

Perimeter Medical Imaging AI is potentially disrupting post cancer surgery imaging with a goal to help save lives, costs, and time

Any technology that can help us beat cancer is most welcome. One company is developing a revolutionary way for surgeons to better assess if they have removed all the cancer, all while still in the operating room. This same company was recently recognized as one of the “10 most promising companies” at the Texas Life Science Forum.

The company is Perimeter Medical Imaging AI, Inc. (TSXV: PINK) ('Perimeter'). The AI in their name refers to the fact that they use Artificial Intelligence (AI) in addition to their imaging technology. A combination of imaging and AI helps surgeons identify if cancer is still present post-tumor removal surgery by examining the 'perimeter' of the excised area, hence the company name.

Perimeter's goal as a medical technology company is to transform cancer surgery with advanced, real-time, ultra-high-resolution imaging tools to address areas of high unmet medical need. Perimeter's OTIS™ platform is an FDA-cleared point-of-care imaging system that provides clinicians with real-time, ultra-high-resolution, sub-surface image volumes of the margin (1-2 mm below the surface) of an excised tissue specimen.

Perimeter's OTIS™ (Optical Tissue Imaging System) is FDA cleared point-of-care imaging system for use in real time clinical procedures



1. OTIS Optical Tissue Imaging Console

- Ultra-high resolution sub surface imaging in real time
- Automated capture
- Inter-disciplinary use
- Non-destructive to tissue
- Non-toxic (no injectable agents)
- Fits into current clinical workflow



Source

Cancer left behind after surgery is a significant problem

As we all know cancer surgery does not always get all the cancer. For example, breast lumpectomy surgeries currently face 25% re-operation rates. This is not ideal for the patient and it is not ideal for the health care system. Re-operating costs are, on average, \$16,000 to cover the additional hospital cost per patient, which when added up, amounts to an additional \$560 million annual cost to the U.S. healthcare system.

The best solution for all parties is to be able to do point-of-care real time imaging using Perimeter's Optical Tissue Imaging System (OTIS) taking only 10 minutes to do. By contrast the current standard way is to send off a post-

operative histology tissue sample for assessment, which takes 2 to 7 days. Now that's a potential disruption right there.

Perimeter's commercialization strategy

Perimeter currently uses their OTIS device in limited markets but have plans to expand, with an initial focus in the US on post surgery breast cancer imaging. According to Perimeter (and WHO projections) the total addressable market across all areas for Perimeter is US\$3.7 billion.

U.S. Commercial Market Entry

Commercialization Strategy

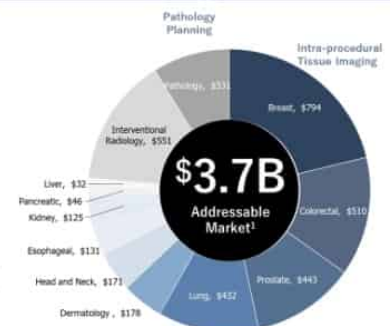
- **Build a body of clinical evidence to support commercial launch**
 - Initiated 20 patient Action Study
 - Clinical development of ImgAssist AI (ATLAS AI Project) under CPRIT grant
 - **Currently underway: 400 patient study** at leading cancer centers to collect images of breast tumors in order to train AI
 - **Next steps: Randomized, multi-site pivotal study** in ~600 patients to test AI against current standard of care / assess the impact on re-operation rates for patients undergoing breast conservation surgery
- **Direct clinical sales efforts**
 - Market development activities (Q4:20)
 - Limited market release (Q1:21)
 - Broader commercial launch (Q2:21)

Marketing Strategy

- **Target innovators and early adopters**
 - Ultrasound heavy surgeons
 - Oncoplastic surgeons
 - Regular cavity shave surgeons/frozen section

Potential Markets

- While outside the scope of Perimeter's current investment plan, OTIS™ has applications beyond breast cancer...



Source

To get a feel for the initial 'revenue potential' just from targeting US breast cancer lumpectomy cases only, Perimeter prepared the slide below. It shows based on a mid case scenario of 500 hospitals doing 3 imaging procedures per week at \$750 each, perimeter's potential revenue could reach \$56.3 million pa of recurring revenue. This is just theoretical at this stage, but shows the potential revenues from just one type of post cancer surgery (post breast cancer lumpectomy). In time Perimeter would aim to expand to many types of cancer post surgery imaging.

Perimeter's 'target potential' revenue only from breast lumpectomy post-surgery imaging

Installed Base	100 Hospitals	250 Hospitals	500 Hospitals	1,000 Hospitals
<i>3 Procedures Per Week</i>	3	3	3	3
<i>50 Weeks</i>	50	50	50	50
Annual Number of Procedures	15,000	37,500	75,000	150,000
<i>\$750 Per Consumable (ASP)</i>	\$750	\$750	\$750	\$750
Annualized Recurring Revenue from Installed Base (\$M)	\$11.3	\$28.1	\$56.3	\$112.5

Source

Perimeter's Q3 2020 financial results were reported [here](#).

Closing remarks

Perimeter Medical Imaging AI is potentially disrupting post cancer surgery imaging with a goal to help save lives, costs, and time. Perimeter's OTIS™ is already FDA cleared; however there is still some further next stage product development ongoing in the area of training the computer (AI training), as well as further studies. Perimeter is targeting a limited market release in Q1 2021 and a broader commercial launch in Q2 2021.

Perimeter's board and management team are extremely experienced and highly credentialed. The company is rapidly gaining recognition and now has a market cap of C\$87 million after only listing on the TSX-V in mid 2020. It is certainly looking like 2021 will be a breakthrough year for Perimeter Medical Imaging AI. Stay tuned.

Disclosure: The author is long Perimeter Medical Imaging AI, Inc. (TSXV: PINK)