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 April 2023

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 ☐

CollPlant Biotechnologies Ltd. has posted to its website an updated corporate presentation. A copy of the presentation is furnished with this Report of Foreign Private Issuer on Form 6-K as Exhibit 99.1 and is incorporated herein by reference.

Exhibit Index

99.1	Investor Presentation

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: April 11, 2023

By: /s/ Eran Rotem
Name: Eran Rotem
Title: Deputy CEO and Chief Financial Officer

Safe Harbor Statement

Certain statements in this presentation constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act and are usually identified by the use of words such as "anticipates," "believes," "estimates," "expects," "intends," "may," "plans," "projects," "seeks," "should," "will," and variations of such words or similar expressions. We intend these forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act and Section 21E of the Securities Exchange Act and are making this statement for purposes of complying with those safe harbor provisions. These forward-looking statements may include, but are not limited to, statements relating to our objectives, plans and strategies, statements that contain projections of results of operations or of financial condition, expected capital needs and expenses, statements relating to the research, development, completion and use of our products, and all statements (other than statements of historical facts) that address activities, events or developments that we intend, expect, project, believe or anticipate will or may occur in the future.

These forward-looking statements reflect our current views about our plans, intentions, expectations, strategies and prospects, which are based on the information currently available to us and on assumptions we have made. Although we believe that our plans, intentions, expectations, strategies and prospects as reflected in or suggested by those forward-looking statements are reasonable, we can give no assurance that the plans, intentions, expectations or strategies will be attained or achieved. Furthermore, actual results may differ materially from those described in the forward-looking statements and are expected to be affected by a variety of risks and factors that are beyond our control. Risks and uncertainties for our company include, but are not limited to: the Company's history of significant losses and 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 timing and cost of commencing clinical trials with respect to tissues and organs which are based on its rhCollagen based Bioink and products for medical aesthetics; the Company's ability to obtain favorable pre-clinical and clinical trial results; regulatory action with respect to rhCollagen based BioInkand medical aesthetics products 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; the Company's reliance on third parties to conduct some or all aspects of its product 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; the overall global economic environment; the impact of competition and new technologies; general market, political, and economic conditions in the countries in which the Company operates; projected. capital expenditures and liquidity; changes in the Company's strategy; and litigation and regulatory proceedings. Many of these factors that will determine actual results are beyond our ability to control or predict. For a discussion of the factors that may cause our actual results, performance or achievements to differ materially from any future results, performance or achievements expressed or implied in such forward-looking statements, see the "Risk Factors" section of included in our most recently filed Annual Report on Form 20-F. Existing and prospective investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof.

The statements made in this presentation speak only as of the date stated herein, and subsequent events and developments may cause our expectations and beliefs to change. Unless otherwise required by applicable securities laws, we do not intend, nor do we undertake any obligation, to update or revise any forward-looking statements contained in this presentation to reflect subsequent information, events, results or circumstances or otherwise. While we may elect to update these forward-looking statements publicly at some point in the future, we specifically disclaim any obligation to do so, whether as a result of new information, future events or otherwise, except as required by law.

The trademarks included herein are the property of the owners thereof and are used for reference purposes only. Such use should not be construed as an endorsement of such products.

Our Company Vision

Imagine a future where…

There will be an **unlimited supply** of spare parts for the human body, including life-saving organs

Medical treatment will be **tailored** for the individual characteristics of each patient

Drugs will be developed without the need for **animal testing**

We aspire to become the leaders in regenerative medicine, helping people live longer and better and creating improvements in science through our regenerative technology

CollPlant

Investment Thesis

- Pioneering Proprietary, Plant-Based Technology Platform
- Addressing Multi-billion-dollar markets
- Broadly applicable, clinically validated technology
- Strategic agreement with global top-tier pharmaceutical company AbbVie
- Highly seasoned management team
- Strong cash position of $29 million as of December 31, 2022

CollPlant

At-a Glance

~70
Employees

Headquarters
Rehovot, Israel

NASDAQ (CLGN)
(listed since 2018)

Re-orient;
fully vertical operation

cGMP production facility
that utilizes proprietary
production processes

Market cap*:
~$80M*

Shares outstanding:
~11 M

Avg trading vol (3m)*:
15M shares/day

Well-capitalized

Clinically validated
in Europe

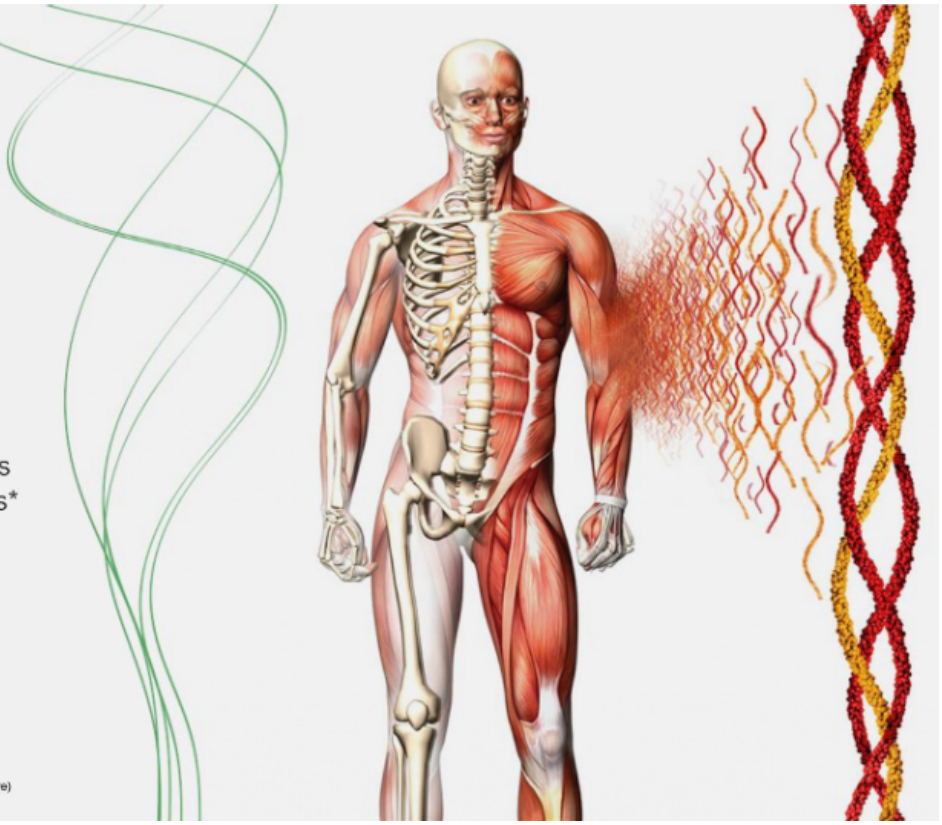
CollPlant · * Figures as of April 4, 2023

Collagen is an Essential Component of the Human Body

25% to 35%
of the whole-body protein content

The main structural protein in the extracellular matrix found in the body's organs and various connective tissues*

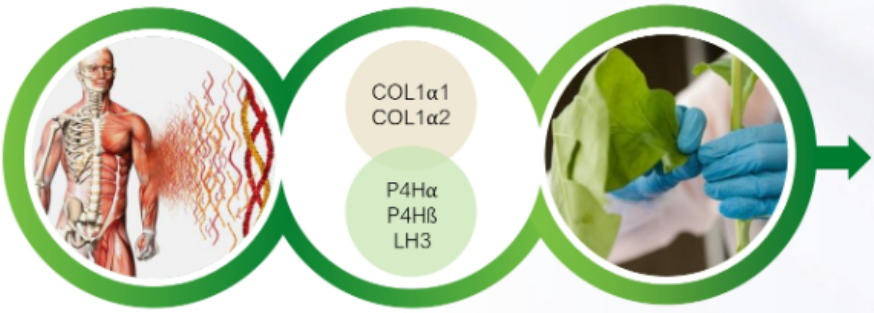
Ideal scaffolding molecule for regenerative medicine



CollPlant (e.g. cartilage, bones, tendons, ligaments, skin and vasculature)

Our Technology Platform Produces Human Collagen in Plants at Mass-Scale

Five human genes essential to the synthesis of Type 1 collagen are introduced into tobacco plants to produce rhCollagen identical to human collagen but without an adverse immune response



CollPlant

rhCollagen: The Ideal Building Block for Regenerative Medicine

Clear advantages over tissue-extracted (animal-derived) collagen

Sourced from organic material (tobacco plants) producing collagen that is superior to animal extracted

Better bio-functionality leads to faster tissue repair

Superior homogeneity allows for creating implants and biological inks with distinct physical properties

Improved safety; does not elicit immune response that would cause tissue rejection

CollPlant

How We are Applying our rhCollagen: Areas of Focus

Product	Use	Preclinical	Clinical	Commercial	Status/Partner
Aesthetic medicine					
Injectable tissue fillers	Dermal/soft tissue fillers	[timeline undisclosed]			Allergan an AbbVie company
Injectable tissue fillers	Photocurable dermal filler				
Regenerative medicine					
Breast implant	Breast reconstruction & augmentation				
BioInks	Tissues, organs, drug discovery & tissue modelling				
Personalized medicine					
Gut-on-a-chip	Ulcerative Colitis				SHEBA, TEL AVIV UNIVERSITY

Diverse Product Pipeline, Associated with Significant IP

Regenerative Medical Aesthetics

Dermal/Soft Tissue Fillers

Photocurable fillers designed to provide soft tissue regeneration and contouring

Key Attributes:

- Enhanced and prolonged lifting capacity
- Tissue regeneration
- Contouring ability for improved aesthetic outcome
- Technology platform for other soft tissue applications

3D Bioprinted Breast Implants

Regenerative implants intended for breast augmentation and reconstruction

Key Attributes:

- Biodegradable
- Promotes regeneration of natural tissue
- Improved safety- doesn't elicit immune response
- Optimal design that secures implant performance over time

Regenerative Medicine

Bio-ink for 3D Bioprinted tissues

A platform material for bioprinting of tissues and organs for regenerative medicine applications

Key Attributes:

- Animal-free: excellent safety profile, ideal for clinical use
- Tunable physical and mechanical properties
- Biocompatible - supports high viability of different cell types
- Compatible with various 3D bioprinting technologies

Drug Discovery & Personalized Medicine

Tissue Models

A gut tissue model intended for drug screening for ulcerative colitis therapy

Key Attributes:

- Accurately mimics intestine tissue structure & function
- Enables high throughput drug screening
- Utilizes patient's cells for personalized therapeutic response
- Platform technology for other tissue models (e.g. colon cancer)

Dermal/Soft Tissue Fillers

In collaboration with Allergan an AbbVie company

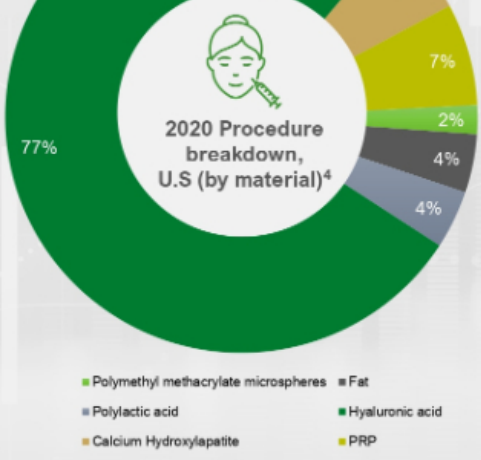
CollPlant

Dermal Fillers: Market Overview

~2.6M
HA procedures in 2020 in the US[1]

$5B, 9.6% CAGR
Global dermal filler market, 2021, CAGR 2022-2028[2]

$100-$250/unit
Cost per syringe[3]



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1. www.plasticsurgery.org/documents/News/Statistics/a2020/plastic-surgery-statistics-full-report-2020.pdf
2. www.gminsights.com/industry-analysis/dermal-filler-market
3. www.medicalspanx.com/juvederm-hydrate
4. www.medicalspanx.com/buy-juvederm-ultra-plus-xc

Collaboration Agreement with AbbVie

abbvie

Agreement Highlights

- A worldwide exclusive development and commercialization agreement for dermal and soft tissue fillers for the medical aesthetics market
- Combines CollPlant's proprietary rhCollagen technology and AbbVie's technology
- Right of first negotiation for exclusive rights to use the rhCollagen for the commercialization and sale of an injectable breast implant and photocurable dermal filler products

Financial Highlights

- Up to $103M in potential payments, including:
  $14M upfront payment
  Up to $89M milestones and option payments
- Meaningful royalties on all products sales
- CollPlant will manufacture and sell to AbbVie the rhCollagen used in its dermal filler products

CollPlant

Unmet Need:
Dermal Fillers To-Date Have Numerous Drawbacks

Safety issues
- Various adverse events, including inflammatory response
- Potential for nodule formation

Undesired physical outcome (unnatural look due to lack of pliability under skin)

Short-lasting and require repeat injections

CollPlant

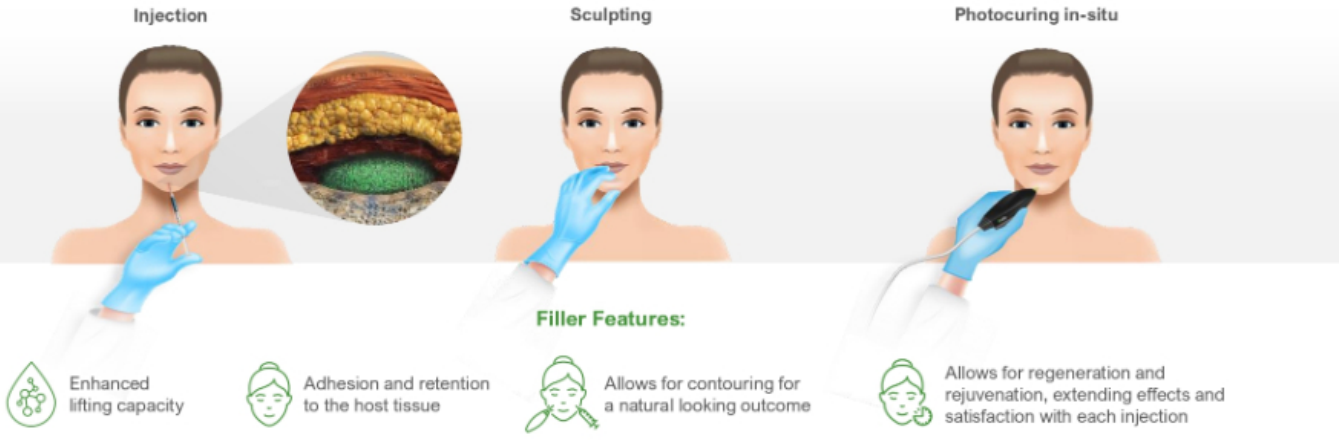
Photocurable Dermal & Soft Tissue Filler

The New Shape of Beauty

CollPlant

Introducing our State-of-the-Art Regenerative Soft Tissue Filler

Photocurable filler comprised of rhCollagen and hyaluronic acid, injected in a semi-solid phase, hardened in-situ by light illumination



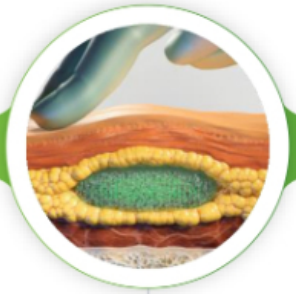
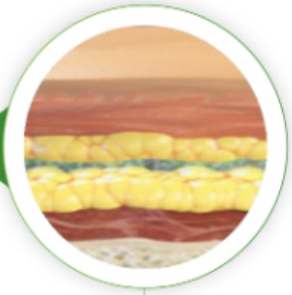
Filler Features:

- Enhanced lifting capacity
- Adhesion and retention to the host tissue
- Allows for contouring for a natural looking outcome
- Allows for regeneration and rejuvenation, extending effects and satisfaction with each injection

Contouring and regeneration may apply to other body areas

CollPlant

Key Attributes

Easy injection (30G needle)	Sculpting before curing	Optimized post curing stiffness	Good tissue retention
			
Injection	**Sculpting** Allows for molding of material for a natural look; prevents encapsulation nodules	**Photocuring in-situ** Strong scaffolding allows for skin lifting and rejuvenation	**Tissue regeneration** Reduces repeat injections

See animated video on how our photocurable dermal filler works here

Evolution of Hyaluronic Acid (HA) Dermal Filler

Currently HA marketed products		CONTOURA®
✓	Lifting	✓
	Rejuvenation	✓
	Contouring	✓

Breast Reconstruction / Augmentation

CollPlant's first-ever regenerating breast implant

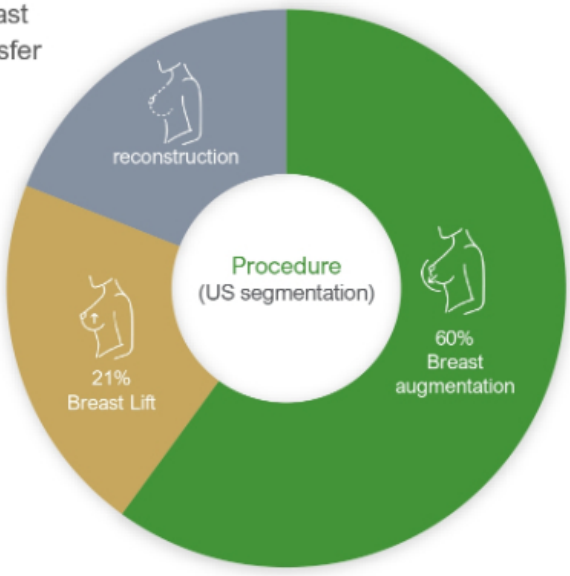
Breast Implants Market Overview

Current breast reconstruction is based on synthetic breast implantation, free flap surgery/autologous fat tissue transfer - all of which replace tissue rather than regenerate it.

$2.5B Market
worldwide (2021)[1]

$ 5-10K Cost
per full procedure in US[2]

~2,200,000
Breast implant procedures WW (2020)[3]
~400,000 in US (2020)[4]



www.imarcgroup.com/breast-implant-market
www.webmd.com/beauty/cosmetic-procedures-breast-augmentation#1
https://www.isaps.org/media/hprkl132/isaps-global-survey_2020.pdf
www.plasticsurgery.org/documents/News/Statistics/2020/plastic-surgery-statistics-full-report-2020.pdf

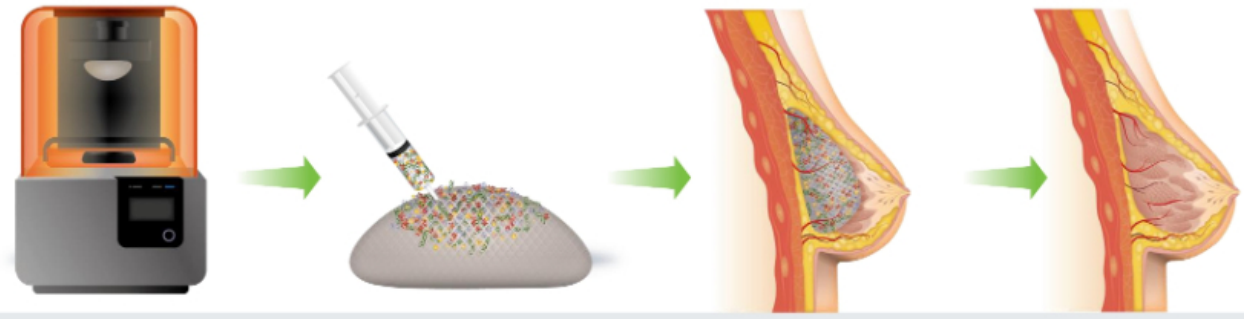
Unmet Need:
The Ability to Regenerate Breast Tissue

No regenerative breast implant exists

FDA alert:
Patients with breast implants have an increased risk of developing breast implant Associated-Anaplastic Large Cell Lymphoma (Feb 2019)*

* https://www.fda.gov/medical-devices/breast-implants/medical-device-reports-breast-implant-associated-anaplastic-large-cell-lymphoma

CollPlant's 3D Bioprinted Regenerative Breast Implants for Aesthetic and Reconstructive Procedures



Breast scaffold bioprinting | rhCollagen + ECM components | Implantation and vascularization | Implant degrades over time and replaced by newly formed tissue

A preclinical study demonstrated progressive stages of tissue regeneration after three months, as highlighted by the formation of maturing connective tissue and neovascular networks within the implants, with no adverse events reported.

A follow-up large-animal study is planned to be conducted during the 2nd half of 2023 using commercial-size implants

Joint Development and Commercialization Agreement with Stratasys: Announced 4/4/2023

- Co-development agreement with a leader in additive manufacturing with decades of 3D printing experience
- Combines the technologies of Stratasys' new bioprinter based on its precise P3™ 3D printing technology with CollPlant's rhCollagen-based bioinks
- Under the agreement, both companies have agreed to cross-promote each other's bioprinting products

CollPlant

stratasys

Agreement terms

CollPlant and Stratasys have a joint development and commercialization agreement to collaborate on the development of a solution to bio-fabricate human tissues and organs

The first project focuses on the development of an industrial-scale solution to produce CollPlant's regenerative, first-ever breast implant based on its rhCollagen technology.

Gut-on-a-Chip

CollPlant

Our rhCollagen-Based 3-D Bioprinted Gut-on-a-Chip Has the Potential to Shift Drug Discovery and Personalized Medicine

H.R.2565 - FDA Modernization Act of 2021 passed in January 2023, amends the Federal Food, Drug, and Cosmetic Act to allow manufacturers and sponsors of a drug to use alternative testing methods to animal testing to investigate the safety and effectiveness of a drug, and for other purposes.

Chip technologies offer significant potential to change the diagnostic paradigm and personalized treatment landscape with both refined and cost-effective laboratory testing

> **"Animal models are wrong more often than right…"**
>
> **Don E. Ingber, M.D., Ph.D.,**
> The Wyss Institute
> for Biologically Inspired Engineering
> at Harvard University

CollPlant

https://www.congress.gov/bill/117th-congress/house-bill/2565/text?r=76&s=1
https://www.science.org/content/article/fda-no-longer-needs-require-animal-tests-human-drug-trials

Inflammatory Bowl Diseases: An Example of an Unmet Need that Exists for IBD Patients

Inflammatory bowel diseases, which include ulcerative colitis and Crohn's disease, are characterized by chronic inflammation, a relapsing and remitting clinical course and life-long treatment.

>6M
ulcerative colitis patients worldwide

Limited models
In predicting therapeutic response, this results in exposure to unjustified drugs and a delay in treatment

Individualized
In treating each patient, some fail to respond

No cure

There is a need for novel personalized platforms to improve therapeutic choices and patient outcome

CollPlant

Our Collaborators:
Gut-on-a-Chip Technology From Tel-Aviv University and Sheba Medical Center

- Co-development agreement with Tel-Aviv University and Sheba Medical Center
- Model designed to accurately mimic the human intestine tissue structure and function
- Patient-specific cells enable screening of multiple drugs and identification of the most effective personalized therapeutic response

CollPlant

SHEBA Tel HaShomer City of Health

TEL AVIV UNIVERSITY

Agreement terms (Nov 2022)

CollPlant has an exclusive license for development, manufacturing and commercializing of the final product;

Tel Aviv University and Sheba will receive royalties on product sales

CollPlant is open to partnering this program for commercialization

3-D Bioprinted Tissues and Organs

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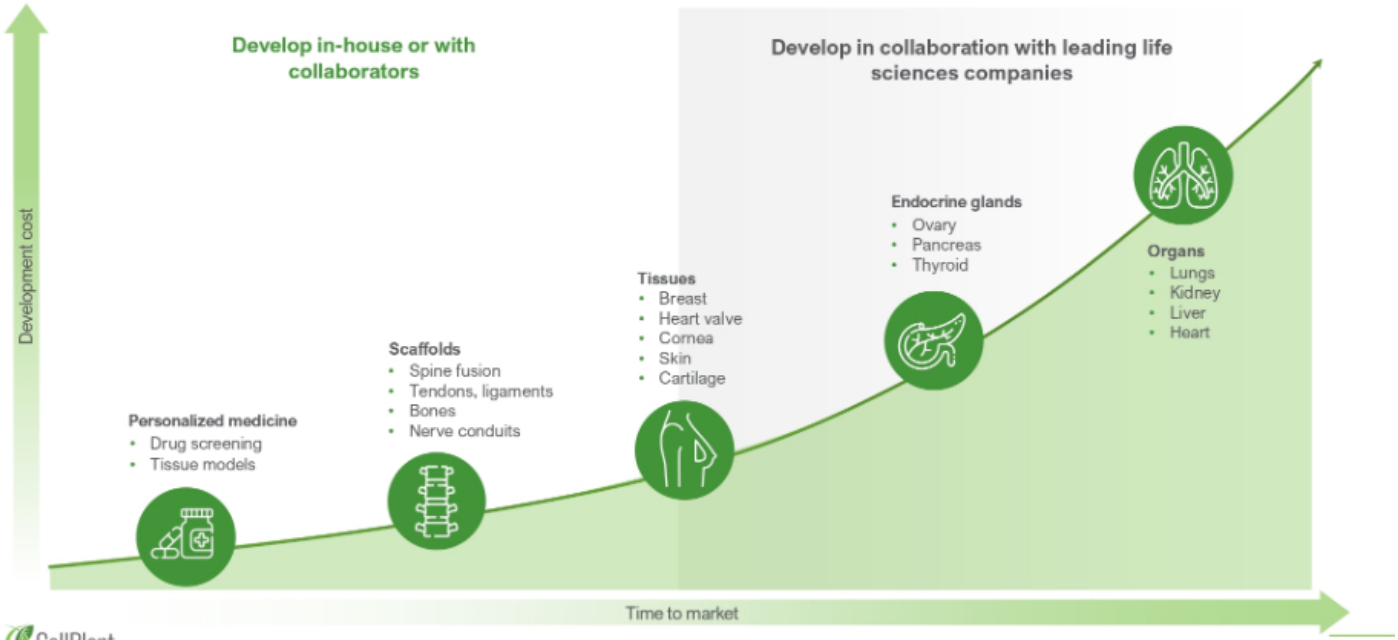
3D bioprinting represents a wide range of development opportunities



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rhCollagen-based BioInks enable high resolution printing of elastic scaffolds

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Bioinks Competitive Landscape

Collagen-based:

- Tissue-extracted collagen (e.g. rat, bovine)
- Synthetic peptides

Non-collagen-based:

- Polysaccharides (HA, cellulose, alginate)
- Glycoprotein (Fibrinogen)
- Synthetic peptides
- Synthetic polymers (PEG, PCL, Pluronic)

Drawbacks of most commonly used bioinks:

- Unsuitable for clinical use
- May elicit immune response
- High batch-to-batch variability
- Small scale production

CollPlant

Collink.3D: rhCollagen-bioink platform for biofabrication

Collink·3D 50 | Collink·3D 50L | Collink·3D 90

- Animal-free: excellent safety profile non immunogenic
- Optimal rheology at room temperature
- Cytocompatible, Biofunctional
- Compatible with major printing technologies
- Mass production-consistency robustness
- High homogeneity reproducibility

CollPlant Collink.3D™:
A xeno-free human-collagen based BioInk, perfectly mimicking properties of the native tissue or organ

CollPlant

rhCollagen BioInk components

CollPlant

Seasoned Management Team with Engineering, Pharmaceutical, Device and Life Sciences Experience

Yehiel Tal
CEO
Regentis Biomaterials
ProChon Biotech
Kulicke & Soffa Industries

Eran Rotem
Deputy CEO & CFO
Tefron, CFO (NYSE,TASE)
Healthcare Tech., CFO (NASDAQ) & Gamida E&Y

Elana Gazal, PhD
VP R&D
Neuroderm (now Mitsubishi Tanabe)
Waters IS Foamix (now Wyne)
Beckman Coulter

Michal Roytman
VP Sales & Marketing
Ocon Medical
Neuroderm (now Mitsubishi Tanabe)
Neurim Pharmaceuticals
Frutarom (now IFF)

Oren Fahimipoor
VP Operations
Omrix Biopharmaceuticals (J&J)
Teva Pharmaceutical Industries Ltd

Philippe Bensimon, PharmD VP RA/QA/CA
Maquet Getinge
3M Medical

Hadas Dreiher- Horowitz
VP HR
Elbit
Teva Pharmaceuticals
Mul-T-Lock

CollPlant

Our Partners

abbvie

Development and commercialization agreement

SHEBA Tel HaShomer City of Health

TEL AVIV UNIVERSITY

Joint development agreement

stratasys

Development and commercialization agreement

armi Advanced Regenerative Manufacturing Institute

Scalable manufacturing of tissue engineered products

ReMDO

Universal BioInk

ISBF International Society for Biofabrication

Industry committee

STEMCELL™ TECHNOLOGIES

Supply agreement

Investment Summary

Pioneering proprietary, plant-based technology platform

The only commercially viable technology that can produce truly human collagen at mass scale and without reliance on animal tissue

Addressing Multi-billion-dollar markets

Innovative rhCollagen technology initially focused on medical aesthetic applications; differentiated, transformative, next-generation soft tissue filler is regenerative

Broadly applicable, clinically validated technology

Ideal building block/scaffolding molecule for regenerative medicine that has clear benefits over tissue-extracted collagen and the potential to create first-in-class products, extend product life cycles and expand applications in other areas of medicine

Strategic agreement with global top-tier pharmaceutical company AbbVie

Allows for up to $89M in milestone payments plus additional royalties on sales

Highly seasoned management team

With experience in bioengineering, biomaterials, broad life sciences, pharmaceuticals and devices

Strong cash position at $29M as of December 31, 2022

Zero debt as of December 2022; Collaboration agreements with well-capitalized industry leaders

Thank you

CollPlant Biotechnologies | Pioneering Regenerative Medicine