ELUTIA

Medicine *Humanized*™

C. Randal Mills PhD
Chief Executive Officer

Matt Ferguson
Chief Financial Officer

November 13, 2023

Forward-Looking Statements

This presentation of Elutia Inc. (“Elutia,” “we,” “us,” “our” or the “Company”) (together with any other statements or information that we may make or discuss in connection herewith) contains forward-looking statements. All statements other than statements of historical facts, including but not limited to statements regarding future financial condition, results of operations, including, without limitation, cash flow improvement, business strategies, development plans, industry trends, regulatory activities, market opportunity, competitive position, potential growth opportunities, our products, their targeted effects and expected commercial availabilities, our pipeline and investments in new products and technologies, approvals of future products or product uses, expectations regarding continued acquisitions, ability to close and execute on strategic transactions and the potential results of such transactions, are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expect,” “plan,” “aim,” “anticipate,” “could,” “intend,” “target,” “project,” “contemplate,” “believe,” “estimate,” “predict,” “potential” or “continue” or the negative of these terms or other similar expressions. Forward-looking statements are based on our management’s current expectations, beliefs and assumptions and on information currently available to us. The future events and trends discussed in this presentation may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

The forward-looking statements in this presentation are only predictions. These statements involve known and unknown risks, uncertainties and other important factors that may cause the Company’s actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements due to various factors, including, but not limited to: our ability to enhance our products, expand our product indications and develop, acquire and commercialize additional product offerings; our dependence on our commercial partners, including Sientra and LeMaitre Vascular, and independent sales agents to generate a substantial portion of our net sales; our ability to maintain our relationships with our existing contract manufacturing customers and suppliers and enter into agreements with new contract manufacturers, or if existing contract manufacturing customers reduce purchases of our products; our ability to successfully expand, manage and maintain our direct sales force; our ability to achieve or sustain profitability; the adverse impacts of the novel strain of coronavirus disease, COVID-19 or any other future pandemic, epidemic or outbreak of an infectious disease in the United States or worldwide; adverse changes in general domestic and global economic conditions and instability and disruption of credit markets; the Company’s ability to continue as a going concern; physician awareness of the distinctive characteristics, benefits, safety, clinical efficacy and cost-effectiveness of our products; the continued and future acceptance of our products by the medical community; our ability to obtain regulatory approval or other marketing authorizations by the FDA and comparable foreign authorities for our products and product candidates, including our 510(k) submission with respect to our CanGarooRM product; risks related to our shift away from our now-divested Orthobiologics business; future revenues of the now-divested Orthobiologics business and their effect on “earn-out” provisions in the related acquisition agreement; the impact on our business of the recall of a single lot of our FiberCel product and the discontinuation of its sales by our distribution partner; consequences of our recall of a single lot of one of our viable bone matrix products and market withdrawal of all of our viable bone matrix products; the impact of the bankruptcy of Surgalign Holdings, Inc., a significant customer of the Company, on our future revenues; the possible delisting of our common stock from the Nasdaq Capital Market; and our ability to obtain, maintain and adequately protect our intellectual property rights and other important factors discussed under the caption “Risk Factors” section of Elutia’s public filings with the Securities and Exchange Commission (“SEC”), including our Annual Report on Form 10-K for the year ended December 31, 2022, as such factors may be updated from time to time in our other filings with the SEC, including, our Quarterly Reports on Form 10-Q, accessible on the SEC’s website at www.sec.gov and the Investor Relations page of Elutia’s website at www.Elutia.com. Except to the extent required by law, we do not undertake to update any of these forward-looking statements after the date of this presentation to conform these statements to actual results or revised expectations. Forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified.

This presentation may include a discussion of certain non-GAAP financial measures, including non-GAAP gross profit and non-GAAP gross margins. We use non-GAAP financial measures to evaluate our ongoing operations and for internal planning and forecasting purposes. We believe that non-GAAP financial measures are helpful to investors for supplemental informational purposes. We recommend that you do not rely on any single financial measure to evaluate our business. If non-GAAP financial measures are included in the presentation, a reconciliation of these non-GAAP financial measures to the most comparable GAAP financial measure is included as an appendix.

This presentation may also contain statistical data, estimates and/or other information or data made by independent parties and/or by us relating to market size and growth, as well about our industry and business. Any such data or information that is based on estimates, forecasts, projections, market research, or similar methodologies, involve a number of assumptions and limitations and are inherently subject to uncertainties, and we have not independently verified the accuracy or completeness of these data. Neither we nor any other person makes any representation as to the accuracy or completeness of such data or undertakes any obligation to update such data after the date of this presentation. In addition, projections, assumptions and estimates of our future performance and the future performance of our industry or the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

3Q23 Highlights

ELUTIA Medicine Humanized™

Launched company focused on developing and marketing proprietary **drug eluting biomatrices**

Record Financial Performance

26% YoY growth from proprietary products

11% Growth from CanGaroo

44% Growth from SimpliDerm

Partnership with: sientra

LeMaitre®

Cardiovascular partnership with LeMaitre

CanGaroo RM FDA Update

Completed validation of an accelerated in vitro elution assay

Held successful pre-submission meeting with FDA

On track for 4Q23 510(k) resubmission

Strategic Transactions

Gross proceeds of up to:

$60M

PIPE proceeds up to:	**$26M**
Orthobiologics sale proceeds up to:	**$35M**

Leadership - The Right Experience

C. Randal Mills, PhD
Co-Founder & CEO

Osiris Therapeutics, Inc. | CIRM California Stem Cell Agency | rti surgical

Matt Ferguson
Chief Financial Officer

AVINGER | bossanova | FOXHOLLOW

Courtney Guyer
GM of SimpliDerm

LifeCell | Cordis, a Johnson & Johnson company | MERCK

Kimberly Mulligan, PhD
GM of BioEnvelope

Medtronic | cormatrix HEALING THE HEART

Kevin Rakin
Co-Founder & Chair

HIGHCAPE PARTNERS | Advanced BioHealing | GENAISSANCE PHARMACEUTICALS

Michelle Williams, PhD
Chief Scientific Officer

Osiris Therapeutics, Inc. | TBI | BE THE MATCH®

Jeff Hamet
SVP Finance

MARTEK life enriched. | IGEN | ARTHUR ANDERSEN & CO

Sonali Fonseca, PhD
VP of Business Development

ELSEVIER | pwc | Deloitte.

Introducing ELUTIA

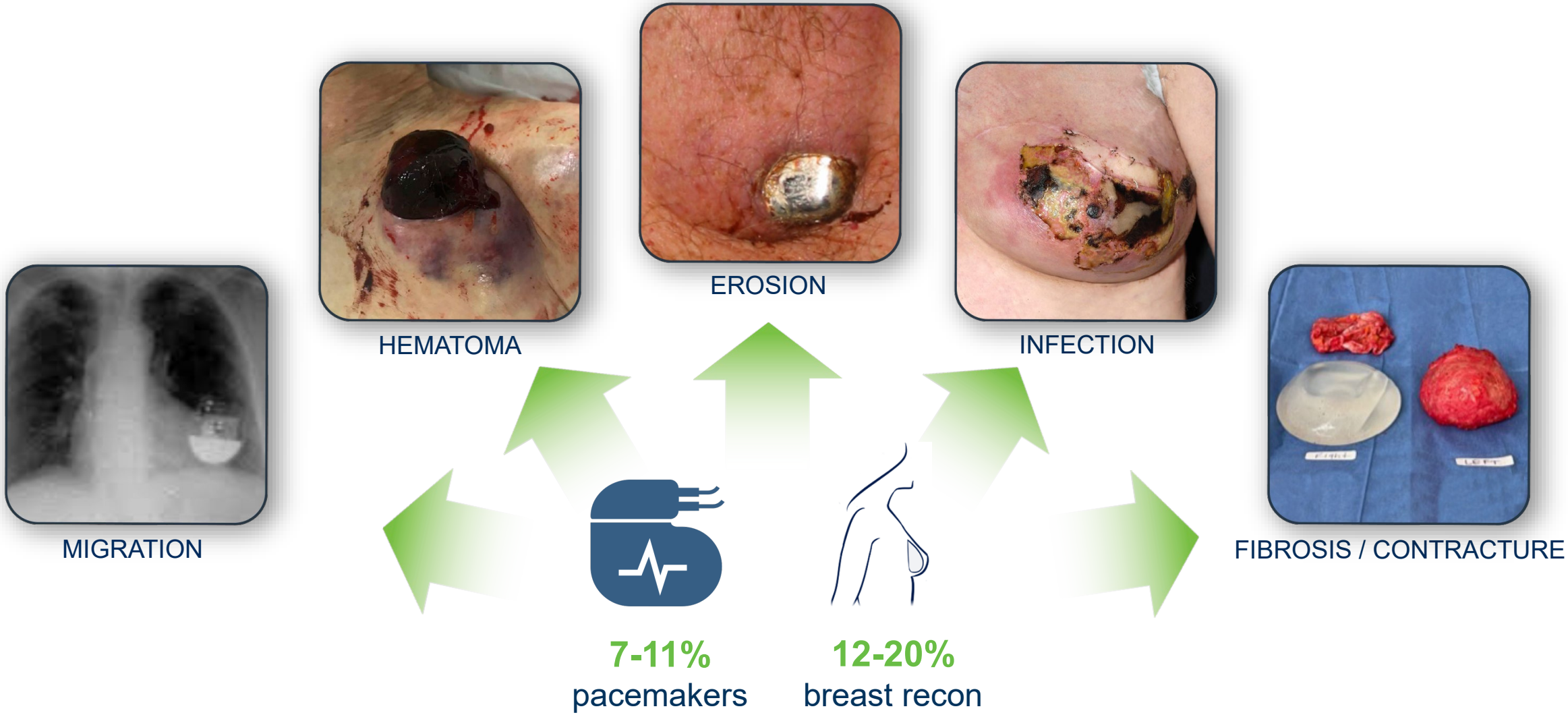
Humanizing

medicine
so patients can

thrive without compromise.

- Elutia is a **commercial-stage** company with product platforms in CIED and breast reconstruction
  - CanGaroo
  - SimpliDerm
- We are pioneering the **drug-eluting biomatrix (DEB),** which solves problems unaddressed by available alternatives
  - We expect to launch CanGarooRM in 2024, a first-in-class active biomatrix with a therapeutic payload
  - CanGarooRM has market potential of $600M+ in the established pacemaker/cardiac implant space
- We intend to leverage our DEB platform technology by developing and commercializing products for **markets with similar unmet needs**

Serious challenges can arise from **device implantation**



Medicine Humanized™

Elutia is **breaking silos** to develop great solutions

Biologic
Remodeling

Pharmaceutical
Activity

Device
Structure

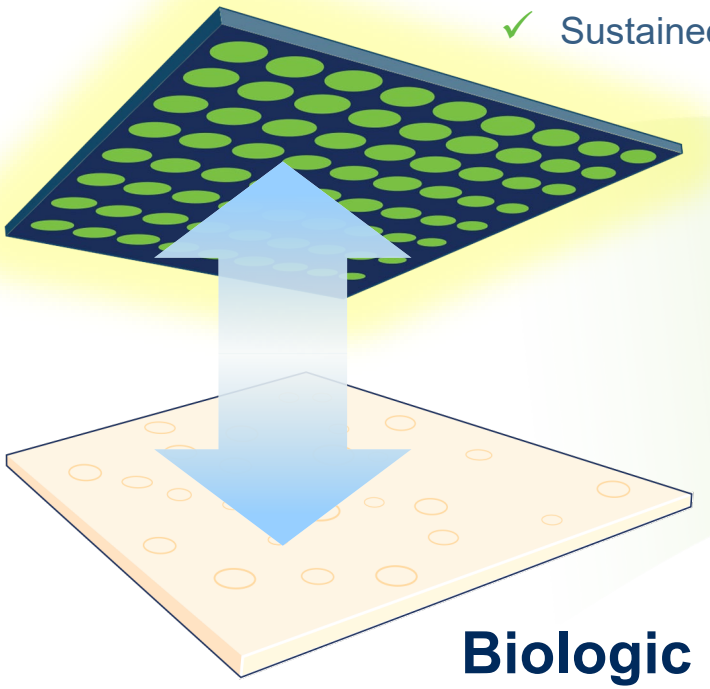
DEB™
DRUG-ELUTING BIOMATRIX

Medicine *Humanized*™

Creating a **Compelling Combination**

Therapeutic Payload

- ✓ Specific activity (antibiotic, etc.)
- ✓ Sustained release

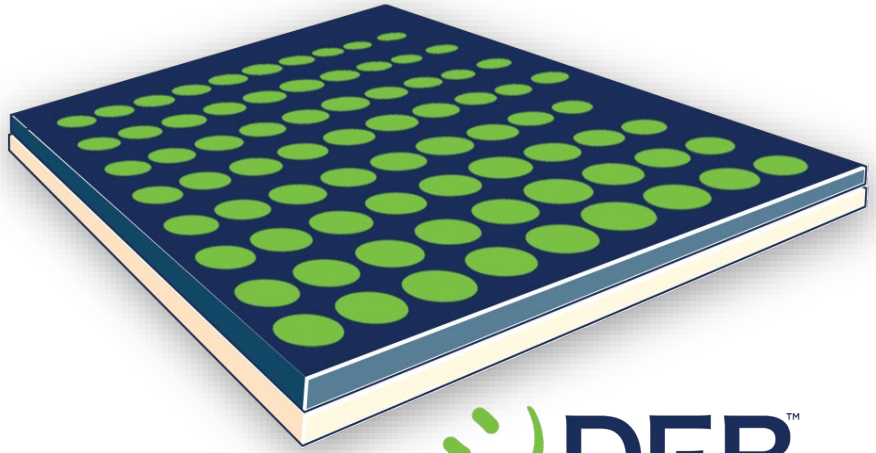


Biologic Material

- ✓ Structural support
- ✓ Reduces inflammatory and fibrotic response

The Drug-Eluting BioMatrix

- ✓ Durable structural integrity
- ✓ Enhanced surgical site healing
- ✓ Targeted therapeutic delivery
- ✓ Remodels into patient's own healthy tissue



DEB™
DRUG-ELUTING BIOMATRIX

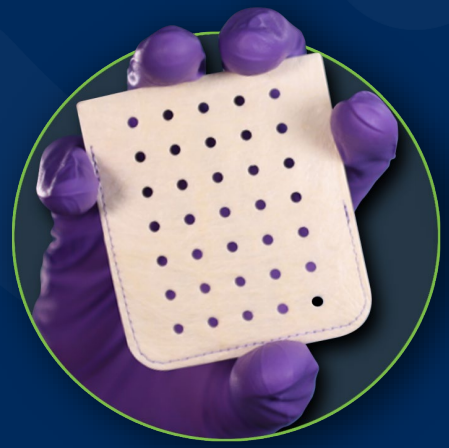
A **Protected** Platform

- 40 issued U.S. patents
- Exclusive licensing agreement for SIS-based ECM
- Specialized manufacturing facilities
- Proprietary product release assays

Two Biologic Platforms

SimpliDerm®
BIOMATRIX

Breast Reconstruction



CanGaroo®
BIOENVELOPE

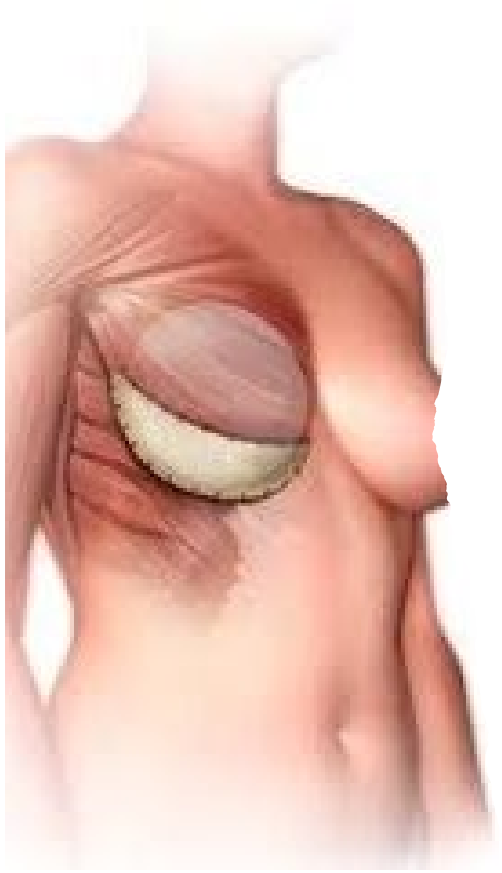
Cardiac Implantable Devices

SimpliDerm®

BIOMATRIX

Medicine *Humanized*™

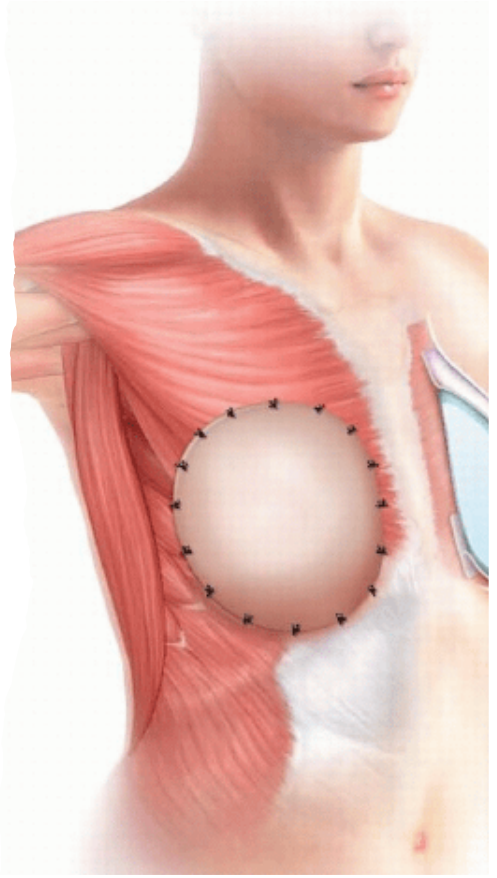
Role of biomatrices in breast reconstruction



Subpectoral

- About 13% (1 in 8) of women will develop invasive breast cancer in their lifetimes
- This leads to approximately 151,000 mastectomies requiring reconstruction in the U.S.
- Alloderm is the market leader
  - Acquired by AbbVie as part of Allergan in 2020
  - Deemphasized marketing Alloderm

Created an opening for SimpliDerm



Prepectoral

Breast Cancer Facts and Statistics". *BreastCancer.org*, Jan 18, 2023.

A $1.6B opportunity to improve outcomes in breast recon

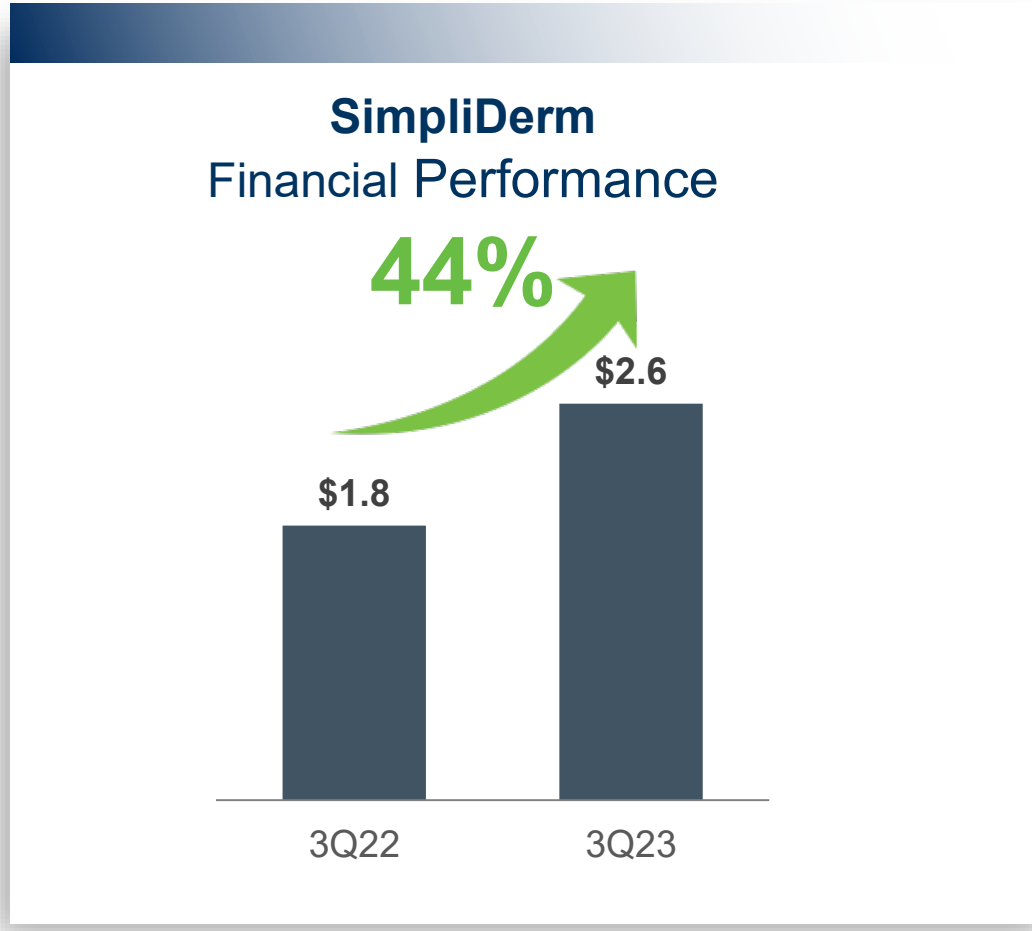
SimpliDerm – simply a great product

- ✓ Superior handling characteristics
- ✓ Prehydrated and sterile
- ✓ Lower pro-inflammatory M1 macrophage (TNF-α) response
- ✓ Lower fibrotic response

Results surgeons can see for themselves

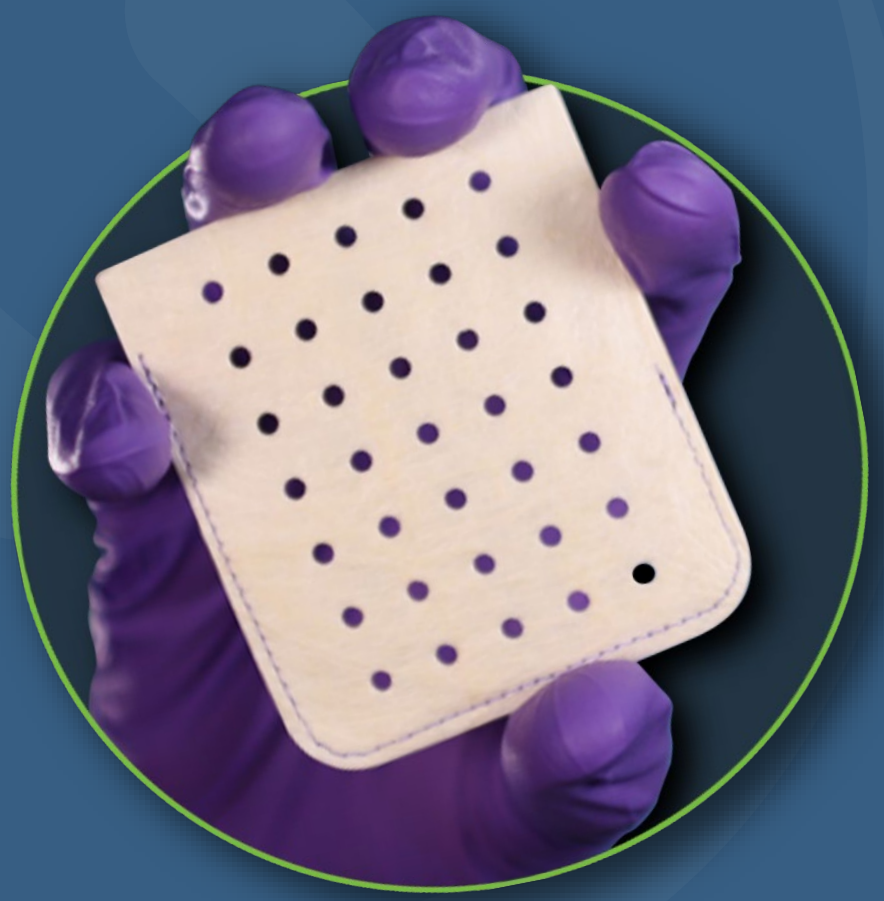
Effective Distribution Network

- Highly trained, proprietary network of distributors
- New partnership with implant maker Sientra **(23% market share)**

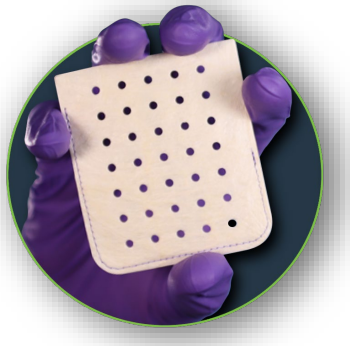


CanGaroo®
&
CanGaroo® RM

DRUG-ELUTING BIOMATRIX



Medicine *Humanized*™



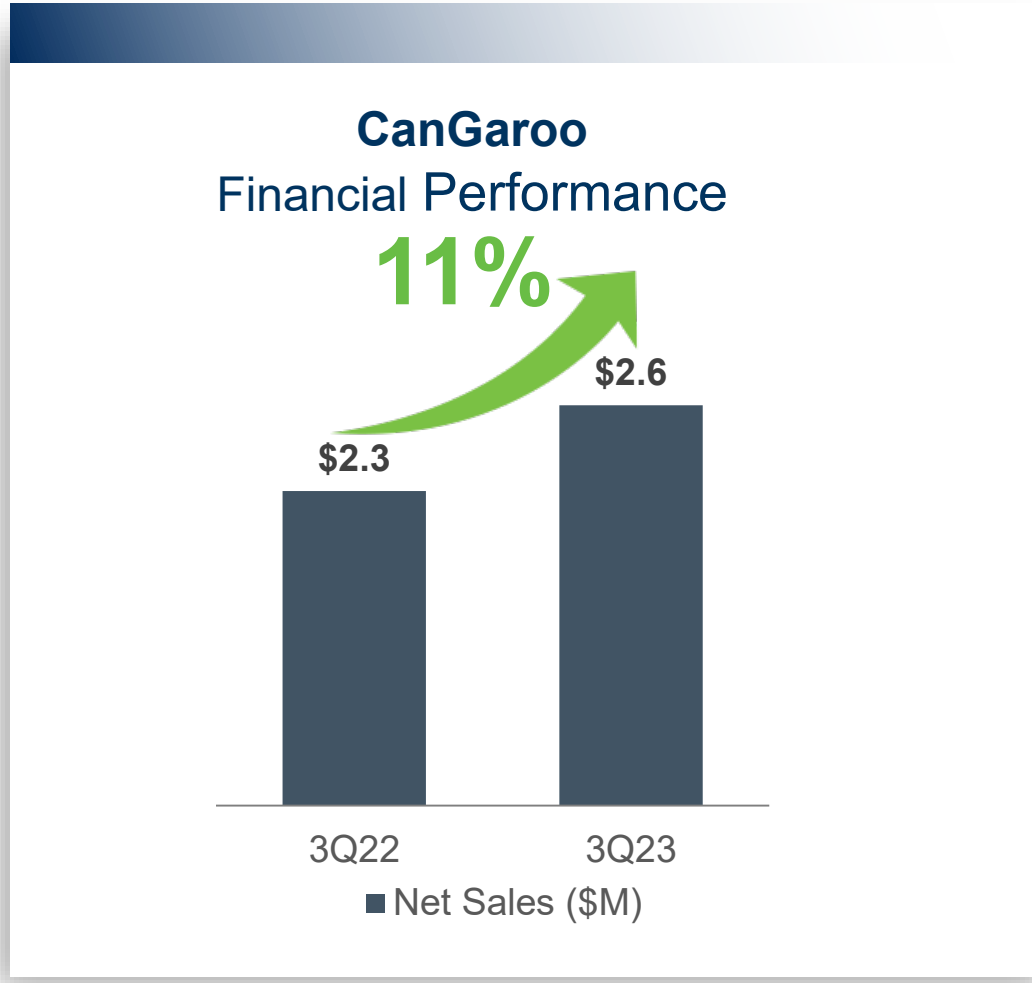
CanGaroo®
BIOENVELOPE

CanGaroo – the only biologic CIED envelope

- Biologic material supports wound healing
- Decreased inflammatory & fibrotic response
- Only envelope available for larger SCID devices

Market Dynamics and Distribution

- **$600M market** with only one other player
- Singularly-focused direct sales team
- Strengthened distribution partnership with Boston Scientific



Next Generation CanGaroo RM

Feature	TYRX	CanGaroo	CanGarooRM
Primary Placement	✓	✓	✓
Change Out	✓	✓	✓
Standard Incision		✓	✓
Erosion/Thin Skinned		✓	✓
Fibrosis and Inflammation		✓	✓
Defibrillation Threshold		✓	✓
Antibiotic Eluting	✓		✓

Introducing

CanGaroo® RM

Drug Eluting BioEnvelope

with Rifampin and Minocycline

A more complete option

for a $600M market

Favorable Market Dynamics

TYRX
on the market

Medtronic
~$250M-300M
(global est.)

CanGaroo® RM
only other antibiotic pouch

Boston Scientific

Abbott

Biotronik

Obtaining **FDA Approval** for CanGaroo**RM**

Received 'Not Substantially Equivalent' (NSE) Letter from FDA in March

- Review was satisfactory except for four items
- Two were administrative; other two were QC test-related:
  1) FDA wanted an accelerated in vitro elution test
  2) Demonstration of consistent elution of at least 80%
- Importantly, no changes required to product design

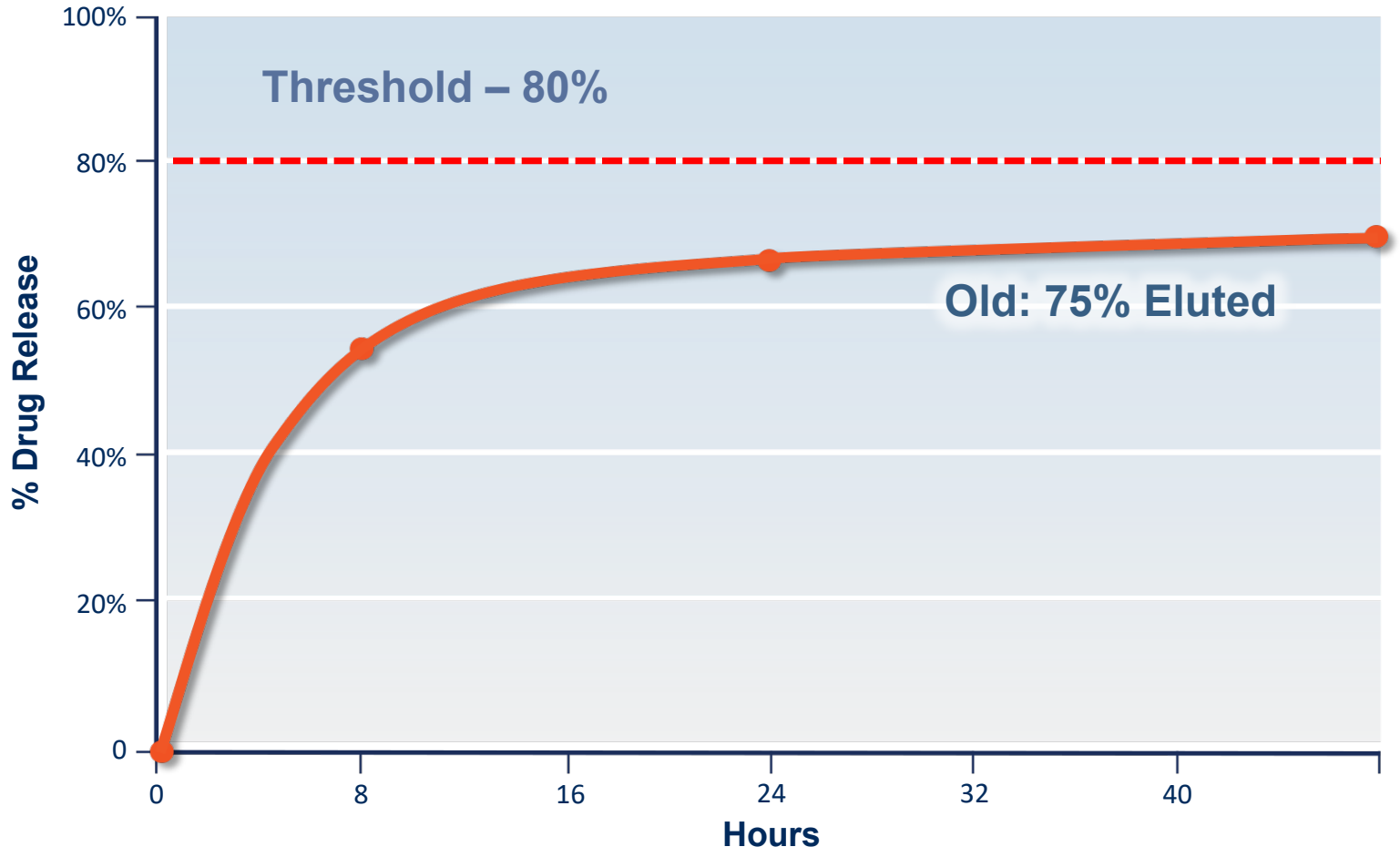
We have met with FDA twice to collaboratively determine path forward

- Most recently, presubmission meeting with FDA

R&D team created a new test method for CanGarooRM

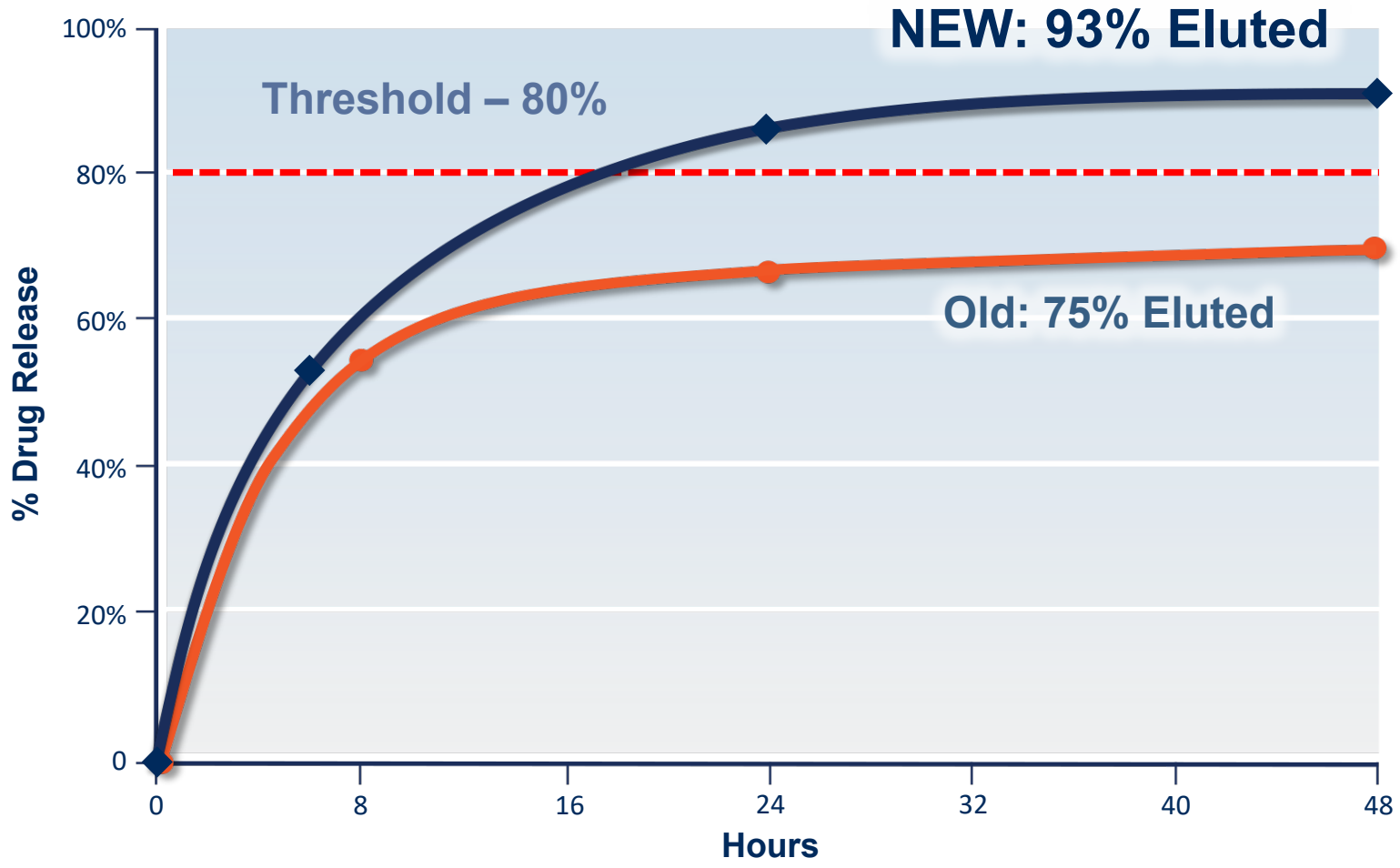
- Fully responsive to FDA's request
- Generated new IP

Generating the Data FDA Requested



Medicine Humanized™

Generating the Data FDA Requested



New Methodology

- pH
- Surfactant
- Agitation
- Temperature

Medicine Humanized™

Focused Pathway to **FDA Clearance of CanGarooRM**

Developed and validated a new accelerated in vitro elution method responsive to FDA requests

- Based on original method, with changes to later stages to accelerate release

Successful pre-submission meeting with FDA, paving the way for 510(k) submission

- Previewed approach to addressing outstanding items

Will submit new data and refile 510(k) in 4Q23

- Submission focused on the four outstanding items

Decision anticipated within 1H24

Financial Update

Matt Ferguson
Chief Financial Officer

Financial Update

Matt Ferguson, Chief Financial Officer

- Two major strategic transactions significantly strengthen balance sheet
  - PIPE financing, up to $26M total proceeds
  - Orthobiologics divestiture, up to $35M total proceeds
- Net sales of $6.1 million vs. $5.8 million in 3Q22
  - SimpliDerm net sales grew 44% from 3Q22
  - CanGaroo net sales grew 11% from 3Q22
- Gross profit of $2.8 million vs. $2.9 million in 3Q22 (due to LeMaitre distribution agreement for Cardiovascular)
  - Non-GAAP gross margin excluding intangible amortization of 60.2% vs. 64.8% in 3Q22; GAAP gross margin of 46.4% vs. 50.2% in 3Q22
  - Operating expense of $10.2 million vs. $11.9 million in 3Q22, a 14% decrease
- Net loss from continuing operations narrowed to $8.5 million vs. $11.0 million in 3Q22, a 23% decrease
- Cash balance of $14.5 million as of 9/30/2023 (excludes Orthobiologics divestiture proceeds)

ELUTIA Positioned for Growth

Humanizing

medicine
so patients can

thrive without compromise.

- **Commercial-stage company** with two established biomatrix product platforms growing at 26% YoY
- Pioneering the **drug-eluting biomatrix (DEB)** technology platform that solves real problems
- **CanGarooRM –** Expected to be the first drug-eluting biologic
  - $600M market, with only one competitor
  - Expect clearance decision in 1H24
  - Expansion into adjacent markets
- Strong team and recent transactions providing up to **$60M** position Elutia to execute this growth plan

Thank you

ELUTIA

Medicine *Humanized*™