

Company Overview

Our Mission

Developing and delivering
collagen technology and
regenerative medicine products
to improve and prolong lives

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 pre-clinical and clinical trials with respect to tissues and organs which are based on its rhCollagen based Bioink, its breast implants under development and other products for medical aesthetics, or whether such trials will occur at all; the Company's ability to obtain favorable pre-clinical and clinical trial results with respect to the foregoing trials; the Company's ability to develop a printing solution for its breast implants program, or at all; regulatory action with respect to rhCollagen based BioInk and 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; success in development, commercial success and market acceptance of the Company's regenerative breast implants, the bioprinting solution under development with its business partner, and other 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 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 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 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.

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

Investment Thesis

(Nasdaq: CLGN)



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 \$22 million* and zero debt, as of June 30 2023

At-a Glance



75
Employees



Rehovot, Israel
Headquarters



NASDAQ (CLGN)
(listed since 2018)



Fully vertical operation
Organizational structure



cGMP production facility
that utilizes proprietary
production processes



~\$78M*
Market cap*



~11 M
Shares outstanding



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



Well-capitalized



Clinically validated
in Europe



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



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



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

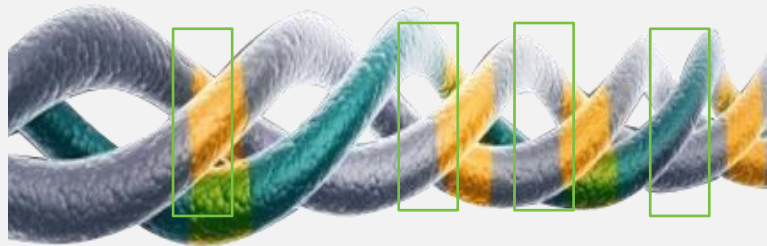


Superior homogeneity allows for creating implants and biological inks with distinct physical properties



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

Plant-derived



Animal Extracted



 = Cell binding domains

Diverse Product Pipeline

Regenerative Medical Aesthetics



Dermal/Soft Tissue Fillers

First-ever filler designed to provide soft-tissue regenerative properties

Collaborator: **AbbVie**  **Allergan**
an AbbVie company

Status: **Clinical phase**



3D Bioprinted Breast Implants

Regenerative implants intended for breast augmentation and reconstruction

Status: **Preclinical phase**

Regenerative Medicine



Bio-ink for 3D Bioprinted tissues

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

Status: **Commercial**

Drug Discovery & Personalized Medicine










Tissue Models

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

Status: **Development**

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				
Regenerative medicine					
Breast implant	Breast reconstruction & augmentation				
Biolinks	Tissues, organs, drug discovery & tissue modelling				
Personalized medicine					
Gut-on-a-chip	Ulcerative Colitis				 

Dermal/Soft Tissue Fillers

In collaboration with  **Allergan**
an AbbVie company



Dermal Fillers: Market Overview



~2.6M

HA procedures in 2020
in the US¹



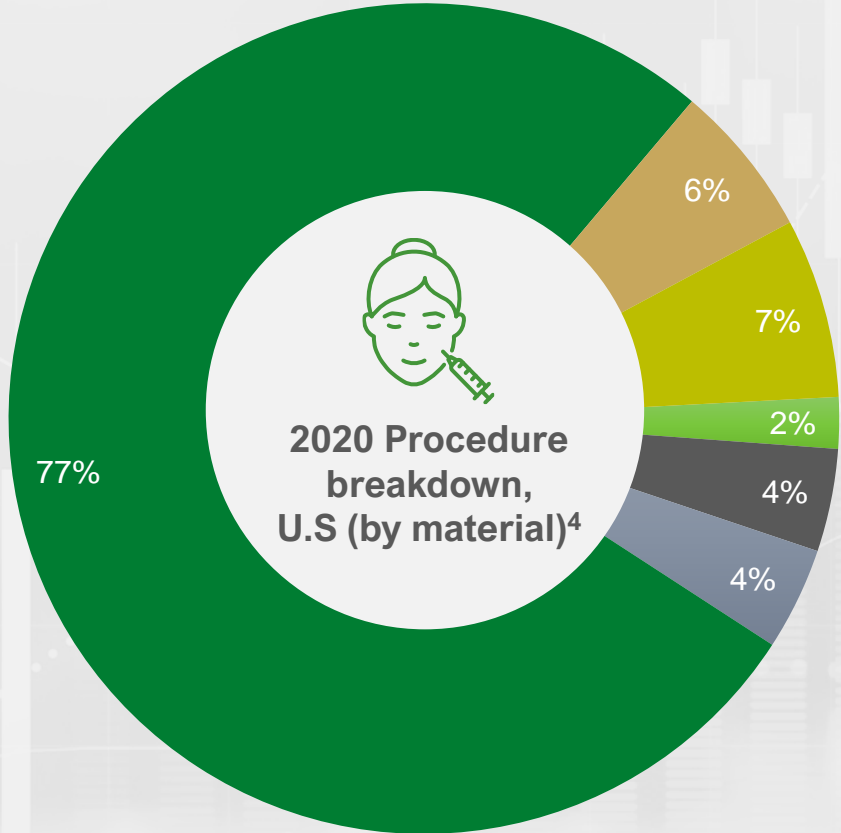
\$5.5B, 10.5% CAGR

Global dermal filler market,
2023, CAGR 2023-2032²



\$100-\$250/unit

Cost per syringe³



- Polymethyl methacrylate microspheres
- Fat
- Polylactic acid
- Hyaluronic acid
- Calcium Hydroxylapatite
- PRP

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.medicalspax.com/juvederm-hydrate
4. www.medicalspax.com/buy-juvederm-ultra-plus-xc

Collaboration Agreement with 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

CollPlant achieved the first milestone in June 2023 and received a \$10 million payment from AbbVie



Meaningful royalties on all products sales



CollPlant will manufacture and sell to AbbVie the rhCollagen used in its dermal filler products

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

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.



\$2.6B Market

worldwide (2022)¹



\$ 5-10K Cost

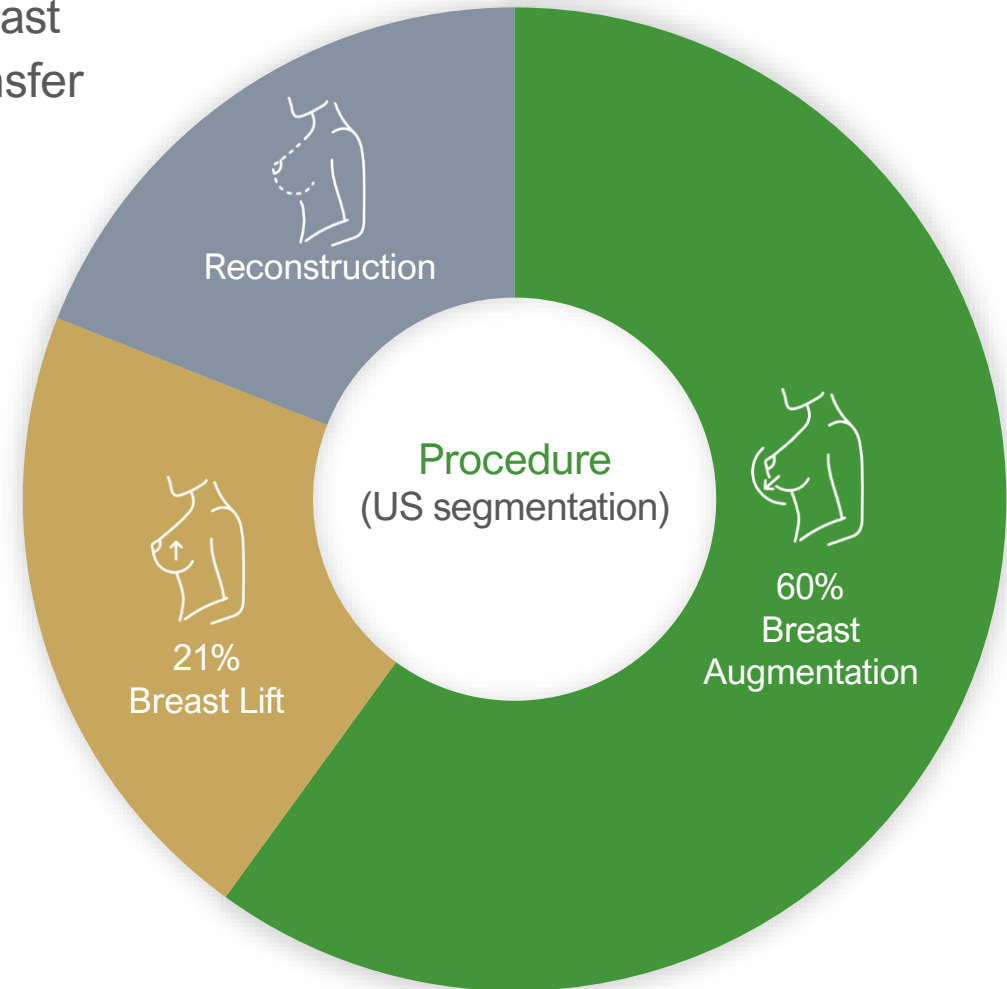
per full procedure in US²



~2,200,000

Breast implant procedures WW (2020)³

~400,000 in US (2020)⁴





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 (April 2022)*

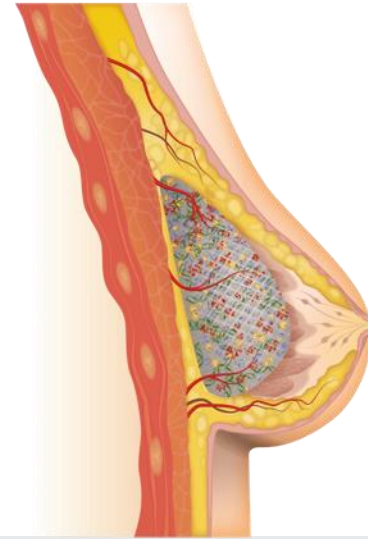
CollPlant's 3D Bioprinted Regenerative Breast Implants for Aesthetic and Reconstructive Procedures



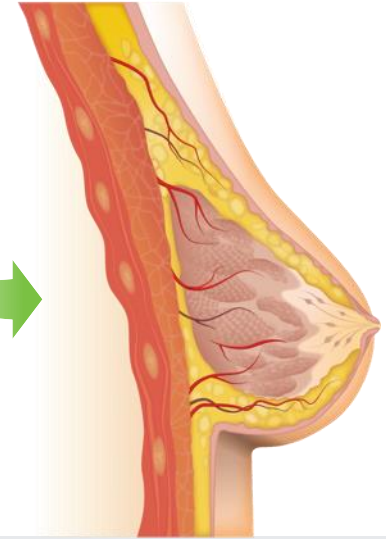
Breast scaffold bioprinting



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 Q2 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



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



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

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

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

Agreement terms (Nov 2022)

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

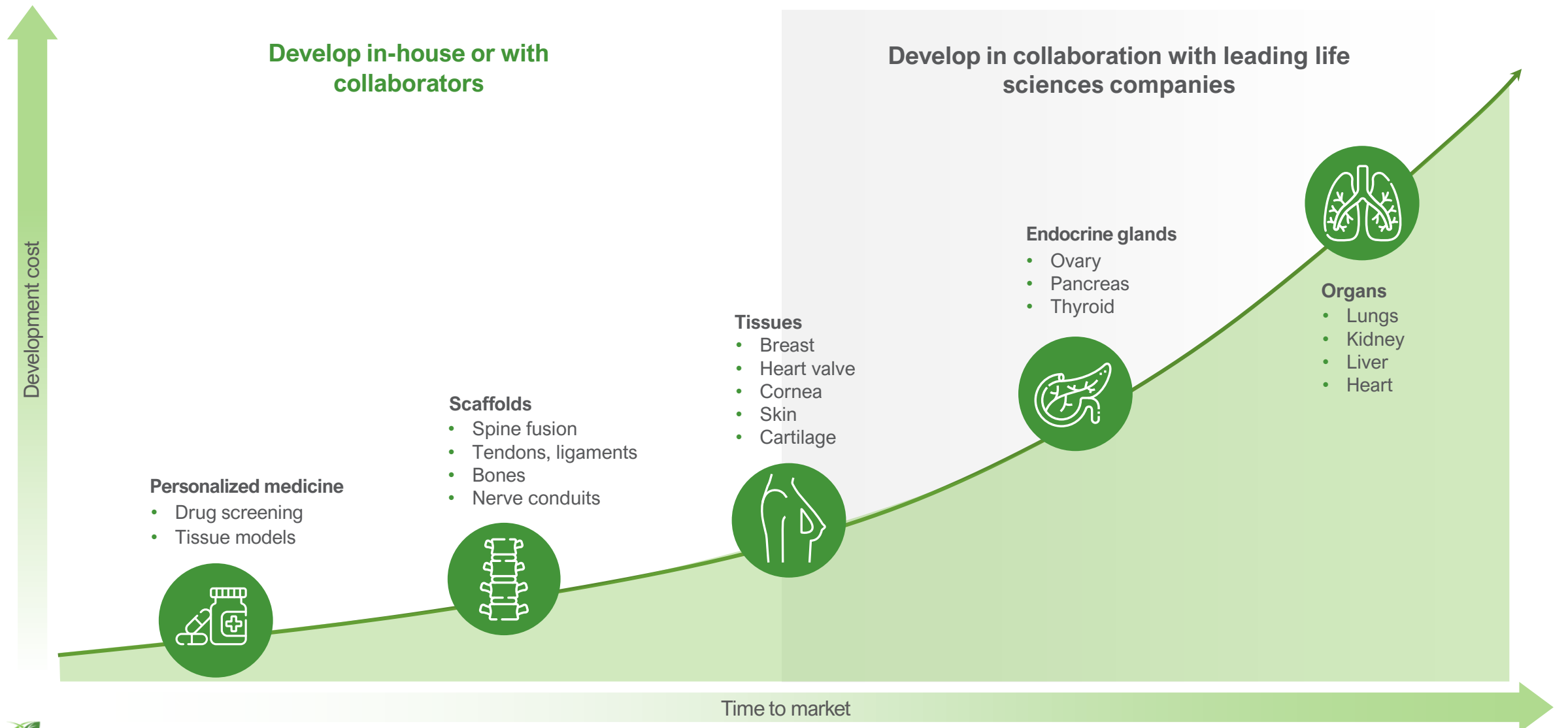
Tel Aviv University and Sheba will receive royalties on product sales

CollPlant is open to partnering this program for commercialization

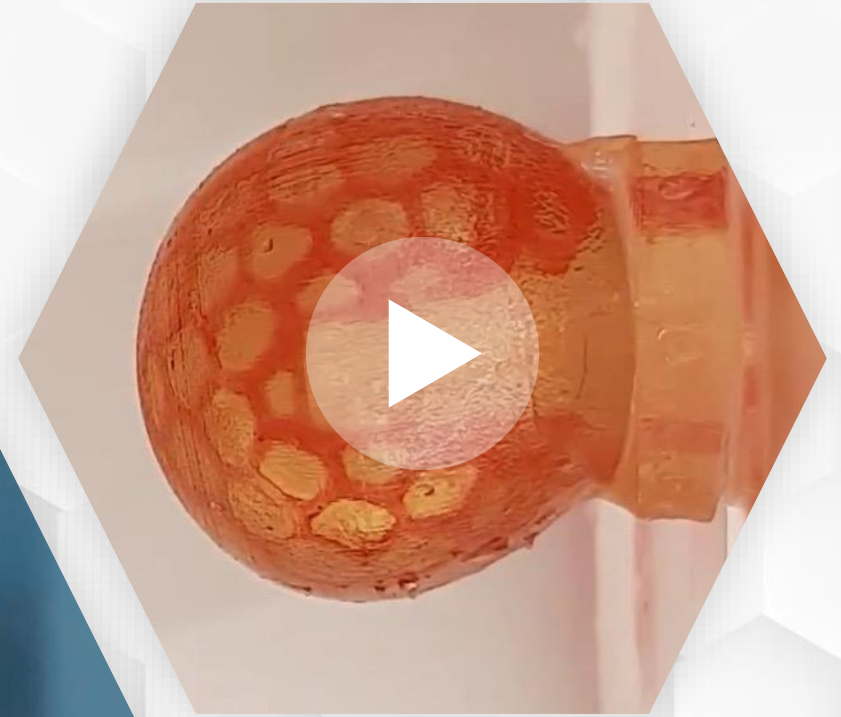
3-D Bioprinted Tissues and Organs



3D Bioprinting Represents a Wide Range of Development Opportunities



rhCollagen-based
BioInks enable
high resolution
printing of elastic
scaffolds



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



Collink.3D: rhCollagen-bioink platform for biofabrication

Collink-3D⁵⁰

Collink-3D^{50L}

Collink-3D⁹⁰



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

rhCollagen BioInk components



Our Partners



Development and
commercialization agreement



SHEBA
Tel HaShomer
City of Health



TEL AVIV UNIVERSITY

Joint development
agreement



Development and
commercialization agreement



armi
Advanced Regenerative
Manufacturing Institute

Scalable manufacturing of tissue
engineered products



R e M D O

Universal BioInk



Industry committee



Supply agreement

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



Oren Fahimipoor
VP Operations

Omrix Biopharmaceuticals (J&J)
Teva Pharmaceutical Industries Ltd



Philippe Bensimon
PharmD VP RA/QA/CA

Maquet Getinge
3M Medical



Hadas Dreier- Horowitz
VP HR

Elbit Systems
Teva Pharmaceutical Industries Ltd
Mul-T-Lock

Introducing ESG at CollPlant

- As a company firmly committed to the principles of Environmental, Social, and Governance (**ESG**), we are in the process of integrating **ESG** considerations into our day-to-day operations.
- Our Planet-Based Solution, a groundbreaking innovation that not only disrupts traditional animal-derived collagen but also redefines the future of sustainable sourcing in the industry.



CollPlant's ESG Journey

COMPLETED IN H1 2023

ACTIVITY UNDERWAY FOR COMPLETION IN H2-2023

ACTIVITY PLANNED FOR 2024

Appoint ESG manager

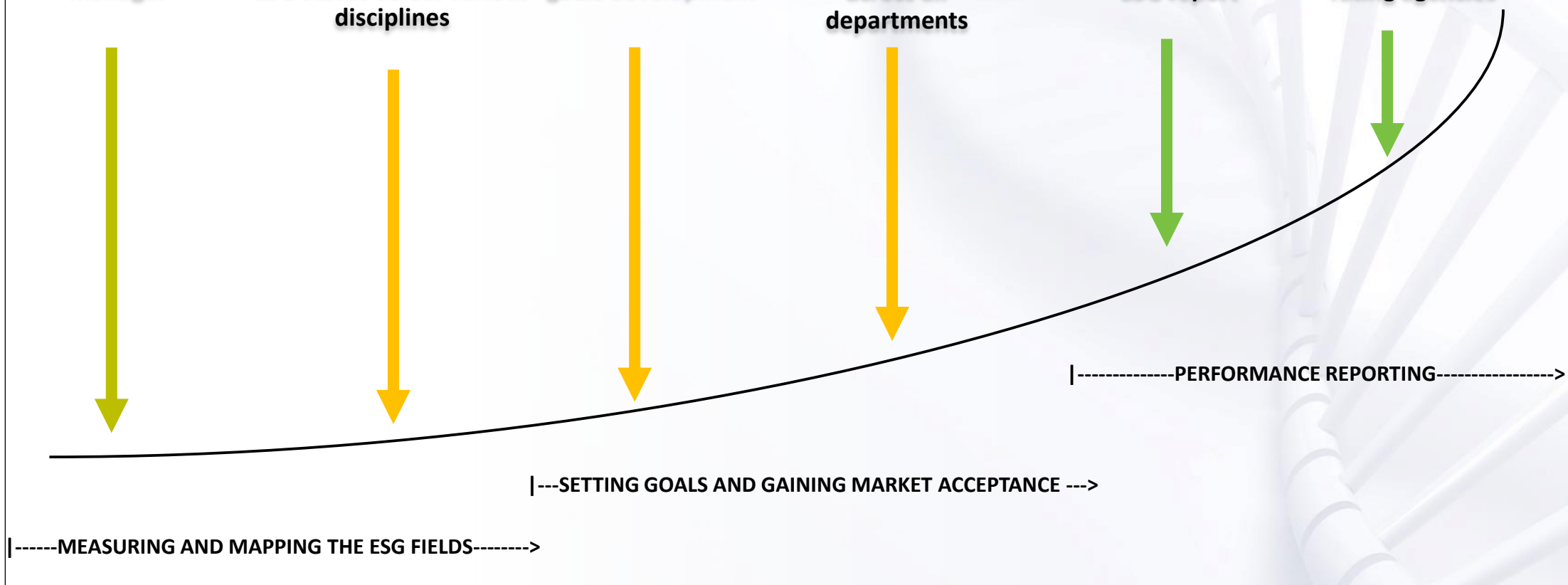
Assessing our current ESG status across various disciplines

ESG strategy and goals development

Integrating ESG plans across all departments

Publish first annual ESG report

Engage with ESG rating agencies



|-----MEASURING AND MAPPING THE ESG FIELDS----->

|---SETTING GOALS AND GAINING MARKET ACCEPTANCE --->

|-----PERFORMANCE REPORTING----->

2023

2024

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

Product in clinical phase. Agreement allows for up to additional \$79M 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 \$22M* as of June 30, 2023

Zero debt; In addition, CollPlant received in Jul 23' \$10M from AbbVie, for a milestone achievement

Thank you



CollPlant
Biotechnologies

Pioneering
Regenerative
Medicine