\1& 0ECVZ8A=N,8*

*M5H=Y6-RTD]?6(PIZ5DL06G,9PV'<.,V5#NAIR0NF4^YY+L&,NLK>8@L75)Z+ M<5Y),?",VM5>+Q*TIXIRN">YSC&*?6=,$D0<:F8DN=Y*(Z(BS+B1RS.F!>'*

M,;S"0(XPY>H5'K08P-VV2<)G-S=GWXPE"/Q5]:A_])1!WD#..$PL37=%4H2 M7?3]$;$Z4TB\&WXWOJA"Y-]XHOBM7#?/O'_4J^"E#I^3"/D!)Z+_#@4-3=^ M@/PPQ%'@>$&*

*<2/5D&:%A^D524,5:1JUKVA"6WW$OH3.]6J0&>CEP\4%[<,3 M BEMQY?67&Q7GA'JOSE//;J8?KV?!M!N_Q_@)[7,HLF9$F>KKO>2J-#^^!?7 M@0*O;*

[;UIGSFZO#++VWU5TBUIFIQ]9]5K3E@[$'Y%2<1A]@A*B&,CW^'_2#$- MD,U"FOF.G3[I#JO2C?!IW

*/HV&IO]G>,67O.1&;NCK>F7&+'77<##;%XY4U_JVN=A^J_YTF/Q,\$=HDC+I2GHWPN&QR MLTF8S]*8C1)3+4$3-9W?-WC3I:.\Z\T&WS:GKEV]|YZBH2JR4:FTE8P-4UFX M/FQ4U/-*

BL/"9S8XZ_]G/_T/OR540)L1_,%"TA&?(=YF'4I8X$K"E,28Q5'H(@9ZN?1M$EH.I8Y MO7SC9_FC,,/4\FXUP3!MGVMQ%49VH^,;/[#B\ 9E0:.^HYQ[\,Y?!VBR|A[F MQZXE^!4?00!PU?*

S3ZK$B3@Hf+KM'Q."@*?E6D. M<%U#-0UPN.ST37.0GXWI-$A.4C$1,DDQ^FFK#>UL\IPX#@)Q\YDE33\D2A#_ M/P>1*(Q3VPV3-*

"9\Y/U#9OB1CWK'4E@B.4$"8FH!$Z%RD9UK(F3P?88_(B')]ID54F,*U)" <:VIL'SDEF:Z.D1?I M++LD[+@GUC1*26O=T6]"M^EIX),_RV89T3).0S$R\(M.*YK>F2#*5E'$]H1O+*

(X29%3N,5K:U1F4)[?N%A]7L7EEPL&V!L_XQRTVNW1=N5Z48.P[* T#OL\)Y)$78#QWD4"RR?]PT MBZ1Z,4G0,JQU"7$K[\A=6?_7 1_^ ZU1;,54C,*,/T\|Z C;0 &0 F7/CC4 M2KF4?*

A>PHBXY$4>+NR:66*[(2TZ6HV(OR5?4DY+;QD$?"]K,2&V2/S[IB3_V;2V29S(M\,/$11ZF&/E99,D\5(4X""Q29)2QJ0R "'GI;L.8U1*V'_%FG\K+F(X,*)23/Z5RD_DEYXDGE?*

*R*X9]H8.W_WA8?6,8[_N&Z M]+!52#%-'9N[G+;M\O-RX* DBP6*+$L3'+M.%$!VPTF*IF]AVKO6O+!H1]=: MYT2,,[&JE@'8'CF-H-Q>]147F/!N2%L_[8C_+/#9T=]EJ&K>).355_NVP2]*

*ML;/@.Y,0?R(>3?!&^S=ZV%OLP<.#S;ABXQ(YS^663O!J&ICP9Z*V_A_6 T' MFO=:1&5]L^191?;@Z9%Z^]#8_W?WUWVTV!P46SXN/CYF-5B4K]Z^->K)W*

M<0'#VTF/KL4)5^Q1)/%P\F7!RFUI]TAW]N=S]E,<1V5:);4 M-(G5B =-'-2 M5B75O+Sj8IHY*5A?,:'OJRVBSW""S#R0X>?P4B&44RHC5(:18[MV:Z;^1 SV"@UP^IYH&W5*

*M>^*P(=,OE.WS=LVWI5?6&X$N-JE=+>R!$YAE ((L9RK,00>S'3L^_MK#\Y(T"X3TO5Q#\P(9$#09-E@5(?%%3HP,,]>U17$4E08H]Y[*04FCLQ!H1,*

*[R&>]@W"41H@D6>2YF1,3+Y'/CKLR+!"IZ5/N5^^<V MQ"$=G^]%/97.N HQL/GK)]/WNOIVR&*C2/V8#!C #:H>`1X^3Y`_A$M\#'9=T*9):5M!<+.M MQ-CY%3%*6,>_A^R!P6*

*M,4I=)MW8Y!(1PX9@GU=[H-MUT(*G$),A,Z[JNJ2&Z;:"P$]HQ)Z9]+]X%H88T M[]*C,X:$ODE/?ENE8>JQ%*=<"QV&?#LD*+9Q@K(H(G%FARG&4D6WBO0-*^R>*

*M(;G!AW]\ZTT^5)DY"0G-/;P MC1%V(S$:Q>% \ODQQV8!=8.0.C20K^N6(&@^38(\68(%Z\"#=6 "8%MDT).P MRIHQ@9GA*3A4AG7*X*

*(PLIKQ4;.JRC\;F.4$R#I]*F766X&SO4R)PM#'WF)<&&;(TLR5"&2>QCF_@^D2!4 M':5B/!6D)0:\G1P'9MR::1,79L+I)97612E)QB*Q?(%>%);_V^%4.;[V(DHI*

M)=Y.$^4>5KM^X3=X.H.UUP?MC:?YPK#H^3OBF\B:.P2Z=<%_5H6U>Y?:!\U MW@TU(_ZF?]PBQ8&_PT"U%,1997[%."PS2FF927HITSPVK>ZU/6]3R5T!O _.SX ,?

*%FF'1M.=DCZ^%KUYT@[GZ?V4 M?@**/2H):?-#67M#@\N!0*_;$BCI_9>U(@,)E77]EF[OL ?^UPMRHQK'O(,]+ M, ^X&,1O%#HY0BETW2Q//B0G{I@+!#F\XU.7"SN_ON\V.M.2O =I=*

*?.4,H4'4 M8..N#UA[*W[$BM7-]/A)>(++(MN'CG0T0FGE>(%%]O'SDZ]DA$SPYC.XOM&#E8S 7QTA2EQ ZX\D81#C#QF$NE MX\23Y$P[!]M'$>RS9\>*

(IW&3B!!K10.XZ8\"H1(=GD8$$!O6BHQ:9%COP"+ M"TO+.1H5GEYEN9BPM$1'$6'YMJ2.2- 8!N<%%HQ0D"[67>_2,?HJ[@D8ST"[G7>_2,*HJ[@D0S^L>=D!'L1@Z4*

*#Y,QG6O$LISDDL9K A"YH\M,6'&:D?/VA&< MMD_@(\BX3)I.&A>(+'J@&!?TI-PP\;1B\7Y>E%5^Z =!V?!?_9/^4O7&!@_ MLE_>OG)Q1(E?N>8K/:/K)PP="'"24<1P0)"?.3Z**

*X__PTV'.1QDF"IL6%U?%@M(TW[\X85J\?+E=5PHV^S5P)!TP8/H[WH MIJX$R^E&KK8(?//^OOG/^XK<50!U],'>Y,]-2.D+VSR5]-!02W(SEUG+1*EH MF_[?5V)W*ROKX?LWZ\"*U?*

*(BO\%+@3.IX>O&!7@DD(#$^D-KYS&HT$],@12! MQ1P%B+A]QP'TGL\UR#[O\9^ _5(6=!<1BV+B>4$<($*$E'L*#D51"8HI,P M-TZYMV^-XO+_]78UNXV#0/C>I_*

*ZVHG5T%*YJCB7#W U,4M. MM:N(OKR:+AXN2C%ZT7#^UG(7"Q!&Q.WM%T'1_,F/XS2-VQ/+@P^Z+/T:U;+E%)I MGRKJ$3 MO^)\+5)+^>*BT[/W@K.P%HT0?*

\5Y(3]5BYVPR#P0^1ACUN](*8H3@**,I?Y M?AQ0S\8%-4R%,F#85!T{6H^QH^C+D54GXU2A4.3D0*37]1*]8)S:J;4UU%.5J^VC-Y7 M9<9]$6K'ZT^,,[?N(T2 -W30*$".B?3NC*

4J;69(AR>$YXQ\F9OCOI M4;4R[L%CP0U>P_//QR3.RWZ@(9DHZN=82%H&R@W9[(+9TD+B

M0$ZXS%OP.G'O[@]$=W*;_"&/9;5&Z0OZ>#+AA5U3[/:$07T)1V6=CK..5M0 MF"*>RZBU/^FH-$H1R^$5%PM1C@K4CTF./ZC8OQ2_-??/#^4UX0>%BA|>7EEW*

M'IV;&H3VZ7(#KT(^2G%*,XRIZ4N#6F6A5F*HU714),B#X#^I2,TI7Z62?NS M/*,LOU_R_ XDSL5EQL_#>^+B;/P\]PK***9RF^ALB-1R$CJHK]P1]?]$=;8 MKE1"/%U]2L=*

*(+=N@5$+HL\ZD.N\H3FZN;]9ES1Y*,;;V0UZ3VX**,GW0.,8+ M@C>104)X+3F2\).[YZZY 1ZLPU5JR$KS-)#_LR$6C9#G 4'_"^VE7!N.2OY M:TZYMV^-XO+_]78UNXV#0/C>I_*

*#%,F_&"X];*4]5>I*?8 *,+21TG7E)"OM MVQ=2X\:*C1F"?8F2"//Q3303-)KY!C[/>8%T^%3GN8VWG>V\0.]JPO/2^M . MQM^[O>SL7_IKKCA14M17=0-*D7&$9-$H2*EK&*

(4\UP!&Q=''^Z]HO_WNV#M# M#M<,.)?BV"!N#XU $WB!!3$,Z$2-531!GK$"EJC(CM2V0=K8]PI+@6>GUQ^<"6=FU1!) MCPGMQ9DPC=^%|%;"_">#

<0UHP9DG$ZT!9?)BX_;;>9+7S3>.M:%NV_&,B!/ M>M<_LE-M|\'TV9_Y?O?\?0!!:4'+E!*D1*U0V>09G#H%|PHP^EG.+SY$LPEH\MAVGWWQ))=.J5!0E+(:HU(2C(BYU&-&>-*

*]GN38?S+ /,[*CMX#)P-R M8J A ACS%G*[=43>P&S6).4@\8]YA#5CR@V*)3F2\)(YZZY 1ZLPU5JR$KS-)#_LR$6C9#G 4'_"^VE7!N.2OY M:TZYMV^-XO+_]78UNXV#0/C>I_*

MRTGRFRG#XDD86U &W,DH/4]O>-F.6\GH-]/H:H1Q+9)+.J>VYP M?#*$G,8D 6_""4M33CSD"L6]8 ,?OS-$YHB*"(;BYV>?F9N:V _?_!\^SV0_? M<+:F:+N;_^A?^5_:?'W">%GDZ__RO?*

_GHI?@_O)__K?_\E_^Z_\&\#]??_CU MAY\6Z?P.Y^L?WBPQK#'_\;=T_>6'11?\X=\?RWI,OX4?WI_"NBR69P#_,?:_

MO5E\O5A,/W!9_R"@4%>_=O6WRW)SC!4:?@(J/@+@C^5__7.6_+?_\L,/E^Q8+F,X IR__OE_.CCS:I?Ef|@BJ&QY^2O!8/Q_UU7VI0#_7,,\X^6>KCY_MMDAW?

FE6.;JX_C[G(>)L\|-)QNED\ZFOXF]]#&D\]2H'DX,'Q4($5:PA_D! MQ>HB/6IM8[R[X4KPBBC>"&"%Z:^?%]^1_^L3*A?K'AQH83#Y:[Y,IA=%^= MN$_TNY-L423A

```
RC/"'AM$!QJ!24EXD[VDH=R%-FW5[M+]6UIOEJF'Q;+C$M2 M&5?+A66Z(]F'8-W^QH]?PY(^"-*7Z2Q?_=]EN3AK(:OUH@'G+L5"Y/[E!]IU MP>42\Z^74GER*@1@\!YF\"S)+ZYAO
H@[R^X$!]D_' [G92=@^+0,\]6T,GX+Z,@R M(TO*0HR:=!POD@ =!$06BS+1)<5YF]OAWLH[04+U#XFC.#HR*GZ>KZ?KB[?3 M&?Y^?A9Q.1$F1Y$,)_5F)*CL.#A7B!D^*YM4-
C&SH]!P?\6=4*#[1<%1'.Q" M^A_P\[0R8;[^/9SAQ'%A3*0;32&WQ @NP9EL(*6BI(S1Q90;(.#NJCNAP/2. M@B,XV042?B$G?DDJ;,/XC\1_?+,XGZ^7%V\6&2=>1(R9W&UID8
=2@#/10:4 M+AKZU]K40C4\2\1..+&]XZ0=G[N S:?PYR^9V#HN-ZATH*W78#D5+73%OA-4',C0GC"QN1K?+=\O M%]^F\U1O1B,59QFT<81M;Q*$$B-
@D$*'J#1+Q[FJSZV^&SHZCFPV8VU/$'F_ M6*W#[/^9?MV83D)DZ9 8HC$E4+0A""$I(/*C1"V*/#*V]?3:N\&CXX!G([:. M#
(Z]]5XM,6SH=M(+R0G%R;%8^9$AQF*!)Y6\EV15*SP*#K=7VPT '8E3I*[/=7W$WT'8LU1#)J06CG MT16'YP#MMM35A, MT6/B0%Q@H)S*X&6*P'E@@H#NI#DN0>:YU7>#2/>!R
:L[0(B]1EW^2:L\?-B M>3$))KA4<1U<)K>7;&((.@LPSFGB26+'WB>/++I;VE3W,A=GL M]?EJ.L?5:N)-"3XQ#BSI^J+/"T0N: _D%A66F,^Y1=CQSJ*[X:#[:./AC.P" M!S^?X?
(S77E_6R[^6']YLSC[&N87$^M<+EQ'$-*3=^3(0XZ1:9#%A.R2RRX> MYV ^L_ANN.@^S'@\8[O Q\9N:.@XYG@D&[L 1%^5M,X%ND?'[\0WU;OSM>U1RL.9UX>J(,J78?;+/..?
M_S>286RY(A:8"_*XU)>G5MX-$QV' M,9NPM),:C9M-O*6?K"8RD4$7(5*N_*V^F<5IT27A:7 MY5[7,(S&\:(TAR)JSJU&!\X$ \6EK$/T]='LF9-8PBIN$+)=]/(XXFR]NOK)
MS;G4PS%SCY!QH7.,9!\%R3%L[@ K;\+JRZMYKO_Y^3_.I]_"C#:S>K5^$Y;+ MB^G\\[^%V3E.DK(J6T4GR":ZX8WP$"/9\5ZY8C (P]-S\=1#L+,383U@Z2@ M+
(:61@<0>_4M3.G',WR[6'ZD'6VS7*:X^@GC^N:[JZ=JQX+B*3HP!%8BY\2E+\_%:0]25/N1.$Y#C>%@-Z2$>@!@2K6F<_4!$]*9HGW^CNOK
MO6A2\]9(8*$^B*O:OLI)7:O%72C!Q^":7XO/T#-.\Q'*I:2Z(#<-TEWC B,ZL,FA@!RG('/J2:]&^5)^UJ3'[N->)H8WV<5B # MJJ&#N7LX-!;K,&ND=Q9?
<;F^>#\+Q(YYKJ;AU^K^DBJ=!,LLOL4GRNLO\PA?,T/3V81DV\NV9,[T"W_+J8?_Z$R[-?YM]PM:Z; M6$V$-.B-+\"#,I?]]$*2=+B4T"EK+5"+QKAYA(P>S)TF<#F6Q1V@Y!WA/=2L
M\E\QK/!#;?GZKOR=KM?*I4E.)6J=(J#@IA:>9G A"N .465,*83GGC@.PS@\W7WJP M6QH&%_=B9 >6RJ_3$*>S3:R KLQ-@MB7Q8R8OJK7Y_KBFC79:K3<1[ NDP56
MD';HF82AXB2$VD:(F<"L)B,UW>26#N+(W:=H MW!C 0%!J*(0.(/6(/M592Y6U@:!K1]T:UXC62_"%B*A=P66 X%T X83)7''% MY',57X?HL*,([N:F',YW/)U #T;O-US&Q;"VVJTM*2YUC?
*!=YS\EB+(98DI M0$S1JDE>DY*,0M FE@>O( MMNL+L?9CF7^9OPM!S5K4.6CU!RMC/@X/ I@7;.T#/!UP' M\A[RSV$Y)]-M]2JE\[/SC>?
[$Y9IFJ[)+1::YV@!8Y'D)M!YB$8ED$Z%&'W2 M2;:N9'F9JG']NH$PU5@8'<#KU@XV^<:U3=(2OR YI=^P#I(ZPU\7J]7ON'Y7 M/H4_)R78H(RO#9LOGYP*!*%\;>0J;#4$>?M"EOU('-
>1&TJ9#2BF#E#XD&N3 MXIB),29R,>HYTI:!SRR(])Y52KO7M^)"*<=VZ@;!T)+,[\.=>\E0FD:,+ MVD0(IG:"C!8AU/8LZ#TKM"D13.L@Z$LTC3-:<*P(P?%B:0:SL;I?O-\(Y@NN
MIXDL[#N[:MX*X^Y:I^V+\TJ9%'\,Z%1DM6$Q&*I&-:%Y= M=)(F&;X6:=>7YU5ANG_^?FYT]6>$R09^VD(-8$S4%)*^A@ M6P,940G)N8CIN29/1QIN1]$^=E2C,?
J>L>U.)^(.C+X"3=_6:W.,=<2DV"9 MR< W0\"X,[2-Y*&P5&)P/M-=,5P<[38I8\=%!@9>"P'TB*/;G5M3,9RA+N!8 MJE5M)D#@'&E#4HHH;R#H_F0R-K\3(:#C*?6[L1V/T".BX9,
[0,4FZC,Y0Y6 M/RW.PG0^B4EG;:('76<@J.(\W<[,0,A >/ HXU,'P+D M2 :/B))-9NV;Q8Q^M+B\N6O+ML5\HTI7O^%F:FL1TGG/- BT!921!KP*"J1U M(@3MR7#4+YDQNRPT.BB.E>-
B(*:.#9#?%_/:QN\RQ_IBNP$GHDE2*$#N(JB M#J(CI1J9LL253+X$WPD5CWWZ.![X0% XFGT=.-O7-RKY"_@+?;F:1!\-KUFB MKN;D*"4T.$-*$[E@6DG'?&S_4G>?BDY"-8?;&8T8W
%$MI6&-STC@B\B6". #(IF0PJ22[:)GU/ M>94A("K(L] J4B$=GX& ,2X@CI/@$W#8BYT=P."Z'&';\O"&&PHSLI08E#HD
M7@6Z&'W)OL8,E=&RN.!;/]\_24PG%TL;S=&&Y1U@YP.)@0BHC:5_(OC/%IL7 ML.VN)I&7H-$EL"7KVF%(0VU.!-DXVECF3I;6;2N>)6A<9=-(Z ^T3BL)= "G MO^&<>#2K+ZWY;#J?
5O[4:=-7V^%U.&C5IUIR,M)]E. B2Q!8I-WHC,&TSK!] M@:1QU=(PD&HIA;%=Y5_F:5FK['["R__^,G\;ILM-_<*[\E+UY\1+GDL0'F2I MB5+)2
B1TQGR:%,RI41SSZ5ZPJ<^BHQQ'RO;8NS$0NE IY&"7B_/T_I\2;MZ M\R4L/Y.)6"L?3&W?F65DQ+I )J(*!H1VI5;.H.&M>^T\1L>X.=J#78C'\;L#
MS#S@S$0;QKAT$E)RH8:G%#AM(UB>T:H0$Q.M6S$_(&+<+.QAT'( MP$WUP43)S(M$4HZYLD%9"SZBAB*$T\QR\F,'J^N_(:.3')O&'MN!;.X *3?M MHR_W\,N<%!;]9,*-)
<8$51NQZ#I5VX&35H$NTLC N Z\=;NEIV@9NVBH*6:: M,+R#V^B*[JV*_'TQ7UR=!N*/%1*5@XA>U?YU'EP1!D+M))TDUS&TOI>>(6?L M.J'&\&G#]OT1Y"\1-,?/F\9.S8#T=K'$Z>?
Y9>>Q=/%I&>8KNL!)/'\+TWG5 MJ:^QT._4RCF!1D:5R&)S*Z%CK8:Y/$C-N35IC-+5A M>0?VTN^XOF7L%>.=3RR3:U'O;"<+1(=\TW#?>(71R-;9G7<(V DCS6>T#X61 M@UG;
2ZNF@Z\Q^4FN?[:#^6F9&NJ*V S@M(Y0&3D2#JON$7KA1.MG\N>HF4G MM#2?W#X06IHPO(/+Z/X^7H?5-$U0A.@+JS7?CC9!MRF$$AQ83FYD2BB*:VU! M/TK(N(]C;63\
G#V9WB'J/EI.CLGJWP2:AZ!B I"+%CK@P2=**\A&.&O?\<@-&HT/&5#;-G\WV)'&8?*0' MV%7_KQM;Q/*(L020WI!!0O<+>$_72Y"<.ZX*1S9 +X67R-I-&WXOZ=BMY= !
MM'["N/Z(Z7QYV_ M:,8@6"O *S2&>>>*;IWBOR^-X_J9S4'R8,S3@!+K )'/\*]VKW,8$]D2/#F@ M?=%7:#E8%1/*[#4V-_Z>(6=I2BA97% M J-
3!:HPA*CK7H5U=$RE3Z5U==H(='WP98B36E=K_L09U@Z0!)/P6:H]G> 8;N M[6%;WLYK_]<2R LB0:(F?T)R21ZT]72T;").22-XZ[RI!T2,_)1XO&"?;J=W M )
<[@,D3,SBVFTG,&^T,!RT#;0:YAAACALWL:J1=YMSZEGJ6H)'?$YO#IQWW M.X#2_=$;VUU8C=RDE(&36P7*,U$+33DDS\D355Y&KQMCZ'%*QJTZ: ^>!OSN M
#4[S,VXZL/DF1=*&\BR!O^=MA"25N"=BU83ISPV5T:[$C=N=<( BFD0J70 MMT=>%I*-C'D;:H^H ,HD1\1[!E@<\W1JN__/^N.U,3_.HS!'4#D80WRP_C&
MA\5L]G:Q_",L\\0GM)&+.I#%D<)E=6!Z)K-/DAY&6[2)S?/%]R2Q$T?M0$0\ M*'X93CP=H._9!MT\(T<6*O%)URI6UGG$1_=*'[*M\'! MV*=M^CY2.1AA7W$Y7=38_W+=Z")\,/R'*VU-
'8RG;2T=DV0TQI "I,@28SQ9 MPUJ/1SUP"M-@%^$I,76D!+I!TJO\_YY?%K.N/BV>\&@WAR:&S4O66:WYV4CT M ]*V5],U;OMWOM]0]@'3XO-
\\RF7TV2U)>,CB@+).5NK@SB0<2D@"E8L*\;$ MYA.@A]]3N+[H*5'>%3K&3KS>L/ERALM/FRXDEWNZO%)^QS\V?[5Z1RSX+2S_ M@>N:&?+J\Q(WYM.D8'),B40.5GU+DTI"+%D
)FN+\-D;>^_!\8E4[*/(&-?5 M/05T3RRJ3D&Y.5TO;I1+5R63)D],6 M]X\-R?:"ZL ->O;X;?[RW=?-^)]?_\1EFM+5,7%9.F]C!IN< 87>UY1D RAX MEE:5;$+[M)-]J1RW/<#)S=OA)-@O1C?
G\?$-)HU.UP;R+$<$9;V&6 =Y11NM M1ZF"*.U'8.Y)Y+@M!SI :"/Y]0O0RR/X\]G7V>("+W?Z_GR9OA"[Z\C*U<0; M%B5=T" 9HVWZHB"HK,%PF81)NJC0.E/@0%+'[7W0 5B;RK)?R&
[.Y).[G.0H MM78I )>Q@!(N0*CO75D5'X2U .9_S! MJ/F&R[@XA?FY:<8\39MZ%OJU5Y59FP-"C"LX79_3[TQJLD&,F9&![2,QKQ2( M.FE *4)M:*CR
*D91Q*]&S[_>5ZP3B;@#C3A=/_QF66/08%E)9$Z*@;HHBN QMOLLD I6[=1>HZ>!JYN_[X 29 )RGF$PL MN7F[Z+VI["0#^%@$/>(@#RFN#DRTNR$
;I/2(3O@4M>\:9.@AD4!K=/*:0P. M.XB]# 6CH:7];/1E']9W@)M;:7>_+^:)V+;)O/^TJ/ES\S2=X9WM?5KLR]G: MV"UEQX'IHD%EQL!QFT$K'IS49(W:UN[!T'L:-_7XQ.CN"B =')B?
D%9.TXVX MZ>L9;N0^SZ_.%LOU]#\W/Y^42 8WYPY*$0*4UAIB\7762O2N9"M2;-VL;Q>Z MQE7+?2'I0=>UQF+M *IWYAA^Q/5ZMC&N:%>_G'T-TV7]9L/?5F12.M:H@ M
6>6#"S/+3A#?I_..=EB6<#F]6G[43BNWNT:O@.*N@,@7[4Z?#>O3Z;O"NV$ M^+B^J+D F[8NFXG5$S3$)55CJ=S3\92UR;HJ :SD@B6.V;#6IL9NE(U;Q=$U M< <0;0>
O9H5<;=091(0L7#F(3LCR3=0 6*M@4^.<2\#V6'-!W4\3LFXM1E= M [*!Z#H X.OSU72.JQ7M(4[GFRT\,17[U7(9Z*<;:;SY4K_\94Y&S_DF"//"
M(&T^21:]=AR!"RZV#UE*9RA!BN"UI#];J]P3;6W<6I&NCTB/X!HUD653=4-R MJD+XL+@(L_7%!_R&\_H:O.F-\FEQ>;N]/:_OOY>_0M*@'=I UE MA7=UU(PB0\PX;G*^E^?_1%74
8N/6V'2)WN:]$;$O[+-DX9TO M2-Y"** *GN MHSJ,TG'K4[K$]@E%/[Y*?CK7XYJMVQX(USR5UBI7;('-0%Q51*FY/;DF1QJN M1%$QMI^;OBMUXT8\3OQ$,I#0.E"
[#W=&IW%SZD@SX/3;I@M<+L*44 =A&F2@ M7.3@A'*0N?0AR^BC:-VX"Z>FLZU083+T+O2 $=JPH'@AUI^*]AFG_:4K2U
M<4CU;VIM7JU6N*Z%#RRIXA5(91VHE#4XEBU8EC@/EEO?O''U893VUKOJ1-!L M+L1.P7IU!-^'BWK^ZBLBV3#GM-XVME$-<.F2$[&V:G:T.U607,:@$PBN.#+'
MBFM>LG(8I;VUH#JQ'FTFQ"ZO\ZNSN US3!02_2K2<3.80"E=P.FH( G)M"E6 M%S%\C])[1/762.I$ #Q&-%UB;:/EKYEW^QB50C9(EAIR"8)T/G,0@C> V3/& MC.?:B>%=F:?
(ZZUKU(GPUT9<'2!Q=V]P8F147ML,V:0ZG-U;B+6YIA1"$A?) M_."M6\?O3MVX>O#T2;5#"*W9L,+F<+R,73W.2%+M)F01(:5DB)'.@#/: G)> MF,O&,CE .O>>5';2F?Y$I0.MQ-6!?
B0+]ZKM:OJ/\^D2;X=1HPI.9\;!(UTL M2M=.*XP<,YZ3T=(6:W+KX,YS]'196- ,"XN!!--/?)M8EQ#SZBWQ]I&$+_*R M;G*^-#IAL B0*=1.E*I>'[E.R-+$1Z^DD*U]D3W(Z[((8#
D#B2V'K3?O:W] M%FH2[?]"]O1F,9MAVK3V>U=NGSW:DTZ"!3"L#MPRC+98ZV(]JJ1+,HDNEX&1 MN0.97;[!G JAK<78 U+O7P=/GT%6.+-%&1 Y1%#*^-HSRH(3(A 0=K63<*6-
XZSS1W:D; M-\!S8D .)+1^'>NWTWF8IRNJ0AV.0@ M6N,UBQKC_2*1)W(L#Z6@2Q^[&2P6IY91#Y;C;>/XT8;E@BX2YB."+D:#LG6( M8W 1//V4\YAL#,W#/"\1U:6'W1J'PXBHB[:>#
[9TV6A<&<=12 M:\%3;4Y%5 M0:9O_8-)4;Q$U;HV_G%*NO2/3X:O_871@2+;G6D34[+QP3':BG"U)(-!D,C] MR)#:OBR76$[T9O((=5VZP$-!;R"A=>!Q_%P*)C*,?_XS;8K;/I"I_&Y3C%'_
MK9[]-S(;-LF85TU!ZU^0UW_W![=^<^*=UUF0TU5"UG4L>X:@I:D3&8J*)1GT MK:<3#;"-<0$^F,\RML [4,%';?:R3^[#7),T.Z]-2V^S]9+5$R&#B#P;"*+& M:&L-
:"R1@_'"!!V$T:SU<3CM#L<-/@UV4CJ&20<7QW$:(UCEI(H&>'*GX=Q4>*VE468Y[*ID%Y\W?:A M6-W=Q&[]GW?YV 8-G_>FOE&'YW?+SV&^K<"]Z35]V2CO_:V]O"M;YR[,;MI0
MWZ0IZUR4U X$\@BDZTJ=P9VAV&!U28F,X=8F71/"CPY>;*3VKKR[%M($C?"A MQ R)>SK&N0Z"EAS!:#K(V0870O-\XP=4C!OO/SVF'L0GCI-+,Y^LJ8+[./T\
MGY9I"O1)EY5,9#A_)>:F&GXZ0+4]_X$-E-H>%#=29Z^NEWF_7>8:3R99&9/7 MD%.NQ39"0D06@>0VE],)^FYNAN=#>=!GKKU0^M1$;\-T^:U.1CHC
M)YX4[65NX@$:Z/$/:J!Y=J"PD<:I*VVF1-7N);-%7>P&34D;;5Q L(* I!S= M/"Y[N7MB6_BAH!2;+ M?.O,FV<)&E?'-,/%?2W33@A]*I=;Z;S3^=DF4Z-6:Z^NIZH>HFA>_M &2F=/
MRALIH%NK_H3Q*O]T?7%K#.T5[%QV6)ATP)2QH"*WX!4KH*64S&HE2VQM#NQ. MW?'5R=&[JL,3KR2H;C6M.]C-U 9Q"D/JQ[[@ (O>O6Z?QO.,=O9*H> MITYO?4Y3#?H4?
8V4YB4*?L/UE_HH=8T7 L-_7TSGZW^C;^Y10'OB@^*U]5\]G)8G MYNH^4+7.+-R=NG%5W)"X>I"Y,(S$^M1<5[U[OE[V[@GS'"Y[]\QN=?4X0)/M M]+D---O^]#?2=-
MF1ZNK;D=A=H,^)IQ0,B>PR.L<4/(8(MUB@&BY4YK%G >H M*7N*G 8-95]L[_38X2B61Q-+@% <7>LB2O"<(2@;,: W@C>?K'<@J>/JME9( M>J0;[.!RZU.IU0J$1;E\YUM>]\0^))+_Z
>UB."_3&&KA\C:F^A1B=^T'+:H M2+((0@537X02^" %. Q&E8@BN-:MGU^FZJB*HEN?_'QS[QO46YF%BLG4,26> ML&YJO^_H:\4*BTD5YA)["2X'KCWRJV);@-RI&AI8#GUJG^MI'?
5Y@@P2^HNS MZ?K@6/YS']=F(O9NU#;21V]N/G_3<.#6ZH\@KWCA2ZVR$,$(4-D7B%H5<%8; M&9AFKKEJVHO H[/$=EGLYG"$Z$)61M?'^@PJI PN&@Y96HTE*^U*ZT#C?A2.
MJ\J&P]:#Q+#AY-:K4IL1?!?;K(]$&ZX\K IC-DTX7]'VPU7-YX%J;I\%FBB^ M@W?42!5NVY76.K,WV^7_?;K^\N9\M5Z$\OD!;(_6T MJ7W=+G,9$_U]L;ZY/H.-&HWT8*(S-
:_:0RA2@;=&ZJ*M"LW[7S]/T=&Y7X]^ M^F/P1JG(&7$()FDZ1G4\3W!& 1TB:Y1BQ>76+7IV)FY<1=00,P^RP 813Y_: MY\Z,ZD,4S]T/:*!SGJ&HF35T:X5-7<4F8/!
(A74P2C+D'KBHS;M9;9:<502> M,"@3D3/9VBGW;:_)#R[%.1/9NI?I7"VSS'_OJ#A\ZU?WP'P'^?DNI"!U:QX&&R[E_'5;3U;MR;X&+RS]O^10I6^NR M
$R^]JXW'((2!8H)CBL9K0ZQ\9YWHZS;G/M]4/)@<'5[H?30D>%VU=3]O4C! MHA?6DUW*!"A#;K+C-D )I>CH3;2E?8#A:7K&[>DU$*R:": #,/T T&JI1@Z0-4+ MH;S[N_,VY%T@+/?\8];
[%HNYO1ENGQO>WQ_(F2+7B0H&(B#1I(C+HT%SX71SCITIO5# MV+XTCMO 9R#T#2JH#H!X7?KWVTU5ZQ/^3C'9,#20C*>-*<_^=I9UG%N1$H\ MRM9.Z,
[$C=N#9R#H#2.:/H-E]_=:$R[;]:,;E8COO8M3%(US+C*7 MG$.(W-<9BP(B8^0-D+>9-*>_QL'.[I!%XR^>#*.22\@=9&URG7^F:,]Q$ZXQ
MC&LCHFKMB+956N,4D^^#E\/5UC["Z5=M/>@)\6E3TG"HJGKJXX;J8/$8M:=0 M25&YY&-*P#/JVE.\FDC*@BRE>!5\=JYU(L&0*NEC^H+Y?)/>?;7*9=7OJ_GM
MHI/MFV#NP>NZ&A"[L!3N-G\ZVU#PL:])[F M;<>TFZUKAS+R)"%L7G=-;2[BA ,7HD\U$TJ?RVJ4UP.'Z:X]//U&;@P&UV',EZCQ93O>< *9R?635FMQD*R%Y3?^Q
MW@;7?/;X<,T.;N[_7@U(B6[KLE[ .@P[HEM)%3G_IKK[+A)BR!S5(9&:0HH7VIS8E*CQ_Y[!K'O!7&O+AWN@(JR7UQ MH 4CGRB2@1)81(B'PLQLS:=Z/8F\RQRVK:
(^N1+.)!9==5H/FINNMJ./^^ MF*"A3X-AH?5\$=X.T]]UB!5^P/>[R_484OFN3+)0$B&S,00R,U-0H!F M3#"3I"ZV]5RI@6OWKX_(SR3GQ07B1UQ^(Y-
JP_77887YS>+L*UE8EYIAMOG( MS:RD#Y@6G^?3_\1\.4OSS6*UOA4'3_UQW9'QT72P+/J\/9]M_W#$O;G3YP[= MOF+(N_*9>A!F,!N1$^0B(VD79B'HK$!G3>
(CEG>^@)LW[UB$['_=S)G9Q?O M_IAC_G@>5],\#4OZ[%_F:79.+)S.'SEE$[2F5$L7+#K?-*O8!Q9U7D\%ET,$%=\N_N5?M7G-JT^N+VH^6-/XLK"X#/!.. M&*/* AQMAM@I"VSS\QIC
MO$D<^_G/R^-V&0@]^WI^96<\X,+%XQ_PZL_I:J*3,,8+!*;JZ DG&00D;YL% M8KR7)<;<.M@RX'9&#K<,"\3[PT8Z046W!^3W<(8_+<["=#ZI ZC(DBY@0["@
MF(H012Y0GP%"P.2+:>VAO$33R&9!+^#9"=0'2K(#9%X'1VLD]MW7RLW?\"SB M^:.\U/$M,C%@^5^?U>14T$T .2'KM2 MR"_%7\C"7DV$% *%\\!D\: RCW3H-
*.+)18C;"$K6[:&T[,4C6MJGO8J;BB; M#I!VY-WPZJP:^1.7,@\L)?"%+@!EZ_$228#AS*=D, 71NM"V">$C3]ULB*2V M]N(!8NTSOOAH.?KO87F9PW%$@'&W#QZJH/[Y'9RBM)
[P%U(*Y,.+>DW'.HR" MVP26G/? 2F&*?T_=/JZJ4>E4Q.G\*K[_6/WI=0)<30@Z7]9S/C$N>58P@?2^ MSA^R'KQ,%HK@2A,[A)2MS;NC".ZX='X?7#UHJGLR(79P<>^^V=N);&^^U"]_
MF5\J^)KQ]CQ_^ 2S4!AB90LG4RF2J10,XR"EC+391EA?2VUQK^]&:U/B2#*&,CQ:I"G9CBUA+O.6EP\[Q$QT=-%J)L ;2[==I-LN!ND! M.7=6:#K#NO4#5C/B.S9?]L';DTW-
3BK<#DR9ZXV_OKC5S^WM$O_C'.?I8A-G M1G)%G2;KC"Y&5IO7)XA)";#".*9]-IZW-D-V(*L3))X6,$_!MI'T>@+D8QO: MQJFUK]&9D %KX%!Q5.!SH.,NG6 Q)!>U&
J03Y/5"2!;06&'MH_'R*53J*VN M3^SV]<+R4H016%M;T9Y2S&1J1P,"+6HLPG,SF/)[AJY.P-8*##N [2C)](2V MUQ?77_Y?4_+MENG+Q:_X#6>;,ZJBU]I* RS(6I7A_A-
ODZ,0EH4WIG6K;)V MHZP3E[V7^[:5#'M"YNW3]G!_5X_$4:<0:_L'*>JQTQ*2R$Q)A6A7I=2!I(&!8ZG0+2&5 M989[A:< E]@#7,-?MJ. ZQ")= HN>66J&HM9%
\)C:WO6PH"9[4*F!6#W/F" M@QEU#\D9=U;>N. Z1"(]@>L(\_?7Z^P6GS./,6@PZ(BS#HF?C'$P/GMD9 4' M.U@"08L-= +@/ER1DR.B@^-PN>='7@-
N!C,)M(Q[#MPPLDQXR!"+#E"$<=;9 M:%CS-Y87B>K$8CP]8.XGR#65WL%P_(;+N&@U?3FLOFPKS&O_CV]A=N=6N]GB MA(R6H
)W8).IGA\=?._I:F/,VU"\#$ZWSE?:F;B1T]/;PN)^8[5!)-0%^&YU M.7AL/UGQ'.O,B%0'QRE%AS9P+R 9EKDL13#56A4^3]'(Q9&#PJRA++K UE7/
M@UO[FJ!SBEE&CAD3OGIG''PLCI@DO(K.&!5:N\J/D#'RQ.]!470LUWLVT2;. M"%YT0K"!D*_JA"0R'11PG:5PTB>16U?0/$G,R".\!P51&PET *5;=NISO$HL M*N:+A>(DG1(?
+3A%^\L873#<:19:XVHWRCH)YHUN]P\@QR[NR"-SW\D2L*%. MMS&U>V\R"IP3$8+-+J5H,\NM.R]_QP4,0V"H;2G#'N+L KW/PV6KKO$NEM/8>GJ=H7&UZ OPU%,CAE_=B'68GS?
V_+(*@DW>3 MR/Y4(43K?/\#EAXJQ_]8+IPBK]_5J M(J]_TV'K^H,?L8GN%U)\N!E-,D'E0E!>08B,>)!=K#Q@4 S*J&025K^(Q6,( MZ"24?"P\[G0[.X4L.O!FCC,O;-#>&&
(GF1>T6>4D1)X*&+H3-'T7L/E+\G=H M+9X.3TUMQWV$>S"2OVYZ@7]$8*#1TL6EF3!:8N9 MB];#&/^IBV&_@S-R.L#L?YK\Y6F:XZE/T6.* SEJ9FFKH2A7LUD81)L\**,R
M&LZ4:MX#9OA;H7GL_CM__+'"/?)6^'F>AW+Z7IQ4_MC,YB,\O:/6.\5D]IWW M>_IQ[20XBQ2+)^E+NOE-W]+:?).:[&=.^#U9V&M.^MR@Z\.FN^W#_,B>VG%?& M;IR4F3N3+
ML=BHA$NAT@^[?%'"\NS_[;\WE>;7/OG=-22E:_C6@ M;*3;0I-]&[WCVF8AM6WMK3Q.R;AH&P\9]Z_AX\74 =C^_O'3SF8W M]\QV-]FDDHHWH+.HT0!'#&(F@-!"6Z,%]ZHT!MWS%
(W[CMD-^!J*;400;D(+ M?__XM\4W7,XW]\;GV@KA]>+F.)%!$Y5U"-$%!8H;!IYS!4;Q[(U+#M6]@7!/ M/!D]N\RX69&CHZJQ',9'U)O%\FN=>HRWMQ!R#M+H BJ77"LC$T0C V0EDF**
MML%W&[/T^.>/FQ39"X:.YOS8X/E?8?X/O$.]-=Q+$T*=5%=]]4C<4#7Y,Y&; MCJX8X\1.N'GPT3M!1O]S0^8X?H^-EMM*\_8>JCI,W- %K'@$I01"2#Z!YMIK
MH9223.U];>V+'///C9P6O._G\=9L0:_/@%XJ6<:WN8>)@3?C>*7ZV1\LC.A:8AAI4)J.M1(@I M"Q!%FA2,]A);=_Q[FHQPP9MI+T#A Y@?0<@>KS.OH#TB$RWZG0]@
!C&T1W7H$^V7^F.9^<_E ?W59 M$V.0+F:Z_3D=/T%^94RE@+0<5:#[FHNRDZ&TW[KC7FB-,30TW[N'U$W:Q]7P M-$R%)YW &:S9_EY#0!M
!A]*2K8PS=J@ZO[2XT:21@'64=SOX.Z[&<;VZEN8 MSNKFWBZ6'\/M/?YZ7=89PL MBI1V,O$;-?@:S*0: #%#\+@#3?2T17#-+?)Q@R:#$RQ#TJU1&?".3%$T+A6+ M*
(UKW83I9:IZF44]M$756#X=(JZF?=_:U=EBN9[^)^8WB]5Z4QHSX*-%-JTC\OO2.'([P\88>0&"3076/R!3.C\[GX4UYK\M M%ZO5W^=+#+.ZX;^%Z?
PUEL42/X4_)U'69BPJ@3>*U>"@@F"=!^.4]TD&U&)H M+7D0X2.W2!P5N@.(]CO&\Z_TW+]HARY<^5D(&-U+L,F#BG@O=!0^)T7)65"F+A'G2(6AOK M)=>G,U7OTC9R_\?
3XK*)@#I4I4_MZU8--1]<72>8Q\Q*/>N&-A<@@I-H/J:9O._!Z6M?'. M-QRRT\R#14[17N;YG9V^ITR61DE!*H]G2V#BJG92"A%2S,BL<\7EUD[@Z7K*
M[.QIV3[+@R+GO(2F9061;PP6DP3M17=:R= MID]Z<>](^+CQ\A.!]_0B[L ?=EO$QRYC\S73! +2G)+I]0%8-H+JYW-KOD MA&0;(V@L(8B08O, X&Z4C>MH#
(FGIZL]FDEJQ%MRM5R_N*.' M/T7\/9SAID!9H8E.UL;)6#OO:)<\G#;M6W1,@M--)W-T@\EL9> M2D+:X64Q@O!&!NE3^]C6#QKADDHR@E>1@3+,U%90$JQ'SR/7,N_V"O<"#)^G
M8AR@G18%BT%$,G9&_Y71\S%-<9YP==4GBD1WU?9'"\RV&$B:.U"V,/"6;A#% M$D^1W"%_?_;\$PG]+RXU'HI:"G0Q&'>[B,R]J-5OWGCJ='%>:#-8:B).K#FZ
M2!:'*$8:*26/KO5HK=VIZR6YO_G=.+"@QE98'\_CK].$\]5T_OD#?L/Y.;[' M9:K"^XP3+[4AUYE(ST*#2MF!RR6"--:9E***?K=>@L\NT[E==:!@%X-P>6R\ MO%[,P]MIQC>+&?
W55OG>VHL)5D:1'"1FB44AT!'3TD"67":,)K/[[9N?0,P+ M"W6N;QI@IB6G.PB?/LZH=W_,:84OTZ^W-U:#=37#U+)(Q\'J#$%I,BB#S\(4
MJ55N"9O8F;A>$N(&@=VPHNH6@ZN)D='&R"T$7>O1L[0VS8L46I9J/B7B& MG ;OV!M.;Y?XM QT[V\3[9+)QK/@ 9VM\T58!CI[ 9SQ:'4=.%=:9UT\0\ZX MMGHK1#SR6-V$_V-
;Y]M']P\D%2*B]E/XB;R-V>)K5; 3)8+'$DS5JG1;Q^ @ MI$S;B9DN:NNL$6XGV_S99<:US%LCI#%;.S""MIMYOUP47*U(+&'V%J_[)DX" M7>#2ZSKRP-
$E''*"8*,'Z1QS)0;CFRO6YRD:U^0>4..TDD(G2H#E1@Y+T&'DKQBLM@6S^E[$'>N%,O M3F1C-Y//X=!;K,-LJ$A 3;I>E')>\X66BXLP:U50M-L'-_#^#]A!([]_HZ1N MH>*F5=M-
SFB2Z+-T$)DGFYL[,KKJ^^/=I MQE_F9;$\VPAO^W#TED[LS\3H)9F,;\Y7Z\49J=#7%V1)YO.TOIE5<]61.)./ M&JU)D)!OW!-.9ZE6EWJ7T#N3T SX;-QN(^-
&'AIC\IG7Y9%$/VHV1$T:>5-O M!UR2.-87URE%S+#@-(]@4V"U'D4!N48&$B\Y):8+BIWZ];Z0CO78VMV\2H\% MB$5#V8R<]/PPE>?EX@U;'-_2]O<)#2*64U&K\=4ZB&6X /Q2D1O
M?;1:Z;23MGP!<#L3-%X2U_$R7PPM@+$C'^]^^_G#QVWFF3$Q2Q,$A*0E*$P" MO$$-1CB>HS B*/N2;7?_0\<3_D#R6C1@WMBJ),P_7YX%;;@GOZ>F7=0B-EF( M?
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of business and future operations Description of the Business
 Arbutus Biopharma Corporation (“Arbutus” or “the Company”) is a clinical-stage biopharmaceutical company leveraging its extensive virology expertise to develop novel therapeutics with distinct mechanisms of action, which can potentially be combined to provide a functional cure for patients with chronic hepatitis B virus (cHBV) infection. The Company believes the key to success in developing a functional cure involves suppressing hepatitis B virus deoxyribonucleic acid, reducing hepatitis B surface antigen and boosting HBV-specific immune responses. The Company’s pipeline of internally developed, proprietary compounds includes an RNAi therapeutic, imdusiran (AB-729), and an oral PD-L1 inhibitor, AB-101. Imdusiran has generated meaningful clinical data demonstrating an impact on both surface antigen reduction and reawakening of the HBV-specific immune response. Imdusiran is currently in two Phase 2a combination clinical trials. AB-101 is currently being evaluated in a Phase 1a/1b clinical trial.
 The Company continues to protect and defend its intellectual property, which is the subject of the Company’s ongoing lawsuits against Moderna Therapeutics, Inc. (Moderna) and Pfizer Inc. and BioNTech SE (collectively, Pfizer/BioNTech) for their use of the Company’s patented lipid nanoparticle (LNP) technology in their COVID-19 vaccines. With respect to the Moderna lawsuit, the claim construction hearing occurred on February 8, 2024. On April 3, 2024, the court provided its claim construction ruling in which it construed the disputed claim terms and agreed with the Company’s position on most of the disputed claim terms. On August 5, 2024, the Company and Genevant Sciences Ltd. (Genevant), along with Moderna, filed a Stipulation to Extend Time with the court that requested an amended case schedule to accommodate certain outstanding discovery from Moderna and third parties. The court approved the amended case schedule and the start of the trial was moved from April 21, 2025 to September 24, 2025, subject to the court’s availability. The lawsuit against Pfizer/BioNTech is ongoing and a date for a claim construction hearing has been scheduled for December 18, 2024.
 Liquidity
 At September 30, 2024, the Company had an aggregate of $130.8 million in cash, cash equivalents and investments in marketable securities. The Company had no outstanding debt as of September 30, 2024. The Company believes it has sufficient cash resources to fund its operations for at least the next 12 months.
 <span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-

weight:400;line-height:120%">The success of the Company is dependent on obtaining the necessary regulatory approvals to bring its products to market and achieve profitable operations. The Company's research and development activities and the commercialization of its products are dependent on its ability to successfully complete these activities and to obtain adequate financing through a combination of financing activities and operations. It is not possible to predict either the outcome of the Company's existing or future research and development programs or the Company's ability to continue to fund these programs in the future. 1308000000Significant accounting policies Basis of presentation and principles of consolidation
 These unaudited condensed consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles for interim financial statements and accordingly, do not include all disclosures required for annual financial statements. These statements should be read in conjunction with the Company's audited consolidated financial statements and notes thereto for the year ended December 31, 2023 included in the Company's Annual Report on Form 10-K for the year ended December 31, 2023. These unaudited condensed consolidated financial statements include the accounts of Arbutus Biopharma Corporation and its one wholly-owned subsidiary, Arbutus Biopharma, Inc., and reflect, in the opinion of management, all adjustments and reclassifications necessary to fairly present the Company's financial position as of September 30, 2024 and December 31, 2023, the Company's results of operations for the three and nine months ended September 30, 2024 and 2023, and the Company's cash flows for the nine months ended September 30, 2024 and 2023. Such adjustments are of a normal recurring nature. The results of operations for the three and nine months ended September 30, 2024 are not necessarily indicative of the results for the full year. These unaudited condensed consolidated financial statements follow the same significant accounting policies as those described in the notes to the audited consolidated financial statements of the Company for the year ended December 31, 2023, except as described below under the section entitled "Recent Accounting Pronouncements."
 All intercompany balances and transactions have been eliminated.
 Net loss per share
 Net loss per share is calculated based on the weighted average number of common shares outstanding. Diluted net loss per share does not differ from basic net loss per share for the three and nine months ended September 30, 2024 and 2023, since the effect of including potential common shares would be anti-dilutive. For the nine months ended September 30, 2024, potential common shares of 18.7 million pertaining to outstanding stock options and unvested restricted stock units were excluded from the calculation of net loss per share. A total of approximately 21.0 million outstanding stock options were excluded from the calculation for the nine months ended September 30, 2023.
 Revenue from collaborations and licenses
 The Company generates revenue through certain collaboration agreements and license agreements. Such agreements may require the Company to deliver various rights and/or services, including intellectual property rights or licenses and research and development services. Under such agreements, the Company is generally eligible to receive non-refundable upfront payments, funding for research and development services, milestone payments and royalties.
 The Company's collaboration agreements fall under the scope of Accounting Standards Codification (ASC) Topic 808, Collaborative Arrangements (ASC 808), when both parties are active participants in the arrangement and are exposed to significant risks and rewards. For certain arrangements under the scope of ASC 808, the Company analogizes to ASC Topic 606, Revenue from Contracts with Customers (ASC 606), for some aspects, including for the delivery of a good or service (i.e., a unit of account).
 ASC 606 requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers under a five-step model: (i) identify contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when or as a performance obligation is satisfied.
 In contracts where the Company has more than one performance obligation to provide its customer with goods or services, each performance obligation is evaluated to determine whether it is distinct based on whether (i) the customer can benefit from the good or service either on its own or together with other resources that are readily available and (ii) the good or service is separately identifiable from other promises in the contract. The consideration under the contract is then allocated between the distinct performance obligations based on their respective relative stand-alone selling prices. The estimated stand-alone selling price of each deliverable reflects the Company's best estimate of what the selling price would be if the deliverable was regularly sold on a stand-alone basis and is determined by reference to market rates for the good or service when sold to others or by using an adjusted market assessment approach if the selling price on a stand-alone basis is not available. The consideration allocated to each distinct performance obligation is recognized as revenue when control is transferred to the customer for the related goods or services. Consideration associated with at-risk substantive performance milestones, including sales-based milestones, is recognized as revenue when it is probable that a significant reversal of the cumulative revenue recognized will not occur. Sales-based royalties received in connection with licenses of intellectual property are subject to a specific exception in the revenue standards, whereby the consideration is not included in the transaction price and recognized in revenue until the customer's subsequent sales or usages occur.
 Deferred Revenue
 When consideration is received or is unconditionally due from a customer, collaborator or licensee prior to the Company completing its performance obligation to the customer, collaborator or licensee under the terms of a contract, deferred revenue is recorded. Deferred revenue expected to be recognized as revenue within the 12 months following the balance sheet date is classified as a current liability. Deferred revenue not expected to be recognized as revenue within the 12 months following the balance sheet date is classified as a long-term liability. In accordance with ASC Topic 210-20, Balance Sheet - Offsetting (ASC 210-20) the Company's deferred revenue is offset by a contract asset as further discussed in Note 9.
 Segment information
 The Company operates as a single segment.
 Recent accounting pronouncements
 In November 2023, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures (ASU 2023-07), which requires disclosure of significant segment expenses and other segment items on an annual and interim basis under ASC 280. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and for interim periods beginning after December 15, 2024. Early adoption is permitted and the amendments in this ASU should be applied on a retrospective basis to all periods presented. The Company has not yet determined the impact ASU 2023-07 may have on the Company's financial statement disclosures.
 In December 2023, the FASB issued ASU No. 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures (ASU 2023-09), which improves income tax disclosures by requiring: (1) consistent categories and greater disaggregation of information in the rate reconciliation, and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for annual periods beginning after December 15, 2024. Early adoption is permitted. The ASU indicates that all entities will apply the guidance prospectively with an option for retroactive application to each period presented in the financial statements. The Company has not yet determined the impact ASU 2023-09 may have on the Company's financial statement disclosures.
 The Company has reviewed all other recently issued standards and has determined that such standards will not have a material impact on the Company's financial statements or do not otherwise apply to the Company's operations. Basis of presentation and principles of consolidation
 These unaudited condensed consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles for interim financial statements and accordingly, do not include all disclosures required for annual financial statements. These statements should be read in conjunction with the Company's audited consolidated financial statements and notes thereto for the year ended December 31, 2023 included in the Company's Annual Report on Form 10-K for the year ended December 31, 2023. These unaudited condensed consolidated financial statements include the accounts of Arbutus Biopharma Corporation and its one wholly-owned subsidiary, Arbutus Biopharma, Inc., and reflect, in the opinion of management, all adjustments and reclassifications necessary to fairly present the Company's financial position as of September 30, 2024 and December 31, 2023, the Company's results of operations for the three and nine months ended September 30, 2024 and 2023, and the Company's cash flows for the nine months ended September 30, 2024 and 2023. Such adjustments are of a normal recurring nature. The results of operations for the three and nine months ended September 30, 2024 are not necessarily indicative of the results for the full year. These unaudited condensed consolidated financial statements follow the same significant accounting policies as those described in the notes to the audited consolidated financial statements of the Company for the year ended December 31, 2023, except as described below under the section entitled "Recent Accounting Pronouncements." 1All intercompany balances and transactions have been eliminated. Net loss per share Net loss per share is calculated based on the weighted average number of common shares outstanding. Diluted net loss per share does not differ from basic net loss per share for the three and nine months ended September 30, 2024 and 2023, since the effect of including potential common shares would be anti-dilutive. For the nine months ended September 30, 2024, potential common shares of 18.7 million pertaining to outstanding stock options and unvested restricted stock units were excluded from the calculation of net loss per share. A total of approximately 21.0 million outstanding stock options were excluded from the calculation for the nine months ended September 30, 2023.1870000021000000.0 Revenue from collaborations and licenses
 The Company generates revenue through certain collaboration agreements and license agreements. Such agreements may require the Company to deliver various rights and/or services, including intellectual property rights or licenses and research and development services. Under such agreements, the Company is generally eligible to receive non-refundable upfront payments, funding for research and development services, milestone payments and royalties.
 The Company's collaboration agreements fall under the scope of Accounting Standards Codification (ASC) Topic 808, Collaborative Arrangements (ASC 808), when both parties are active participants in the arrangement and are exposed to significant risks and rewards. For certain arrangements under the scope of ASC 808, the Company analogizes to ASC Topic 606, Revenue from Contracts with Customers (ASC 606),

*for some aspects, including for the delivery of a good or service (i.e., a unit of account).
 ASC 606 requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers under a five-step model: (i) identify contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when or as a performance obligation is satisfied.
 In contracts where the Company has more than one performance obligation to provide its customer with goods or services, each performance obligation is evaluated to determine whether it is distinct based on whether (i) the customer can benefit from the good or service either on its own or together with other resources that are readily available and (ii) the good or service is separately identifiable from other promises in the contract. The consideration under the contract is then allocated between the distinct performance obligations based on their respective relative stand-alone selling prices. The estimated stand-alone selling price of each deliverable reflects the Company's best estimate of what the selling price would be if the deliverable was regularly sold on a stand-alone basis and is determined by reference to market rates for the good or service when sold to others or by using an adjusted market assessment approach if the selling price on a stand-alone basis is not available. The consideration allocated to each distinct performance obligation is recognized as revenue when control is transferred to the customer for the related goods or services. Consideration associated with at-risk substantive performance milestones, including sales-based milestones, is recognized as revenue when it is probable that a significant reversal of the cumulative revenue recognized will not occur. Sales-based royalties received in connection with licenses of intellectual property are subject to a specific exception in the revenue standards, whereby the consideration is not included in the transaction price and recognized in revenue until the customer's subsequent sales or usages occur.
 Deferred Revenue
 When consideration is received or is unconditionally due from a customer, collaborator or licensee prior to the Company completing its performance obligation to the customer, collaborator or licensee under the terms of a contract, deferred revenue is recorded. Deferred revenue expected to be recognized as revenue within the 12 months following the balance sheet date is classified as a current liability. Deferred revenue not expected to be recognized as revenue within the 12 months following the balance sheet date is classified as a long-term liability. In accordance with ASC Topic 210-20, Balance Sheet - Offsetting (ASC 210-20) the Company's deferred revenue is offset by a contract asset as further discussed in Note 9. Segment information The Company operates as a single segment. Recent accounting pronouncements
 In November 2023, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures (ASU 2023-07), which requires disclosure of significant segment expenses and other segment items on an annual and interim basis under ASC 280. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and for interim periods beginning after December 15, 2024. Early adoption is permitted and the amendments in this ASU should be applied on a retrospective basis to all periods presented. The Company has not yet determined the impact ASU 2023-07 may have on the Company's financial statement disclosures.
 In December 2023, the FASB issued ASU No. 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures (ASU 2023-09), which improves income tax disclosures by requiring: (1) consistent categories and greater disaggregation of information in the rate reconciliation, and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for annual periods beginning after December 15, 2024. Early adoption is permitted. The ASU indicates that all entities will apply the guidance prospectively with an option for retroactive application to each period presented in the financial statements. The Company has not yet determined the impact ASU 2023-09 may have on the Company's financial statement disclosures.
 The Company has reviewed all other recently issued standards and has determined that such standards will not have a material impact on the Company's financial statements or do not otherwise apply to the Company's operations. Fair value measurements The Company measures certain financial instruments and other items at fair value.
 To determine the fair value, the Company uses the fair value hierarchy for inputs used in measuring fair value that maximize the use of observable inputs and minimize the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs market participants would use to value an asset or liability and are developed based on market data obtained from independent sources. Unobservable inputs are inputs based on assumptions about the factors market participants would use to value an asset or liability. The three levels of inputs that may be used to measure fair value are as follows: •Level 1 inputs are quoted market prices for identical instruments available in active markets. •Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly or indirectly. If the asset or liability has a contractual term, the input must be observable for substantially the full term. An example includes quoted market prices for similar assets or liabilities in active markets. •Level 3 inputs are unobservable inputs for the asset or liability and will reflect management's assumptions about market assumptions that would be used to price the asset or liability.
 Assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurements. Changes in the observability of valuation inputs may result in a reclassification of levels for certain securities within the fair value hierarchy.
 The carrying values of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate their fair values due to the immediate or short-term maturity of these financial instruments. To determine the fair value of the contingent consideration (Note 8), the Company uses a probability weighted assessment of the likelihood the milestones would be met and the estimated timing of such payments, and then the potential contingent payments are discounted to their present value using a probability adjusted discount rate that reflects the early stage nature of the development program, the time to complete the program development, and overall biotech indices.Fair value measurements The Company measures certain financial instruments and other items at fair value.
 To determine the fair value, the Company uses the fair value hierarchy for inputs used in measuring fair value that maximize the use of observable inputs and minimize the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs market participants would use to value an asset or liability and are developed based on market data obtained from independent sources. Unobservable inputs are inputs based on assumptions about the factors market participants would use to value an asset or liability. The three levels of inputs that may be used to measure fair value are as follows: •Level 1 inputs are quoted market prices for identical instruments available in active markets. •Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly or indirectly. If the asset or liability has a contractual term, the input must be observable for substantially the full term. An example includes quoted market prices for similar assets or liabilities in active markets. •Level 3 inputs are unobservable inputs for the asset or liability and will reflect management's assumptions about market assumptions that would be used to price the asset or liability.
 Assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurements. Changes in the observability of valuation inputs may result in a reclassification of levels for certain securities within the fair value hierarchy.
 The carrying values of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate their fair values due to the immediate or short-term maturity of these financial instruments.
 To determine the fair value of the contingent consideration (Note 8), the Company uses a probability weighted assessment of the likelihood the milestones would be met and the estimated timing of such payments, and then the potential contingent payments are discounted to their present value using a probability adjusted discount rate that reflects the early stage nature of the development program, the time to complete the program development, and overall biotech indices. The Company determined the fair value of the contingent consideration was $8.3 million as of September 30, 2024 and the increase of $0.7 million from December 31, 2023 has been recorded as a component of total operating expenses in the statements of operations and comprehensive loss for the nine months ended September 30, 2024. The assumptions used in the discounted cash flow model are level 3 inputs as defined above. The Company assessed the sensitivity of the fair value measurement to changes in these unobservable inputs, and determined that changes within a reasonable range would not result in a materially different assessment of fair value.
 The following tables present information about the Company's assets and liabilities that are measured at fair value on a recurring basis, and indicates the fair value hierarchy of the valuation techniques used to determine such fair value:
 <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.853%"><tr><td style="width:1.0%"></td><td style="width:45.752%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.637%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.532%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.637%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.532%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.641%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Level 1</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Level 2</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Level 3</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom"><span*

style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:8pt;font-weight:700;line-height:100%">Total</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">As of September 30, 2024</td><td colspan="21" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Assets</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Cash and cash equivalents</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">31,846 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">31,846 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Investments in marketable securities, current</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">95,948 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">95,948 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Investments in marketable securities, non-current</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,964 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,964 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 18.25pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">31,846 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">98,912 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">130,758 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Liabilities</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Contingent consideration</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">8,335 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">8,335 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 18.25pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">8,335 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">8,335 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table>

 <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.707%"><tr><td style="width:1.0%"></td><td style="width:45.674%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.656%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.533%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.656%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.533%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.659%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Level 1</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Level 2</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Level 3</td><td colspan="3" style="padding:0 1pt">

</td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Total</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">As of December 31, 2023</td><td colspan="21" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Assets</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:top">Cash and cash equivalents</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:top">26,285 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:top">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:top">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:top"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:top">26,285 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:top">Investments in marketable securities, current</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">99,718 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">99,718 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 6.25pt;text-align:left;vertical-align:top">Investments in marketable securities, non-current</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:right;vertical-align:top">6,284</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">6,284 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 18.25pt;text-align:left;vertical-align:top">Total</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:top">26,285 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:top">106,002 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:top">— </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:top">132,287 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Liabilities</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:top">Contingent consideration</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">7,600 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">7,600 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 18.25pt;text-align:left;vertical-align:top">Total</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:top">— </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:top">7,600 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:top">7,600 </td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr></table> The following table presents the changes in fair value of the Company's contingent consideration: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.707%"><tr><td style="width:1.0%"></td><td style="width:37.609%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:18.841%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.533%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:18.841%"></td><td style="width:0.1%"></td><td style="width:0.533%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:18.843%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:top"> </td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:top">Liability at beginning of the period</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:top">Change in fair value of liability</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:top">Liability at end of the period</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="15" style="border-top:1pt solid

#000000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Nine Months Ended September 30, 2024</td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">7,600 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">735 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">8,335 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Nine Months Ended September 30, 2023</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">7,531 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">(158)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">7,373 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table> See Note 4 for additional information regarding the fair value of the Company's investments in marketable securities.83000000700000 The following tables present information about the Company's assets and liabilities that are measured at fair value on a recurring basis, and indicates the fair value hierarchy of the valuation techniques used to determine such fair value:
 <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.853%"><tr><td style="width:1.0%"></td><td style="width:45.752%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.637%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.532%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.637%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.532%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.637%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.532%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.641%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Level 1</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Level 2</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Level 3</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Total</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">As of September 30, 2024</td><td colspan="21" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Assets</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Cash and cash equivalents</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">31,846 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">31,846 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Investments in marketable securities, current</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">95,948 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">95,948 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Investments in marketable securities, non-current</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,964 </td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,964 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 18.25pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">31,846 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">98,912 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">130,758 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Liabilities</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt">

</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Contingent consideration</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">8,335 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">8,335 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 18.25pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">8,335 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table>

 <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.707%"><tr><td style="width:1.0%"></td><td style="width:45.674%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.656%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.533%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.656%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.533%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.656%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.533%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.659%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Level 1</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Level 2</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Level 3</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Total</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">As of December 31, 2023</td><td colspan="21" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Assets</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:top">Cash and cash equivalents</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:top">26,285 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:top">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:top">26,285 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:top">Investments in marketable securities, current</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">99,718 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">99,718 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 6.25pt;text-align:left;vertical-align:top">Investments in marketable securities, non-current</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:right;vertical-align:top">6,284</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">6,284 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 18.25pt;text-align:left;vertical-align:top">Total</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:top">26,285 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:top">106,002 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:top">— </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:top">132,287 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Liabilities</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:top">

style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">Contingent consideration</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">7,600 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:top">7,600 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 18.25pt;text-align:left;vertical-align:top">Total</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:top">— </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:top">— </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:top">7,600 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:top">7,600 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td></tr></table>
3184600000318460000959480000959480000296400002964000031846000989120000130758000008335000833500008335000833500026285000002628500009971800000
style="text-align:justify">The following table presents the changes in fair value of the Company's contingent consideration: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.707%"><tr><td style="width:1.0%"></td><td style="width:37.609%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:18.841%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.533%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:18.841%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.533%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:18.843%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:top"> </td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:top">Liability at beginning of the period</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:top">Change in fair value of liability</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:top">Liability at end of the period</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="15" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Nine Months Ended September 30, 2024</td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">7,600 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">735 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">8,335 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Nine Months Ended September 30, 2023</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">7,531 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">(158)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">7,373 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table> 760000073500083350007531000-1580007373000Investments in marketable securities Investments in marketable securities consisted of the following: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:100.000%"><tr><td style="width:1.0%"></td><td style="width:38.073%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.572%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.512%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.572%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.512%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.572%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.512%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.575%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Amortized Cost</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Gross Unrealized Gain(1) </td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Gross Unrealized Loss(1) </td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Fair Value</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">As of September 30, 2024</td><td colspan="21" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Cash equivalents</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Money market</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">25,948 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-

height:100%">25,948 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 12.25pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">25,948 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">25,948 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Investments in marketable short-term securities</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">US corporate bonds</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">43,477 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">23 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(9)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">43,491 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">US treasury bills</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">52,408 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">49 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">52,457 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 18.25pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">95,885 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">72 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(9)</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">95,948 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Investments in marketable long-term securities</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">US corporate bonds</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,932 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">32 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,964 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 19pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">2,932 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">32 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom"><span

style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">2,964 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table> (1) Gross unrealized gain (loss) is pre-tax and is reported in accumulated other comprehensive loss.
 <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:100.000%"><tr><td style="width:1.0%"></td><td style="width:38.073%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.572%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.512%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.572%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.512%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.572%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.512%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Amortized Cost</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Gross Unrealized Gain(1) </td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Gross Unrealized Loss(1) </td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Fair Value</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">As of December 31, 2023</td><td colspan="21" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Cash equivalents</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Money market fund</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">18,029 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">18,029 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 18.25pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">18,029 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">18,029 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Investments in marketable short-term securities</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">US government agency bonds</td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">17,918 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">(44)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">17,874 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">US corporate bonds</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">71,045 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">30 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(189)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">70,886 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Yankee bonds</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,000 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(17)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,983 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">US government bonds</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-

height:100%">9,001 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">(26)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">8,975 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 18.25pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">99,964 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">30 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(276)</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">99,718 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Investments in marketable long-term securities</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 12.25pt;text-align:left;vertical-align:bottom">US corporate bonds</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">6,273 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">18 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(7)</td><td style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">6,284 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 24.25pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">6,273 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">18 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(7)</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">6,284 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table>
 (1) Gross unrealized gain (loss) is pre-tax and is reported in accumulated other comprehensive loss.
 The contractual term to maturity of the $95.9 million of short-term marketable securities held by the Company as of September 30, 2024 is less than one year. As of September 30, 2024, the Company held $3.0 million of long-term marketable securities with contractual maturities of more than one year, but less than five years. As of December 31, 2023, the Company's $99.7 million of short-term marketable securities had contractual maturities of less than one year, while the Company's $6.3 million of long-term marketable securities had maturities of more than one year, but less than five years.
 At September 30, 2024 and December 31, 2023, the Company had 7 and 27, respectively, available-for-sale investment debt securities in an unrealized loss position without an allowance for credit losses. Unrealized losses on the Company's investments in debt securities have not been recognized into income as the issuers' bonds are of high credit quality and the decline in fair value is largely due to market conditions and/or changes in interest rates. The Company does not intend to sell and it is more likely than not that the Company will not be required to sell the securities prior to the anticipated recovery of their amortized cost basis. The issuers continue to make timely interest payments on the bonds. The fair value is expected to recover as the bonds approach maturity.
 Accrued interest receivable on investments in marketable securities of $0.3 million at both September 30, 2024 and December 31, 2023 is included in prepaid expenses and other current assets.
 The Company had realized gains of less than $0.1 million for the three and nine months ended September 30, 2024 and zero and less than $0.1 million realized gains for same periods in 2023, respectively. See Note 3 for additional information regarding the fair value of the Company's investments in marketable securities. Investments in marketable securities consisted of the following: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:100.000%"><tr><td style="width:1.0%"></td><td style="width:38.073%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.572%"></td><td style="width:0.1%"></td><td style="width:0.512%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.572%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.512%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.572%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.512%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.575%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Amortized Cost</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Gross Unrealized Gain(1) </td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Gross Unrealized Loss(1) </td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Fair Value</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">As of September 30, 2024</td><td colspan="21" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px

1pt;text-align:left;vertical-align:bottom">Cash equivalents</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Money market</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">25,948 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">25,948 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 12.25pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">25,948 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">25,948 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Investments in marketable short-term securities</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">US corporate bonds</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">43,477 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">23 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(9)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">43,491 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">US treasury bills</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">52,408 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">49 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">52,457 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 18.25pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">95,885 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">72 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(9)</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">95,948 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Investments in marketable long-term securities</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">US corporate bonds</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,932 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">32 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,964 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td>

<td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 19pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">2,932 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">32 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">2,964 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table> (1) Gross unrealized gain (loss) is pre-tax and is reported in accumulated other comprehensive loss.
 <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:100.000%"><tr><td style="width:1.0%"></td><td style="width:38.073%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.572%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.512%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.572%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.512%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.572%"></td><td style="width:0.1%"></td><td style="width:0.512%"></td><td style="width:0.1%"></td><td style="width:0.512%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13,575%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Amortized Cost</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Gross Unrealized Gain(1) </td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Gross Unrealized Loss(1) </td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Fair Value</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">As of December 31, 2023</td><td colspan="21" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Cash equivalents</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Money market fund</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">18,029 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">18,029 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 18.25pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">18,029 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">18,029 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">US government agency bonds</td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">17,918 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">(44)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">17,874 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">US corporate bonds</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">71,045 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">30 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(189)</td><td

style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">70,886 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Yankee bonds</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,000 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(17)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,983 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">US government bonds</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">9,001 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">(26)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">8,975 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 18.25pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">99,964 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">30 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(276)</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">99,718 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Investments in marketable long-term securities</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 12.25pt;text-align:left;vertical-align:bottom">US corporate bonds</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">6,273 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">18 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(7)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">6,284 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 24.25pt;text-align:left;vertical-align:bottom">Total</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">6,273 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">18 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(7)</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">6,284 </td><td 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 (1) Gross unrealized gain (loss) is pre-tax and is reported in accumulated other comprehensive loss.
259480002594800025948000259480000434770002300090004349100052408000490000524570009588500072000900095948000293200032000029640002932000320000;in Genevant In April 2018, the Company entered into an agreement with Roivant Sciences Ltd. (Roivant), its largest shareholder, to launch Genevant, a company focused on a broad range of RNA-based therapeutics enabled by the Company's LNP and ligand conjugate delivery technologies. The Company licensed rights to its LNP and ligand conjugate delivery platforms to Genevant for RNA-based applications outside of HBV, except to the extent certain rights had already been licensed to other third parties (the Genevant License). The Company retained all rights to its LNP and conjugate delivery platforms for HBV.
 Under the Genevant License, as amended, if a third party sublicensee of intellectual property licensed by Genevant from the Company commercializes a sublicensed product, the Company becomes entitled to receive a specified percentage of certain revenue that may be received by Genevant for such sublicense, including royalties, commercial milestones and other sales-related revenue, or, if less, tiered low single-digit royalties on net sales of the sublicensed product. The specified percentage is 20% in the case of a mere sublicense (i.e., naked sublicense) by Genevant without additional contribution and 14% in the case of a bona fide collaboration with Genevant.
 Additionally, if Genevant receives proceeds from an action for infringement by any third parties of the Company's intellectual property licensed to Genevant, the Company would be entitled to receive, after deduction of litigation costs, 20% of the proceeds received by Genevant or, if less, tiered low single-digit royalties on net sales of the infringing product (inclusive of the proceeds from litigation or settlement, which would be treated as net sales).
 The Company accounts for its interest in Genevant as equity securities without readily determinable fair values. Accordingly, an estimate of the fair value of the securities is based on the original cost less previously recognized equity method losses, less impairments, plus or minus changes resulting from observable price changes in orderly transactions for identical or a similar Genevant securities. As of September 30, 2024, the carrying value of the Company's investment in Genevant was zero and the

Company owned approximately 16% of the common equity of Genevant. 0.200.140.2000.16Accounts payable and accrued liabilities Accounts payable and accrued liabilities are comprised of the following: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.853%"><tr><td style="width:1.0%"></td><td style="width:62.736%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:16.615%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.532%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:16.617%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:top"> </td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">September 30, 2024</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">December 31, 2023</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Trade accounts payable</td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:top">2,315 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:top"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td 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style="background-color:#ffffff;border-bottom:3pt double #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#ffffff;border-bottom:3pt double #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:top">7,544 </td><td style="background-color:#ffffff;border-bottom:3pt double #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:top"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:3pt double #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:top">$</td><td style="background-color:#ffffff;border-bottom:3pt double #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:top">10,271 </td><td style="background-color:#ffffff;border-bottom:3pt double #000;border-top:1pt solid #000;padding:2px 1pt 2px 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0;text-align:right;vertical-align:top"></td></tr></table> 2315000322300013670002884000709000815000258800033490005650000754400010271000Sale of future royalties

On July 2, 2019, the Company entered into a Purchase and Sale Agreement (the Agreement) with the Ontario Municipal Employees Retirement System (OMERS), pursuant to which the Company sold to OMERS part of its royalty interest on future global net sales of ONPATTRO® (Patisiran) (ONPATTRO), an RNA interference therapeutic currently being sold by Alnylam Pharmaceuticals, Inc. (Alnylam).
 ONPATTRO utilizes the Company's LNP technology, which was licensed to Alnylam pursuant to the Cross-License Agreement, dated November 12, 2012, by and between the Company and Alnylam (the LNP License Agreement). Under the terms of the LNP License Agreement, the Company is entitled to tiered royalty payments on global net sales of ONPATTRO ranging from 1.00% to 2.33% after offsets, with the highest tier applicable to annual net sales above $500 million. This royalty interest was sold to OMERS, effective as of January 1, 2019, for $20 million in gross proceeds before advisory fees. OMERS will retain this entitlement until it has received $30 million in royalties, at which point 100% of such royalty interest on future global net sales of ONPATTRO will revert to the Company. OMERS has assumed the risk of collecting up to $30 million of future royalty payments from Alnylam and the Company is not obligated to reimburse OMERS if they fail to collect any such future royalties.
 The $30 million in royalties to be paid to OMERS is accounted for as a liability, with the difference between the liability and the gross proceeds received accounted for as a discount. The discount, as well as $1.5 million of transaction costs, will be amortized as interest expense based on the projected balance of the liability as of the beginning of each period. As of September 30, 2024, the Company estimated an effective annual interest rate of approximately 2.0%. Over the course of the Agreement, the actual interest rate will be affected by the amount and timing of royalty revenue recognized and changes in the timing of forecasted royalty revenue. On a quarterly basis, the Company will reassess the expected timing of the royalty revenue, recalculate the amortization and effective interest rate and adjust the accounting prospectively as needed.
 The Company recognizes non-cash royalty revenue related to the sales of ONPATTRO during the term of the Agreement. As royalties are remitted to OMERS from Alnylam, the balance of the recognized liability is effectively repaid over the life of the Agreement. From the inception of the royalty sale through September 30, 2024, the Company has recorded an aggregate of $24.4 million of non-cash royalty revenue for royalties earned by OMERS. There are a number of factors that could materially affect the amount and timing of royalty payments from Alnylam, none of which are within the Company's control.
 During the nine months ended September 30, 2024, the Company recognized non-cash royalty revenue of $1.7 million and related non-cash interest expense of less than $0.1 million. During the nine months ended September 30, 2023, the Company recognized non-cash royalty revenue of $2.7 million and related non-cash interest expense of $0.4 million. </div><div style="text-align:justify"> </div><div style="text-align:justify">The table below shows the activity related to the net liability for the nine months ended September 30, 2024 and 2023.</div><div style="margin-top:5pt;text-align:center"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:100.000%"><tr><td style="width:1.0%"></td><td style="width:70.537%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:12.788%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.384%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:12.791%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30,</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#ceeeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Net liability related to sale of future royalties - beginning balance</td><td style="background-color:#ceeeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ceeeff;padding:2px 0;text-align:right;vertical-align:bottom">6,953 </td><td style="background-color:#ceeeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ceeeff;padding:0 1pt"></td><td style="background-color:#ceeeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ceeeff;padding:2px 0;text-align:right;vertical-align:bottom">10,365 </td><td style="background-color:#ceeeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Non-cash royalty revenue</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(1,736)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(2,667)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ceeeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Non-cash interest expense</td><td colspan="2" style="background-color:#ceeeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">98 </td><td style="background-color:#ceeeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ceeeff;padding:0 1pt"></td><td colspan="2" style="background-color:#ceeeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">412 </td><td style="background-color:#ceeeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Net liability related to sale of future royalties - ending balance</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">5,315 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">8,110 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table>
 In addition to the royalty from the LNP License Agreement, the Company is also receiving a second royalty interest ranging from 0.75% to 1.125% on global net sales of ONPATTRO, with 0.75% applying to sales greater than $500 million, originating from a settlement agreement and subsequent license agreement with Acuitas Therapeutics, Inc. (Acuitas). The royalty from Acuitas has been retained by the Company and was not part of the royalty sale to OMERS.</div>0.01000.023350000000020000000300000001300000003000000015000000.020-2440000017000001000002700000400000<div style="text-align:justify">The table below shows the activity related to the net liability for the nine months ended September 30, 2024 and 2023:</div><div style="margin-top:5pt;text-align:center"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:100.000%"><tr><td style="width:1.0%"></td><td style="width:70.537%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:12.788%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.384%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:12.791%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30,</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#ceeeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Net liability related to sale of future royalties - beginning balance</td><td style="background-color:#ceeeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ceeeff;padding:2px 0;text-align:right;vertical-align:bottom">6,953 </td><td style="background-color:#ceeeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ceeeff;padding:0 1pt"></td><td style="background-color:#ceeeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ceeeff;padding:2px 0;text-align:right;vertical-align:bottom">10,365 </td><td style="background-color:#ceeeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Non-cash royalty revenue</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(1,736)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(2,667)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ceeeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Non-cash interest expense</td><td colspan="2" style="background-color:#ceeeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">98 </td><td style="background-color:#ceeeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ceeeff;padding:0 1pt"></td><td colspan="2" style="background-color:#ceeeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">412 </td><td style="background-color:#ceeeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Net liability related to sale of future royalties - ending balance</td><td style="background-

color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">5,315 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">8,110 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table> 695300010365000173600026670009800041200053150008110000.00750.011250.00755000000000Contingencies and commitments Stock Purchase Agreement with Enantigen
 In October 2014, Arbutus Inc., the Company's wholly-owned subsidiary, acquired all of the outstanding shares of Enantigen Therapeutics, Inc. (Enantigen) pursuant to a stock purchase agreement. The amount paid to Enantigen's selling shareholders could be up to an additional $102.5 million in sales performance milestones in connection with the sale of the first commercialized product by the Company for the treatment of HBV, regardless of whether such product is based upon assets acquired under this agreement, and a low single-digit royalty on net sales of such first commercialized HBV product, up to a maximum royalty payment of $1.0 million that, if paid, would be offset against the Company's milestone payment obligations. Certain other development milestones related to the acquisition were tied to programs which are no longer under development by the Company, and therefore the contingency related to those development milestones is zero.
 The contingent consideration is a financial liability and is measured at its fair value at each reporting period, with any changes in fair value from the previous reporting period recorded in the statements of operations and comprehensive loss (see Note 3).
 The fair value of the contingent consideration was $8.3 million as of September 30, 2024. 10250000010000000.008300000Collaborations, contracts and licensing agreements Collaborations
 Qilu Pharmaceutical Co., Ltd.
 In December 2021, the Company entered into a technology transfer and licensing agreement (the License Agreement) with Qilu Pharmaceutical Co., Ltd. (Qilu), pursuant to which the Company granted Qilu a sublicensable, royalty-bearing license, under certain intellectual property owned by the Company, which is non-exclusive as to development and manufacturing and exclusive with respect to commercialization of imdusiran, including pharmaceutical products that include imdusiran, for the treatment or prevention of hepatitis B in China, Hong Kong, Macau and Taiwan (the Territory).
 In partial consideration for the rights granted by the Company, Qilu paid the Company a one-time upfront cash payment of $40.0 million, net of withholding taxes, on January 5, 2022, and agreed to pay the Company milestone payments totaling up to $245.0 million, net of withholding taxes, upon the achievement of certain technology transfer, development, regulatory and commercialization milestones. Qilu paid $4.4 million of withholding taxes to the Chinese taxing authority on the Company's behalf, related to the upfront cash payment. In addition, Qilu agreed to pay the Company double-digit royalties into the low twenties percent based upon annual net sales of imdusiran in the Territory. The royalties are payable on a product-by-product and region-by-region basis, subject to certain limitations.
 Qilu is responsible for all costs related to developing, obtaining regulatory approval for, and commercializing imdusiran for the treatment or prevention of hepatitis B in the Territory. Qilu is required to use commercially reasonable efforts to develop, seek regulatory approval for, and commercialize at least one imdusiran product candidate in the Territory. A joint development committee has been established between the Company and Qilu to coordinate and review the development, manufacturing and commercialization plans. Both parties also have entered into a supply agreement and related quality agreement pursuant to which the Company will manufacture or have manufactured and supply Qilu with all quantities of imdusiran necessary for Qilu to develop and commercialize in the Territory until the Company has completed manufacturing technology transfer to Qilu and Qilu has received all approvals required for it or its designated contract manufacturing organization to manufacture imdusiran in the Territory.
 Concurrent with the execution of the License Agreement, the Company entered into a Share Purchase Agreement (the Share Purchase Agreement) with Anchor Life Limited, a company established pursuant to the applicable laws and regulations of Hong Kong and an affiliate of Qilu (the Investor), pursuant to which the Investor purchased 3,579,952 of the Company's common shares at a purchase price of USD $4.19 per share, which was a 15% premium on the thirty-day average closing price of the common shares as of the close of trading on December 10, 2021 (the Share Transaction). The Company received $15.0 million of gross proceeds from the Share Transaction on January 6, 2022. The common shares sold to the Investor in the Share Transaction represented approximately 2.5% of the common shares outstanding immediately prior to the execution of the Share Purchase Agreement.
 The License Agreement falls under the scope of ASC 808 as both parties are active participants in the arrangement and are exposed to significant risks and rewards. While this arrangement is in the scope of ASC 808, the Company analogizes to ASC 606 for some aspects of this arrangement, including for the delivery of a good or service (i.e., a unit of account). In accordance with the guidance, the Company identified the following commitments under the arrangement: (i) rights to develop, use, sell, have sold, offer for sale and import any product comprised of Licensed Product (as defined in the License Agreement) (the Qilu License) and (ii) drug supply obligations and manufacturing technology transfer (the Manufacturing Obligations). The Company determined that these two commitments are not distinct performance obligations for purposes of recognizing revenue as the manufacturing process is highly specialized and Qilu would not be able to benefit from the Qilu License without the Company's involvement in the manufacturing activities until the transfer of the manufacturing know-how is complete. As such, the Company will combine these commitments into one performance obligation to which the transaction price will be allocated to and will recognize this transaction price associated with the bundled performance obligation over time using an inputs method based on labor hours expended by the Company on its Manufacturing Obligations.
 The Company determined the initial transaction price of the combined performance obligation to be $50.4 million, which includes the $40.0 million upfront fee, $4.4 million of withholding taxes paid by Qilu on behalf of the Company, the premium paid for the Share Transaction of $4.1 million. The Company determined the milestone payments to be variable consideration subject to constraint at inception. At the end of each subsequent reporting period, the Company will reevaluate the probability of achievement of the future development, regulatory, and sales milestones subject to constraint and, if necessary, will adjust its estimate of the overall transaction price. Any such adjustments will be recorded on a cumulative catch-up basis, which would affect revenues and earnings in the period of adjustment.</div><div style="text-align:justify">
</div><div style="text-align:justify">The following table outlines the transaction price and the changes to the related liability balance: </div><div style="text-align:justify">
</div><div style="text-align:justify"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:100.000%"><tr><td style="width:1.0%"></td><td style="width:49.923%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.519%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.384%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.128%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.384%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.862%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Transaction Price</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">Cumulative Collaboration Revenue Recognized</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">Deferred License Revenue</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="15" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:top">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Combined performance obligation</td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">50,445 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">37,561 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">12,884 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Less contract asset</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(1,973)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Total deferred license revenue</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">10,911 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table>
 The Company recognized $0.1 million and $0.9 million of revenue based on labor hours expended by the Company on its Manufacturing Obligations during the three and nine months ended September 30, 2024, respectively, and $3.2 million and $10.3 million during the three and nine months ended September 30, 2023, respectively.
 As of September 30, 2024, the balance of the deferred license revenue was $12.9 million, which, in accordance with ASC 210-20, was partially offset by the contract asset associated with the manufacturing cost reimbursement of $2.0 million, resulting in a net deferred license revenue liability of $10.9 million. The Company incurred $0.6 million of incremental costs in obtaining the Qilu License, which the Company capitalized in other

*current assets and other assets and amortizes as a component of general and administrative expense commensurate with the recognition of the combined performance obligation. The Company recognized amortization expense of less than $0.1 million for both the three and nine months ended September 30, 2024 and amortization expense of less than $0.1 million for the three months ended September 30, 2023 and $0.1 million for the nine months ended September 30, 2023.
 The Company reevaluates the transaction price and the total estimated labor hours expected to be incurred to satisfy the performance obligations and adjusts the deferred revenue at the end of each reporting period. Such changes will result in a change to the amount of collaboration revenue recognized and deferred revenue.
 Barinthus Biotherapeutics plc
 In July 2021, the Company entered into a clinical collaboration agreement with Barinthus Biotherapeutics plc (Barinthus), formerly Vaccitech plc, to evaluate imdusiran followed by Barinthus' VTP-300, an HBV antigen specific immunotherapy, and ongoing nucleos(t)ide analogue therapy in patients with cHBV. This clinical trial was amended and is now dosing patients in an additional treatment arm that includes an approved PD-1 monoclonal antibody inhibitor, nivolumab (Opdivo®).
 The Company is responsible for managing this Phase 2a proof-of-concept clinical trial, subject to oversight by a joint development committee comprised of representatives from the Company and Barinthus. The Company and Barinthus retain full rights to their respective product candidates and will split all costs associated with the clinical trial. The Company incurred $0.5 million and $1.7 million of expenses, net of Barinthus's 50% share, during the three and nine months ended September 30, 2024, respectively, and $0.7 million and $1.6 million during the three and nine months ended September 30, 2023 respectively, and reflected those costs in research and development in the statements of operations and comprehensive loss.
 Royalty Entitlements
 Alnylam Pharmaceuticals, Inc. and Acuitas Therapeutics, Inc.
 The Company has two royalty entitlements to Alnylam's global net sales of ONPATTRO.
 In 2012, the Company entered into the LNP License Agreement with Alnylam that entitles Alnylam to develop and commercialize products with the Company's LNP technology. Alnylam launched ONPATTRO, the first approved application of the Company's LNP technology, in 2018. Under the terms of this license agreement, the Company is entitled to tiered royalty payments on global net sales of ONPATTRO ranging from 1.00% - 2.33% after offsets, with the highest tier applicable to annual net sales above $500 million. This royalty interest was sold to OMERS, effective as of January 1, 2019, for $20 million in gross proceeds before advisory fees. OMERS will retain this entitlement until it has received $30 million in royalties, at which point 100% of this royalty entitlement on future global net sales of ONPATTRO will revert back to the Company. OMERS has assumed the risk of collecting up to $30 million of future royalty payments from Alnylam and the Company is not obligated to reimburse OMERS if they fail to collect any such future royalties. If this royalty entitlement reverts to the Company, it has the potential to provide an active royalty stream or to be otherwise monetized again in full or in part. From the inception of the royalty sale through September 30, 2024, an aggregate of $24.4 million of royalties have been earned by OMERS.
 The Company also is receiving a second royalty interest of 0.75% to 1.125% on global net sales of ONPATTRO, with 0.75% applying to sales greater than $500 million, originating from a settlement agreement and subsequent license agreement with Acuitas. This royalty entitlement from Acuitas has been retained by the Company and was not part of the royalty entitlement sale to OMERS. </div><div>Revenues are summarized in the following table:<table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:97.953%"><tr><td style="width:1.0%"></td><td style="width:51.885%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:9.795%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.397%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:9.795%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.397%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:10.989%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.844%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:9.798%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Three Months Ended September 30,</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30,</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="24" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Revenue from collaborations and licenses</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Acuitas Therapeutics, Inc.</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">644 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">714 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">1,981 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">2,980 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Qilu Pharmaceutical Co., Ltd.</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">123 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">3,221 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">880 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">10,349 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Non-cash royalty revenue</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Alnylam Pharmaceuticals, Inc.</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">572 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">723 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,736 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,667 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Total revenue</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-*

weight:400;line-height:100%">1,339 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">4,658 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">4,597 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">15,996 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table>
40000000.0245000000.0440000035799524.190.1515000000.00.025504000040000000.044000004100000The following table outlines the transaction price and the changes to the related liability balance: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:100.000%"><tr><td style="width:1.0%"></td><td style="width:49.923%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.519%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.384%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.128%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.384%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.862%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Transaction Price</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">Cumulative Collaboration Revenue Recognized</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">Deferred License Revenue</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="15" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:top">(in thousands)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Combined performance obligation</td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">50,445 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">37,561 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">12,884 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Less contract asset</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(1,973)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Total deferred license revenue</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">10,911 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table>
504450003756100012884000197300010911000100000900000320000010300000129000002000000.0109000006000001000001000001000001000005000001700000700624400000.00750.011250.0075500000000 Revenues are summarized in the following table:<table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:97.953%"><tr><td style="width:1.0%"></td><td style="width:51.885%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:9.795%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.397%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:9.795%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.397%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:10.989%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.844%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:9.798%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Three Months Ended September 30,</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30,</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands)</td></tr><tr><td colspan="24" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Revenue from collaborations and licenses</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Acuitas Therapeutics, Inc.</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">644 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">714 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">1,981 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">2,980 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom">Qilu Pharmaceutical Co., Ltd.</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">123 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">3,221 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">880 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">10,349 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Non-cash royalty revenue</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-

serif;font-size:10pt;font-weight:400;line-height:100%">Alnylam Pharmaceuticals, Inc.</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">572 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">723 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,736 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,667 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Total revenue</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">1,339 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">4,658 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">4,597 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">15,996 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table>
64400071400019810002980000123000322100088000010349000572000723000173600026670001339000465800045970001599600OShareholders' equity Authorized share capital The Company's authorized share capital consists of an unlimited number of common shares and preferred shares, without par value, and 1,164,000 Series A participating convertible preferred shares, without par value. Open Market Sale Agreement
 The Company has an Open Market Sale AgreementSM with Jefferies LLC (Jefferies) dated December 20, 2018, as amended by Amendment No. 1, dated December 20, 2019, Amendment No. 2, dated August 7, 2020 and Amendment No. 3, dated March 4, 2021 (as amended, the Sale Agreement), under which the Company may issue and sell common shares, from time to time.
 On December 23, 2019, the Company filed a shelf registration statement on Form S-3 with the Securities and Exchange Commission (the SEC) (File No. 333-235674) and accompanying base prospectus, which was declared effective by the SEC on January 10, 2020 (the January 2020 Registration Statement), for the offer and sale of up to $150.0 million of the Company's securities. The January 2020 Registration Statement also contained a prospectus supplement for an offering of up to $50.0 million of the Company's common shares pursuant to the Sale Agreement. This prospectus supplement was fully utilized during 2020. On August 7, 2020, the Company filed a prospectus supplement with the SEC (the August 2020 Prospectus Supplement) for an offering of up to an additional $75.0 million of its common shares pursuant to the Sale Agreement under the January 2020 Registration Statement. The August 2020 Prospectus Supplement was fully utilized during 2020. The January 2020 Registration Statement expired in January 2023.
 On August 28, 2020, the Company filed a shelf registration statement on Form S-3 with the SEC (File No. 333-248467) and accompanying base prospectus, which was declared effective by the SEC on October 22, 2020 (the October 2020 Registration Statement), for the offer and sale of up to $200.0 million of the Company's securities. On March 4, 2021, the Company filed a prospectus supplement with the SEC (the March 2021 Prospectus Supplement) for an offering of up to an additional $75.0 million of its common shares pursuant to the Sale Agreement under the October 2020 Registration Statement. The March 2021 Prospectus Supplement was fully utilized during 2021. On October 8, 2021, the Company filed a prospectus supplement with the SEC (the October 2021 Prospectus Supplement) for an offering of up to an additional $75.0 million of its common shares pursuant to the Sale Agreement under the October 2020 Registration Statement. The October 2020 Registration Statement expired in October 2023 with $29.3 million that was not utilized under the October 2021 Prospectus Supplement.
 On November 4, 2021, the Company filed a shelf registration statement on Form S-3 with the SEC (File No. 333-260782) and accompanying base prospectus, which was declared effective by the SEC on November 18, 2021 (the November 2021 Registration Statement), for the offer and sale of up to $250.0 million of the Company's securities.
 On March 3, 2022, the Company filed a prospectus supplement with the SEC (the March 2022 Prospectus Supplement) for an offering of up to an additional $100.0 million of its common shares pursuant to the Sale Agreement under: (i) the January 2020 Registration Statement; (ii) the October 2020 Registration Statement; and (iii) the November 2021 Registration Statement, of which only the November 2021 Registration Statement remains active. During the three months ended September 30, 2024, the Company did not issue any common shares pursuant to the Sale Agreement. During the nine months ended September 30, 2024, the Company issued 16,499,999 common shares pursuant to the Sale Agreement, resulting in net proceeds of approximately $44.1 million. During the three and nine months ended September 30, 2023, the Company issued 633,922 and 9,848,090 common shares pursuant to the Sale Agreement, respectively, resulting in net proceeds of $1.4 million and $26.0 million, respectively.
 As of September 30, 2024, there was approximately $25.4 million of common shares remaining available in aggregate under the March 2022 Prospectus Supplement, pursuant to the November 2021 Registration Statement.</div><div style="text-align:justify">
</div><div style="text-align:justify">Stock-based compensation</div><div style="text-align:justify">
</div><div style="text-align:justify">The table below summarizes information about the Company's stock-based compensation for the three and nine months ended September 30, 2024 and 2023 and the expense recognized in the condensed consolidated statements of operations: </div><div style="margin-top:5pt;text-align:center"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:96.052%"><tr><td style="width:1.0%"></td><td style="width:44.409%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.989%"></td><td style="width:0.1%"></td><td style="width:0.561%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.989%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.408%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.989%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.561%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.994%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Three Months Ended September 30,</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30,</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="21" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands, except share and per share data)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Stock options</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:bottom">Options granted during period</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">784,240 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">4,163,000 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">5,082,640 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:bottom">Weighted average exercise price</td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom"><span

style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">— </td><td style="background-color:#ccceff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ccceff;padding:0 1pt"></td><td style="background-color:#ccceff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ccceff;padding:2px 0;text-align:right;vertical-align:bottom">2.25 </td><td style="background-color:#ccceff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ccceff;padding:0 1pt"></td><td style="background-color:#ccceff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ccceff;padding:2px 0;text-align:right;vertical-align:bottom">2.49 </td><td style="background-color:#ccceff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ccceff;padding:0 1pt"></td><td style="background-color:#ccceff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ccceff;padding:2px 0;text-align:right;vertical-align:bottom">2.78 </td><td style="background-color:#ccceff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Restricted stock units (RSUs)</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ccceff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:bottom">Restricted stock units granted during period</td><td colspan="2" style="background-color:#ccceff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ccceff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ccceff;padding:0 1pt"></td><td colspan="2" style="background-color:#ccceff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ccceff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ccceff;padding:0 1pt"></td><td colspan="2" style="background-color:#ccceff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,316,200 </td><td style="background-color:#ccceff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="2" style="background-color:#ccceff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,344,550 </td><td style="background-color:#ccceff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:bottom">Grant date fair value</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">2.40 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="padding:0 1pt"></td><td style="padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="padding:2px 0;text-align:right;vertical-align:bottom">2.90 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ccceff;padding:2px 1pt;text-align:left;vertical-align:bottom">Stock compensation expense</td><td colspan="3" style="background-color:#ccceff;padding:0 1pt"></td><td colspan="3" style="background-color:#ccceff;padding:0 1pt"></td><td colspan="3" style="background-color:#ccceff;padding:0 1pt"></td><td colspan="3" style="background-color:#ccceff;padding:0 1pt"></td><td colspan="3" style="background-color:#ccceff;padding:0 1pt"></td><td colspan="3" style="background-color:#ccceff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:bottom">Research and development</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">847 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">1,002 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">3,007 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="padding:0 1pt"></td><td style="padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="padding:2px 0;text-align:right;vertical-align:bottom">2,854 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ccceff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:bottom">General and administrative</td><td colspan="2" style="background-color:#ccceff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,313 </td><td style="background-color:#ccceff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ccceff;padding:0 1pt"></td><td colspan="2" style="background-color:#ccceff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,481 </td><td style="background-color:#ccceff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ccceff;padding:0 1pt"></td><td colspan="2" style="background-color:#ccceff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">4,347 </td><td style="background-color:#ccceff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ccceff;padding:0 1pt"></td><td colspan="2" style="background-color:#ccceff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">4,724 </td><td style="background-color:#ccceff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13.75pt;text-align:left;vertical-align:bottom">Total stock compensation expense</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">2,160 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">2,483 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">7,354 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="padding:0 1pt"></td><td style="border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">7,578 </td><td style="border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table>
1164000150000000500000007500000020000000075000000.075000000293000002500000001000000001649999944100000633922984809014000002600000.025400000
style="text-align:justify">The table below summarizes information about the Company's stock-based compensation for the three and nine months ended September 30, 2024 and 2023 and the expense recognized in the condensed consolidated statements of operations: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:96.052%"><tr><td style="width:1.0%"></td><td style="width:44.409%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.989%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:0.1%"></td><td style="width:0.561%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.989%"></td><td style="width:0.1%"></td><td style="width:0.408%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.989%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.561%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:11.994%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Three Months Ended September 30,</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30,</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom"><span

style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:8pt;font-weight:700;line-height:100%">2024</td><td colspan="3" style="border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="21" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">(in thousands, except share and per share data)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Stock options</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:bottom">Options granted during period</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">784,240 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">4,163,000 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">5,082,640 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:bottom">Weighted average exercise price</td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">2.25 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">2.49 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">2.78 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Restricted stock units (RSUs)</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:bottom">Restricted stock units granted during period</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,316,200 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,344,550 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:bottom">Grant date fair value</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2.40 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="padding:0 1pt"></td><td style="padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="padding:2px 0;text-align:right;vertical-align:bottom">2.90 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Stock compensation expense</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:bottom">Research and development</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">847 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">1,002 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">3,007 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="padding:0 1pt"></td><td style="padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="padding:2px 0;text-align:right;vertical-align:bottom">2,854 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:bottom">General and administrative</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,313 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,481 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">4,347 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">4,724 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13.75pt;text-align:left;vertical-align:bottom">Total stock compensation expense</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">2,160 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">2,483 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-top:1pt solid

#000;padding:2px 0;text-align:right;vertical-align:bottom">7,354 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="padding:0 1pt"></td><td style="border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">7,578 </td><td style="border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table>

*** 078424041630005082640022.252.492.78001316200134455022.402.90847000102002000300700285400013130001481000434700047240002160000248300073540007578067***

*** On July 29, 2024, the Company's Board of Directors approved a plan, effective August 1, 2024, to streamline the organization to focus its efforts on advancing the clinical development of imdusiran and AB-101, and therefore ceased all discovery efforts and terminated its IM-PROVE III clinical trial. In taking these steps to streamline the organization, the Company implemented a 40% reduction in its workforce, primarily affecting the discovery and general and administrative functions. As a result, the Company incurred a one-time restructuring charge in the third quarter of 2024 of $3.6 million, which includes approximately $2.9 million of cash severance and continued benefits paid, a non-cash impairment charge for laboratory equipment of $0.2 million and $0.5 million of cash payments to vendors for close-out activities in connection with the cessation of discovery efforts and the discontinuation of the IM-PROVE III clinical trial.
 As of September 30, 2024, there were $0.6 million of accrued restructuring costs for contract close-out activities and severance payments included in accounts payable and accrued liabilities.***

*** 0.40360000029000002000005000060000falsefalsefalseOn September 18, 2024, the Irrevocable Deed of Trust of Michael J. Sofia dated July 6, 2020 (the Trust), adopted a a "Rule 10b5-1 trading arrangement," as defined in Item 408 of Regulation S-K, to satisfy the affirmative defense of Rule 10b5-1(c) of the Exchange Act. Michael J. Sofia is our Chief Scientific Officer. This plan provides for the sale of an aggregate of up to 96,456 shares of our common stock, held by the Trust, this plan will expire on July 15, 2025, or earlier upon the completed sale of the maximum number of common shares subject to the plan, subject to early termination for certain specified events set forth in the plan. September 18, 2024Michael J. Sofiatrue96456April 15, 2025 '""***

XDS7V! H'/MFDH@OQ !W[@L2GN__O)FL9B][W:EI_E()YFER*@U#%UINR*-0*J[R*5FK6BM MO3-N=8\EN!)U4!0=,GV-"M:0=?AF5[QHDLJ C(T5E3I$;66D6LD*O IU8)^% MS/3:5%I6)(6EQN&@"!J9>RH4FU, D9+/:+Q;ZU+!BV5KDR#;RZ"B^E(#:!+G MTGFR\@Z.4J5X'5;2.5L.1/?D[^??@89=YLHWH6\/8.%(H^%*2-&X5?=\;FBE MY)AHV[O)J/QLA;9K9U@VM TS-O"VGPTHE;N[][IPMI5&P48A=3E&"2];^50B MM'Z)V(! 4:]4CS54<,9R1?#C(#1*ZB64Z+INK8*6T(!;*CQRBSDP?_T^4*;, MQ7QE[+6-RML$=.>6@AD N?%:1;2@Q 77VI)=EZ8M%3.9OGX^7]L1'N/L$KSU M>+=W=G[P>O%V?YPLQ0(8:^CZ\N#3'#HJ7>CH_)BP:SZ;3^AJ$*Q$(#C(N8%@ MUPH4L:ME:P;"$DJ/@*$UO(N^BV"E^I_7^P1L*IO+%0<06]R M.Y[0%TMGR"M#AWFE4^=:'_NZEB.WXP3?FE2&;1^_V+_GN@@U**Y-RSAD8:1U MG7N.6'F%Y501=P+H@L[MQU*-JM(#O4MA]J%=8>BB5]M.]+SD _^.%%XC^>A& MHABC:M*G6((7_3H7!@-F99,ZB,>TU :'"4P.NFE-3B2$X0,WG9*^8$D0=@,6'^1@.T)>,* M9R6Z%J*U]*X>XL[NQ$K[DA*G^HJ:CQ<-!ZV#? ?)61X+**4#L"F=:8-B5R?Q M=&(FQF*>0'W%)F.:4% M3\]^IZXMD/I!8:!@QF?0D#MB=^)DUYUJNG5S1L16Z?^!P+7'QGR)'E:'OR#. M\LW[87O^_^(/X7&9""#\$J*SR>M7(_+Y/X'\$%V3[N&8XW"K3S]1=%"+>0/> M+QTFG>Z!#QC^F#G]#U!+ P04 " !0@&99]#G3M0T- \)0 & 'AL M+W=O3R=/3E;;NZ.H5?_>^N7KEVUA99]XW*K2KE6ZV-Z;RF]='9T?YBP]VL8ST MQ>G5JUHOS*V)'^OW#?XZ[:24=F5E:^/)F20J4P128+&?VOSQE05*B(9OR>91YU*VCC\G*7_Q+[#EYD. MYHVO?K-E7+X^NCQ2I9GKMHH?_:8?)OGS \DK?!7X7[61M>?3(U6T(?I5V@P+ M5M;)__I+BL-@P^7DP(9IVC!ENT416_E61WWUJO$;U=!J2*,/["KOAG'645)N M8X.G%OOBU:U=.#NWA781$2I\ZZ)U"U7[RA;6A%>G$4IHZ6F1!-Z(P.D!@<_5 MS)[%95 _NM*4N_M/85QGX31;>#-]4."MJ3E M]9>=-9>/"3]K^3GFP2J&QUL4'ZNV!D7M12/* &%=86M*\./"\"]I3R_-T#G_,K=.0H2L5(-B@N&-02[TV:F:,(Y6U;K#..K:M M*:'H"+B4GUT+/B6]@6U,,XTNJJVM,[4]&3H3&\IVA:D1=/8U7[MY)GHPLYJ M.U*E5\Y';"JJMC0*2E1I0U'YT"(B:$2_MY9L),G:N1;B]@D>IY@,5(6E;ZL2 MKBIJG^0D@O.I==*?V,NX-.J-7]7:;;__[G)Z]NPE+.QC^I5(DB^P'59"3F.B M9R-)YM;H1AFJ2/76%&8U,XTZ/^.:.L^NLD7[#+@6+S^8VC=1P53JA^IL:8=Y1>:-&!ZZ_(1&W:>@ M,46E0^ J(VN"\C4?M@Q2/V^I:P+M%-'9$UWHOY M:*]8:,2P8D&8ZDTR+ND"OJ*)/^]05.BS5'&._U_&G M()(_5;5LL=\/;&\+)> ^;(5T6A;IN&:M[IB/IDK/W-?D(E-82<0XO<65=R;M=L M31RHS$KF+8!!5?%MZ)\#NA@8)#'H%?[Y2O?65/H>ZDH3BL;.^J).?<%+(3VZ MI23W4FH?5>\C9;Y03R9C>C-FQ/\0A=*(A)!H&;386&$!P68Z>?D!XN#<<$HW MWN%SD?HJKSM[J:X18.[L1;)MIBL:%U*#F.8NZ$(RWT\84UF0*')WK'X!Y457 M#PH006^F/._YRA*.JZ*M.9 $MJ@>3"ABD?C9XU0+9 C%L.!$_'%7 E(A#$ M-B*DCB;,6+VU54N;W'U=I<=BPEIIYW-\.V_\BE3:8M_J;Z[;8&FZD@@#=44D MPZ7="J8BY09PV'5FDX<8,&A/2O(&=3"FH?#H$A\=E X3SB['ST!UJXK@ 7,&@$T[/QI+/UL'6/T/PG.B0:XP>S-JXU M(@IGQ&K/?.YS% JT VHQ@=MA+EXA39%)C&P'=`R[6*I"HKPK2>D%@-6/M21S M\'5NT/VZE=YFAK33-Y"[$K6'.E%KM%"/J=M0\;#D4[A.O!GRPVB 0*KNBH8P ML0]$G;"PS?NPIW-2AFY 3R)K\$<) RI?DTV=Y#$H)#6?L&ORSJ2D:N^I)0Q> MV%EER'H,&D/MWGEW FJ /J;I25LC U!2ZVV21H_(>,KG5VT:$78 5J(I681X MX[>ZBM8(C;P_60_E:4Y\9-!D"P2-V5+?3F\)HKHI Z26'4=13ZYOWQRK7T%S M"G4YN1SA::<#?E\W:*B+I(76TJ+C$<@5NNK,@[J"N4<>08U)9VWY"D1<*Y&3 MT=,+$N[-E0&: Z0CSL,!U]CP.2=W0Q9+D\E@U4.3]ODL1NXF&-2M\:@O[A\QA" M6B(N/YT\'>U6U1ODE8Z$09CY&SZ+FR9YC_7PGI(<\"U&70V<[J W%W3"_59X MR\+[4O5X5T_LV!#CY!;%2R13QV.5U.1ZHDC(M-PF0'J$ZH_$C%>TB?9WI>V1 M&POL02SB2];1=^C;W<3M!@C-RKD,+I39RE(NR- PL)1W%UT0)-X:I&%M3M!T M:_0L>/H"#ATK6Y*.^9;X!2$3GPZ A:%EZV-BZ!X8/[H,Z)'JR8X/H'8/OXYXEP* M="A$I@[(H_X2\"G,+3&0=ZX3'&C[G::YA*25YR^1>NX1^Z7"!^1MC5CRH2>' M6$)^+Y'@9QJX.&RA6>NJ9;K#;3L'&0;2L9 (A44X$Z.=@#1TE"@_)P1PS+(9 M*&;@SIDY=G:S[VXA&,N;R0+J[AL.9?0+D>/Z(2O!MPX!217/8$A-BF.03KYA[YEN!JF=9-J^H20(H1*[EBBG0^[("O8:&(@ M"S ?.@?C ,*.ZATS9WP-Q6"@*PVD,G IQPRH2)Q/D=ISV94L3X*$C)E3L1W&^Y%2+?(7(?:GIH MP"Q)P\.P(*E=WRF5#KN]A['G*X9>:NF-"-\IQQPE!M*^3C^FV3>T,P2/3V@TU\UU*I%/ >KUCJ-22 M$)M/=*1"\&$N:I?,30=CSJ1+.1+0R9E(YD#LVWN)H,\)$=O:Z[/]/2)53V MV;I.#W' :@<.7653-L$TJ]YJON1M4!XXUH81DBO/M39) R_)/U+_F\V BYYJ)MZP[WCN<]B7*\W[J7U*N;OS M_=2\;7C8TPU_&X(4RR\>3CU';S +'@#6R_EI-]?V?[4W<+M_?,=N/QGWKRT_7M#Y+=9$82)?%Z;[<@TOR_R6]]@$9G?OR8"\ZBL M2>RH,1CN'0L4YVFZ8)YEN](K!>I*0YS2.8):P)8*MJ=29(\=%"M3#,&ITA<,7 MIG[_VZ]U\3#%V1?\VH5.T;_J+X0H0>.SBWUH[%<> M0N'S#H56]O([)-H4L6GX*F^6[ZJ021QE>C*OC@,B^;Y_:))E??W8%^ 2?K2 M*Y3N& <8\\4$!9Q)&H%?6-"BM3(RZKX \$BXJ$N7K.G"+1)59]NY>(J."N0S M+YSHZR0G[. +W+]40\^_O8;NJL9 LV9#O0.1R>=@FBJT@)6BZB@(VVIPZZ= MB#'!??J;+.BK,EFI%)[J&;$H./=YVYHKIO3;M[*IY 3ZO5+2JW\+C?;^2.1W\ MH@7<;<&_VZ% [3\PY^7%+]VWWTZ!K^45,OUQ^5_2S;H#8H"HSQ];)^-D/1W*' MG/^(ON;?Q\Q\!%'DCTNC,55H 9[//?A ^H,4=#^8NOH?4$L#!!0 (%" M9EFK\A*AV < %<6 8 >&PO=V]R:W-H965T&ULI5AM M;]LX$OXKA+=8M(#7[TF<- F0IK?8 KM[Q;:[]^%P'VB)MGB51)6DXOI^_3TS MI&39D7UM[XLMB9SAS#,SSXQTNS7VD\N4\N)+DY:A%.2 M(K>V$)ZW-K-V%56R92%BGP\FTPNQX74Y>#^EI^]M_>WIO:Y+M5[*UQ=%-+N MWJC<;.\&TT'SX ^]R3P]&-_?5G*C/BC_9_7>XF[<:DUEH4JG32FL6M\-'J8W M;Q:TGS?\I=76=:X%>;(RYA/=O$OO!A,R2.4J\:1!XN])/:H\)T4PXW/4.6B/ M),'N=:/]9_8=OJRD4X\F_X=.?78W6 Y$JM:RSOT?9ON+BOY9%XK42CI:JN N'>W8P_EM&6<1$5O@J+9M"477XC=3^LR)OY6I2@_EQS"JM6S66/9F=E;A!U6-Q'PH%>/);'%&W[SU=,[Z MYN<\_8L]?:M=DAMRUHE_/JROSQB\: U>G-/^+:$YJZC?S!:Q<=,B4=35++<-0M.),IZ%+A8ZU*6 MB9:YT"50JX.(+%-A?*:LT%X5N/=BW6H?B8\&9>*51?8J@6V=Q2'?-\?5#D<= M;A"95E;)-L)$!!.K6H=ANS!K85;DNESE MJM%#AL.J9SOK\OG>U0X<]+G6?!R?00*%<;Y'\4H%&[>9 O$\29W3ZDC_;D) MMKT$*7X""U?2>IUH(()G6U/G*9OE3?1/0J-SV @\?'\.Y:C*$KYFDW"\ABZ9 T.=J. MNQ$__K" M,^O!+Q0*O"B;@^.)NDSR.J6DT3Z#ZL92=I@4=,)"UA':/8F@-!^0:HN^E^\$ M5TUS-Q+OUJ<$,\E10(2)S:LX375;*A0MET4:$<$^Y&AK@:#(L"@1'9S"25#G M07HD'DJAOLBB8KC807<:<=*S*4-UKFN>9H!^A]PS[MP]]7P&=BH?K8:9F,H MH(D!9Y082BCD=,CTZK7KR CH0G>!PQ4RO9.A[.2)LP%2\)=LZ#I,;B0Y!/1: M=PN:U""K%:+!Y=%61SA<.P"Y*2&4("IT^A&G=OE^)!Z1BIL +^UK4 NP0#/) M2)Z@6IXB*G08>S@DN&Z,3,(^",6R)<";WN%4 JYFQV*&GZ+Z4/^)M'9'9,NK M3 &)=!FCQ!?$QE@C+X;(C,345)ZP1FF.>N=A)7>UR(JU5@Z(N"I5JVD;IFAGK?Z(\!R:>G&/ L \4U]LJSS;#*,LE"+^) ME''IP$(VX/KR=]2-6+[JZ9H2&6963=2V/(O"1THVY^CH1GFN/ZE<9\:DH7_I M'&ED2N7V.5M01=A'8N,"NY0FP@&U+@ZR0C1(B(?MH9P5K"0F:#K1;,W-"C, M7A244!ZS8,#HH:4%"X*.-$B4% MI84U=D8&ZHW5D9R@V<[@U,; MXO1;8[P%"[]8CN84F9Q?6SCS,0QCM%Q!V)N)N T1:!5O8V%P>3$97;62W.+? MHAR"W)3EYLSS*Z7HE2HQ-N4L8>(O*N1!S!3C$4*,$605@J&^8$QP>Y(OC[. MBS185='Z0&&DR:J,7MR>B*C9@&1M)",%$GM*9TJ6L[04Z[T_H!DJ0AMZ+"I7J^5)4L.R_M@YB;S>?;A M<974N[;,=!E>YCF]VLDMHM+M=GU-J1U'(B3IX;C/DR&E5FUY4D;3TA$*KA2X M<6;&C\#O6PZ56*B_$PLWK71/GTQ$>STW[P9R@2W4SA'.=])QP*PHEBTHA? M7PRO%\OCVZ_359KRIV-]L^'UY>+H+L#1\>)Z:;R>$@Z MWWY_\,B6Q=%=@V?KQ71R.9Q,CJ,WP^K5]T7O:G@YF<3?<]$+.YK_'L9I""<4 M?(<2;ML@28PV8:9]?M1^WC]0HZBO?RX MRJK?B6ZZW[?Z:*2#2">KOT)TSJ(7\RG^7TXOEJ_X?GXU%WU?D<:=CWV%LAO^ MI$F(H2N&[W[MT_:KZ4/X6+C?'CZY_B8M\'/HFFN(8G:X& @;/F.&&V\J_G2X M,MZ;@B\S)1$,VH#UM<$0%&_H@/9;\OU_ 5!+ P04 " !0@&99&$9934,& M "!$0 &0 'AL+W=OVE[3; ML$7R>/?=W7='T1<+;1YL#Ñ#88R&5O>SDSI7GO9Y-H2%*Y,M2FXPZ&9 M]6QI@&=^4R%[41B>]0HN5.?JPL]],%<7NG)2*/A@F*V*@IOE#4B)N.ST.ZN) MCV*6.YKH75V4? 9WX.[+#P9'O59+)@IO5FC%#$PO.]?]\YLAR7N!SP(6=N.9 MD2<3K1]H\"Z[[(0$""2DCC1P_)G#+4A)BA#&ET9GIS5)&S>?5]K?>-_1EPFW M<*OE[R)S^65GW&$93'DEW4>]^!4:?T:D+]72^F^VJ&5':#&MK--%LQG'A5#U M+W]LXK"Q81SNV1 U&R*/NS;D4;[FCE]=&+U@AJ11&SUX5_UN!"<4)>7.&5P5 MN,]=O5-SL ZC["P3"C6;!W\(H%92"LCG ![T7-HB>1[::/UIM8:[=&:L/=: MN=RR7U0&V?;^'B)L848KF#?1085W4';9(Q8%$;# _H&K=L#KV_PSVX'[#5, M'.,J8[)J81;LKO6< ;G]<0Z@]3Y:U<0:AO#W3:HG,YMR5.X[&"]6#!SZ%R] M?-$ "U\=\>C \I/\'$?S6MFSA%*-A6L=9$Q/FC_J0-3;$;L @Z#9DIMN ,VT8B9#0?!,(Y9-&#'R8D? M)7V2#S"ASC"+]+EYPZCE%K- MG@,R"I)!Q/"$,HX39\-UJ/SR$?-?&'T\0NLD5^LDSWSZ),&$9%L^IXX^^ M0G%H *T3KP3U]+0J*LD]S9!D!L$5*)_3J3$G%ZSM_B=T>PUIP[:^9]O@^]@V MK="9(]8?!V&4[*%1L[B*XW-D?X!R,ST'HV@+PT-8I/A\.3 M>F4<#W=Q(>X'X7"$)8A1&R/-XA")=\;^X.H!UGP)P[!5>MR/3U@_2,:#)VA6 M,!(4[V^CB,X(3A(XM&:XHDGU!9I'8R^!LW/\W2'X61/$ P\R.$2X.QFN" MUTN4 S(P2T%.7<]2N@"V!F^[>WAQL:?66C@;= M3 MI!M_7RAY=@#JMX$+V"(7$G9;/^L.OB=.9/NG0N-VY9OX>CA-\@&4[O&%RE]+J!]6(@$\Y+ WIROZV @J%VAEALMXNG<'*.T5$:6Q0 W4Q2 M/5->JU!8>$)AF0)5"JD6UE9@;*.Z:289W7L$!9@^!VC?M:T MC%62,HTRY L)D6V-GDI9]R-'!CU;I'@@HYX<)(T/;BO9"R1D$Q.,"!Y[Z%:K MC 0WXE<:@0!QD>:Y]R%$KL_ZN>A6[S]NA.Z>C&^Y=H'&@"Z\M*]%4P M'O 7[XP(M76ZY,LZDTVR?0IJ'=N1A4:;$&--X)%/-:C54R+M+E!T]BCU4\PD"7+L:!*0-ID/HYUK]GL*-U=-ZK>QK6X "P;NOP38RKE MZAMR.]O^OW!=7ZO7XO6?$^^QZ@B-A"EN#;OQJ,-,?>&O!TZ7_I*-F<,KNW_ M@6=@2 #7IUJ[U8 ,M/^Z7/T-4$L#!!0 (%" 9ED7"67&PO=V]R:W-H965TITZ?R74!%%<5L;&\X&58S-R_$X](IJ&4.N(8M?9L[7,N+5S\>A\23+9%2; M\70R.1[74MO!^4R+0+GIZZ-1ENZ\B*T=2W]ZI*,6YX-#@;KA6L]KR(OC,]/ M&SFG&XJ?FBN/MW&/4NJ:,-#.."D^SL\'%P+?@EZ3,0R$,+YVF(/>)1MN/Z_1?TIOVK8Q?-W=D$A M0N4HM!6_D*6%M/%T'(-.\:JP[G,.--[<'X4'YR-51!O;$GEKOT8,?6!3=>! M74X?!+RA9B0.)T,QG4R/L [[(D>)KS#>_#>?&UU7(D/%"M7B@WM(*0MQ:]. M0X'/>&\]!?'"11&B1\7\N4^)[.AHOR/NHI>AD8K.!FB30'Y!@ _/'CPZ.)Z\> MH''4TSAZ"/U?Y.N_X$ 7<=%X;:#ZP-(M/QT*#:F-]'.X%:&2GBIG2O)PXK#>6E7U M80R%%*IS.W/H KCE#A:%=[(47MHY"3<3UQ\OGG%+EARHEPVU4:N 2&5AL%BL MM@D\?G0R/TCQ"H%]O$HY-WK. Y2S?[5S&0G:,# A/*Q(5=89-]<41N*W+1&, M5AA(P/;<[8%C9U[?AVR,C#Q"DTDO-U:V2,BF ;[D:14$!FC09:+Y]O+S4-"M MHB:R-7.BV\C**_(1@W<=305QI.'9O!(%D=V"S'/$L%8^U(TTD=P$T\8]X_F M?=[]=)>R)W;!X1ES#^T'^3)',!B)3Y@,7NSSB'RC#5%+&!THE!DRO8ESA0.C MZ(@D.5" &.*8ZJTTHO$XGWA33Q59W^CK7;U3Q*BJFKS2TNAOX"^WL$O&*EL5 M=\N^(-@0%U74T601/2D"339O2.F99F/ 8H_,E=DGAA9D6P*BC!C;#+>VOA.I MXY,2/;)"I89=I2V[GP;B4-IVRX10'G@4$W.4MYB.4,!XG%9YZ0 *[3',!0 M.)^4Q6_ 1*W,DYD$!OZ%FIYSINW'"[65P)$A@38DGV:)5+9:*.F"(_,#3 MA6T5*IQQI$#PVU#BB1[1:"BL _+[S?K3'7EXQ* CA"Q+S?T!\BBZZ'71YL,= M] ^.]G@KL%?)N)%P4AI9.]Z*\^L-?Q(7/2X9I5TZCUWV0K,6!&5(1>5S!<* M(''FM)UYZ)C'(>+FPMGMM$["N[/H.[6\-2MVJW+I6E-R,>TI2W33#*,:O<@9 MXA#AW(#>/%-7+L0P3,GIHNJI[2W- Z%R.GVXDKO"0=JYN .WT=THDL!; 7-K M4 1+EGIO- M? 3]MW*!9\AG@<@$[#%]=JQQ1LO20AQ;:M<'P2%9N;C'!RG7$=;[6<]*SXAD MH$%>^W3'&6(>MX&%1.AX4!4?HVSHIO&-LKIR5I[@J^KB1JN 0HZO=I3@*F-WSC M6F1#+OU.SY)K4"%6O&B:DPEZ3>R;EA"HU01N-I%]@N4Z/I^-^RZUOL5![.C MTC];9N -98GT?2/OTBC8;A6WM/EL]>XV)00D#H[[VN=Q"M$['=VF\T?[;FOC MK9LV!MD\?4] 3RZO?.GN5_M/EHM\4]]LS)\['W 7TM#0T RFD]&+YX-\O*Y? MHFO2O;UP$5\!Z;%"%9+G#?A]YEQ&ULI57+;MLP M$/R5A1H$+6!$3S_BV ;LI$5["& D:7LH>]"EE46$$E62BI._[Y*R%0>UC0"] MB%QR9W:6E$:3C52/ND T%\R*2D^]PIAZ/LZ+;!D^D+6%.+E7)#(5][>M: M(EF@D)NI%W]A3N^+HQ= M\&>3FJWQ'LWW>]DH\CN6C)=8:2XK4)A/O7DX7B0VWR7\X+C1>W.PD:RD?+3! MMVSJ!580"DR-96 T/.$U"F&)2,.:?+:?7E;3 _?F._8OKG7I9,8W74OSDF2FF WWLB##'/6"',G-U]QVT_?\J52:/>$39N;4,6TT4:66S#%): _:D3UOSV$/, J. M *(M('*ZVT).Y0TS;#91<@/*9A.;G;A6'9K$*RKU1M,L)9V;S-)5-9334 M[(6M! *K,C]J5#68@>!LQ04W'/7$-U3-8OQTR{QHF:,CS)=P*RM3:/A<99B] MQ?NDLI,:[:0NHI.$]UA?0!ST(JBY 1?W+4>.[[X"-^R[5B[EN>V928T_)JO MM%'TLOP^U'++F!QFM!_06-[/Q#.BN3NA-.KW)*?;.NJJ3 MS(=UO[<@QTP0;+%:KNEN$&T^U*Z%9B M^,@KPLE&4Q7]"1X4R]!6>ROA#*>)/9IC'L1H>ZH*Z;2PFG+\(G,J"9K,:U. M>^]A+QX,"34:);!4,D=M?8<)R!%?LX;!)8R(E]X=1<)?-Z)>?S2B8G%R:8L9 MU:2F4=36FQ/H#_IP_F$4A=$5/$C#Q+_*CQW>&0Q[_22A,0QZT3"$0V^4OV<$ M):JULSL-KD3K"=UJYZCSUDA>TUL[OF5JS2L- G."!A?#O@>JM;@V,+)VMK*2 MADS*30OZ*Z"R";2?2VEV@2W0_6=F?P%02P,$% @ 4(!F68;)OUGG!P MHQ0 !D !X;"JW;W)K4ULG5AK<]NV$OTK&-7I MV#,*)4KR(XGM&>?1:3N)[;'3]L.=^P$D(1$-"#:$7WU]^S $E1?B2M/]CB M8W=Q=O?L8L'3M;%?7"F$9]\JI=W9J/2^?CV9N+P4%7>)J87&FZ6Q%?>XM:N) MJZW@15"JU&0VG1Y-*B[UZ/PT/+NVYZ>F\4IJ<6Y:ZJ*V\U;HC Y/ZWY2MP* T=];7$WZ:T4LA+;2:.9%": MD2>9,5_HYK?B;#0E0$*)W),%CI\[\4XH188 XVMK<]0O28K#Z\[Z+|%W^))Q M)]X9J9#-L!)34FY]19O M)?3|^2U7@IDE6S:`L8)9L^'#2^%,)Q[626:2MY;>1DNS)RRJ8I^,]J5C'W0A MBEW]"5#UT&8=M+>S[Q]%77"YM,QFTUGB^.8F_>NSH.]^1/VKGPI+/L]H>2:5 M)! _9> ^ER91PY_I^+S'D+COSW, <^CX<7CAJEN7KN:Y^)LA,)PPMZ)T?G//Z5' MTS??@;WH82^^9_U?9>AYEMB59K\W:L-F%.OTU9@A4NR=J6]N-TQH+ZPHF-3> M,,ZN&YN7* /&=<&"Q8N5%0)UZMD^Z? 6W!Z"R+X.M*^VYE89]:K3,95W*O-P!YHPJZ$V09C6W MGIR3WK6>;0@RH#L\UYW3*V4R+*_1[AS .U*YNKR^^/SYYHHA9\>+-VS_FGOI MI.7Z %C:EX##-;NYO(A6ES"LJ-X MQ:Y+CCZ2!V&NW)CJIO.$[;>O#Y(M$$@H^3^@&_C[\1\GL_3XC6,?+Z^9%WFI MC3*KS;B-S)H[IF2.=BE"5+I%AS$,UQQD[N7'*+E-UI@5W$/STMR)*D..=1@$, M^ \/*->9\&LA}$X*Z'FW4$@^87M@&Y[]@9Y@@RIB5X6H/RF^2S_IB('2]^@6 M^$ID[#)<\PVI.,KP=U.+9*XH)TMK*I8FT^D+LC9+YO,7C"\|"M)+)SRRTK.V M1$(7!L[W Z19=6"AM.PCZ7\A$N4])VJ#MF M8KD487=B/*#^G<.ZW;"TJT=LOFQOUIN&,;:B/++:FER(PB$[D(%^<2>=@>H2 MI96TI;&&%C90CRT:?FT#&FJNP;5"U3 4-81R 1@%VYOO+-:W"A2!,PE7&[C$ M4HHD(+L&CYY;=RW .V&W-(IV[UP@<-QA**Y0!^$S)52@*V+5"5AE*2;2 9" PXLP1;QO@;#0F"@6 M]YLLT4$\5ZSI_W(.@4V1WH6@7=W8WJYQA!%OWMI?VFXQ<*?OQE 66O*/QX(3KP4 MV&F*A%T$&0P1/C:T;I*XM[LY+ZN09'3W01W&^NZ!6HB0.70!:[X%#=HOD^D+ M,/2N;6T($!&D17:OGR$L#RWVT0D+B[!;!.&*8AVS)JO6NX[$5"BZ$90\L](Q MIA#$KJQ7@H(;^VRO1XTAY\X/VF9K(J&=G[.O:#9 1?L6=]+M!JBM312?<'$_ MHJ0%L-LE0DGNVAX3/J[R1I&CK5-$ 1ZG<2#>AGLW*O2.%W\WU'I#Y +S:"D$ MW]511P46:-!8%)&B'>(^+E3<^B5<+Q^)G>HJFY9XV)**QM*'W8[U(*F!7]OR MY53JHI*^-1H+>-AE8E3O,7J0PBVYJ4%WD5$$.70%T[%,R>5#CB7L%UJ+GDG8 MKWU7D8/$D)-X8$VS*G]8%^UN8&P12X.OL-2JK8*JV2)9# O_R3A3-]E&27"K M(\E#?$+::-.B/Z:; (<(BUHQELB&S0:YQUY)!6[^E YJ-8%4\Z@@ZZOPPEH,L/QDHBFJ':/=! M)9\ZDO9*#_HFM%0L2Z1H;YJDV^'CWR&>/P_Q[#F(@7,Q')) RC!69?2%@+G2 MK%W7,>6=#"ON%"O-$-MJ(8;]T[0$C.3M:W9)XL,#ZV/B),KV S=,XZ#L#MCE MSNH#:.ZIT]7+P2;5U?|>.Q]_.ISC-YV.YT>'F+N?"/-^.CZ>'^$@,AL?'1T? M; 4?A/;5"5NDLV#4=2BN7T3*L&TD@!' MW:0MFL'$/F;&2JS*?;\R ?3=J,S[@R[QR#69$U\;NFW/70.! . B;Z1'' V\ M/2-N#WWQW4$L@)UH=FK4@C,:Y>+HOTI^AD_FG_!>XB?GC:BL?/=Y^X1>AP!A5+]%+L1YC2PR>Q M>.--'3Y#9<9[4X7+4G <"TD [Y?&^.Z&%NB_2Y[_'U!+ P04 " !0@&99 M@(N^!HP$ D"@ &0 'AL+W=O.+7E=1-D;+>:/6?,OQC^;&8S7J40I=LPW:6?)<+K++R<753.23P%?-VW#T M31+)RKD[67PJ%ME8'&+#>10$A;|-7[,Q @0WONTQL]ZD*!Y_']!_2;$CEI4* M?.W,G[J(U2([SZC@4K4F?G';C[R/YTSPU-IV M_ ^K[GH7U\Y&;==L<\V!E"TH=W6M(WB/83Z*,"&"HWP/=]7!39^ ^XD^ [*]+,M

MN'BH/X)KO7_3@W]7TV-2"-=A$;EO,C0*8']AK/ERQ>3M^/WSX0P MZT.8/8?^WU/V/^#H-KK\CFY:GU>H?;I<>V8Y09G&"EE64(8N?;+T6Q[=BCTR M-9D-Z-*OVM@&'.3#
<6*077=*+M[^>)\.GGW/M"V*0@JJ.02E#D$-!894[5I(-DH7(MZC](YCIIC>#P11L \@K34%K9C: M)AG!P"D*+9-'&3J9C*?#,_0O%#&*M*6@#$)HV*>Y:G.60X9C%MLXSYVU^\&5
MF!8.1.? 1ZE]B"E3['.MC/X!OAKOBC:/M-H=$TXPD=814SNE54 ^7GT=8*JN ME2]@-[&YK1AB,K'SJL?2(4V] G')$ V!I7,.&6K1Y@(.J9[%02HB19CW%,"3
MX3>%7NM(WNV4B3L"CL5UTU$ N\G>HP'!R8,C@P.Q,OUTW=8]7*-VAZ!.)L-Q MSW*L%+1TF3(YP.VP3Y K2P0!?W%EP>1CI=GGXAY\9?1:23["D*[91RB32W05 MO,'=UB2QHR1Z-
BIR*B$QD2@+NLLH8\!$W1TBOK57M?2#!@\H*;(.Y*$E_9[? M8PL/<]MQ+6XPLLSI*.\;>O?0"8=:?\)9Y.\'>]#]TKG?#S<@ M5?*LV#!H1NF_"LSTJXM,IZ\
[!H[L[_OM24ZV*M#)^?"T+SN5K.+>@@\R#@^7 MU_"QT3\ZNKE1^.OT/DG#Q,;N$N]W^R?097?SWXMW[Z?/RJ]1T&2XA.IX^.XL M(]^]2;I%=$UZ!ZQ&UL
MK5MI<]PV$OTK*$5)2574: Z=CNTJR9V;PZFAV%!Q_T.JWIP?GKEZ5=T$[61KSB7Z\35X=38DAE:FXIA4D/I[4&Y5E MM!#8^,VO>=22I(G][V'UO_'>L9>EM.J-R?
ZEDSI]=71S)!*UDDU6?S";'Y3? MSR6M%YO,\E^Q<6,O03%N;&UR/QF_>QIW'O:,SWT+@5[[!J:L7W1:*2X?QS M\-LR/0],W\|/+OBHRHE83",QG\XO#JRW:(6PX/46>];
[H)Y4T2BQJDPNWG@) M0!%U*MZP"E0E_GVWM/S\/[L$X-:_V+T^.=8+6\I8O3J"YUA5/:FCU]]\-;N: M?GN ^XN6^XM#J_]%*CQ(8_<._CQA,9PB_JFS1CRD$NX5JZ;6L8 MM(<-
<4+K_,@OE+@+CT^=Q@_S=$*O3R-1-I5M)-8"\4VJXW3 VQH U[^#H4@(HI+1K1YQ#MB:!^\:V@=B$,/V5R;.C50[[/PC'NI?//5S7QV_:T52Y7*;$5\@2LG0!JV M2T]L'C))=,U2U]6(--
QA\:A_Q&U!NR7CR%L\8D2LH8 M$B=E613DR:0+*R&2@2>1?0]L=R(^DG6V9&3%ZB8$H9W+X&!GR^H-0),/ MFB4M1JKI6T()GIZP6RP1;=D%#>YV_N>!8"2HCO7?
&ETY#AM83$\9+:4W! MXE,KD*S[T CQ*/7ICV\ [E*+#"O6! 2]O01-Q)BA$XAK![MWXE<#HQG ,BVN MZUHID4HR854(^ RXU4CM@$H*AJ6*(085/KXP2IL*GD/TG
T\43Y,HP>NN@W\ MV]Y:9I+,X=[4J4-.LKW,&C"&\# *NK8I2\BVBZR.NK.3WV#MY*?=V\-! GL.6H#):H)?B+@),Q_,K6?$Q*UF7]"PU419 MO2Y8KB'-
&A%&82:+H$50[$OR$,P@WXV;JB+]L"SIM?JLXB8XW\YDZ6 N]I@2 M6CTT58R-]B:Y\+SOK<^_[HH8 ^**R(+KU)')#ES:1Z;M&W)XYA, LD'^3C MF=S8@(?DTYQN8C-M\N!B+
(!TM=*9)L_!6U8.,_FV>**@5>U-]<(>LT;2<0B MNKR^C6XOYT%JX]!$A@:96A*)0B1[6P@!T1,$W]^_(Z"X^R68H@;&_*[# P%:II$6>&L]YV71HW8L"VSS'8#:HD1V#3
M2[UGKM":];7WD4Q;*_93H MRJ5$CL:0?8ML(6B^U8:W[^TU*\6%"R=Y[&V?-6IZ!1B93R#0G0(R30UK*Q(7 MKW*5:#<#,C55(+WE*_OLV^UARY/$"@!@?>Y/\VV,5)\6NWM\(VZF-
Z2GY0". M*^6[&>Y1K"'YVH:]RPK;7G=X3,/5Y])8%QD)1_0*;H+7E;:?@IML9)4 ^/^5 M(ETC@[*#A72[_)B]:!25)+ /.,KAE89<3:\8RRS*:&R%"@MO=T,2_5HBI 2) MRK!+F
'&2[$V)B$\I/*3C/I$3]2$L*$I-">M,HX-T-JE_?2C2F01JP[7UHWF M)T.>410 XE=:N21_A1K5;(@-%Y5=AMWII\?S"_!P&DJ(?CK14#EG4;Y%+H21 MK2)56E$T8&$@ 62YZ[Q$+B*
(C39W %M0#+C!EKRY).+!OSV1% Q6NF"XW0W. MI\Y5&#8>^[149@D"! 5CGS MRF4@YE(FOS$#T9*!%@8)D;8U;* FX.-V(^FNS^'*P2V9,IL0L,; F']WR:?K MX5#)FZK11AAT
#ZPN!3*PL;)#EW 3[JPO#$-((5866(A"B/0Z5(5$'?=X55? MK&Q:@(F=<*^+)Y/YDLJK:I2!D1.[E*5+,EI)>S@93OE4F,U9BDI#=RD(4DJ@ M81.G0[/F? ICEI"_EWQ?
ZARKN8C<*>UAM*M[2.HB"J].8H*SQ*$N($GRBZ 9 MCR3;TZ6U)M8\K_7.)7PLH["^FR'S1 [(-;?KYU V4P*B1:Z@A,376AC)+28! MO526D$]1VW%4V=,PRJOV6O(!0Z8<47-+87M?
71Q9\NC]PH7LCB^G71'<-G%< MJ\29\:"+T-:P*P5T^7(!S77VTN?)5 ER93Q*3IS-A'R"IP3TW1&85YR:!+(' M9;2S2T&[?I*59N<:-F3Z!2I>0+14)+G>D2IK)G?G' T*)5:4A+@PS2)E)A]#
MB >6LK\K1.ADASL ()%E-Y3NN6V;I5QJ+E,X?@QZ(!P,&DZ@]W0\7&7HJOFN MS;%O*P4XTJNN((D<3S+YM4$A2=:(!3@K"=3)Y*D\V+(SB);(I_WTYV @U.2 M^U6)"95FU
M9)T5=%&S=CT*=P!D]\ '+#PX+;O^F&9OQ0 1>*3 *XOX#A,NJ!@DKOC'+?L(YS3%0KA1"8* M#61H)O,^SZ=D2)9:EKGW?19+RK1.@_L& <\+@7O0ZO8#4[J^7,H$:ABS8Q0 M
.990"+A?B@1\A-%&P&0+ MPV*?8RY59Z!4SD($=O4TJOCX2OWQ\.%M,IQ0?Q _WOPAJW*376FVTC&U7)K"\^/#B"G6 MAG12-'&FC#VI3Y% ^J9#PSD=C26-
T(&!SXFPPQ@$R#"I:@HBJ2M*X;FGECMC MYH*DD]V ANA4*QR>52G+PO$_P0WWPUN[[X5HS*Z1W',S!VN7;@B[-ZN_O\<:@>E2JTRC[BIX?#IHSUI7%94 M=C!L=482NH.P!G_7
Z*A.PL]#&;S42G=QWBB\U(+J_C@+D.([^GP)O-3[[+B M.9/YZ!H&1/ZVB">\U%W<((^PI,,6K?SKOEKIH(7:3?[*!<%C1X4:E(Y0J[EU MAH)P=$;
[_J>'NX\?/[SGKN)\BFQ_/^)R.^ZGAQU=7INMT>/)9J M[U.TYCQN-Q'=KF,W:9?-9%/$=%P2-N+X7^D*Z66+4_[LI)*'2; N3#$<3,1 M/[>]4>H =-W=D(#*W:=&V@89N#Z^9CD&5;5=
S!T2"V"NK'<-";\F4VF<+XS M,9\L%E^CI*VYD49I.%6[0734!$2FP23[IT;/(E:*+%+Q^R$+<38VTDR=;G&LI A4'IXW'BP&Q]H)!1$F0R]=+C@ S M$F30Y [_(;WX[LA!]7@>$63H-
D3\J;W7X:P@;(68!&@WN6\?T=%$R)](A-W= MEL7@5,FSL&4U; W!!4*.V;,\ZO+Z'-&97UMH>88T.P'D+:DQ:P(CW*KGQLN MLB:EO#T@+24#M % QVLE)N[PB)%+I)M+\/Z"(.77]/N
M9Y/9G [O#B.$=WPWB[S]F>.D\2/7E,DQ?E'5U//S"(+3:[I6T<(+L54'E0ZO M/?0:D5NXY]'?Q:P1?/2-Q!FM#VWM31#GX-L='$Y^I#-E4NY8D?V5G5)-$/Z' MMLD'"W87LD-
)/CP"XV;>"W!,"47_&N_(,GZB/./ >RY<.=GHOHU:;Z.?@TNY M\?#>:'>QD\+G_E3@6%Q=7.#O]8S^SJ+;&^K7S?$Y_<(]SQGX6T3S^4S<8.QL M&BTN;L5/ICCC^V-!PJ&<.YRO7%
[/Q376FT77BRM0O[JZ]@W!,)]X6RQN\7D1 M75W>\.?E[34]OXQN;Z_$KFO"Y[U;WT@4UGRWG3J0 'YW ;Q]VEZ?OW.WQKOA M[N[].UG!SA&PU0I3R5&.7"(>?
M2FY#OD2U/7)N>OJ9*(^C0 [U<&V.5_$('V M/Q6_B]02P,$% @ 4(!F63L#*!]J!P "AD !D !X;"]W;W)K&ULU5E9D]LV$OXK*$65S%31$B])U%Q5X[&3W51\E)5L M'E)Y@$A(1)DD& *
<8W_]=C=(BK(EC13/P^9%),'NQM M%?IZD!I37HS'.DY%SO5(E:* -RM5Y=S 8[4>Z[(2/"&F/!O[KCL=YUP6@YLK M6OM8W5RIVF2R$!\KINL\Y]73:Y&IA^N!-
V@7/LEU:G!A?'-5\K58"/-;^;&" MIW$G)9&Y*+14!:O$ZGIPZUV\#I&>"/XCQ8/NW3/49*G49WSX=W(]RWV5BTNM!-&")6/$Z M,Y_4P[]$H\\$Y<4JT_3+'BQM,!NPN-
9&Y0TS(,AE8:_\L;%#CR%R]S#X#8-/ MN.U&A/(--_SFJE(/K$)JD(8WI"IQ SA9H%,6IH*W$OC,S2+EE4A5EHA*?_]= MY'NS2R;^JJ5YNAH;D(]4X[B1]=K*\O?(FK-WJC"I9F^+1"3;_&/
U8'S6W"O M_8,"%Z(2RN!Y 76E3W8G#S_7?>U+T\@#GL,(>'I)_HH(.R=B/= MOP&[K4VJ*OE?D3"-5"SFI30\8[^F@MVIO.3%4\.B&=]'''M(86TT4RO&"U8# MK%P:
("OJ?"DJ7(Y5GD.*$A](*A(&^%:BJEIAVH&\ /FU826OV#W/:N$0H>=X MT]!Q79\^@PE<<&!ZW9= M"0&%R/3U9BE'I(>H%^](//M9K%86VR^_W+&S[O&<)1SM\$;$@BSA4ZA[$6@&
MLD$&I!%;@A_PED2^5R/0> _?W/F"TF\I;^LUE!(VHTQRR6[;E$%+"9K$*0N) MT&-G&QP.,Z#\MH;G#G@3XH8]I!*X3,\Z.7]B4NM:T&90A;-M)SML5:F<&2CP MS"BZ@N6+GDY!JU-?
[$IF)*#$)&MH"FL):8MU7=M0 %2"!ZP8K/%J\ Z@)"+ MN*ZDD4U\O7V,4UZL27(.0%'"&=&]O3MG9S_"/M8P0?#*#R;367A.?#R.+10, M+6P'$%-*E]!C:HPFLL,#6"T1<<8QT-
#9U'G0DV"@(U9UECVQVLB,2E-2$R#4D>)M.S-V!]L>X5UD@4/)>8TLLM_'#<^B MXSG?;QA8Y$DBT=Q0,H>SR;:9I#G-+$U>'AE2UO_/PG_6GL=&D7@L)>:&+/KD M0=\A?
G3((W\C_=%)VUD=1N%T]L)9_2$VBJJ7W_J;O7;LAH^M$_+Z@_%=CW_ MMO"VHJ@O_/]$]Q&FM7'Y'/K#P>V1,=O-HITQ%[GHO;JWWP\'0_Y%ZL?4G47^"]>/#KX7M9]@^+9;
MIJ5OJ""G?A=T%82^QK"JO4@%\;\UX+TO2^'?B_@+=B;/C^V2ET#<4!\1^Y=D M?^!H6(YQH8.:V&A11?9T-!]$,LY?=#/C&+$WMG AOTE!8Y;;@[D]4<"QVEB9
M[=EZVZV)3"@+V^_WIQ._R'J[%_"9>-KFM"D=NZ?K4MHRD3T]H]G0&X5=/N">0W^ZR9!M42-V2SQ[7 %'=ZQ57]C* MG_0V^.K(;@,0L?%[+C..AVU R=>@S!HD]
KYGM2N(1$2&T0;Y ? MVB3(%&#%6*T+:GRRH#=PU$KP54)3%)5)>TKOFA7Y497"FD-?@+((I3^'^P+! M>T1XX#TA)'2;NS-"HVH-@*&?B<<86)HI#PUK@-<^ 3Q^;ET!L
@3^]!)&Q-1PBJPML%V>?%K_I\WUO#Z-MKYX3 M0*6"#W.\"T-G,G'93\A)XQ2VXK(9*VUA[*,%]? "M<%:;2O VL C(+2!JV= M"$AB55+A'[(HG,&O!Q;SX8J6PV??B28A^TD48*_,?
J(D.22H31SX[$#@ ?R& MD0.S7=6'LJ+I;[0;]MW:^O2&W_Q)]5ACI\O$"EC=T6PR8)6=O-L'HTJ:=B^5 M,2JGVU1P*#Y(.]72IGV 3?H_OZX^1]02P,$% @ 4(!F6:9^WNTF! M2 D !D
!X;"]W;W)K&ULE5;;;N,V$/V5@3;= M)\>2%2>;9&T#=G:+ND"0($&W#T4?:&ED$$:%(A:3LN%_?&4I6G*TW;5\DD9S+ M.7.C)EMCGUR)Z.&E4MI-H-H]+
[^CJ.759B)=S0U*CII#"V$IZ6=AV[VJ+(@U*E MXC1)+N)*2!W-)F'OWLXFIO%*:KRWX)]J$G:W0&6VTV@4[3<>Y+KTO!'/)K58 MXR/ZW^I[2ZNXMY++"K631H/%8AK-
1]>+,;8@Z+7!&U2*#1&,Y\YFU+MDQ:^G$:7$>18 MB$;Y![/]!3L^YVPO,\J%)VQ;V?.K"++&>5-URH2@DKI]BY-9I.\:?,1Z"&?) -(D M';]C[ZSG=Q;LG?T7?B!T#@^HA,<BT#K8'S< 3?-
MM:M%AM.(NL*AW6 T^_AA=)%\?@?^N(<_?L_Z6_@#6%:UD)9ZP@\"ESM?HCUD M\D6Z3!G76#S&Y'_X@CL-OS9J!^E5FXL!D"^X,81 [SY^N$Q'GSX[6!AA
.D=6S&6WMS)^4;HC$&R2D;*,A.*>G%#,Z;FZ# B6>6-DU;H$*GY MXG24C-JH<="0K)$N4D,34D7:%#F";7>])Q8-N]I+W9 8PUC>GMX_W'W["LOE
M\M6UMU*H(2P)LWCJ@#DD25R[,88T:+8'D;Y'3#)%<["$A1:.#;3>$.1$F9XZF MV7>0=-98&_ 8C:>>1C++'91*5@J[1L;'>KZ45!+/C;">:I,2P;GF]\G9\()&
MF%*!];:46XP4.%!B98B_X50_-[(OF)-DF/9.V05MG/\#12UVK!#2 MND&=<\FS56X[/*5KK[UHVG:DD!!.W=U 6^G+MF31N;;$R>KQPNO3&%CVPKS]
M;@E2&DF,IJC':D7QWX_205OUL.4'$;LX)":RS'(DOTNK<;[C1BAX/!XGR7!? M<]/'ITMMSD$@!Z;1(44[L5)M!O=>E10KJ8*MX;&1&1_<;A52%OD.=Q LMA==
MO]O_)LS;V_%5O/W'N*4BD-J!PH)4D^&G\PAL>V^W"V_J<%>NC*>;-WR6]*N# ME@7HO##&[Q?LH/]YFOT-4$L#!!0 (%" 9ED9N-FRW@($H+ 9 M>&PO=V]R:W-
H965T$@W"9<#9C@HX :M$'\LEE3TS,8E M3G.$64HPH&@]-&[M_L*3>B7XG:(=.V@#N9(G0IYE9Q$/#4M."&4HXM(!BK\M MND-9)HW$-
/[6GD834H*'[;W[5*U=K.4),G1'LC]IS).AT35 C-:PS/@#V0V+&>0IKO[A2[T/!X!]"G!JP'D/>"< MP;< MMH!7 UY;P*\!ORW0J8%.6R"H@:#M+G5KH-LV0J\&>BH=JO-3AS^&'(8#2G:
M2K5PDPV508H69YYBF>LK3L735' \7,)7L&5@B:AZ;W"$P#AE449821&X!H^K M,?AR]15<@12#7PDI&<0Q&YA%-L>9FXOP^?_M_.+#Z_]*!'WDW=3GQ4P M0D-#7#X,T2TRPL^?
[([U79=EES0;7])LYB,>EFOC8_L_LS6C,]%H5C5=6_V594I/K*;%#.0H;4(M9=T$HH"@5>56=3@IU+7^1+@H$E0S$<4NHE(@GJ\)X?N.#-"4S^$_4$L#!!0 M (%" 9EF.; OWA@0 &T0
9 >&PO=V]R:W-H965T)"B2I) MV0FP'[\C9?HNHY54]SI#-/"0BT*/6YDQY5D0Z#C# MG.F.++&@-ZE4.3,T5(M EPI9XHQR$73#MR>P88RE_+>#JZ2<2NTC%!@;"P$HY\E7J(0%HEX?
%N#MAJ? MUG#W>8/^DPN>@IDSC9=2_,$3DXU;PQ8DF+)*F%NY^AG7 ?4M7BR%=G]AM5X; MMB"NM)'YVI@8Y+RH?]G#.A'_Q:"[-N@ZWK4CQ_(3,VPR4G(%RJXF-/O@0G76
M1(X7=E=F1M%;3G9F_N F#7TNAMZ%UTOX S+#AR';>B&W1[HC"G4'MCC)NIC M!WO\#.R^:-LP?X2K(N%+GE1,[N^!NWM![7WYTR7+,9QBRZ(1K7$UN3]NV@0
MGGLH]QK*/1_ZY%=9'-U6 B$*Y_VC:)73AO*I?^]9COLX^:U^W!$/D2CK_S+J[9=WU M[RE=U\E_$L=>WG[&*K$'RIQ",, M'$H('RR*L_C8!E;7>&#P_MVPVPVPW/=VN:6*AUS#-
#:=I]%Q2GFEX#+CF,(LYD20ISR&K^0C1M6!NXR6E((54"I)IP@U MD.1TT)H)YYC>L<5"X8(R9<=5:1F?#MJ]_F M#>RT]1/+/*>H2#W%]VW(4"3V M@#;IW'6WXD* V7P'@*RFI>
("HK[;!?I+-) IP6F#JY+>6QAR4 JT^[%A9V=) ME_&\RJ&HW'&@V0V1FIVNYG^3&K6T[7+KO[T[:=T\-F3LOM@<4'X,R6O0)<:4 M-/*)2WOI0)-HIP4FLQN[>SXKLM6'T5>+7-
@M8)_7EG)WD)015M%%?7>I))Y M-=6AK+=2*SI,:WE$X N(1E4^(1-ME5;DET2.@CVVU(KL_>Z^8/^TDOIH;056 MY%=8GQ]*KIB?
F!_A^Y+@([454Y%7^$RF32F;+AD7]J;M)5:C]!V*;;&7D],! M%;Q1L-QU'^QT@#FJA>MS-96?JC!U,]C,-KWTM.X@M\OK1OR:J04O- A,R33L MG)!O5?>V]<#
(TO63I]*:38#ZZ#Y#\/D7U!+ P04 M" !0@&99RJN;4P0/ !5+0 &0 'AL+W=O5!:G\]GL_+34MCJZ>LG/WC57+UW7 M%K8R[QKEN[+4S?;&%&[SZNCL*#YX;U?KEAZ<7KVL])2FY+
M4WGK*M68Y:NCZ[/G-V>V*WVS>KE\=71RIW"QU5[3O MW>;O)@CTE.AEKO#\?[61M>?S(Y5UOG5EV P.2EO)O_I+4,1@P\5LSX9YV#!G MON4@YO*-
;O75R\9M5$.K08U^L*B\&\S9BJQRVS9X:[&OO;JUJ\HN;::K%AK* M7%>UMEJIVA4VL\:K1^_"K^.7IRW.HUVG6:!]([3G>VA?JI]=U:Z]^EN5FWQW M_RGX3,S.([,W\X,$;TT]58]G$S6?
S9\0^^Z%SB*J?Y]O?!M M V?YSYC 0N_).#V*H.>^UIEY=800\::Y,T=7/_YP=CY[<8#;)XG;)X>H7]UH M;[UR2\6TJU:36X\Q^2?(*%WE>&"KS-:%X=>9JSR4DLO[#VLL5EVEN]RV)J>W
M.6)3?H5U^&-I*PT:NE >A W"M_5JK>^,6AA3T9&U;K#.5NQM38[5!B[?KM7' MB@G?TCZO5J8RC2Z*+:TS-;T9NF?/*1(3J+6FL>7XZ229G(6=Q7:BBK*NJ [DQPM.@D\%1?
NVZ(H>HBA(D"0GE M?.HJ24 L9;LVZK4K:UUM?_SA8G[V[4X['7Z%4V2+. =7().8UK'3!+-K=&- M,A1GZHW)3+DPC7I\QI'R.(K*'(TQ<"U2OC>U:UH%5BGAJ;/9R3^^B?[TN[PC
MVH%."29F_[MN%EW;>75C7;W62,!@NP&#O;]:6EC!?=8.CG+B-A7.\-W"V]RB MPDP>DIBHMU4VG?!N9'\J#9.H%%?;BBCCZ%)7JCWH3=0^>?D(E[$S0F*[3W
MG#>)&Z\JZ,1['*K()MHV<-P07Z,:[S51.V]%(I;ZEGQ=M!OR')_X0.>34;(X M$=6(":%N-X&Y:,-VW1@C/H2?*4?1K[+A,^[5:HK#W9_Q/E*?J
MMLO6N^IM#'&OX>:P5T&J[IJ&8K[2+>*3?>TOEA-'4D*(-K2PG:URMNT=<],. MCHR'+#LX!D7%]WG_$JZ+,D 4O2[QOZ_48TVA[W!<;GS6V$4?U"$O. FD;TXI
M0;Q@VF^*]XDR7R@G$S,]&PM">-!";H2"#[@+I]BVP)RF_GLQ7N0@W##VMNX M"K^SD%=YW=FABODT5%(9,#I;@Y:@_\&4D M0YC *\2%/!@3]1O/V4-CA_EGB?EG!XF^-W>FZA
XC2O!<%'HA8N12QJ$@U/0 M^)#OEJ:A(AQVC#]@CI:1@&R';G$=:NURDS3:B[H TI*KY!I^KH0 M: X>QPS7KROU-D*,G<"#%7-XRQTT?H<HK4@$[)U=#0O@D%IO S5Z1WKX_5
M!^"$3%W,+B9XF\Z W-<-4L JG$)K:='Q!.@$>6#A@/T ?5O.X8T)W:@\0HK2 M@H0D=_>$!+QBN?D"G(!P@)Z'%:*Q_G,T[H8XGA)T2\ZJARR-R2Q,[AH8V*=P M*_N'%!-:(B*?
S\XG:B>J7L.NU"EY@;:ON5NEU,/28SVD)R-[/$6MJ.&G.]X; M:TWP^ZT4_I5SN>K]73VR4T.0#0+8EI>(I8ZG*AP3XXDT(>5F&QS2055_!&A9 MTB;:GT+;P38O@>RT"]Q1\^
WE/)2HB"LCLRDK1-KK1D"V+4#SCEW5E2@NA; MH^K>F1/?FAI !)(^AT#'RN9TQG)+18EU^,@?BQ9U(O$"*X=+B1$$.$]BJ&MR M"T1?
R&C!=2(UWHJ]N4&]*@D$)2FD1E$'E1E:=G=,$-?!Q_6=7&F_FWO8]US!KA=2>B/$=\(Q M:HD=:2S33ZGV#?GTWJ&QHK62Q-L3*LT\C(#@4NH'#"=,LU,/O<;3$_'KG14' M99)D
P,LI!O@D-]%"5C>@'CL];*N[$*$1$H#^AL+@$26<1E:;P#8 5<)=$6T M%X=,.*;+)FD :#$\U-Y4-PD.OZ)?HZG[; MHGX+7K?+8U(>S2X)*=#$@*= C*KS"+!Z+# 9 %ILZJ&]
(8&X#NP41NI1"\-H MEHK%_JHX%/3 (7WZICSC!:G%3#ZA:Q"1.VHQN&R34Q%_<_^MH"T)O(79Y]QP MI6"_LWDI)S=><"S[!HN]C0B[[R78/G%0:C+0R.-BS05N#C8IM^:%9<06\D-
MXY[1S'<2V6'M,K%V^94) @^J=JX=AH.J,3Z_CR+9_Q=W)].V?LK[4YK;C3:I M-P[_J$<_7=_>H%OPOH.-1A=^K-D9X20?CW'.E(\XF3V;J*A N0%@3PH^=S$[M?J[>E@2>
X^(#EG&Y2;N?#.X0:$#(FUN@*G)2CU:?]="6618IWR@18&8IA8" M->,KVQK*/A4#$KFU8 04+H $64BRXE"XF%&7F+AA[+Y!$^PB-CO+Y8 M0IK AQL#-!,@KTB/)53%/#
(5[B$H#3\X5[C1#EO M2QFJQX[$@L4*)("AUFAFQ3---WY_-#)8'EZI<5Y+"AGX-3PV.2R.ZUWRDB]J M:&SP07\ACQ)O?/9DS!O[E?N\|#)YH96]?.M$FUIL&E[^+>)P#I9$IWYV+,4;
MN!^?BJ'+[X^A^T>C@ENSH=P!S<3& MG^H+=>P25 DSLZ>MM=_E$SKF46^_+&%_YE0K:F$;XBD(].V\,S@.-^W,W,9Z M$PWH1JGT-WF'@,79K/^R97:PVOZD+*
MK7S;=/WHVH4A$94RV&"9J,/([M[,KG^Y.Z7MO'P$,%B@UA8*;++U-E2HNJ.Q M;X!LPA^/7?L=[.E_F++.";%S@VG KP]9:-+/,(/8&9_+0(78@H.)?+H*0)9[F0"STU]W#=0 M@HVSI$
7.$F#5;(C38&I%T-R,C5=B!)0D?$:W9>,**KG,I$%$UU9A\NGA>O: M8+H,?=;W"2-Y06Z\"Y(G9'4^/YAWFW1,XR#QTZ$7\'U$[&+\<[FH/7^A_DGT MU-E0L-\[-Q@!R2Q-O(UGA-
E];T_C1AL_P M[H;S=8^8C^I- X=EN.#B6^C6MI+$.S1+608E8BE'E7 M)7IJ4OL]1M) B!O]]!T![4;-K0!]-37N?6'?JW"/2"QT(]SY(7M6)K*'U?UX MJ.ZQ&#Z@-HH?
KA1A#CKX7J;_INF!Q_=CP_2"S97FH-%#PZW#Z-E0DL@KUZV] MP"3&H,4>#H?1:F]H)LOAD:)##J=!]Z #"95I.9[OI^KUFN[3TL [:DW4 LIR M+2"P+^2I;?
ARA$WRX,LAVA3"=CFXN//TU4L$/FG@,);JP]14-\V6DBV_E:\= MZ-L\^5Y M=A6T:,O2Y):'X/05 3I&F7>4]"%/4%C+G\Z,ELI1$' Z^-*U-,V*O^>EVUZP M+A^]IJ?
IF^%K^5*V7RX?'/^L&\!6#_4OL74V??;T2&[.XQ^MJ_F[V85K6U?R MS[71:"UI =XO'4(S_$$'I"^IK_X+4$L#!!0 (%" 9EF%,?S&UP0 "H, M 9 >&PO=V]R:W-H965T^]J1S*-2 M:
<;3R>1P7$I=98NS^.W:+;9^?[)Q8SEH\ W31L_6 N.9&GM+6\^ MY?-LPH#(D IL0>+GGB[)$&'>MS:QWR8K#=6?]0XP=L2REITMK_M1Y*.;9 M<29R6LG&A,]V\Y':>-ZQ/66-
CW_%)LG.CC*A&A]LV2H#0:FK]"L?6AX&"L>3 M%Q2FK<(TXDZ.(LKW,LC%F;,;X5@:UG@10XW: *\#3#O#%]%6#-U2/Q,%D3TPGT]DK]@YZ @ZBO8,?$S",^:_S MI0\.-
?/WKIB3R=END]Q')[Z6BN89&L63NZ=L\?;-_N'D]!7 LQ[P[#7K"?!] M!%RFC*%'@M\%\S\9$E*$I>VK&6U[0Z\4.0"6ERL="4KI:41N@)!35+ABK&A M("=TH!+
[(%:]]9'X8M$H@1SJEP3$!H=[<=^Y:SQ/Z%+_D_Q!7-B5L$M.AEP:ZNPP<*!Z)ME4SV676TRA MNT9'=]$'*Y36AQV&EY0P;@K"Z+F7VO#I2/SQ'(+KEQB+MYC#M70!_09&\&UC
M&Y-'6,&V\4E8]!Z"X,-HN=1&AVT,A6WE=(]16\,W3RODI>KLYA@0@,IYQ/>5 MLR4I4L.[_!3.*11@* M1R0,Q^,Y*:W_-KW;GF/8:NMT6 6,6'H4C<'%XT_$VS?'T^GAJ?B=[8G]86!W
MC0VPTR%V&C2D:F-BM'I:[5TZN0+3M=+J@KS';J8[^$N-@BBJSG'K45?*-#D7 MC0X%3'=(8\!L8) 61L=L[R@$TM%!KAUN/K,5L6NZW4A\6KVD6(N*13F-0^^
M!E%SSZ8.C=A%B0N):7\"Q#<8ED@PQ@+\Q2)H3-(>B?-*T(,LZTA7#-"_3+A' M)QKI$CH_A*?H4V[I^-!FP\"_C- !\5GB6<QC ,F,-0!@IZI8<-S690U81LQ/;HNR,YUQY$
MKBLH*62%O3^9J<-Y/Q*7*,5UHI?E.M82+;#,.C*^H?HYQ:/0X^$34X)U!U(E M.2BU;')X59'0-K*_RE49_Z7TGGMCQLXVD< 4KZ(K(4%SR-<<91[*$R
ME&VX/8&&=,SZX&,MM[$.XI14RC7TA.FZ=A8WA@PQ28#T'9<7>4,=B[HL*=;R6Y=7REXLYEZ.DIUW_M'\+G MZ?WW73R]HJ^D6\,=Z%]!=3(Z>I<)EUZF:1-L'5^#2QOPMHS+ H]Y
[#X%U!+ P04 " !0@&99T$DR>/\# !T"P &0 'AL+W=O MV4'(9Y4!:/*C MR+F:.YG6NZGGJ22#@JH;L0..)QLA"ZI1E%M/[230U"H5N1?Z_L@K*./.8F:_M/)%%E45#Y>@>Y.,R=P&D^?
&/;3)L/WF*VHUMX!/WG[D&BY+4H M*2N *R8XD;"9.\M@>C MZV BO&),DGV-"^!%$!5*0$SKA6Y>J+K M'-3US--HQ=SUDAKQKD(,SR!.R%?!=:;(;SR%]%C?0^]:%\/&Q;OP(N C[&Y(
MY+LD],/!!;RH#3FR>-&ED+_;D.^92G)AHE;D[^5::8FOY)^^F"O(03^DJ9RI MVM$$Y@Z6A@*Y!V?Q\4,P\F\O.#QH'1Y<0E\LE0*DA/*4Y(RN6-5B["U
MML;Z)QJOKT2QH_SUXX*$[&0U.I"H=G2@FL3L)PJ,@ LS.>!B3+QWJ5]@MD%,#GPAL]BG2 M9EEJU)HU=J-H6/\VQOHR5=UHUK>P=PJ)35Y@R8O>05XX,:E^O"=Y$W< M<1"?
BN\GS_@R.)&:?+91!/[(]?U3]D(\';^/O;$[\OWZ]Q)[U8UFO=]AVWW M'%[LGH\XQZ0EY@6)3C**OMJ$=9O+QOC>&T9?X[QH[LV-L^F;5=\ZZUA?#SWG M[+1EYM6TSS5L&>?&8(VS
\E$2E;6UG]-Y:WR$0S@>S\&."F./TS7[/[G]W7# M#K&=XGR#:F15AU& ZU4PC*^M'(VCWK?A=2:A N36SGLF8R77U5#4?FU'RF4U M2?V\7LVC7ZG$_"F2PP95_9LQ\BZK&:\2M-
C9N6HM-$YI=IOA6 S27,#SC1"Z M$8R!=M!>_M02P,$% @ 4(!F6<9W*2/G P 3@H !D !X;"]W;W)K M&ULO59M;]LV$/XK!S4H;$"-7BQ;4FH;R$O;%6B!
MH&DZ#,,^T/+9$D*)+DG9\7Y]CY0L.YOC9<,VP)#)>WWN[J'$\4;(!Y4C:G@L M>:4F3J[UZL+S5)9CR=2Y6&%%FH60)=.TE4M/K22RN74JN1?Z_L@K65$YT[&5 MW2E!U63*YO4(N-
A,G<':"+\4RUT;@3<K6TD[KXLR M+TJL5"$JD+B8.)?!Q55D[*W!MP(WZF -H*9$]F\W$^<7P#"#EFVD1@]+?& M:^3"WXS\5V0,F:UTJ)LG6E?

%E7SSQ[;/APX)/XS#F'K$%K<32*+\H9I M-AU+L0%IK"F:6=A2K3>!*RHSE#LM25N0GYY^K-:H-'59*R@JBBP?4+,91U"8 MU;+0!2KH?342U1][FE(:1R]KPU\UX<-GPJ?
P650Z5_"NFN/\J;]'4#N\X0[O M57@RX!VNSF'@NQ#Z870BWJ"K?V#C#?ZZ?A=N<*:!57-X][TN]!;N]BWX]7*F MM"0._7:L"4V.Z'@.@<82$X'>NB6E[92FD+GXGW;50&CY(H13<5_2F
MX%;Z@=X0T OZ?]9\,GNC><*"=\8KQ$NE4E!T]98SE!V(X<>1=&YJ!7-2?7A MFJDVO%SDO:A4$ 'X8UFC_:TT58B93>*LR+.JO+FC-+,R*9 M)' EV>?F4[
V)2AU_I_0[0:SEFV!9=O@[[%M45,Q9Q DKA^FS]"H5>[Z^!+; M?T"YI5BCK(P+T)>URK;M5"EF[*;!4X[WHJC?:)(X.L:%.'#]:$A'D+J6$,UB MGX@W@E]8]8![OOB^WP7M!7$? C=-!G]
LX.1DGGP%$4X,B@2-XV'>XJGEE!G M)K/@WR#YR WC ;49>@27-LF>X(W*S, DCON-*/E_R'WLJ^ =?.-+ ME$M[DS%OY+K2S>>^DW:7I&PO=V]R:W-
H965TPA@Q&E[*'J@I95%A!)5DHJ3O^^2LA4'=8Q*AKY'4O&2ZPTEQ4HS*?>/!PO$KO?;?C)<:L/^F"=K*5\M(/OV=0+ MK" 4F!K+P*AYPAL4PA*1C+\[3J\+:8&'_3W[5^>=O*R9QALI?
O',%%-OY$&& M.6N$N9?;;[CST[=\J13:?6';[NW''J2--K+<@4E!R:NV9<^[&63LC**5CGAS&R>IK*IC(::O;"U M0&!51D>5J@8S$)RMN>"&HX;S![NL+R:^H; 6[*>[$(LV1/1.B"NXDY4I-
'RI M,LS>XGV2VVF.]IH7T4G"%=:7$ <]B((H.<$7=V<0.[[X';YE:UT[[W/KG0D- MO^=K;13=FC_'++>,R7%&^Y+&NF8I3CUZ*AK5$WJSLT_A(+@^H3?
I]":GV&IE90[F2N4W5A_)WS,/)*,<]?/BZ,(60RK)67-,*"34%0BX%%0%>;<9 .318 MKE%UB81;3'?1E$87<.#-$Q\.%?D9-CK)PFU8="+ MAB$\+1JOV]O2>\?4AE<:!.8$#2Z'?0]4 M6\
[:@9&U*R%K::@@N6Y!?P!4=@.MYU*:_< &Z/XILW]02P,$% @ 4(!F M68Y479SB @ H 8 !D !X;"]W;W)K&ULG57;
M;MLP#/T5PAN&%DCK6Y*V61*@EPT;L'9%TVT/PQX4FXF%RI(GR4WS]Z-DQTV! M-"CV8MW(PW,DDAZOE'XP!:*%IU)(,PD*:ZM1&)JLP)*98U6AI).%TB6SM-3+
MT%0:6>Z=2A$F430,2\9E,!W[O5L]':O:"B[Q5H.IRY+1]04*M9H$<;#9N./+ MPKJ-<#JNV!)G:']4MYI688>2\Q*EX4J"QL4D.(]'%WUG[PU^LX
M)AN.%\E>P!E6QY!&/4BBI+\'+^TTIQXO?07ONRU0PS?.YEQP+_:*FTPHXV[@ M]_G<6$W)\F>7\@:XOQO8%=#(5"S#24 58E_8C#]\"X>1A_WT.YWM/O[T*R%+I9I>"0=FD#KK4
7IXB^6<'FOS^L!D M[B;I"&Z<^7:F[3)WIG#)050M2%G4-<)!W#M)AX=PD/2&PY/#9T,N+=(M M6L GZK$&X>P4^G'R7P3IPEZR&_32>$#C:2^.(]B5?N%6URA1+WUO-)"I6MJF
M@72[7?L];[K.LWG3NZ^9IOLQ('!!KM'QR2 W?3#9F%5Y7O07%GJ:'Y:T"\$ MM3.@\X52=K-P ;J?TO0?4$L#!!0 (%" 9EDH@-S,OP, * (9 M>&PO=V]R:W-H965TZ^I+:! MQ-
NB"V07WB1M'XH^T-+8$I8B59**-_WZ#BE9L5/'+^)US@SGG"$UWTOU39>(M!K[77.B%5QK3W 2!SDNLF1[)!@6M;*6JF:&AV@6Z4<@*9U3S([#<5"S2GC+ MN9M;J^5;&(C!J
MGG&%G%L@"N.?'M,;7%K#X_X!_5=W=CK+AFE<2?YG59ARX4T]*'#+6FX>Y/XW M[,_C LPEU^X+^V[O./0@;[61=6],$=25Z%KVO<_#D<'T/8.X-XA=W)TC%^5' M9MARKN0>E-U-
:+;CCNJL*;A*6%(>C:+5BNS,DD[#V48J9G.D?0?O 9]1M A;)6M8]:D@ M1DP)*\<%*OCK=J/=_-_G$M#AI^?Q;87=Z(;EN/"HA#2J9_26/_T0C<.?+T2? M#M&GE]"7CU2Q1!HA"?Q9%
<$$*V2"%[+(4NCO6*N%4 .>HO@AU MGNH^;:0GA?V%[O+KLO@_%1!K)5T?)]4/5+L&ZPU5E"W@+^3UTKHM.&L?@-WB"*;Q# AO,B?)&/R/AY/>B4=[&UL23*C-O7'V=2UV6QB
MYS-_-AN?E51P]&K0Q;9S;Z.5;BM,]X ,L\/S>]N].J_;N[?[,U.[BO+*<4NF MX6A"DE+=>]@-C&S<&[21AFY1URWI%P*5W4#K6RG-86 =##\ER_\ 4$L#!!0 M (%" 9EDG^J4!M@, $0(9
>&PO=V]R:W-H965TTLM6F$HZE9179M4)1>J:FC)(Y'42.D"F83OW9O9A/=NEHJO#=@VZ81YN46 M:[V=!H/@=>%!KBK'"]%LLA8KG*/[NKXW-(MV**5L4%FI%1A<3H.;P=5MQN?]
M@;\E;NW>&-B2A=9///E43H.8"6&-A6,$06*#=UC7#$0TOO>8P>Y*5MP?OZ)_ M\+:3+0MA\4[7WV3IJFF0!U#B4K2U>]#;/[&W9\AXA:ZM_*V.YL- RA:ZW33 M*Q.#1JI.BN?
>#WL*>7Q$(>D5$L^[N\BS_$,X,9L8O07#IPF-!]Y4KTWDI.)' MF3M#NY+TW&Q>"8.5KDLT]MV;/!F,KP&_M]*]P-FC6-1HSR>1HXOX>%3TH+<= M:'($]!
(^:^4J"^]5B>6O^A$1W+%,7EG>)BNK,Z]7CI M,3RGBZ?>ZM_@?6?O%^T0_KE96&?L%/IL3OE8MC6"7H)E_CX:2RAT0QEJA0]R?.8Q'N)^$OTP M]\<*P7$0P(*SM\]
<^1]:D*HK"#ZS%I3MX.CP'7$1ZJ4/)-OQ_/T 3U+V"JXR MB"!4"8H(0=.%#7+8 #VZPV:!9O?R_B -4C]@_=Y>*@^%7BEB5A(SOU-H E'= MQ\9>G8_1V>>C6XM M$;8AT2U(!2PGG;>!
[N]G1$^<@P],HN4YP5^]7!FAF'S9&JE6K"1U"=[+R36, M\RQ,LABR<#!*PSB.81C&>1*.:.V;KTJD*C9DZ8H=AJ:0Y+&UD07"VQW*6T@N
MDJ$7V:47XQP>D))!%IWCF%FK)'GN[&'^U9X?VSW-]E4.PG0P"JEW\"C+PN$P MAH^LR9Y 6 I18"/]J]E>.^VS)/!:7<>^U0XG '%&8HO+>+G%#<;SFYR?5/!O3 M=T
>2TBRYWB>A/DP@X^HR%^UUQ(EU5W)58$;B">>TC?+!^3RE$"R<$SO_:@= M*=CC5!B;:H&769Z2'(H%GY_F4)OU6N*_*[U5V+O.DZ MP_C77_]+,Q*4C#5N"35^&),'&PO=V]R
M:W-H965T?+!IV+&8V\(%.3H&00]-C 'I3P1V?C=<_)! MT@/WUSOV^] [];(2#N9&_9 %5C-^Q5D!I6@5/ICM1^C[N?1\N5$NW-FVKXTY MRUN'IN[!Y*"6NGN*Y_X][&2Y @@Z0%)\-
T)!9=W D666K-EUE<3FU^$5@.: MS$GM/\H2+>U*PF'V56!K@9F2K5I'>\XQH0M6MEVZ 2O\VW/L[Y02.7>IA&2 MKD='>:]QVVDD1S26T%RP<7S.DCB9L,?
E'3M[_8(F(MN#]V3PG@3>\1'>;W8M MM/P;#)ZS.;DT2A:B^]K4Q,*" XU=@CJ\EUKH7 K%EI0$&BUT[.?-RJ&EX?AU MJ+'.P.2P 7]@KETCOT.P=8TUBL\)#WY3_JE9+0WBOY4?Q%V
M+6E\%)2$B2_>7W)FNY/2!6B:,)TK@S3K85G1SP6L+Z#]TAC&ULS5;;;MLX$/T50@6*%D@C6XX=)VL+L-T4#=!LC7K;?;T4_:?2CZ0$MC
MBP@O*DE%"="/WR$E*W96$38+/_3%XFT.SSD$-'[6F$&S MI0O<;^_0/WCMJ&5-#2P4_YNE-IL&XX"DL*$%MU]4^1%J/4.'ERAN_"\IZ[6] M@"2%L4K4PUGMJ:3S1
MJB3:K48TU_#>^&A4PZ0[Q975.,LPSL8KMI5LPQ(J+5J:J$):)K8)#>,_V@SLL([:\=S=_O2Y#2!:8"7UX"^@R!^_:H_ MZOW1IOE(8 ?2SQKI9UWH\9^%6(,F:D/*3''^\$Z5D#X>E7/BU]
[)M7E1;3#T M&[AGZ2[N3*[?8&=%/ZGP&$C<-AYME=42SQ80Y8H<^4RYH3,J6')"5D_D(42 M I^K!:?&G)!KF? B=6GP5ZFJ07(#-E,I^?X)<<-
VT6_;;.OD\E+;1O]*Q.@Q$P_,.&_,..\TXTKD7#T D)55R2WYG#NQ;3HZ M85ZJXTA@!XK'C>+Q[W!=QL?TZTA@!WY=-'Y=_$;7I>(RWG]JQZ?G3U[;3L(O
MM2/<*UX$Z*VOZ0SQ_Y=5(=",-F7CS%=+3\;G6$Y6U=\C3%6+WE"]9=(0#AN$ M[)V>XPW657U7=:S*?8FT5A8++M_,L"0&[1;@_$8IN^NX#9HB._X'4$L#!!0 M (%" 9ED+EW)*T0(
.\(9 >&PO=V]R:W-H965T\HR*L95*68QL6\0IY%A#7 .Q;0KP']8P%^#3#2[4]J[<5R$)0X# MSC:(:VO%IAO&^P:M_$6H/B=SR=4L43@9WF#"T1IG): ZD6M=]8]U/
MZ(Y1F0HTHPDD^WA;:6B$N%LA$[>3< [%)?*-0-CR!6 M\-Z;\-GQ<+?#&5X35<_P>5U1?3)1C8B(,Z8#*]"/ZX607-W-GVT!JRC[[90Z
M7XU$@6,86RHA">!KL,+W[WH#YW.;MT])%IV2;'8BLKVX])NX]+O8=V\;6Z)8 MW0!"5^J^Z:8@">@+QVA;<"K>@>'5N7\=7GF>']CK7:>_-AIZ0V_?*&HQ&CC.
MOM&LQHW1GGB_$>]WBK^EL:ID0N63!*K6N4XBR__VB=\B]] EKVTN>O[5 M@4LZ]_VOY^M$9)6+[9W,G@-?F9(JE&M**JO&ULM9MKCYLX%(;_BI6M5JW4-
M@FM^Y,I$Y,M95:J>JT MW<],XIF@$D@QR72E_?%K"(-#< [CF<.7#DG.>3F\ON"GAHO[-/NIUE+FY/[R.$KDEXRHW6839O]>R3B]OQS0P<,77Z.[=5Y\,9Q?;,,[M>2WS[]LOF?
XTK%56T48F*DH3DLG;R\%[^B[PRX0RXDO2G10G[-(/#Y^4/]07KR^F)M0R44: M_Q.M\O7E8#H@*WD;[N+\:WK_MZPN:%3H+=-8E?^2^RK6&Y#E3N7HDK6%6RB MY/
W_%T9<91 _3,)K$I@CTW@50)_;()?)?B/31A5">6E#P_77AHGPCR<7V3I M/Z6D/@B3%?D4A3=1'.615.3S(6I%PIR4R3_*9-WF7^5REV51N0A4I\E+(
M/(QB]4J+?;\6Y.6+5^0%B1+R;9WNE-95%\-<7T)1R'!9E7MU*)>=*?=:;M\2 M[KTFS&.^)7T!IPNYU.FT3.>6=/'XL]O2@\>?G373A[K9ZK9C==NQ4H^?T3NT
MD,W$0YYOSROFGG=J&R[EY4!/+DIF>SF8__D''7M_V2S%%!.88@&26,-\7IO/ M(?7YQV0O57X8++I/ZUGVI^[N-[$DJA@'Y6!Y39(T>5.,"AUF:Z?#*<;E*8HI M?
3]GL['NU_MC_]M!8S8]"1)@L:Z^(HDU?/5K7WVP4Q_--3;'?,R>C2DF,,4" M)+%&"XSJ%AB!/7N1)KF>Q767)5\=-*!VT&3
ML>>==.!1JY=/^(0W@P)+T(C3.JAQN>/ZLCB0OW:17@L6]S1; M>TQ;XYC3J3\^&>WM**;O5R=S@@#+ MN&J)FDWH290 2W5U%4FLX2KU#)=X_:^OJG,T.F-[@66)LJRPX'I=S<52:
[H[M1'T4=/=;FH>QU3':\H)R;S(Z[8_6.,:FDU/7P#J<74-2:[IF>(O"P-6Q-J6H MV(6J)E#5 BRU9CL8]*(P>[FL4"NICB6J)31&TC5W>J:^=
(0*NTMG3/KB,&C"C&&3611!M\&KYVADBX$J=?>V#S)@A M,P:3V=F% VMSE&U\6\)LXQNNPGFKH_>8H:W&'T..3!,2EJ@J@E4M0!+K=D. M1SMF()DXD4,E!0W][A
!%^1L7Q_@Q0QX,1B\S@_]-C^UO.H,$?#9G;WJ@Z^8 MX2L&\U6;%IC5.=0=+50U@:H68*DUV\/0&QL]=;<<%=A0U02J6H"EUFP" VP, MWFISHH5*"YQ2.D,$7)&S?
WW0%C.TQ6#:>C8EL#9:V38;;&&6W0:X6F=O^R P M9@B,81!8!RTPR^97>[_!$F79;X#K=7:W#Q9CAL48S&+G%PZ6C:WIC+)3R]IA MU!M['CLU#16TL-2:#Q@9T.+>(@
MRMJ\/YN*&N3C,7&?'/N\&K.X0 9_=V:M>GBD\>J@0!JPV--B> M,[V"59R'/J::0%4+L-2:[6$@CL-/(YZ'!H[*;:AJ E4MP%)K-H'A-M[Q.*(+ M-/#VLX:M*:4S1, 5.?O7!W1Q
UTQI'R#AQ#!#K M>OB[35DM7SM#!%RILZ]]0!@W$,9A"#N_5.C>WNH.$?#9G;WJ ZFX02H^>Q8= M8)+0 E5-H*H%6&K-UQ4,I?GP=I@+'?CMK2_+HS66*,NC-7!9SB\<](%8OD$L
M_XG/(U9YXP['VE$VQU"I"DOMX-CPZ!6^X@W-SV%V%R6*Q/)6RWMO)[HW9(>7 M'@\|?\G1;OM5WD^9YNBD/US+4G:\(T+_?IFG^*%X4;!^]73^/U!+ P04 M" !0@&99M!4GUM<"
!G!P &0 'AL+W=OVT\.]W M[:2AM*'C82^)/^XY/O?8OAZNI7K4&8 A3SD7>N1EQA27OJ^3#'*JSV4! F<6 M4N748%W["D+ >AF11$P6+D774N)Y&-=P$/#-9Z MJTUL)G,I'VWG6SKR
BL(."3&,E#\K6 "G%LBE/&GYO2:)2UPN[UAOW&Y8RYS MJF$B^4^6FFSD77@DA04MN9G*]5>H\^E;OD1R[;YD7<<&'DE*;61>@U%!SD3U MIT^U#UL Y&D'=&M =Q?
0>P,0UH#0)5HIRUZ)N^'AP?D MA(W_H>,+#_GOK#TEWQF=,\X,0]=OJ\U("?HZA:14"BTG8ZJ9)K^FDG."IWA- M5?J[S=-JS5[[FK8P7.J")C#R\.9K4"OPXH\?.E'PN8T_O$'N\
ML>294$/FL&1"6!_P%)H,2 &*R;3-@(HU<=?H7[6*C1FST?G=! MI/_V-=JS["+&PO=V]R M:W-H965T>TJ MM5+56S=-TW[@$E^"2B SY*Z=]L?/D%P,P;Q
[N67NT#>^^+WP/;'#\+E8Z:^ MY$LI"_)UE:3YU6A9%.M7XW$^6\I5E+_UC+5W]QG:A45>E,MQOE:R6A>.:V2 M,74KJ.%O)7%Y_5'I;?&>Y5YO))I'F1YND^)0]_BIW
7FEWBQ+\NHO>=S9.B,RV^1% MMMMHYZQ:LXG3[/_JZ2T3-0>O8'>C.@?9U8#L'=NC .QSXSH%7F=F&4N5!1$4T MO539(U&EM58K/U3)K+QU^'%:GO?;0NEO8^U73-^E#S(O]
(DL:CS;->CUMD&THT&,?,C28IF37]*YG%O\;V#_$/ ?Z^3L,T2?,O2: M@H*WWD3[#?UW?Y872/?)OV^G;ZG.[?CE,OC?0XE$OU($?3 M'[YS?>=G6^XPQ0226".O?)]7#JGWZD'*M#E
/VPY2& MOKYH'NHIZV,DVD8^G1BC1HC>/D0/#/%Z-E,;.=?A/86J/\ZRE=3C_TS&#V6T MMJBVJEZM+I4F6+BX*J5:-Z_5ZE:FB2M!-EELOV: 5,0T9 M/4A+'R/1-O)IP.SG=
[*/=P+&>Q/E2Z+G(5)]^.6?C;Y*DS)Z6RB@U-"!#5-, M((DU4ACN4QB"$T9G"H],$R%F-C'%!))8(YNN8WC+.7Y)UM+X@D2%SJU2W^)T M07Z/DHUU$-VI-
OJ0%_+)04_K9R8L9N[$H:&]M[DUF'0'!OA(=1'+<1-AL:^!UQ&()T880T [JU\6V*"VVC>"\S83,+ W?2$8.A0A?& MPO<:=H<.XJATB*HFL-2:V32 Z,*$B#"(H\(BJIK
4FO6G@PN4A@7>P]^M(UT MK758#QMAL>GJ<-1P(86YL/?@1]O<=KC&/FXB+"8704<,!OTHC'[PP+=S/JA. MM-K>QTI8K/S.4@0:?*8P/A]?6.X$ZCW'H]QI]<->9@)NSJGA&KZE(.
(-0+"P M%0X_7+GUL!%P>TZ,EQGD9 .1LPO66!L5#X'GN(F 6W-JM 9-&8RF,-:Q-DGJ M*]0+#L/L92;@IP:JB%8!A.LGG<6V8-4:77O+EK(=*8GH$Q/KR=.0/#Q!M\+
M1JUL8JDU:APS=IU4C<(NQ;9 MS% S0ZJ3PCJ#DX.I)EB;N3L6OLSP-D,JO<(Z@Q.#"M3,4L[E';5U9CB9/:>: M"SL/S@N9>RU$7 ZAJ DNMF5RS&.!PY,U'+V3M
ML@#CP>$ZLY^9L)@%KL.]CHY8>\85YN[>A,G;B$O982S';83%INM./#>3<(SLJ[**J"2RU9G(-['*D
MVC!OUWW;D'7<1EALNBH'GJ%*#ZGBZQVO^!XW$1:3KMOSGH%$#X9$E!]@[(YQ MY!<8O:R$UZX) [_!,*#FP47!L-'&-J?4=4$EEHSNX;4O'.7;3W4 MLBVJFL!2:R;7X*/WW+(M+#
X>:AE6_"JT[74SE>[4=52%5;6&=P;E"KME[O MJJUG\-9#JMK".H,3@UJU]2Q56[=KKC/4[#VG:@L[#\X'*@M[EJIM..FH$'F& M<;VC1=O:G]?'2JI%]-LH#[-]6,_T?4$L# M!!0 (%"
9EE>J-QV" , "L) 9 >&PO=V]R:W-H965TLFCJ)-B$!NG80B3:=UH=NJ*S;P[0'DQQ@-;%3 MVX%%VVVVH^?[80 *TV9U+V [=SWW=UWML_])1=W5\1PS
M(H]YCDQ_F7*1$:6G8N;*7"!)+"A+7=_S>FY&*'/"OET;B;#/"Y52AB,!LL@R M(A[/,>7+@=-V5@LW=#979L$-^SF9X1C5;3X2>N;6+ G-D$G*&0B<#IQA^RSJ M&7MK\
(WB4FZ,P60RX?S.3*Z2@>.9@##%6!D&HO\6>(%I:HAT&/<5IU.[-,#- M\8K]H\U=YS(A$B]X^ITF:CYPWCN0X)04J;KART]8Y=,U?#%/I?V%967K.1 7 M4O&L NL(,LK*?_)0Z; !"$Z? ?
@5P-\7$%2 8%] IP)TK#)E*E:'B"@2]@5? M@C#6FLT,K)@6K=.GS)1]K(3^2C5.A5=L@5+I.BH)E&EF<8>*3%($B7$AJ*(H MX0@^$R&(J1 <1OH[3>4[.#" KW->2,
(2V7>5#L>0NG'E^KQT[3_C.H!KSM1< MPB5+,-F!OVC&GS;@72U#K86_TN+<;R0<8WX,@=<"W_,[<#N.X/#@'; BFZ#X M,AWCS,JT*]#_Q!LU\T88:]ZVY0WVY-T2)J@W26
=!2]ODA9$.%&@*PZ7]P55 MCS!>[Y,?PXE40A_EG[MV0^FCL]N'N=[.9$YB'#CZ_I(H%NB$;]^T>]Z'78J_ M)EGT2F1;VG9J;3M-[*&5@VRC&,8U'H-&F]Y?
0PYAGJ'A,C71AA=F53LO8V(@D\[Z]\]K")FFVV4NK5 M*?4:4[I9E6ZFN[$+FP-<6=1>D_*Y;583KG3KL\.Y M?LV@, ;Z^Y1SM9H8!_7[*/P#4$L#!!0 (%" 9EFT2? Q@(,H' 9 M
>&PO=V]R:W-H965T M2?6@X>%.[;)C5WPD[BD&UB"N2\7 M"F=^PY*Q H11F4NA %ZZEWV;^83:R],^_/QL1&LI+RP4YNLZD76$' (366 M@>)O"U? N25"&8]
[3]]Q:8''XP/[1Q<[QK*B&JXD_\XRDT^]L4$:6+Y54F1)C^^((S<&BCTS[9DU#Z&[3[L!;O0)4UAZN$-TJ"VX"5OW_2C MX$-'!,,F@F$7>[)7S1JY;0)KBLA1V
N[38+8W[9X'35>1YU>#T>FS5DG\B^S M$36ZHO]0S^@?1'#>1'#>F=EEM7K/66H;H-A@]R"J("4H'#)8,-LTULS3H[+ MVPO;"SQN9(P[9*:,Q'
M)4S=:IO5YJ&ZK/OSBWG]RLVIVC"A"8.=X15;\<]<3(TG7KE338^]TP MQ\<6E#7 _;64YC"Q#IKG._D%4$L#!!0 (%" 9EGM\LI X0(%\(9 M >&PO=V]R:W-H965TW") =BU8DSVT#
[[V<[- .21KW8#=C)>5_Y_@KHQWC MCZ(D.BI)486X64];5MBZR $HM+5D.EWJP8+[%47;ZV1S7DZ8AM)205SCL2F+#%_O@'*=F/+M5X>W)%U(?4#.QW5> T+D _U
MG*N>W;KDI(1*$%8A#JNQ-7&OIXF.-P$_".S$01OI3):,/>K.EWQL.1H(*&12 M.V#UMX4I4*J-%,:?O:?5#JF%A^T7]\|F=Y7+$@N8,OJ3Y+
(86XF%X%O$FW(3%HS+'$ZXFR'N(Y6;KIA:F/4*AM2Z5E<2*[>$J63Z23+V*:2 M7X M&2\I(%SEJK89WT".*,%+0HDD(-#Y#"0F5%R@C^AA,4/G9Q?H#)$*W1=L(Y1*
MC&RI@+2MG>T'OVD&]UX9? 'U)?*=#\ASO*!'/AV6SR!3B9/UH.?2DW/I'QT8?$-O5\-QS9 MV\-4ND&^IR=IVX,8M(C!(.*=2AKSK##SD\-6'4&U.E!DLU[57/71-I;A 8CK M1_$);3?
(2Y*@GS9L:<-!VCEG*Q#ZM,,4K0 &*<,.0.Q_OGJ_8;XF ME4 45DKG7,8J9=Y<9TU'LMK<"$LFU?UBFH7Z @"N]3[%6/RI:,OF?:;(OT+ M4$L#!!0 (%" 9EDBH\,;508 .PW 9
>&PO=V]R:W-H965T^!W7'];?I'F M5;^FS.*49RH6&&9)\?ME[C\|I\?."HL4?,7]46]LH_RCW0GS/7WR87?:\?$0\ MX5.=
(YCYL^;7/$ERDAG'/Q6T5_>9%VYO/].CXL.;#W//%+\6R9_Q3"\N>Z<] M-.-SMDKTK7C\C5H->H3A#7Q=BI5@V4Q=];0:3 M(_O3JN.@[)@(N+ALY8!7?
^@G&6F'!\L#]SE=WQY@@9>7DZ&+>7A\>6#-CG< MY0&?FO)R*,V,?[WX"TI!K6M!P5O<(#W62^X1!]C=A\G<>'G(%;31*C.!?]-?;!MAO1'Q_;#>*((=%@6"6L*-:V-
%QPL:9Y@:O$7\R%W2J M55DGJJNRD+!@M"?:V>F.KF63T5:3(28[LD*.B0+!+%G]6E;?*>M-G,7I*FT3 MT5G8541(6)"R%A$22, L$L7XQK7XQ?[@I@#.D<2%@ "0LA81$DC +!+.><
MULXY=9Y1;JN)_WF>>(M^KK?;S.*D=34+)"PH8=C;F@F\$\|;CW8F#,A.(T@8 M!8)9/CBK?7#FGEG8TZ&9Q5G857)(6)"R%A$22, L$L7V"OR4R\EYM;*C:0 M>4!I
2@M!*5%H#0*1;,=M)6Z8= YQHWK;!I(6E#1,+:G&8S)[CP#VF\$2J-0 M--L0I#$$<1KB\TUX>]>JO+.NL_*0M "4%H+2(E :A:+9[FC23/R"<28&S3-! M:0$H+02E1:
T"D6S'=2DFM@=:U(IE$)+*::XP-=I>!=Z@)=ODXK?_Z_O'2'==-?N!$0+WN#HK#!J)@M(H M%,U6N$E%L3,ZFWR5+%.LO UD*I16R&S8$T%\X%P_WE]3&NWK#9IV@M)"4%H$ M2J-
0--L63>2)W9EG.)_SXJ8@Q+)LQ9)FD4PRS7.//)\3DNHB=-/J$= L%)06 M5+0S^ULJV?V*"IJ%@M(H%,WV2!.'8G<>VF5EW(WJ; 30B+2BV8OCNR>RL&JU
M/;^1O581Z,AHR\C>D>%PJU?[OJ0FL"3..*O;VK>;U54[4%I0T2SM]J1K:33< M4PYT7!2*9NO;Q(G$'2<6Z1'Z%SD6P]V$SJJ")HB@M!"4%H'2*!3-]DF3,A+R
M#0O5IB]R$A<0=%M;3R>$5<#>A\|D DA: TD)06@1*HU TVR=-0$A& M+SB=@-YC"4H+0&DA*"T"I5$HFNV@)G D[L"Q\W3BM][21 :#W1D%]'Y-4%H(
M2HN./204JMM2ZO[6,T^I&U]\6#6CO[WP>E@^> M-9CR.;@;)A_B3*&$SPW2.QD;K\KRT;+RA1;+XLFF>Z&U2(O-!6&ULS5GO;^(V&/Y7K.PTTW4EM$P<2H .DEN2T
MFZ[7"GK;AVD?W,20Z!R;V0;:_WYVD@9"0EHD:QL?P(G?Y_'KY_6O%X]WC/\0 M"<82/&>$BHF52+F^MFT1)3A#XHJM,54U2\8S)-4C7]EBS3&*SI>HQ5>8/E]
M_<#5DUVQQ&F&J4@9!1PO)]8-O [A0 -RB]]3O!,'9:"[\L38#_WP)9Y8CO8(M$QQ)38'4SQ;/,"&:2?GQ=TEJ56UJX&'YE?USWGG5F2SP@/WA H M3
0(:8SC%GS8C8=N!X&MY*@T<5\UN74[&7_;D"O@N!? =>"HK4/=\ 5>7X&> MH^%NOP4>O!_>:Y.C&Q[@2,%A[KS7(4:O&B"]G*]W@F_"N:8((EC\,A /FKN ME^!S,6KFU:CY<\X(6H*
[Q"/_VKQ_K9HK=_>FEX6K\4:17ABJ75/8+[%UO3G MGZ#O_-(6")-D@4FRT!!9+63]*F3]+O;I-[6_D"ILO R;9$")52FM*5 M6G8)HA%NBUUGL^?&KB#SW"@WY51/;J\3V MNL5F]#)"
(BG5U'IO,=VTZM?)=*Y^!9EW(,TE'/3\(P%;K%S?'QP):,BQFH!^ M):#_/@%3*K&BEP_JV.0:%6PD^I=[9YKLJ#AH1>#Q[-X*!I-(30.1+:D%LUH8>5T,/.;7"N&!&/$J .
M.2!04YRPM3HO2W##.:(KK,L78*8.(ER=?74$'C#7YWB@OL"]3#!7N^-7Q0J^ M2)R)UKUQ:%)WDV2!2;+0$%DMCJ,JCB-SJTTGU;GQ&+V]VC1-FJN-(9]JXD%G MGRTXG?+=?
WNX>7RIU0T]5RZC;(%1MM 46ST(!RD;_._7HM('4]$TR188 M90M-L=6CZ>ZCZ79.J7EY;JP6),%(?*%B2S>(O)XF@4Q47:)J]*:>I*M$6ZH- MG;?&SFT;WI75W*?J<+.K&IZ?
Q?.%ZUZ&$TZ MC;(%1ME"4VSU".P33]C_5_\L@$8S3J-L@5&VT!1;/7#[)!:^,XM]S[&HF^OL MJ#135-A<@9I&_6.CT)1?=0WW>2ST_P?;LM$,V"A;8)0M-,56C^8^L89O9-9G
MS0BC&7/)YG?/B*91RXPPFC+;!]<,&>:K_'Y'@(AMJ"S^7:_>5G=(-_G-R='[M&;P.BIN@/4UQ,76'^"JE A"\5)3.U4!-:5[<]10/DJWSRXPG)B7+\F*"48RY M-E#U2\;DZX-
NH+IQF_X#4$L#!!0 (%" 9EE?MO<: @0 (P: 9 M>&PO=V]R:W-H965TRSU _?74R(N1!DM^,W,>!Y?KL[SS(. MPW3'Q1>Y 5#D:YX5*'/!#J?H%E08'@ISV3]E^R:6,(W .U7@-
P+_5,&H$8Q.%02-(#A5,&X$XSKWAV35F8ZHHN%4\!T1)EK3 MS$%M5ZW6"6:%V5D+)?2W3.M4..>%8L4:BI2!)+18DI3G.5-Z\RA)WD:@*,OD M._(C^;R(R-LW[\@;P@KRVX974D?
+J:WT+ S+3IL1/QY&]%X9<0'E%?&=]\1S MO%&/?#XLCR#56^SWRZ/31^^3QZ:-[/?)D6/YKJI[D[C=KM[5QK7M>ZYY7 M_R3W9L?N??GSSJG M/M. &PT5P?$H1')SAN92>O,9-
"9N*#:#.W% M#Y(L]*."]H4L-E3 AF?:%TG^(8-U=Y!^[IV("8LP83$F+$&"=?R^;OV^OF#= MO<9T&Q,68<)B3%B"!.NX?=.Z?7.ANGO3\|_GMR5U/CCXN0YBPF),6/(R%\^) MZ-CB.L\/\,
[_+;L?Q&.E*DGNBO2J]X%]<(1S;T946H1*BU%I"1:MZ_Q1Z\:] M8 %NX%BF8](B5%J,2DNP:%W3GSL^[F"+(8Q@"QDOC<>UY0+65485%WN2LPRD MXH7>#"7=UQ$E")*Q%
H)=6>OY)76Z%GI'?/>]!%97N6]NP.U.81*BU!I,2HM M:6C'3QFNXP7.:V7^N??C#C=_SO==\#W-U'[89J0N3&,S)BU"I<6HM,1]V>)R MG1?.>YA'VZ ZE]Q M$Z"_7W&NGDY,][[]]
17^"U!+ P04 " !0@&99J06IOGH6 !1; $ &0 M 'AL+W=ORG) M?LPRZV6]_IKE?Q:S)"G%7XOYLGAS,2O+U9MQ9O9Q<96MDF7UE?LL7\1E M]6'^^V<%VL<=ZTF%^KO=

{H>A&GRXNWK[>?B_*WK[-U.4^7292+8KU8Q/FW-M]\D\^_KF0KG8?>)#^C-K-Y^X?OMZ%3\D'Y/RCU645Q]=/REWZ2)9%FFV%'ER-M_^;BG?(J&@\W.VRW^&>:?"WV'HO-4_F<97]N/K&#OWEST-D>4S)-IN2'BZK\O-MR6TRGV^DZCC^MT8OGFIN=MQ_O-.-[9.OGLSGN$ANL_E_I7?E[,W%S86X2^{C-M];S\D'VUDOH);0]PFLV+[;_B:{UM{T},UT69+>J=JR-8I,O'_^,_ZA=B;P=5-M?68'M=Y!/76'?KU#_]0=!O4.@U-W&-8{#]VZ(^?V6%4[S-ZM<*XWF%\Z@XW-M]0XW1^XPJ7>8G/HN=6D-Y>K-/?K>5W=NMG/Q^*[LW7#E\QY]_+KNW M7#EZSR?/{,>[TY7#=WWP[+?ZfU?MN_[]>,/R?8G3(O+^.WK//LJ\LWVE;=Y ML/TQW>Y?_6"ERTVB?"SSZ]MIM5_Y#OD}G,>?LSS>_'P7EV*;+UD=D/!Z1^LP1}85?'<.L$/KR+KGKV-^1{S]Y:7]/-MOK^BO@3X0D(Y,!(]A)<5V_PT[NL[M[E]ZI4=.+EE>B-+H7:4U7QQT=-`M_/K+,QT'=GL*,WR1T5Y@UO.*43>,,I$P^BE'H[S(&'+F8[*Z$OW>]DD-=HQ8 MY=G=>EK6W]X=JBE7_3BO5*6M=C#6Z0?7ES#VZ4^.JN>UZ-1-Z6\U Y4G;"_4NN)4__:??,OUMI?XS-ME3XD11+GT]GVEXJ6?*E.9%>;?R;B79['RX?M+Y9+ <5O-[A%E)(DWYPNB^H?-M$9:S)'_$?WN5*NPR613_T_%DWS\>PJ#[$#9GY}^*53Q-WEQ4I]Y%DG})+M[^-MYW\HH]{?NX*0Q#02TTG,(#&3Q"P2LTG,(3&7Q#P2\TDL(+&0Q" ((:\7BX"D6-M!S*].OE>+*11}6/,7CZ=2A?%.KD3OZ:[K_PFOC^?\>^E),1-M&VZQS=]_(&'' MEJ/)S6@\4 ;M+2/H %M1,WR*FJ$T:K3D/LGS9#>D3T1>G84MUTDUXE]7GU^6-M7=$B) <^-%A+32$PG,>,1&^U_.0FBG(0*V1)B\1L$G-.>C%] M&&"5LIXYY;F*0F$9B.HD9H^-?(/W^-MY" PR(K6Z.A[;# :WK0KVF1%Y_@Y#H:3\4$.'!^6,IQ,1NVM//*X?!(+2"PD ML0C"6G$Q?HJ+L30N/F5E/-]8J;&VGJ7QN\)"81F(ZB1DW1[_9U8/0(&%",ER$82UPF;R%##83>=AD2W$;%S/QHFQ4_3^/R^ILYU,F M/L,S1(3WPEB7ZSRIMTR[AT_2:N<&$(EI)*:3F$%B)HE9)&:3F#,Y/B<8]P\& M6N[D^.=X-#H8LWGD8?DD%!802& (1A+422^D}1=9F4ITDL_Z1SMQ[0DI9R/*5^K/8/^C71DD[*L^R8(MQQ8!USA-$C\U$M0+40U2)* M:X=*T]N@R)L;_'29+M.+SNQ &Q5034,U'=4,5#-1S4(U&]4<5'-1S4,U'}4" M5 M1+.*T]@U1FS8(M??CAY JVCN!.AJJZ.AFH)}):A:JV:CFH)J+.AZJ^.:@6 MH%J(:A&EM7.RZ9U0I7..W^XZ6YLKJ7[{>MP9>6@;!*IIJ*.CFH%j)JI9J&.C MFE-KAY? 4>N/#&Q>B93U4\U$M0+40U2)*;Z>9VJ29O,/!C_JZ;DPKW_/LX$+{ M&E!-1S4#U4Q4LU#-1C4'U5Q4\U#-1{4 U4)4BRBMG6Y-GX3Z$]QF7T6,*5!~ M0S4=U0Q4,U'-0C4;U1Q4? AG)/VF93*==687VK: :AJJZ:AFH)}):A:JV:CFH)J+:AZJ^:;@6H%J(:A&E MM?.M:6Y01S_!L!;MBD U#=5T5#-0S40U"]5L5'-0S44U#]5\5 M0+42UB-+: M.=ET1:CRE19NLZ(L1%[? >KB*P>G^XLZ=H8>V.*":AFHZJAFUMC_O=7AX(R03 M+6EUE!P?EK31DH[:L73 44VWX\ J\& K#STR'J4"5 M1+.*T=J0T#02JO($@ M]/4/'SN3 ^T>0#4-U714,U#-1#4+U6Q4% <5FV:QIDMP5XC[/%J+8+&JSM\;6[NKIE?B<5.F8B/CN2UID^3=Q MGW2WG\J+GAN,J*:AFEYK^\,HM=<[""$9:%$3U2Q4LU'-0347U3Q4\U$M0+40 MU2)*:R=>T_/0E_<\Z,V*@4W(I4FQ.0?\O%FZ=)}D7Y+.NZ/++Y;-C#6U_J+7] M(.H?!Y%>;S:4;V:@QV:BFH5J-JHYJ..BFH=J/JH%J!:B6D1I[;Q2F[R2=S74 M2PON3L96\;? M8J>=^81V.:":UC[>7Z SGT[:S$"/S40U"]5L5'-0S44U#]5\ M5 M0+42UB-+:^=3T)?3EZS?0RZ3*RYT=8F@+ JKJ&:@FHEJ%JK9J.;46NL2 MY_&%T(ZMU*.M//3(?%0+:FW_-^OOZO$2R%:-:*T=C@U$0#5PQ@3ZPQ]__ML;./AJ@FH9J.JH9J&:BFH5J-JHYJ.:BFH=J/JH%J!:B6D1I[9QL>@WZ\H44 MSFT-E7-G1Q[:-E!KD[W3^4T7X>&?T]\V %0S4:CFHUJ :B&J1936SLFFBZ$O7Z7A[$KVI" :EJM'2V/V.\?CEG17@-4,U"- M0C4,U1Q4AEK, MOV9V>.'UY4T,])A,5+-0S48U'!]5<5/-0S4>U -5"5(LHK9U430_#0-[#\&ZZ M3LNX$)^J4[- XE:S+=%I<"GLYO1+?G_H9MKWQK,NN%=LSP'E:Q5C1W:CFHUJ :B&J1936SL:FA:)Z^.-'NP,T M)TE-0S4=U0Q4,U'-0C4;U1Q4<:/L#]FFHIJ.:46NMY5_&ZN&8$^UJZ"@Y5ON'8IZT M6:&CI#+NCP['G,=;J;/1^'#,B387H%J :B&J1936#H^FN6 @;R[X1SI?'PPX MJU.J2^%]TJXZ P5M+D U#=5T5#-0S40U"]5L5'-0S44U#]5\5 M0+42UB-): MD3=LVA2&O1_KARB'0ZHIJ&:CFH&JIFH9J&:C6H.JKFHYJ&:CVH!JH6H%E%: M.R>;#H>A?(V$*"NK)$RK$\)%.D^*,JL"3W;C<3EW=N2AS0JHIJ.:@6HFJEFH M9J.:@VHNJGFHYJ-:@&HAJD7#XP5,U,%P_I;_[3!3FS"3MR%$>,)(UPN1+<5T MGA7I\D%4B3;]4ZSR=)}(7W^IHBV]^ZTSU] FA.'QV@8#Y?#^RQI:4TU_-5"5(LHK9UJ3W!S.3$.+ M6JAFHYISV@OBHD4]5/-1+3CM!0G1HE%'T6%O.!@^3$LQS8IGAID)2ZNQ((34-U714,U#-1#4+U6Q4K&>5^N;<2 MU31[6*;_ZE[54ZZ? G5CHY'Q4TU'-0#43U2Q4LU'-0347U3Q4\X?'+0O\]7"D M'$8;VA> :A&EM:.MZ0L8ROL"/F5E/!=WR7V2Y\E3][FK\4C3STN'Q4"U M1+6(TMK! MTLRB'SY.67UN2JFVBY#='YOVII*^/%44G5*/:AJJZ:AFH)}):A:JV:CFH)]+ M:AZJ^:@6H%](:A&EM?)OU$RI'\GO_'_.M4$Y=6[UX:F:RC^0SV65-CN)[]7"QJ :$'ZL- MND=_V< M;&;4C^0SZNMSP6)[+GA9_R_2HE@G=^+7=/>5WZK3QN+Y\T5T1CVJ:.BFHYJ! M:B;J6:AFHYJ#:BZJ>:CFHUJ :B&J1./C:?S]X7@R&:K=5T%'S43^ZJ$LXK;C MW%W?8Y5H?WS4-EU#CWFV";9?Q+4LW*3ZV>%&:AJJZ:AFH)}):A:JV:CFH)J+ M:AZJ^:;@6H%J(:E&MC?:";7"E3)Y)MJ8'8"3O 8A>:/*,"Q'O5ISK;/66^V=G M&H%@&HZJAFH9J*:A6HVJCFHYJ*:AVH^J@6H%J):5&O[BS[VK1GVB]'31/ M2-X$8%=#T,>F[OOM II/@U2Q6N>;+VW_:%?.$A&NDJ7PX_S/I!0?XWDBWCWD MR? 8/?)V1US&A>7AT?>Q6?G1G9QG: X!J!JJ9J&:AFHUJ#JJYJ..AFH]J -J% MJ!916COSFL:#D;SQX(7KMN$R^?U3NDC$'ZO[/*L"\':S.$KT>(NRSJQ#.Q-0 M34,U'=4,5#-1S4(U&]4<5'-1S4,U'!4"5 M1+:.*T=B0V+0RCFY_@.B[:I8!J M&JKI]&:@FHEJ%JK9J.:@FHMJ'JKY!I:@6HAJ$:6U<[+1R!C)US6(AFR:)'?% MX8+M6=YJ40/MP:BUUCT>>T=C:@TMJJ..@6HFJEFH9J..@VHNJGFHYJ-:@&HA MJD64UHJR<=-<,98W5[PP"MZUG!T$?9HMB^U)8GVID,I8DU<^-_9034,U'=4, M5#-1S4(U&]4<5'-1S4,U'!4"5 M1+:.*T=CHVO1UCY<:CFHUJ :B&J1936SDFUR4GY @BR54+ENYX=;VC?!JKI MJ&:,C[=R4 Z7[#3I4R'R;ZJ'MQ.T49K.K6V/Q7UYN:P@;;KM>CU!Y.#&YR@-M1^:C6H!]{:I%E-9.CZ8M8BQOBPB#Z-VG3Q_"SO1 NQU034,U'=4,5#-1S4(U-M&]4<5'-1S4,U'!4"5 M1+:.*T=KPU+1'5PQ_B:R@.4EJ&JKIJ&:@FHEJ%JK9 MJ.:@FHMJ'JKY]!:@6HAJ$:6U<[)IL!C+&RP^9-_B>?E-I,LRJ?Q2%-G\[K)*-MS>4ZGN]N2"[*6?6U6?65S5SE6? HPVVQ9IDG>F8IHRP6[:,6V/Z;93(T^O)"K-MHU4-5#-1S4(U&]6<$]\M%ZW]G5C51ZL&]!:.B6D1ICQEU7I'D M#\EM,I\?8KI9S6YS0K?WV2J]JL,4UZ]4R^NCSYO**LI>/SCO+*W7I^NN'? MOEI%#XD?YP_ILA#SY+XJU:O:/+&\BK.G#!IL]>9"N1"2LI+,%MN'LR2^2_+-_M!M77[I,LW'VP*? UR__C"0 "H<-M !D !X,"JW;W)K&ULO=U=;JK8%L;QKV(QHU$K-M]01L-PF=!"F-W^UTJD8SYV(I*%R[L@%7-C&V2SNA\^&.#@S%Q=K'Z5WK1AI?U MVX;PQ(NR8E\^QLG7="Y$IGQ;+E;I56>>9>OWW6XZF8MEF)!%;I";|F/DV68-MY1>363==)R*<;HN6BZ[6ZPV[RS!;=<:7V^L^)>/+>),MHI7XE"CI9KD,DW\^-MB$7|>-51.T]7? (YF\ZRXHCN^7(RW]>?DOQ2=Z],HZ58I5&\4A)Q?]6Y-M5M\'^K-HV-[CCT@\I@=?*\5#^1++'7XL+[O2[TRNV2"S$)"N(,/_G0=R(Q:*0-M\NWXNT0[^S6+PL.OGW1K^^#S!_,E3,5-O/AO- ,WF5YV+CC(5]^%FD7V.'QU1-M/]!!X4WB1;KI6WDL[%0*)--FL7+LCC?@F6TVOT;?BN?B(."W&DNT,H"[=0" MO2S0CPOZ+Q3TRX+-^J06#LF!P:L&P+!B>6G!>%IR'76G!1%ER<6C J"T:G%JB!-M^]<[^22_3?[V7?!Q9*G;[>Z_7YW=R^L[;O2"\+-P?)G&CTI2W#_WBB^V+-^UM-M??YBC%9%"N^R)+\URNNR\=T\3,0\7DQ%DO[RTX6FGO^JB+!W4?:/\A_E8Y@D M89$2Y8TALC!:I&_S:W^_,Y0W/!]5?E:BE7(;+19YFM++;I9O36%\V) ^7*'W8K-M:R^LK"NW\2J;IXJYFHH!0_V-O'XDJ>_FS|+^J=">GHH/FA2|\$^LS1>^]4[2>-MIC=MS^GE_89RX\=6-^7EOTVR,T737BRWY.6W87*F!/1MN=90;LO+/\8/>7E_M6ZXVE#LG;'SOXL5R]Y2-?WEU[_2GKM=0!LO+KS>S?/7S%\L#>;D7KLX4M==4-M7GL5Z_M-ZUM/?\& [681!JL3WRET63[X]?P;Y!8J;B67Z5U-&=UB_&2M:@/?I-M.IR(!TZ^CT[%\B-ZXU]^4H>]7YL"0F(&B9DD9I&836(.B;DDYI&83V(!A-7"-MVM^'M2_3QY_REE,DB9@I;9'6=TI: I(Y3)=QD\SB)_LUO>>)/O9'?7OFW*K]1O-MF[\=-MAB1?O^,%;58;_7RW\N/1Q&DUS4)#&+Q&P2P.]]D=DCWPD-PKB1DD9I*816(VB3DDYI*8-M1V(^B0405@OK^3ZLY](=[?5LEHA9F DE#1="62?11!39G>QVP&5'O%E-1;*$-M^5W%4]P:|!G29=K&F.0,$C-)S"(QF\0<$G-)S",QG\2"'38\?A\YJ-Z(U=)Y ML4_G1;LV^+=)U]{-EM!M(TEB:!HF9)&.1F$UB#HFY)..1F$]B 835LCO:9W=$-MML$C,JPD9I"826(6B=DDYI"82V(>B?DD%D!8+:OJK_HDMOLC!40_I-MH$NZJ.:AFH]]-:75HUH-.:GR*2=/W-^+),KC& 0W>;=\W#W?%0&^EF84'7-"-M-0/53%2S4,U&-0?57%3S4,U'M8#2ZF&NOJ+4 =HQHY-0J&:@FHEJ%JK9J.:@-MFHMJ'JKYJ!906CVYU5"4*AWC&'_<++_DS7 >W;(YCM)T(Z;'/?)NXCC?)3+' X)#W5I5/S6R$,MJL_OIP[!H^+/T31QPSU"%_V+WNBH_3/ECZ]UPM 1-M)E1S4,U%-0_57%0+**Y>L&J2296/.GU*XHD0TU2Y3^+E-E!A:O>NM/9V-)N+-M{!PEW2VC:H? A.>L?)ZSA7OW^F7H6\G;,-E[ )-',%V+2;9)E;O->KW8[=+V;RY;3S#)MZMU-M_XK,*&:B6H6JMFIHYJ":BVH>JOFI%E!;_6=-SZ+-M=#ZHO]OQT!5]5 LHK9[4;K!)DP\V?;_/SIOGN/A/)$FOW;,#EF!4ZFRCTU"H-M9J*:A6HVJCFHYJ*:AVH^J{@645D]_-0VEH=-0&CH-A6H&JIFH9J&:C6H.JKFH-MYJ&:CVH!I=636TU#:;\T#25? IW6FT6DH5#-1S4(U&]4<[?ELU7%/[*(K>]CF-MHU! :?6D5L-0FGP8ZJFCWAWOZ8]PL1'O\IO;Y2SD\HG71**>*^6T=)8V'1/P@-MQUO'QV0C6SU&]?;FFC,IW^NK7016U4U@-+J\: [&H#3T-MX% :>G0H5#-0S40U"]5L5'-0S44U#]5\5 LHK9[<:KQ*>Z4C1&#G!I-MZ-7JAFH9J*:A6HVJCFHYJ*:AVH^J@645C^E2#7 I;_2)=\G;.91C4#U4Q4 ML_3G8TWJ\2&6;'1)!15<5/-0S4>U@-+J4:TFN/0?F^#;-]7?LJ/EMZ2:TWK M0*/36ZAFHIJ%.C;I,.CFHIJ':CZ[!9163WXUO:6CTULZ.KV%;@:JF:AFH9J- M.@ZJN:CFH9J/:@&EU9- [<,J^5YK>DJ_3.M/L^?S8$_JQ9_1C3^G'GM.//:D? M>U8_]K1^['G\GD^]O70R!+V:WM+ETUO?ZZZO-S.TNT,'O5#-0#43U2Q4LU'-M0347U3Q4\U$MH+1Z\JNL,!T]]16.#GRAFH%J)J19J&:CFH-J+JIYJ.:C6D!I M]>16 U^Z_+A77'>-CH*AFH%J)I9J&:CFH-J+JIYJ..7FNRW0)!Q5U2N^E< MB,P(LW!\N13)3-R(Q2+-<[=9Y7SQ_UK[:Y5$W!=' 'E_K76ZSZZ_4=\;:G%]MMV+!&E^MP)F[#9!:M4F4A[G.R=W;>_ZA)HME\?R&+UU<=M:-\B;,L7FZ_G(LP MCWIQA_SV^SC.GBX4"SS&R=?M9H_ #U!+ P04 " !0@&99P;GY';P$!P M& &0 'AL+W=O2E[S,?$_H+=L"<'27I3E;&%O.BU/39-$6,LR.20&Y^+(F-,-6\:KNDRSDI>9KD<$D1*[,,T MS2,E^8=C&0\-5LMER MV6 NYP7>P KX=7%)Q9O9LL1)!CE+2(XHK!? &F7T:VA-I4"'^3F#/.LI(NG)# MR*U\^1(O#$N.'%*(N*3 XF<'%Y"FDDE.XWM#:K1]2L/N\P/!Y\IYX,D:XS%"+(DKW_Q M72-$QT#PJ VT MXB2Z_2CC$*,+DHG)R7 5WJ, .$Y2!EZ KE_]J2DN$\9G.3BR'+CLVH&=YY/3SGB>&YZ"O)^9:A,(\A5M@'X_8G(_;F MD*K5RWG0ZJP9)5Q!<8Q:NRIU?ZSW\Z=Y[8KCMY'$K/G=L M\]CFQOFE.-^ 2"@&0L7]5LZ/NWU/W+Y/H M*2MP! M#9$D&= ?&\;MT;>V)]4H5&)UF@DRS41-8+HM<&T1MC7WZK &T7M_O58&J^YA4?TYN:NJWZ-F'80 MSK'C]T&!"N2=]$&A"C2=M:">"GZK@C^JPA4P+MR5.C"9]5 I$QC:B'DLV^*2 MQOE&;I"0N)*D3G5*++>J>_!$M?H@('B-LUYZ(!7^@A0KG>;YO]>68M'),1N7X M3?J-8LP!K7%"T0ZGY7.GPD05PX$ *LP@S,$S>,)QGI[KT];UZ;CK9VE*(EQ- MA$!:BKKI#>[D;ZB=)!6%"#;LIQ!7E&@7,I;<(4*E#/K MI)^^^IU]PQI?5R-7AXRT2BTX%O5,(K9=+&M%I=>C9"^=F5K9 JULH2ZV?EB< M0UB<5\XQS0!TA5(G6Z"5+=3%U@_EH22S1XN%7\TSIJ,#A3AWNL-$HT!Y,WN8 M.!ZC/'>8M$(5:NH%E6@.18T]7M6W$H=;(%6ME"76S]4!Z*0GN*ORSD('IR;JXX1XKBQ60 MZ MCY)5E*#IG/I,)6M ?R.KVZL3W0UW?Q7S'=)$+4%-.B*^MX*D9+Z^OM^H63 MHKJ_O2&&ULM5==CYLX M%/TK5[2]6FD:/O(ODVF"-)/I:BNUVM&DW7U8]<&!FV 5;&J:I//OUS8,@9:@ M3<6\)!A|CN\YOIA[%PN*Z,$,R)'/$>FGVRYR(C2 M0[%S92Z0O!:4I6[@>3,W(Y0YX<++>NQ?A@A*"[1)D;,KC(R0[7J+[D]T^/W)HEIADR23D#@=NE<^-?K_RI =@9?U,\R,8U M&"D;SK^9P8=XZ7@F(DPQ4H:"Z+\]KC!-#9..XWM%ZM1K&F#S^HG]#RM>B]D0 MB2N>_D-CE2R=*P=BW)(B50_\|"=6@FR $4^E_85#.?O7[Z!ET 9? $YX(35(+ERE@S&4;E0MO"H7#DXL/(9/G*E$PGL68]S&NUI$ MK21X4G(;I!+>%+L1>/X%!%XPZ8JG'I!&? 1CKPO>"F=<&SNV?./_9>R*2U6Y M*U'L$?]Hj.?#!X69_-H1[&U)/NDF-^_VMX[A$QK(=->(>^S/.6/-MB+#&/0K"HDX5O1SGJAB(K"5W5LN=/6?^SH;T82"RE@^7M0^7O=N^(C(!V,?E MO?ASI99DTT;B!O-3F7M52[CJE?"72E! ;T.]=/22G*MC(+*6WGFM=_Z!R%H^^-]QX^Z=>2FKI*]94UQEFT@7D M*")DJLNE:N5Y(U.]T;1.U"H$Z WO=^4W;AN_5_Y'LN&"*"X>_;\7--?EIP*;_MY02* !)0L_Y75:N42WRK&\RRHRL;C@-5"> R1Q5QTL;@95;%UGSG[]DMMOHL3(4 M.]MZ2GV.%DR5[59]MVYO;VQ3YQZGE[WQ)R)V5)^7*6XUU!M=ZO5%V6Z6 \5S MV[%MN-+]G[U,= (N.PD50S[>]6:!N^L/_%!+ P04 "!0@&99GYK" MD$ # (% #0 'AL+W-T>6QE_ELI< MO0O<_>3#R4GG_OQJ/WY6 >/D/THH/K6@R3CG>EZ^%6J6%BQ+Z'>-KR M3C':P)MOBPD=C)SXR;MLE-[O/&L9#ZQB)1S6A3 >9DINZB$B+F STYP%#U2, MR(0*/M4<6!G-N5B[< \"R64#HPM1&NE"Y'RT<%=UX,.K75R+I6NT M'KX'-#TPR(5H#?: {"XR'!36&:7EM.]7@*O@$"NKVW;JP#N>:KKN]2[(A5#>; M9*ITRG2;IDN:T'@H6 9V-)\OX&Y4$0)HC,IM(^5TKB2M/#2,NF%E9TR(6WB M? V8[V]ML:T^K'95MTQ]FT[&=4!_6\UI;\M&+](-"OZ@S)>EG8ZL^E K[$:S MC*^J_BIK#6#]75R=%H58?O9\+G/F)O_LA:,A;7C!0FG^;+-!]=,,DW%MFE;^V!YE5_L.,J_EN7J6V7? ML- =C_59^ZR8OC\%D? PFCZ{F!\=@,CD"D_U7^]8\;#*L3QE;1VF=@TP;#>#_M."(_X&@]-DF#Z9(+PV7=6_T9?+))><;*&SJU?^;LZ-OQ**5 MB,T47VM _.L&C"3Q[S:6!QC8+F"U _G]>;"F_)PH@EW%O&%/(XD"89 +?IK M-(Z1U8GAX]\?["F)HIB3Q(X#Y'401AL#3B".8 _" (5%4O0?WWD=A\YX*-__[M&_\!4$L#!!0 (%" 9EF7BKL