



Transforming Cancer Surgery with Advanced Visualization and AI

INVESTOR PRESENTATION

TSXV: PINK | OTCQX: PYNKF



Forward-Looking Statements

This presentation contains forward-looking forward statements. Words such as “may,” “would,” “could,” “will,” “likely,” “believe,” “expect,” “anticipate,” “intend,” “plan,” “estimate,” and similar words and the negative form thereof are used to identify forward-looking statements. Forward-looking information may relate to management’s future outlook and anticipated events or results and may include statements or information regarding the future financial position, business strategy and strategic goals, competitive conditions, research and development activities, projected costs and capital expenditures, research and clinical testing outcomes, taxes and plans and objectives of, or involving, Perimeter.

Without limitation, information regarding the potential benefits of Perimeter S-Series OCT, Perimeter B-Series OCT, and Perimeter ImgAssist; Perimeter’s expected marketing and sales activities; and the expected details regarding Perimeter’s ongoing clinical trials, including anticipated improvements in patient enrollment rates and the estimated completion date of enrollment, are forward-looking information. Forward-looking statements should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether, or the times at or by which, any particular result will be achieved. No assurance can be given that any events anticipated by the forward-looking information will transpire or occur. Forward-looking information is based on information available at the time and/or management’s good-faith belief with respect to future events and are subject to known or unknown risks, uncertainties, assumptions, and other unpredictable factors, many of which are beyond Perimeter’s control. Such forward-looking statements reflect Perimeter’s current view with respect to future events, but are inherently subject to significant medical, scientific, business, economic, competitive, political, and social uncertainties and contingencies. In making forward-looking statements, Perimeter may make various material assumptions, including but not limited to (i) the accuracy of Perimeter’s financial projections; (ii) obtaining positive results from trials; (iii) obtaining necessary regulatory approvals; and (iv) general business, market, and economic conditions. Further risks, uncertainties and assumptions include, but are not limited to, those applicable to Perimeter and described in Perimeter’s Management Discussion and Analysis for the year ended December 31, 2023, which is available on Perimeter’s SEDAR+ profile at www.sedarplus.com, and could cause actual events or results to differ materially from those projected in any forward-looking statements. Perimeter does not intend, nor does Perimeter undertake any obligation, to update or revise any forward-looking information contained in this news release to reflect subsequent information, events, or circumstances or otherwise, except if required by applicable laws.



Indications for Use Disclosures

S-Series OCT

The S-Series OCT is indicated for use as an imaging tool in the evaluation of excised human tissue microstructure, by providing two-dimensional, cross-sectional, real-time depth visualization, with image review manipulation software for identifying and annotating regions of interest.

The S-Series OCT has 510(k) clearance under a general indication and has not been evaluated by FDA specifically for use in breast tissue, breast cancer, other types of cancer, margin evaluation, and reducing re-excision rates. The safety and effectiveness of these uses has not been established.

For full information on unapproved/off-label uses, visit:

perimetermed.com/disclosures or contact
medicalaffairs@perimetermed.com

B-Series OCT

The Perimeter B-Series OCT System is an adjunctive three-dimensional imaging tool which provides volumetric cross-sectional, real-time depth visualization, coupled with an artificial intelligence computer aided detection algorithm which identifies and marks focal areas suspicious for breast cancer and is used concurrently with physician interpretation of the images. The B-Series OCT is intended for use in conjunction with other standard methods for evaluation of the margins of an excised lumpectomy specimen during surgical procedures in patients with a biopsy-confirmed diagnosis of breast cancer.

Perimeter B-Series OCT is not available for sale in the United States. CAUTION – Investigational device. Limited by U.S. law to investigational use.

Unique Combination of AI & Medtech Experience

Strong Leadership



Adrian Mendes
Chief Executive
Officer



Andrew Berkeley
Co-Founder and
Chief Innovation
Officer



Sara Brien
Chief Financial
Officer



Tom Boon
Chief Operating
Officer



Carl Gazdzinski
VP, Engineering &
Manufacturing



Abbey Goodman
VP, Sales



Paolo DiPasquale
VP, Corporate
Development



***We didn't
get it all.***

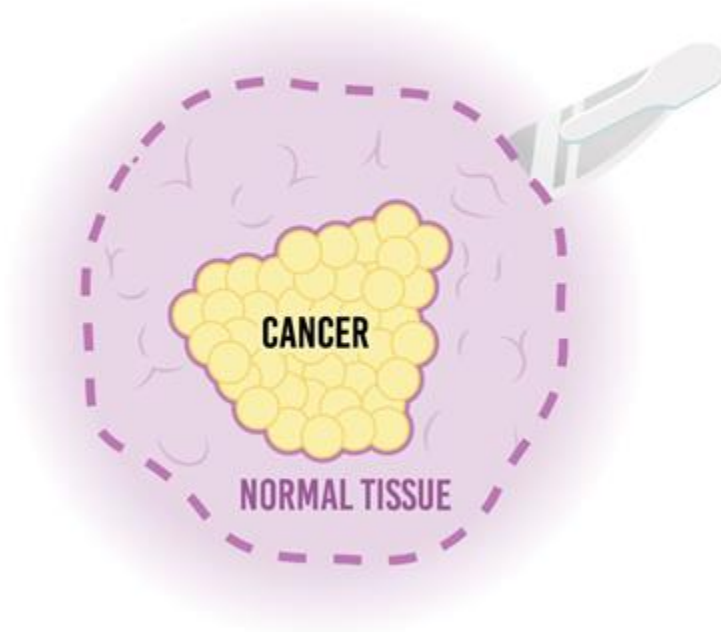
*A conversation no surgeon wants
to have with their patients...*



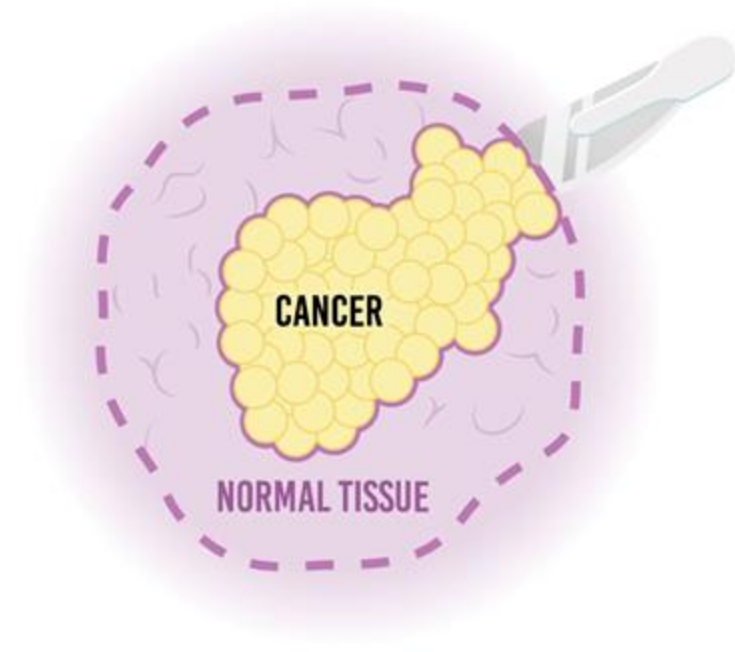
It's All About Getting Clean Margins



Negative/Clean Margin



Positive Margin





Achieving Clean Margins, the First Time



Surgeons cannot detect remaining cancer cells (especially with hard-to-detect cancers) by sight or touch



Traditional imaging used in the operating room (e.g. X-ray) does not have the resolution needed to detect cancer cells at the cellular level

Positive Margins → Repeat Surgery

Even for skilled surgeons, the odds of needing a repeat (re-excision) surgery due to positive margins are relatively high - **nearly 1 in 4 for some types of cancer**



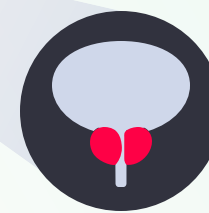
23%

of breast cancer lumpectomies have a positive margin¹



12%

of thyroid cancers have a positive margin²



21%

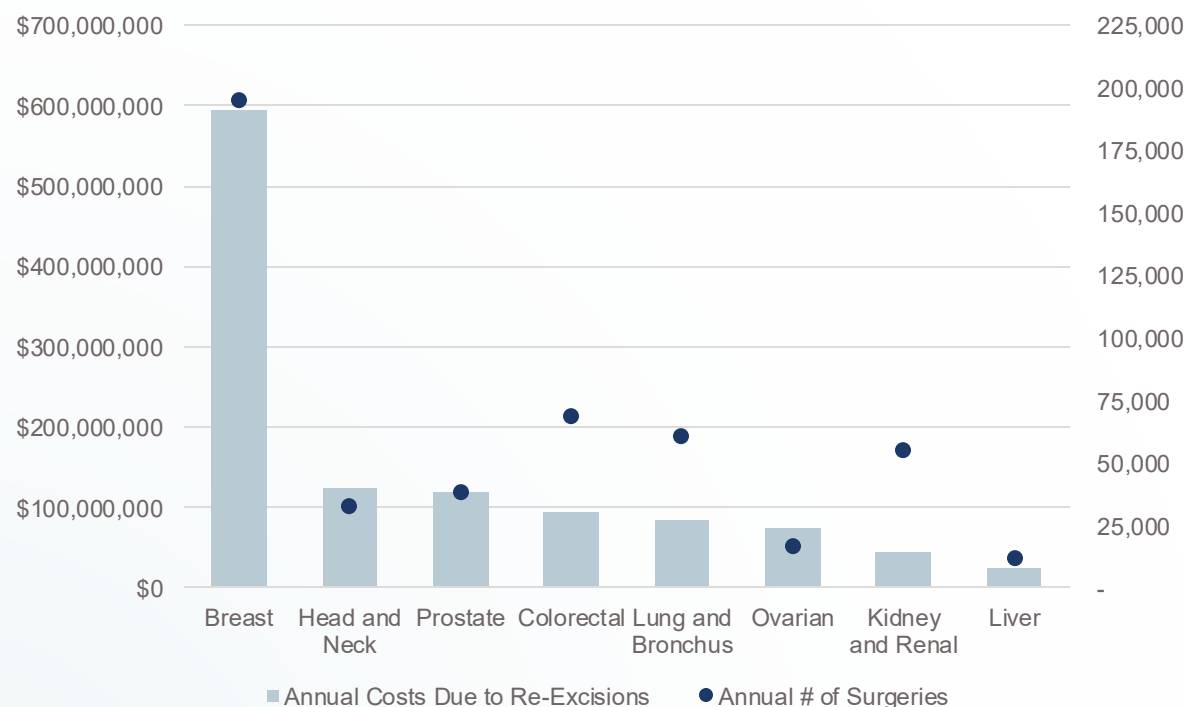
of prostate cancers have a positive margin²

1) Metcalfe LN, Ziska AM, Yamal KS, Jacobs LK, Oker EE, Underwood HR, Thompson AM. Beyond the Margins-Economic Costs and Complications Associated With Repeated Breast-Conserving Surgeries. JAMA Surg. 2017 Nov 1;152(11):1084-1086. doi: 10.1001/jamasurg.2017.2661. PMID: 28768303; PMCID: PMC5831419.

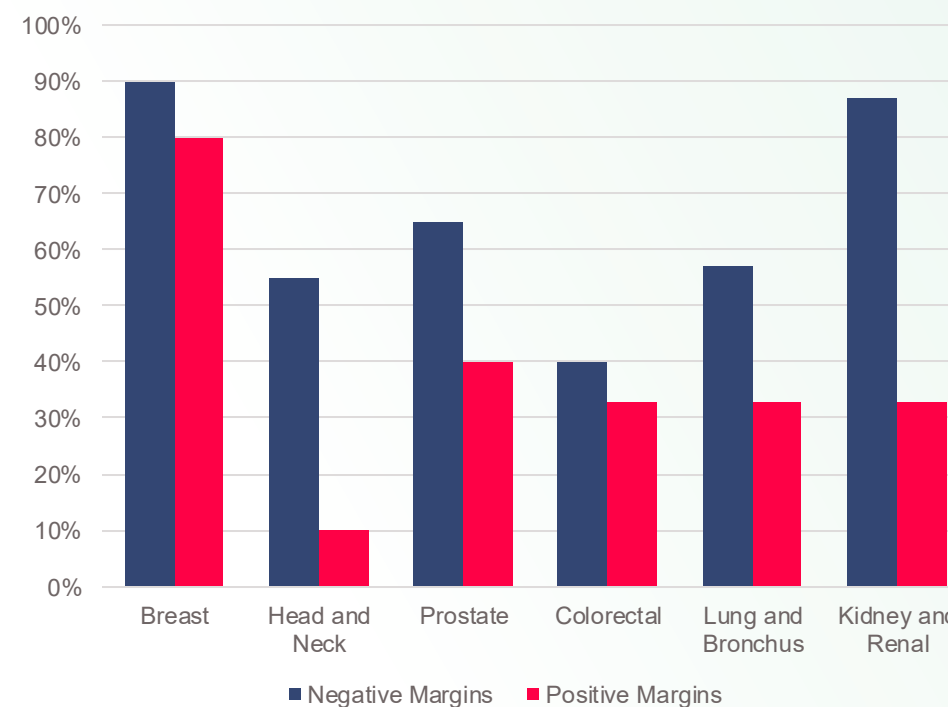
2) Orosco, R.K., Tapia, V.J., Califano, J.A. et al. Positive Surgical Margins in the 10 Most Common Solid Cancers. Sci Rep 8, 5686 (2018). <https://doi.org/10.1038/s41598-018-23403-5>

Missed Margins → High Medical and Financial Burden^{1,2}

Top 8 Cancers Represent ~\$1.2B Annually in U.S. Healthcare Costs Due to Re-Excisions



Approximate 5-Year Survival Rates



1) Sources: NIH SEER, Healthcare Cost and Utilization Project (HCUP)

2) Metcalfe LN, Zysk AM, Yemul KS, Jacobs LK, Oker EE, Underwood HR, Thompson AM. [Beyond the Margins-Economic Costs and Complications Associated With Repeated Breast-Conserving Surgeries](#). JAMA Surg. 2017 Nov 1;152(11):1084-1086.



Example: Re-Excision in Breast Cancer Surgery



Patient (Lucy)

- 66% increased risk of post-op complications* after repeated Breast-conserving surgeries (BCS)¹
- Delay in adjuvant treatment³
- Compromised cosmesis²
- Emotional trauma²



System Strain

- Hospital ratings, patient satisfaction scores, and patient referrals^{2, 5, 6}
- OR time, delayed beds, and resource limitations⁴



Economic Burden

- 24% increase in healthcare costs¹
 - BCS reoperation: +\$12,000*
 - Mastectomy conversion: +\$46,000*

*Reoperation data from commercial insurance cohort

- 1) Kim Y, Ganduglia-Cazaban C, Tamirisa N, et al. Contemporary Analysis of Reexcision and Conversion to Mastectomy Rates and Associated Healthcare Costs for Women Undergoing Breast-Conserving Surgery. Ann Surg Oncol. 2024;31:3649-3660.
- 2) Baliski C, Bakos B. Patient reported outcomes following breast conserving surgery are improved by minimizing re-excisions and excessive breast tissue removal. Am J Surg. 2022 Aug;224(2):716-721. Riba, L.A., Gruner, R.A., Fleishman, A. et al. Surgical Risk Factors for the Delayed Initiation of Adjuvant Chemotherapy in Breast Cancer. Ann Surg Oncol. 2018 Jul;25(7):1904-1911.
- 3) Riba LA, Gruner RA, Fleishman A, James TA. Surgical Risk Factors for the Delayed Initiation of Adjuvant Chemotherapy in Breast Cancer. Ann Surg Oncol. 2018 Jul;25(7):1904-1911
- 4) Chakedis JM, Tang A, Savitz A, Lyon LL, Palacios PE, Vuong B, Kavanagh MA, Kuehner GE, Chang SB; Permanente Medical Group Breast Research Collaborative. Economic Impact of Reducing Reexcision Rates after Breast-Conserving Surgery in a Large, Integrated Health System. Ann Surg Oncol. 2022 Oct;29(10):6288-6296.
- 5) Matar-Ujvary R, Haglich K, Flanagan MR, Fuzesi S, Sevilimedu V, Nelson JA, Gemignani ML. The Impact of Breast-Conserving Surgery Re-excision on Patient-Reported Outcomes Using the BREAST-Q. Ann Surg Oncol. 2023 Sep;30(9):5341-5349.
- 6) Deloitte. Value of patient experience: Hospitals with higher patient experience scores have higher clinical quality. Accessed October 4, 2024. <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/life-sciences-health-care/us-value-patient-experience-050517.pdf>.

Optical Coherence Tomography (OCT)



- **Ultra-high-resolution imaging** of tissue microstructures
- **10x sharper** than ultrasound & X-Ray
- **100x more detailed** than MRI
- **Proven in clinical fields:** Retina, heart, skin



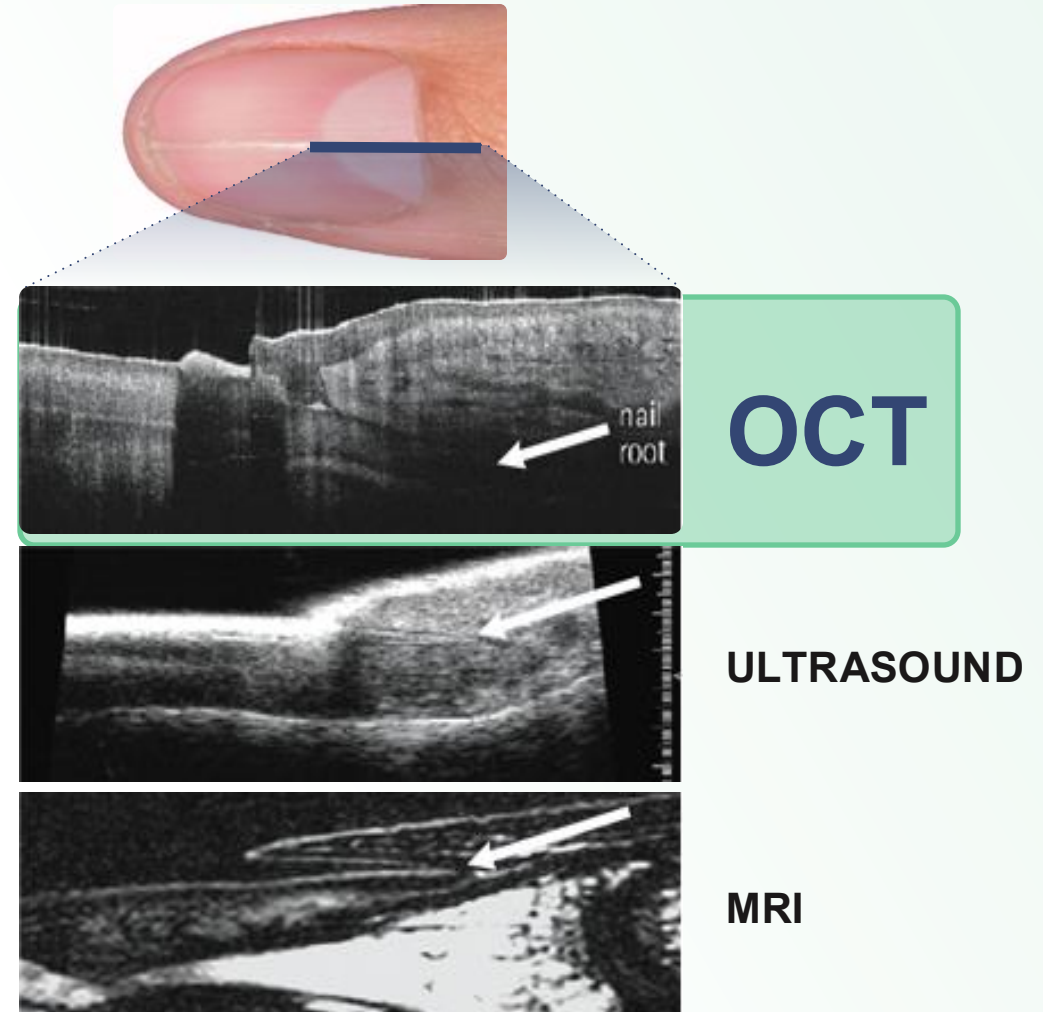
**Cellular-level
visualization**



**Subsurface imaging
down to 2mm**



**No injectables &
non-invasive**

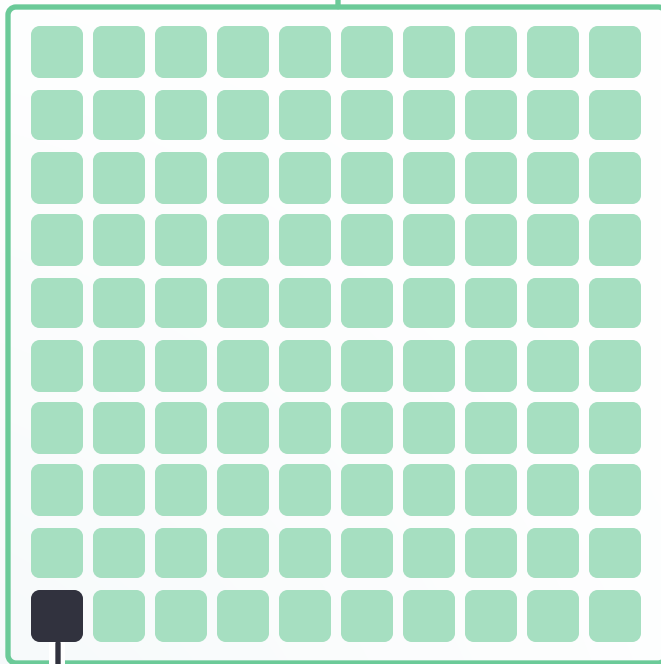


Wide Field (WF) vs. Traditional OCT



Perimeter's WF-OCT
Imaging size

10 x 10 cm



1 x 1 cm

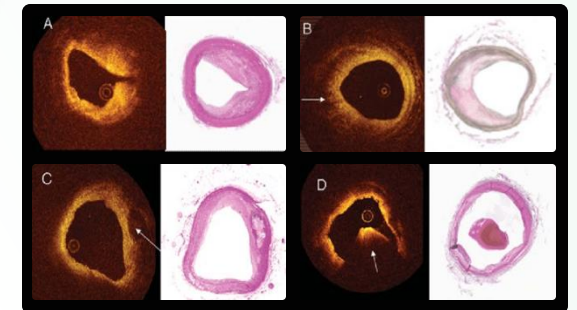
Traditional OCT
Imaging size



OCT in Ophthalmology



OCT in Cardiology

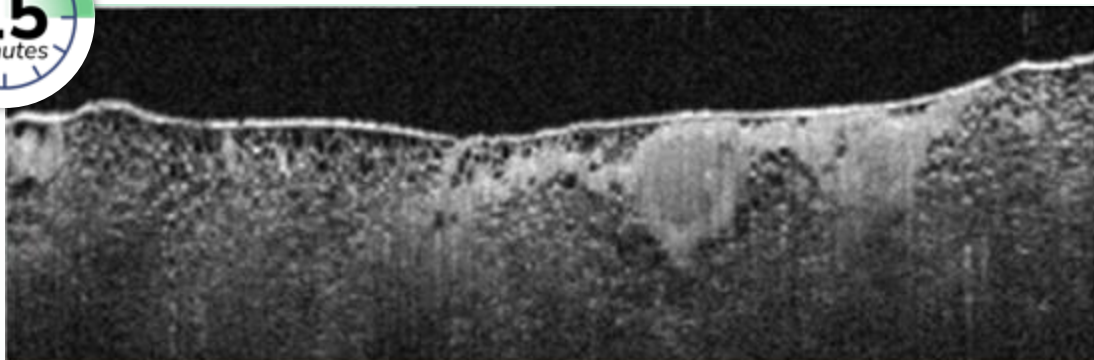


First & Only

WF-OCT for Margin Assessment in the Operating Room



Early-Stage Breast Cancer (DCIS)

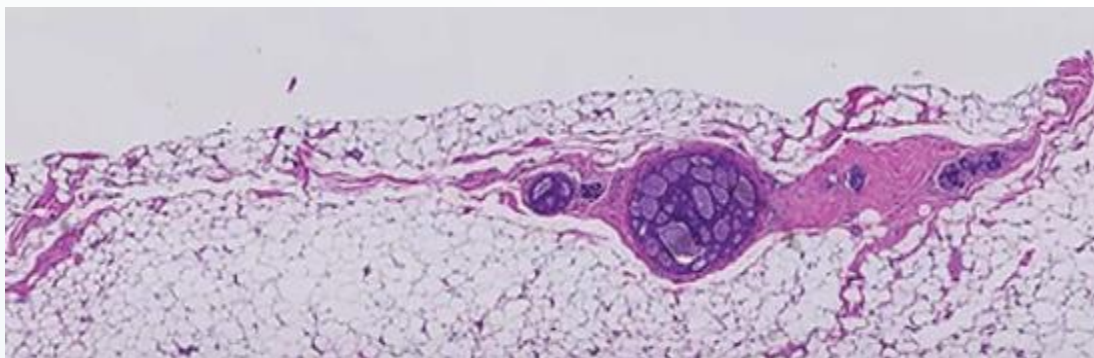


Perimeter OCT in the OR Within Minutes

Perimeter S-Series*

- + Provides real-time insight on margin status
- + 10x the resolution of X-ray and ultrasound & 100x MRI

AVAILABLE NOW



Strongly Correlates to Post-Op Pathology (Up to 10 days)



*The S-Series has a general indication and has not been evaluated by FDA for specific uses. For more information, visit perimetermed.com/disclosures.

The 4 Key Components



1

**S-Series
Wide-Field OCT**



2

**Specimen Immobilizer
(single use container)**

Aids in positioning
diverse tissue types

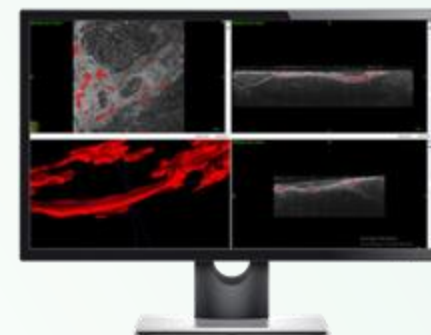


3

**Proprietary
Imaging Atlas**

Provides ongoing support
for image review

**Pending FDA PMA
Approval
(Series-B*)**



4

**AI Tissue
Assessment Algorithms**

Provides “look here”
guidance to help increase
efficiency and accuracy of
margin assessment

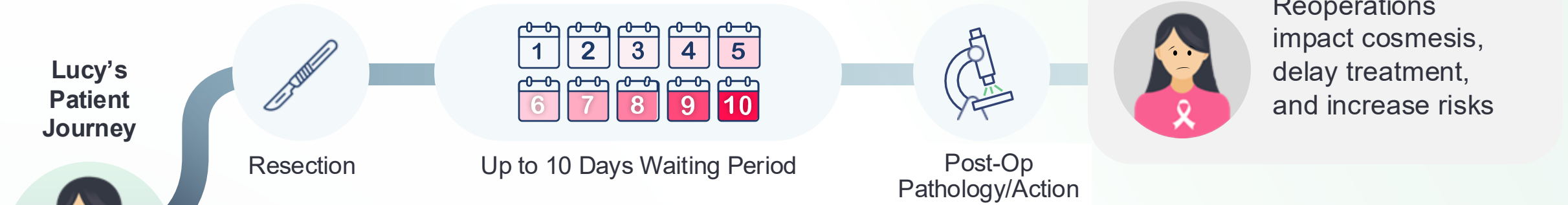
* Perimeter Received U.S. FDA Breakthrough Device Designation on April 15, 2021. Perimeter OCT B-Series is not available for sale in the United States.

CAUTION - Investigational device. Limited by U.S. law to investigational use.

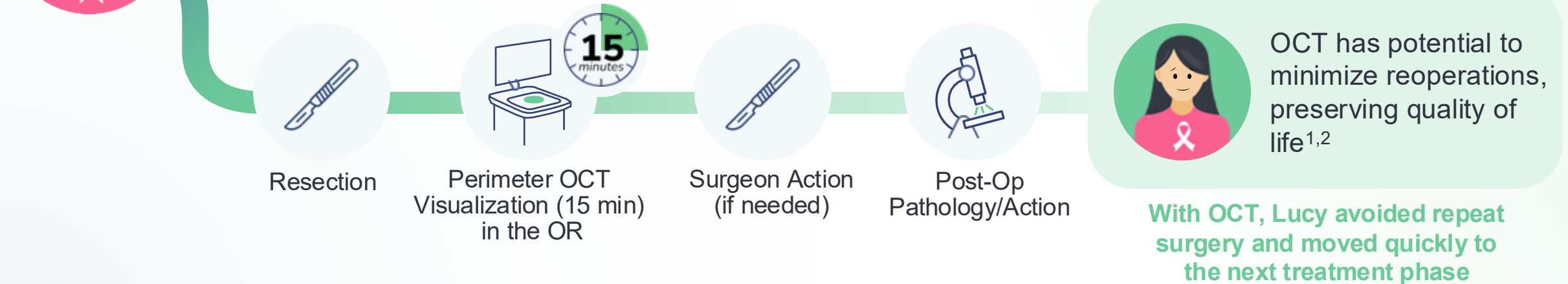
A Path to Better Patient Outcomes



Current Standard of Care**



Perimeter Solution*



*OCT does not replace standard histopathology. S-Series has a general tissue indication and has not been evaluated by FDA for specific uses, including reducing re-excision rates.

**Dependent on Surgeon preference, but could include sight/touch, X-ray, intraoperative pathology, or other adjuvant means

1) Armani A, Borst J, Doulas S, Goldharber N, et al. Intraoperative Margin Trials in Breast Cancer. Current Breast Cancer Reports. 14;65-74 (2022).
2) McEvoy MP, Landercasper J, Naik HR, Feldman S. Update on the American Society of Breast Surgeons Toolbox to address the lumpectomy reoperation epidemic. Gland Surgery. 7(6). (2018). <http://dx.doi.org/10.21037/gs.2018.11.03>.

Combining OCT with AI



Bringing world-class technology to more surgeons and patients



Perimeter's proprietary image library generated on patent protected WF-OCT device

- Trained on a proprietary library of 2 Million+ breast tissue images
- Algorithm highlights areas of interest, potential to enhance decision making in the OR
- Potential to reduce training load and improve ease of use, speeding up customer adoption

The Evolution of Perimeter OCT

OCT + AI*



NOW

FDA APPROVAL PENDING

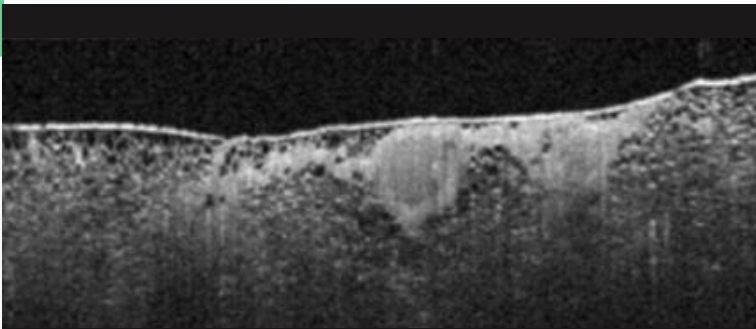
IN DEVELOPMENT



Perimeter S-Series OCT

Real-time visualization

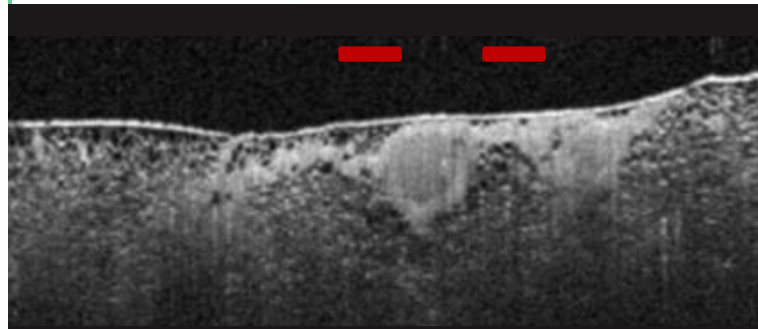
- 10-15min scan
- Manual Review
- 400-900 images



Perimeter B-Series OCT + AI 2.0

Real-time visualization with ImgAssist 2.0

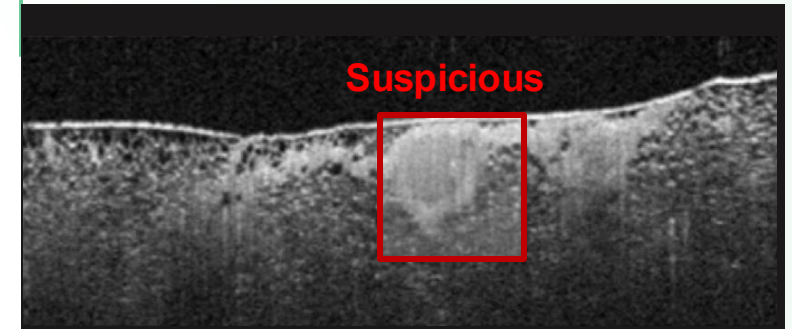
- 10s to low 100s detection to review¹
- AI-aided review



Perimeter B-Series OCT + AI 3.0

State-of-the-art AI + More data Improved accuracy with ImgAssist 3.0 Ease of use – Visual feedback

- Single to low 10s detections²
- More data + More precise AI



1) Levy Y, Rempel D, Nguyen M, Yassine A, Sanati-Burns M, Salgia P, Lim B, Butler SL, Berkeley A, Bayram E. The Fusion of Wide Field Optical Coherence Tomography and AI: Advancing Breast Cancer Surgical Margin Visualization. Life (Basel). 2023 Dec 14;13(12):2340.

2) Internal benchmarking results on the same data as the ImgAssist 2.0 model.

* Perimeter Received U.S. FDA Breakthrough Device Designation on April 15, 2021. Perimeter OCT B-Series is not available for sale in the United States. CAUTION - Investigational device. Limited by U.S. law to investigational use.

FDA PMA Application Submitted

FDA Breakthrough Device Designation

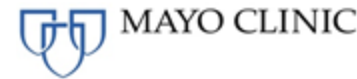
- Allows for accelerated interactions with the FDA and prioritized review of PMA
- Enables expedited reimbursement pathways following market authorization
- Only 156 designations in 2024¹

PMA Advantages Over 510(k)

- PMA creates a higher barrier to entry for competitors
- PMA pathway requires extensive clinical evidence to demonstrate safety and effectiveness of the device
- PMA approval signals to users a high level of FDA scrutiny and review, helping to build credibility and confidence in the product's safety and effectiveness

Positive Perimeter B-Series Pivotal Trial Results

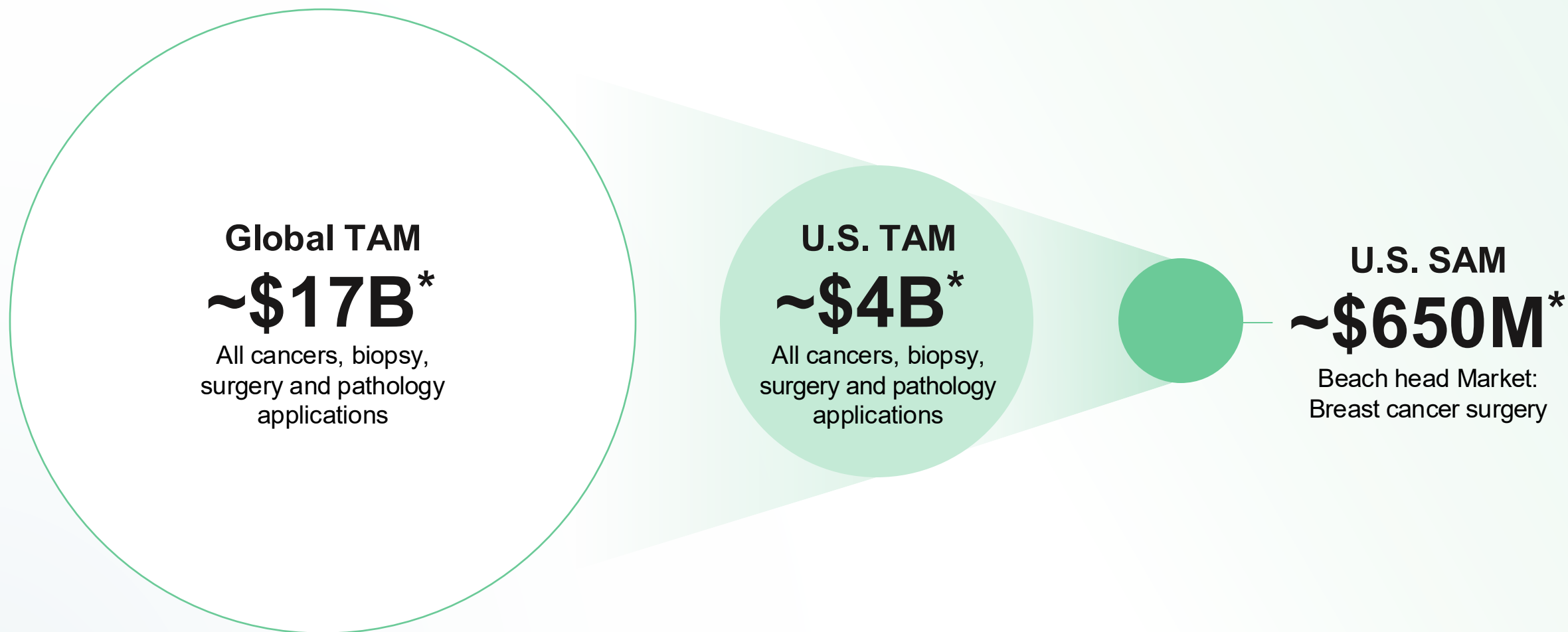
- ✓ **Primary Endpoint Met**
Statistically significant reduction in patients with residual cancer during surgery (p-value = 0.0050)
- ✓ **Super-Superiority Achieved**
B-series OCT system with ImgAssist AI exceeded predefined clinical and statistical significance parameters



1) <https://www.fda.gov/media/185234/download?attachment>



Perimeter OCT for Cancer Care



TAM: Total Addressable Market
SAM: Serviceable Available Market

*Based on internal estimates of 2028 annual oncological surgical volumes in the United States and globally, and using ASPs of \$2,000 for surgery and \$200 for biopsies, respectively.

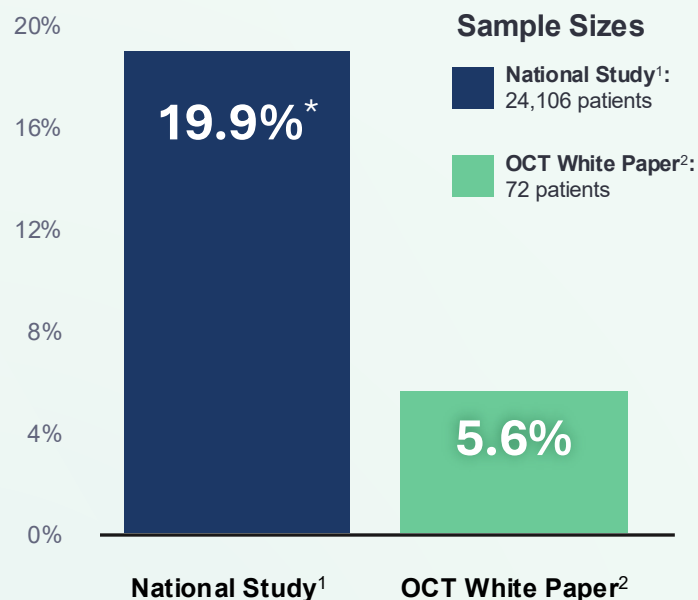
Surgeon-Led Demand Drives Value & Adoption



Surgeon Demand

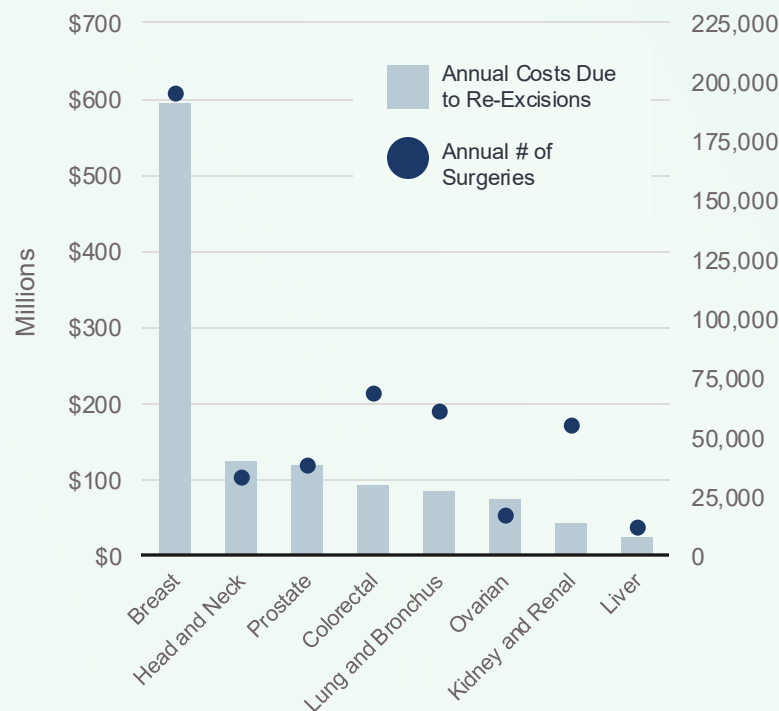
Breast Conserving Surgery Reoperation Rates

National Study vs. OCT White Paper



Payer Benefits

Top 8 Cancers Represent ~\$1.2B Annually in U.S. Healthcare Costs Due to Re-Excisions



Hospital Benefits

Operational Efficiency

- Fewer re-ops free up OR time

Patient Satisfaction

- Better outcomes = higher ratings
- Fewer re-ops improve patient experience

Competitive Advantage

- Surgeons advocate for hospitals with advanced tools
- Attract more patients and strengthen referral base

Quality of Care

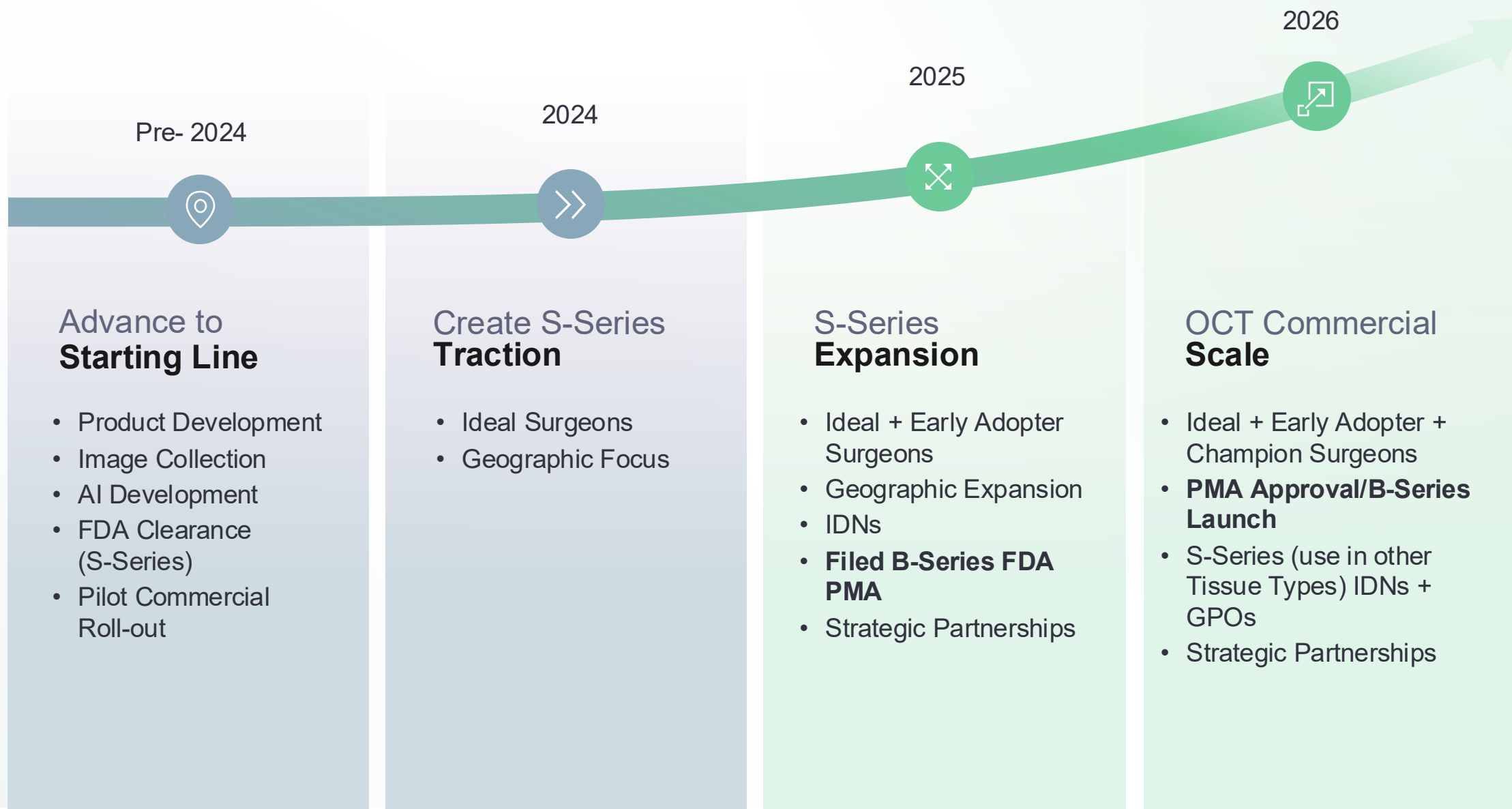
- Fewer complications, better cosmetic outcomes

1) Kim Y, Ganduglia-Cazaban C, Tamirisa N, et al. Contemporary Analysis of Reexcision and Conversion to Mastectomy Rates and Associated Healthcare Costs for Women Undergoing Breast-Conserving Surgery. Ann Surg Oncol. 2024;31:3649-3660.

2) Gunter, Amelia. Adjunct intraoperative optical coherence tomography imaging and reoperation rates after breast-conserving surgery. The Center for Cancer and Blood Disorders, Weatherford, TX. June 3, 2024.

* Perimeter Medical Imaging AI intends the sharing of this research and associated data for an investor audience and not for use by healthcare professionals. The data collected have not undergone peer review nor evaluation by FDA and should not be used to guide clinical practice.

Clear Commercial Growth Pathway



Opportunity is Well-Protected

- 6 issued patents, 6 pending and provisional patents both U.S. and internationally
- Protected IP areas includes
 - Advanced image processing/reconstruction algorithms
 - Tissue differentiation and imaging
 - Tissue management systems
 - Combining OCT and X-ray modalities
 - Visualization of algorithm output and imaging data
- Proprietary breast tissue library containing over 2 million images, labeled and pathology correlated
- Other tissue libraries in process of being compiled



Capital Structure



Ticker Symbols

TSXV: PINK | OTCQX: PYNKF

COMMON SHARES	93,513,842 ¹
MARKET CAPITALIZATION	~C\$25MM
MAJOR SHAREHOLDERS ²	Social Capital Master Holdings, LLC, 31.02%
	Rocco Schiralli, 12.71%
CASH & CASH EQUIVALENTS	USD\$2.4 million ³

Analyst Coverage

FIRM	ANALYST
Leede Jones Gable	Douglas W. Loe
Paradigm Capital	Scott McAuley
Raymond James	Michael Freeman

1) May 13, 2025 (Management’s Discussion and Analysis)

2) November 11, 2024 (Management Information Circular)

3) At end of Q1-2025; does not include \$931,000 CPRIT grant receivable nor any of the net proceeds from June 2025 financing

In Summary

- ✓ Significant TAM & SAM, with ~75% gross margin recurring revenue model
- ✓ S-Series: very positive reception from early adopters; accelerating commercialization; a record Q1-2025 (revenue up 460% YoY and 89% QoQ; case volumes increased 160% YoY and 15% QoQ)
- ✓ Pivotal trial of next-gen B-Series OCT with ImgAssist 2.0 adjuvant use demonstrated super-superiority compared to standard-of-care alone:
 - Primary endpoint met with statistically significant reduction in patients with residual cancer during surgery (p-value = 0.0050)
- ✓ FDA PMA application for B-Series OCT with ImgAssist AI 2.0 submitted March 2025





Investor Relations Contacts:

skilmer@perimetermed.com

pdipasquale@perimetermed.com

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