
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 6-K

**REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16
OF THE SECURITIES EXCHANGE ACT OF 1934**

For the month of May 2024

Commission File Number: 001-41310

ZENTEK LTD.

(Registrant)

**24 Corporate Court
Guelph, Ontario N1G 5G5 Canada
(Address of Principal Executive Offices)**

Indicate by check mark whether the Registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F Form 40-F

Indicate by check mark if the Registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the Registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ZENTEK LTD.

(Registrant)

Date: May 28, 2024

By

/s/ Wendy Ford

Wendy Ford

Chief Financial Officer

EXHIBIT INDEX

Exhibit**Description of Exhibit**

[99.1](#)

[Press Release dated May 27, 2024 - Zentek Granted Second Patent from the Canadia Intellectual Patent Office](#)



Zentek Granted Second Patent from the Canadian Intellectual Patent Office

Guelph, ON - May 27, 2024, Zentek Ltd. ("Zentek" or the "Company") (Nasdaq: ZTEK; TSX-V: ZEN), an intellectual property technology development and commercialization company has received a second patent by the Canadian Intellectual Property Office titled: Graphene Oxide-Cationic Silver (GO-Ag+) Nanocomposites and Their Use as a Broad-Spectrum Antimicrobial Agent and includes a total of 64 successful claims. The Company also applied for this patent with the United States Patent and Trademark Office. The patent claims the novel GO-Ag+ compound, that is the active ingredient for ZenGUARD™, as an effective agent against both regular and resistant bacteria, fungi and viruses. The patent claims liquid, powder and ointments that use GO-Ag+ as the active ingredient.

Zentek continues to do extensive work with GO-Ag+ in collaboration with the University of Guelph. In previous research, GO-Ag+ demonstrated substantially higher cytotoxicity against gram positive and negative bacteria than for human epithelial cells. In current research, the efficacy of Go-Ag+ is being studied to prevent and eliminate biofilms which is a critical challenge for wound care and various medical devices. These results, along with the new patent support future work to develop GO-Ag+ based products for medical and veterinarian markets including wound care products.

"We are very pleased to expand the use case and patent protection of the GO-Ag+ active ingredient in ZenGUARD™ and we see this as another important milestone in our IP commercialization strategy," said Greg Fenton, CEO of Zentek. "Now that we have secured a patent for our GO-Ag+ formulation as a therapeutic that could apply to both human and veterinary medicine, we will focus on how to maximize shareholder value from this opportunity while balancing the other priorities of the Company."

About Zentek Ltd.

Zentek is an ISO 13485:2016 certified intellectual property technology company focused on the research, development and commercialization of novel products seeking to give the company's commercial partners a competitive advantage by making their products better, safer, and greener.

Zentek's patented technology platform ZenGUARD™, is shown to significantly increase the bacterial and viral filtration efficiency of both surgical masks and HVAC (heating, ventilation, and air conditioning) systems. Zentek's ZenGUARD™ production facility is located in Guelph, Ontario.

Zentek, through its wholly owned subsidiary, Triera Biosciences Ltd., has a global exclusive licence to the aptamer-based platform technology developed by McMaster University, which is being jointly developed by Zentek and McMaster for both the diagnostic and therapeutic markets.

For further information:

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To find out more about Zentek, please visit our website at www.Zentek.com. A copy of this news release and all material documents in respect of the Company may be obtained on Zentek's SEDAR+ profile at <http://www.sedarplus.ca/>.

Forward-Looking Statements

This news release contains forward-looking statements. Since forward-looking statements address future events and conditions, by their very nature they involve inherent risks and uncertainties. Although Zentek believes that the assumptions and factors used in preparing the forward-looking information in this news release are reasonable, undue reliance should not be placed on such information, which only applies as of the date of this news release, and no assurance can be given that such events will occur in the disclosed time frames or at all. Zentek disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, other than as required by law.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.
