

Pintuition® vs. SCOUT® for Removal of Non-Palpable Breast Lesions

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Study conclusion: The operative time with Pintuition® was shorter by 21% (or 13 min) even after adjusting for confounders.

100%

INDEX RETRIEVAL

All markers removed at first operation

21%

SHORTER OPERATIVE TIME

Multivariable-adjusted $p = 0.02$ (95% CI: 4-35%)

2.2%

POSITIVE MARGIN RATE

Equivalent oncologic performance confirmed

STUDY OVERVIEW

- DESIGN** Retrospective single-institution review; single experienced fellowship-trained breast surgeon
- COHORT** 90 consecutive breast lesions - 45 Pintuition® / 45 SCOUT® (lumpectomies & excisional biopsies)
- SETTING** Stanford University, May 2022 – July 2024
- ANALYSIS** Multivariable generalized linear models adjusted for BMI, surgical indication and marker depth

OPERATIVE TIME - MEDIAN MINUTES



PINTUITION®



SCOUT®

Difference: 13 minutes per case | 21% reduction | $p = 0.006$ (raw) / $p = 0.02$ (adjusted)

WHY PINTUITION® IS FASTER



Navigational visual alignment - no repositioning guesswork Hashmark confirms simultaneous alignment in both axes (TargetLOC®) along with intuitive auditory signals. SCOUT® relies on audible cadence alone without any navigational information.



Accurate distance display GPSDetect® provides real-time bi-directional feedback in both depth and distance to the marker with mm accuracy, enabling intuitive navigation.



Immune to electrocautery interference Pintuition® is immune to electrocautery interference and remains active throughout the procedure. In contrast, SCOUT® is susceptible to electrocautery current.



Maintains accurate signal in fluid Pintuition® remains active throughout the procedure, maintaining signal accuracy even in the presence of blood, fluid or hematoma, whereas SCOUT® does not.

Throughput implication: 13 minutes saved per case means surgeons can complete more cases in a single day with less anesthesia time - resulting in greater OR efficiency and improved resource utilization across the surgical program.



Outcome / Feature	Pintuition®	SCOUT®	p-value
Index retrieval rate	100%	97.8%*	>0.99
Median OR time	37 min	50 min	0.006
Positive margin rate	2.2%	2.2%	>0.99
Re-excision rate	2.2%	2.2%	>0.99
Detectable in hematoma/ fluid	✓	X	–
Immune to electrocautery	✓	X	–
Visual + audible guidance	✓	Audible only	–
Accurate distance display	✓	Not reliable	–
Nickel-free exterior	✓	X	–

*One SCOUT® device not retrieved at index operation due to hematoma; successfully excised at second procedure.

ONCOLOGIC EQUIVALENCE CONFIRMED

Identical margin positivity and re-excision rates of just 2.2% in each group. Total specimen volume was similar (27 cm³ SCOUT® vs. 32.4 cm³ Pintuition®; $p = 0.80$). **Faster surgery does not come at the cost of cancer clearance.**



PINTUITION® ADVANTAGES AT A GLANCE

Navigational visual guidance

Hematoma-safe signal

Electrocautery-proof

Nickel-Free Implant

100% index retrieval

Accurate depth readout

Intuitive use



Dr. Jean Bao - Stanford University - US

The visual signal provided by Pintuition® provides a **more intuitive and precise user experience** than the audible signal by SCOUT®. The shorter operative time could allow the surgeon to perform more cases in one day with less anesthesia time, resulting in **more efficient utilization of health care resources**.