
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

Form 6-K

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

For the month of October 2025
Commission File Number 001-38370

CollPlant Biotechnologies Ltd.
(Exact name of registrant as specified in its charter)

4 Oppenheimer St, Weizmann Science Park
Rehovot 7670104, Israel
(Address of principal executive office)

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 ☐

On October 20, 2025, CollPlant Biotechnologies Ltd. issued a press release entitled “CollPlant’s rhCollagen-Based BioInk Demonstrates Strong Performance Compared to Matrigel® in Study Conducted by Technion – Israel Institute of Technology”.

Attached hereto and incorporated by reference herein are the following exhibits:

99.1 [Press Release, dated October 20, 2025](#)

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.

COLLPLANT BIOTECHNOLOGIES LTD.

Date: October 20, 2025

By: /s/ Eran Rotem

Name: Eran Rotem

Title: Deputy CEO and Chief Financial Officer



**CollPlant's rhCollagen-Based BioInk Demonstrates Strong
Performance Compared to Matrigel® in Study Conducted by
Technion – Israel Institute of Technology**

- A head-to-head study by Israel's Technion found that CollPlant's rhCollagen-based bioink, **Collink.3D™**, outperformed **Matrigel®**, a leading extracellular matrix, in supporting structured tissue formation.
- The findings suggest **Collink.3D™** could offer a consistent, tunable, and animal-free alternative for advanced tissue engineering and research applications.
- Extracellular matrices are key tools in drug discovery, regenerative medicine, and tissue modeling. CollPlant's plant-based technology provides a sustainable and ethical approach without compromising performance.

REHOVOT, Israel, October 20, 2025 – CollPlant Biotechnologies (Nasdaq: CLGN), a regenerative and aesthetic medicine company developing innovative technologies and products based on its proprietary recombinant human collagen (rhCollagen), today announced positive results from a head-to-head comparative study of its rhCollagen-based bioink, **Collink.3D™**, and **Matrigel®**, conducted by the Levenberg Lab at Technion - Israel Institute of Technology.

Matrigel®, developed and marketed by **Corning**, has been one of the most widely used extracellular matrices for more than three decades. Derived from the Engelbreth-Holm-Swarm (EHS) mouse sarcoma, it contains a rich combination of basement membrane proteins such as laminin, collagen IV, heparan sulfate proteoglycans, and entactin/nidogen, as well as growth factors that make it a cornerstone for 3D cell culture, disease modeling, and drug discovery.

In the Technion study, **Collink.3D™** demonstrated enhanced mechanical strength, elasticity, and stability, providing a reproducible environment that supports organized and long-lasting tissue formation. These results suggest that **Collink.3D™** may serve as a next-generation, animal-free extracellular matrix, offering a complementary approach to traditional matrices such as **Matrigel®**.

The global market for basement membrane matrices, including Matrigel and similar products, was valued at approximately \$96 million in 2024 and is projected to reach \$201 million by 2031, growing at a CAGR of 11.2%. Key suppliers include Corning, Thermo Fisher Scientific, and R&D Systems, which collectively account for more than 69% of market share.

Yehiel Tal, Chief Executive Officer of CollPlant, commented: "We are very pleased with the outcome of this study by the Technion. The results reinforce Collink.3D™ as a biologically supportive and durable bioink that promotes cell organization and tissue development while maintaining structural integrity over time. We believe Collink.3D™ represents a strong, animal-free alternative for tissue engineering, regenerative medicine, and drug discovery applications."

About Collink.3D™

Collink.3D™ is a recombinant human type I collagen methacrylamide bioink, produced using genetically engineered plants and free of any animal-derived substances or reagents. It is the first and only plant-based human-collagen bioink platform, designed to closely mimic the native properties of human tissues and organs.

Collink.3D™ enables scalable and reproducible biofabrication of 3D tissue and organ models, including disease models for drug screening and therapeutic research, as well as scaffolds, tissues, and organs intended for implantation. It supports the creation of complex 3D architectures with defined geometric, physical, and biological properties - offering a sustainable and high-performance solution for the rapidly growing field of regenerative medicine.



About CollPlant

CollPlant is a regenerative and aesthetic medicine company ushering in a new era of medical solutions with a focus on 3D bioprinting of tissues and organs, tissue repair and medical aesthetics. The Company's products are based on its rhCollagen (recombinant human collagen) produced with CollPlant's proprietary plant-based genetic engineering technology. These products address indications within the diverse fields of tissue repair, aesthetics, and organ manufacturing.

In 2021, CollPlant entered into a development and global commercialization agreement for dermal and soft tissue fillers with Allergan, an AbbVie company, the global leader in the dermal filler market.

For more information about CollPlant, visit <http://www.collplant.com>.

Forward-Looking Statements

This press release may include forward-looking statements. Forward-looking statements may include, but are not limited to, statements relating to CollPlant's objectives plans and strategies, as well as statements, other than historical facts, that address activities, events or developments that CollPlant intends, expects, projects, believes or anticipates will or may occur in the future. These statements are often characterized by terminology such as "believes," "hopes," "may," "anticipates," "should," "intends," "plans," "will," "expects," "estimates," "projects," "positioned," "strategy" and similar expressions and are based on assumptions and assessments made in light of management's experience and perception of historical trends, current conditions, expected future developments and other factors believed to be appropriate.

Forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statements. Many factors could cause CollPlant's actual activities or results to differ materially from the activities and results anticipated in forward-looking statements, including, but not limited to, the following: the Company's history of significant losses, its need to raise additional capital and its inability to obtain additional capital on acceptable terms, or at all; the Company's expectations regarding the costs and timing of commencing and/or concluding pre-clinical and clinical trials with respect to breast implants, tissues and organs which are based on its rhCollagen based BioInk and other products for medical aesthetics, and specifically the Company's ability to initiate its next large-animal study for its breast implants in a timely manner, or at all; the Company's or its strategic partners' ability to obtain favorable pre-clinical and clinical trial results; regulatory action with respect to rhCollagen based bioink and medical aesthetics products or product candidates including, but not limited to acceptance of an application for marketing authorization review and approval of such application, and, if approved, the scope of the approved indication and labeling; commercial success and market acceptance of the Company's rhCollagen based products, in 3D bioprinting and medical aesthetics; the Company's ability to establish sales and marketing capabilities or enter into agreements with third parties and its reliance on third party distributors and resellers; the Company's ability to establish and maintain strategic partnerships and other corporate collaborations, including its partnership with AbbVie and its ability to continue to receive milestone and royalties payments under the AbbVie agreement; the Company's reliance on third parties to conduct some or all aspects of its product development and manufacturing; the scope of protection the Company is able to establish and maintain for intellectual property rights and the Company's ability to operate its business without infringing the intellectual property rights of others; current or future unfavorable economic and market conditions and adverse developments with respect to financial institutions and associated liquidity risk; the impact of competition and new technologies; general market, political, and economic conditions in the countries in which the Company operates, including, with respect to the ongoing war in Israel, projected capital expenditures and liquidity, changes in the Company's strategy, and litigation and regulatory proceedings. More detailed information about the risks and uncertainties affecting CollPlant are contained under the heading "Risk Factors" included in CollPlant's most recent annual report on Form 20-F filed with the SEC, and in other filings that CollPlant has made and may make with the SEC in the future. The forward-looking statements contained in this press release are made as of the date of this press release and reflect CollPlant's current views with respect to future events, and CollPlant does not undertake and specifically disclaims any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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