



# AROA BIOSURGERY (ARX)

BELL POTTER HEALTHCARE CONFERENCE NOVEMBER 2023

Unlocking regenerative healing for everybody



# Important Notice and Disclaimer

This presentation (**Presentation**) is dated 14th November 2023 and has been prepared by Aroa Biosurgery Ltd, New Zealand company number 1980577, ARBN 638 867 473 (**AROA** or the Company).

## Information in this Presentation

The information in this Presentation is of a general background nature, is in summary form and does not purport to be complete. It does not contain all information relevant or necessary for an investment decision or that would be required to be included in a prospectus or other disclosure document under the Corporations Act for an offer of securities in Australia or in any other jurisdiction.

This Presentation is intended for investor education purposes only and is not intended as a medical device advertisement (including, for the purposes of the New Zealand Medicines Act 1981). Any medical information provided is of a general nature and is not intended to be a substitute for medical advice, diagnosis or treatment of a physician or other qualified health provider. Results may vary. This Presentation includes GRAPHIC WOUND IMAGERY, VIEWER DISCRETION IS ADVISED.

The content of this Presentation is provided as at the date of this Presentation (unless otherwise stated). Except as required by applicable law, AROA does not plan to publicly update or revise any information contained in, or provided with, this Presentation whether as a result of any new information, future events, changed circumstances or otherwise.

## Not a prospectus or an offer of securities

This Presentation is not a prospectus or any other offering document under Australian law (and will not be lodged with the Australian Securities Investments Commission or with ASX Limited (ASX) as such) or under the law of any other jurisdiction in which an offer of securities may be received. Nothing in this Presentation should be construed as an invitation, offer or recommendation of securities in AROA (or any of its subsidiaries) for subscription, purchase or sale in any jurisdiction.

## Future performance

Past performance information in this Presentation is given for illustrative purposes only and should not be relied upon (and is not) an indication of future performance. The Presentation contains certain "forward-looking statements". The words "forecast", "expect", "anticipate", "estimate", "intend", "believe", "guidance", "should", "could", "may", "will", "predict", "plan" and other similar expressions are intended to identify forward-looking statements. Indications of, and guidance on, future earnings and financial position and performance are also forward-looking statements. These statements are based on current expectations and assumptions regarding AROA's business and performance, the economy and other circumstances. As with any projection or forecast, forward-looking statements in this Presentation are inherently uncertain and susceptible to changes in circumstances. Opinions involve significant elements of subjective judgement and assumptions as to future events which may or may not be correct. Actual results, performance or achievements may differ materially from those expressed or implied in forward-looking statements and statements of opinion. In particular, all market data provided reflects estimates only and investors are cautioned against placing undue reliance on it. Market data also includes data prepared before the onset of COVID-19. Whilst the Company has no reason to believe that the markets to which that data relates will not return to the operating levels experienced before COVID-19, the impact of COVID-19 (if any) on such data is not possible to currently predict with any certainty.

## IP notice

AROA, Aroa Biosurgery, AROA ECM, Endoform, Myriad, Morcells, Myriad Matrix, Myriad Morcells, Myriad Ultra, Symphony and Enivo are trademarks of Aroa Biosurgery Limited. All other trademarks are properties of their respective owners. ©2023 Aroa Biosurgery Limited

# AROA at a Glance

Well established high-growth soft tissue regeneration company



## Four product families

predominantly sold to US hospitals



## AROA ECM™ platform

for new products, line extensions & enables AROA's tissue apposition platform



## > US\$3b<sup>1</sup> TAM

for existing products



## US Direct (AROA) & Commercial partner (TELA Bio™) sales



## 6 million+

AROA products applied in treating patients



## > 71

Peer Reviewed Publications



## Regulatory Approvals

in 50 countries



## Enivo™ Tissue Apposition Platform



## ~ 270

personnel<sup>2</sup>

1. Estimate based on Idata, Soft Tissue Repair Market 2022; DRG Millennium Research data; Hernia Repair Devices, 2020; AROA management estimates; DRG Millennium Research, Breast Implants & Reconstructive devices, 2018.
2. AROA NZ & North American employees.

# AROA ECM – Structure & Biology for Regenerative Healing

Unique Extracellular Matrix (ECM) derived from ovine forestomach with proven tissue regeneration properties across multiple products<sup>1-6</sup>

The diagram illustrates the structure of the extracellular matrix (ECM) derived from ovine forestomach. It shows a network of fibers and molecules, including:

- laminin
- collagen IV
- elastin
- residual vascular channel
- collagen (17 types)
- GAGs, hyaluronic acid, heparin sulphate
- growth factors, chemokines
- fibronectin

The products shown are:

- Myriad™**: Myriad Morcells™ (Morcellized Bioscaffold, 500 mg) and Myriad Matrix™ (Soft Tissue Bioscaffold, 10 x 10 cm).
- Symphony™**: Symphony™ (Proliferative Bioscaffold, 5 x 5 cm).
- Endoform™**: Endoform™ Natural (Restorative Bioscaffold, 5 x 5 cm - 2 x 2") and Endoform™ Antimicrobial (Restorative Bioscaffold, 5 x 5 cm - 2 x 2").
- OVITEX™**: OVITEX™ PRS (Reinforced Tissue Matrix, Resorbable and Permanent) and OVITEX™ (Reinforced Tissue Matrix, Permanent).

1. Irvine, S. M., et al. (2011). "Quantification of in vitro and in vivo angiogenesis stimulated by ovine forestomach matrix biomaterial." *Biomaterials* 32(27): 6351-6361. 2. Bohn, G. A. and A. E. Chaffin (2020). "Extracellular matrix graft for reconstruction over exposed structures: a pilot case series." *J Wound Care* 29(12): 742-749. <https://www.magonlinelibrary.com/doi/full/10.12968/jowc.2020.29.12.74217>. 3. Parker, M. J., R. C. Kim, M. Barrio, J. Socas, L. R. Reed, A. Nakeeb, M. G. House and E. P. Ceppia (2020). "A novel biosynthetic scaffold mesh reinforcement affords the lowest hernia recurrence in the highest-risk patients." *Surg Endosc* 35(9): 5173-5178. 4. Chaffin A et al. Surgical reconstruction of pilonidal sinus disease with concomitant extracellular matrix graft placement: a case series. *Journal of Wound Care*; Vol 30, No. 7, July 2021. <https://www.magonlinelibrary.com/doi/full/10.12968/jowc.2021.30.Sup7.S28>. 5. Chaffin, A. E. and M. C. Buckley (2020). "Extracellular matrix graft for the surgical management of Hurley stage III hidradenitis suppurativa: a pilot case series." *J Wound Care* 29(11): 624-630. <https://www.magonlinelibrary.com/doi/full/10.12968/jowc.2020.29.11.624>. 6. Desvigne, M. N., K. Bauer, K. Holifield, K. Day, D. Gilmore and A. L. Wardman (2020). "Case Report: Surgical Closure of Chronic Soft Tissue Defects Using Extracellular Matrix Graft Augmented Tissue Flaps." *Frontiers in Surgery* 7(173). <https://www.frontiersin.org/articles/10.3389/fsurg.2020.559450/full>



# Clinical Evidence

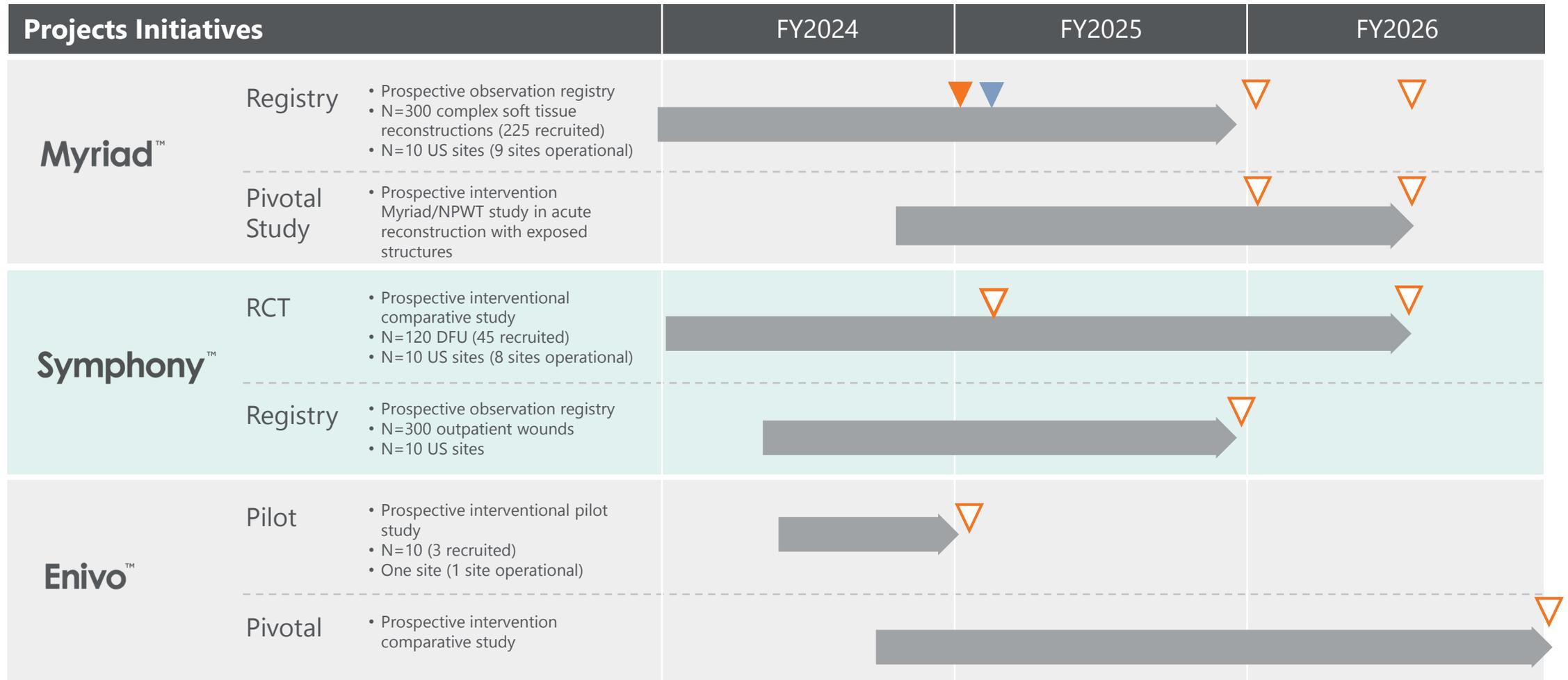
---



**Barnaby May, PhD**

**Chief Scientific Officer, Aroa Biosurgery Limited**

# Clinical Research



Study reporting

Extremities publication

Trauma publication

# AROA ECM - restores functional tissue

96

PRESENTATIONS/  
PUBLICATIONS

Endoform™

46

PRESENTATIONS/  
PUBLICATIONS

Myriad™

37

PRESENTATIONS/  
PUBLICATIONS

REINFORCED BIOSCAFFOLD  
OVITEX®



Volumetric fill- Rapid formation of well vascularized and functional tissue<sup>1,2</sup>



Tolerated and contaminated field resistant to infection<sup>3,5</sup>

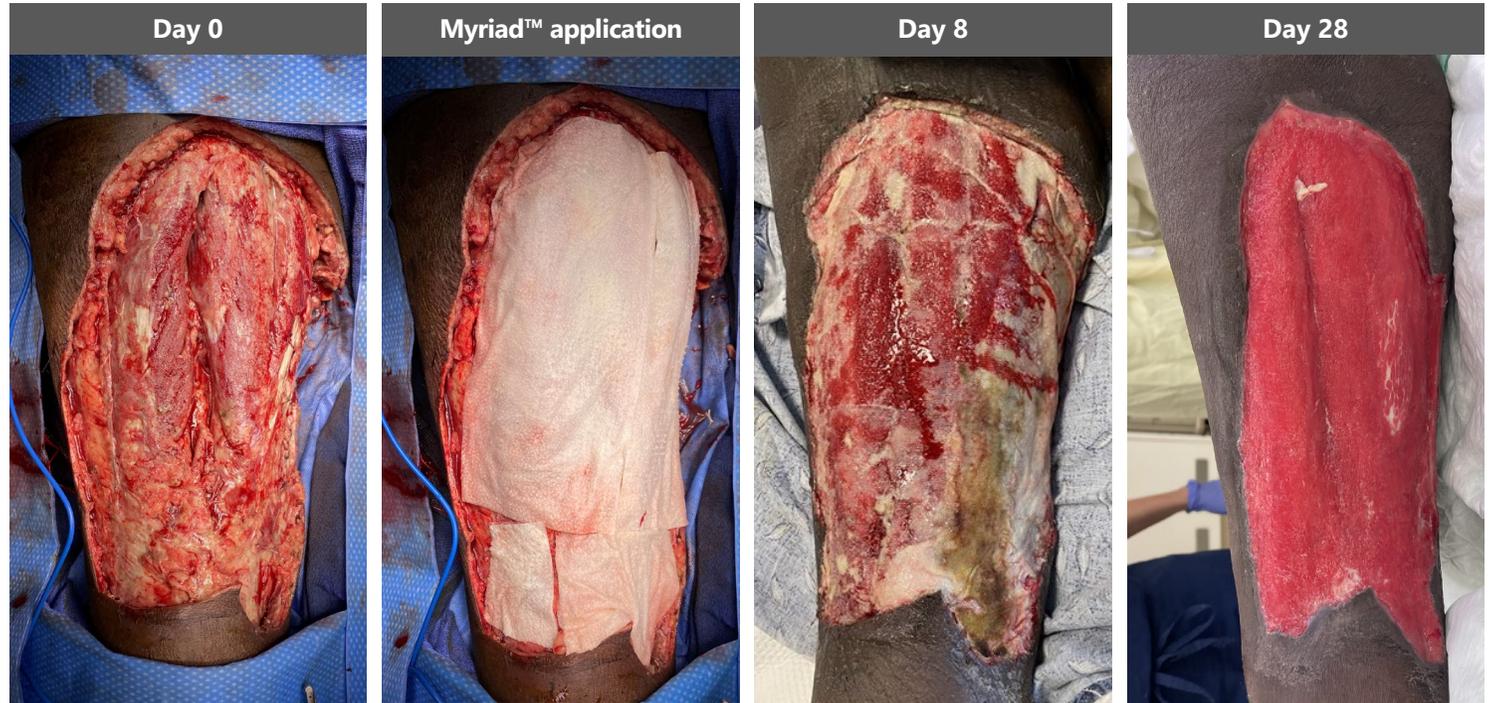


No negative inflammatory response reported<sup>2-5</sup>

1. Irvine, S. M., et al. (2011). "Quantification of in vitro and in vivo angiogenesis stimulated by ovine forestomach matrix biomaterial." *Biomaterials* 32(27): 6351-6361. 2. Bohn, G. A. and A. E. Chaffin (2020). "Extracellular matrix graft for reconstruction over exposed structures: a pilot case series." *J Wound Care* 29(12): 742-749. <https://www.magonlinelibrary.com/doi/full/10.12968/jowc.2020.29.12.74217>. 3. Parker, M. J., R. C. Kim, M. Barrio, J. Socas, L. R. Reed, A. Nakeeb, M. G. House and E. P. Ceppia (2020). "A novel biosynthetic scaffold mesh reinforcement affords the lowest hernia recurrence in the highest-risk patients." *Surg Endosc* 35(9): 5173-5178. 4. Chaffin A et al. Surgical reconstruction of pilonidal sinus disease with concomitant extracellular matrix graft placement: a case series. *Journal of Wound Care*; Vol 30, No. 7, July 2021. <https://www.magonlinelibrary.com/doi/full/10.12968/jowc.2021.30.Sup7.S28>. 5. Chaffin, A. E. and M. C. Buckley (2020). "Extracellular matrix graft for the surgical management of Hurley stage III hidradenitis suppurativa: a pilot case series." *J Wound Care* 29(11): 624-630. <https://www.magonlinelibrary.com/doi/full/10.12968/jowc.2020.29.11.624>. 6. Desvigne, M. N., K. Bauer, K. Holifield, K. Day, D. Gilmore and A. L. Wardman (2020). "Case Report: Surgical Closure of Chronic Soft Tissue Defects Using Extracellular Matrix Graft Augmented Tissue Flaps." *Frontiers in Surgery* 7(173). <https://www.frontiersin.org/articles/10.3389/fsurg.2020.559450/full>

# Myriad™ - complex surgical reconstruction

- Inpatient complex reconstruction of volumetric soft tissue defects
- Tolerates a contaminated defect[1-3]
- Persistent[4-6]
- Augments NPWT to potentially reduce duration and complexity of NPWT[4, 6]
- Rapid fill of soft tissue defects[4]
- Coverage over exposed structures (e.g., bone, tendon)[4-6]
- No reported infections[4-6]
- No reported graft loss[4-6]
- Typically, single application[4-6]



1. Chaffin, A.E. and M.C. Buckley, Extracellular matrix graft for the surgical management of Hurley stage III hidradenitis suppurativa: a pilot case series. *J Wound Care*, 2020. 29(11): p. 624-630. 2 Chaffin, A.E., et al., Surgical reconstruction of pilonidal sinus disease with concomitant extracellular matrix graft placement: a case series. *J Wound Care*, 2021. 30(Sup7): p. S28-S34. 3. Hsu, A., et al., Surgical management of perianal fistula using an ovine forestomach matrix implant. *Techniques in Coloproctology*, 2023. 4.Cormican, M.T., et al., Ovine Forestomach Matrix in the Surgical Management of Complex Volumetric Soft Tissue Defects: A Retrospective Pilot Case Series. *ePlasty*, 2023. 23: p. e66. 5. Bosque, B.A., et al., Ovine Forestomach Matrix in the Surgical Management of Complex Lower-Extremity Soft-Tissue Defects: A Retrospective Multi-Center Case Series. *J Am Podiatr Med Assoc*, 2023. 113(3): p. 22-081. 6. Bohn, G.A. and A.E. Chaffin, Extracellular matrix graft for reconstruction over exposed structures: a pilot case series. *J Wound Care*, 2020. 29(12): p. 742-749.

# Myriad Matrix™ Clinical Evidence

Reference	Reconstruction Type	Sample Size	Contaminated Fields	Mode	Outcomes	Major Complications
Chaffin, A. E. and M. C. Buckley (2020)	Hidradenitis suppurativa	N=8	Yes	Implant and dermal	<ul style="list-style-type: none"> <li>No post operative complications or recurrence at last follow-up</li> </ul>	None
Bohn, G. A. and A. E. Chaffin (2020)	Exposed bone and tendon	N=6	Yes	Implant and dermal	<ul style="list-style-type: none"> <li>1-2 weeks for 100% granulation tissue</li> </ul>	None
Desvigne, et al (2020)	Complex chronic wounds	N=9	Yes	Implant	<ul style="list-style-type: none"> <li>Two minor post surgical dehiscence's</li> </ul>	None
Bohn, G. A. (2020)	Tumor excision	N=1	No	Dermal	<ul style="list-style-type: none"> <li>Use to temporize post-resection (in the absence of definitive clear margins)</li> </ul>	None
Chaffin et al (2021)	Pilonidal sinus disease	N=6	Yes	Implant	<ul style="list-style-type: none"> <li>One minor post surgical dehiscence</li> </ul>	None
Bosque et al (2022)	Lower extremity	N=50	Yes	Implant and dermal	<ul style="list-style-type: none"> <li>26.0±22.2 days for 100% granulation tissue</li> </ul>	None
Wolf et al (2023)	Anal fistula	N=9	Yes	Implant	<ul style="list-style-type: none"> <li>78% (n=7/9) healed at post operative week 8</li> </ul>	None
Cormicon et al (2023)	Trauma – volumetric fill	N=12	Yes	Dermal	<ul style="list-style-type: none"> <li>100% granulation tissue at 24.1±9.3 days</li> <li>Median application 1.0</li> </ul>	None
Duplechain et al (2023)	Plantar fibromatosis	N=1	No	Dermal	<ul style="list-style-type: none"> <li>Healed at day 75</li> </ul>	None

# OviTex® - clinical evidence summary

	Goetz et al 2022	Sivaraj et al 2022	Timmer et al 2022	Denoto et al 2022	Sivaraj et al 2022	Ankney et al 2021	Denoto et al 2021	Parker et al 2020	Sawyer 2018	Ferzoca 2018
Participants (n)	28	50	55	19	36	619	76	50	25	31
Hernia types	Ventral	Ventral	Ventral (n=46)	Ventral	Ventral	Ventral, inguinal, incisional	Ventral	Ventral	Hiatal	Inguinal
CDC/VHWG Score	N.R.	26% VHWG 1 64% VHWG 2 10% VHWG 3	69.6% ≥ CDC 2 91% ≥ VHWG 2	100% ≥ VHWG 2	N.R.	N.R.	70% ≥ CDC 2; 57% ≥ VHWG 2	70% ≥ CDC 2; 68% ≥ VHWG 3	56% ≥ CDC 2	N.R.
Maximum followup (months)	16	55.5	13	23	28.6	39	12	12	14.2	12.6
SSO	46.6%	18%	78%	32%	16.7%	17.3%	26%	36%	N/A	0% at 30 days
<b>Recurrence rate</b>	<b>3.6%</b>	<b>4%</b>	<b>9%</b>	<b>16%</b>	<b>2.78%</b>	<b>1.2%</b>	<b>3%</b>	<b>6%</b>	<b>0%</b>	<b>0%</b>

Goetz, M., M. et al (2022). "Semiresorbable biologic hybrid meshes for ventral abdominal hernia repair in potentially contaminated settings: lower risk of recurrence." *Updates in Surgery* 74(6): 1995-2001. Sivaraj, D., et al (2022). "Outcomes of Biosynthetic and Synthetic Mesh in Ventral Hernia Repair." *Plast Reconstr Surg Glob Open* 10(12): e4707. Timmer, A. S., et al (2022). "Clinical outcomes of open abdominal wall reconstruction with the use of a polypropylene reinforced tissue matrix: a multicenter retrospective study." *Hernia* 26(5): 1241-1250. DeNoto, G., 3rd, et al (2022). "24-Month results of the BRAVO study: A prospective, multi-center study evaluating the clinical outcomes of a ventral hernia cohort treated with OviTex(R) 1S permanent reinforced tissue matrix." *Ann Med Surg (Lond)* 83: 104745. Sivaraj, D., et al (2022). "Reinforced Biologic Mesh Reduces Postoperative Complications Compared to Biologic Mesh after Ventral Hernia Repair." *Plast Reconstr Surg Glob Open* 10(2): e4083. Ankney, C., et al (2021). "Minimizing Retained Foreign Body in Hernia Repair Using a Novel Technique: Reinforced Biologic Augmented Repair (ReBAR)." *J Clin Med Res* 3(4): 1-11. DeNoto, G., et al (2021). "A Prospective, Single Arm, Multi-Center Study Evaluating the Clinical Outcomes of Ventral Hernias Treated with OviTex® 1S Permanent Reinforced Tissue Matrix: The BRAVO Study 12-Month Analysis." *J. Clin. Med.* 10(21): 4998. Parker, M. J., et al (2020). "A novel biosynthetic scaffold mesh reinforcement affords the lowest hernia recurrence in the highest-risk patients." *Surg Endosc* 35(9): 5173-5178. Sawyer, M. A. J. (2018). "New Ovine Polymer-Reinforced Bioscaffold in Hiatal Hernia Repair." *JLS* 22(4). Ferzoco, F. J. (2018). "Early experience outcome of a reinforced Bioscaffold in inguinal hernia repair: A case series." *International Journal of Surgery Open* 12: 9-11.

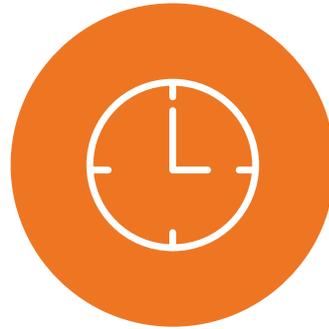
# Endoform™ - advanced ECM technology available from day 1

- Outpatient device for the treatment of acute and chronic wounds
- Can be used in conjunction with NPWT
- Reduces time to wound closure by up to 5 weeks, versus standard of care collagen dressing\*



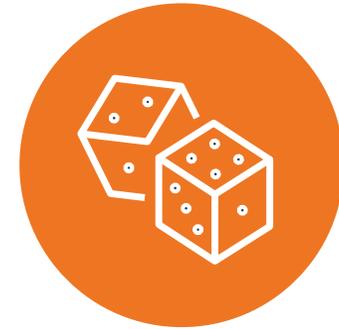
**2,222**

Total DFUs evaluated



Up to **5.6 weeks**

Faster closure with Endoform Natural\*



Up to **38%**

Increased probability of closure, with Endoform Natural\*

\*For wounds that require 12 or more WCC visits. Across all wounds analysed, time to closure was 1.9 - 5.6 weeks faster, and the probability of wound closure increased by 18% to 38%, with Endoform compared to the standard of care collagen dressing. Bosque, B. A., C. Frampton, A. E. Chaffin, G. A. Bohn, K. Woo, C. DeLeonardis, B. D. Lepow, M. M. Melin, T. Madu, S. G. Dowling and B. C. H. May (2022). "Retrospective real-world comparative effectiveness of ovine forestomach matrix and collagen/ORC in the treatment of diabetic foot ulcers." Int Wound J 19(4): 741-753.

# FY24 Guidance



**NZ\$72-75m**

**Product Revenue** (YoY CC  
growth 25 – 30%)



**85%**

**Product Gross Margin**



**NZ\$1-2m**

**Normalised EBITDA**

All guidance is presented on a constant currency ('CC') basis using a NZ\$/US\$ exchange rate of 0.65, compared to the average exchange rate of 0.62 in FY23. Constant currency removes the impact of exchange rate movements. Guidance is also subject to TELA Bio delivering CY23 revenue of US\$60-65 million.



# Q&A

# CONTACT

**James Agnew**

m +64 21 744 915

[investor@aroabio.com](mailto:investor@aroabio.com)

Visit our website [www.aroa.com](http://www.aroa.com) and find us on LinkedIn at [www.linkedin.com/company/aroa-biosurgery-limited/](http://www.linkedin.com/company/aroa-biosurgery-limited/)

---

64 Richard Pearse Drive,  
Auckland 2022, New Zealand

PO Box 107111, Auckland Airport, Auckland 2150,  
New Zealand

Unlocking regenerative healing for *everybody*

