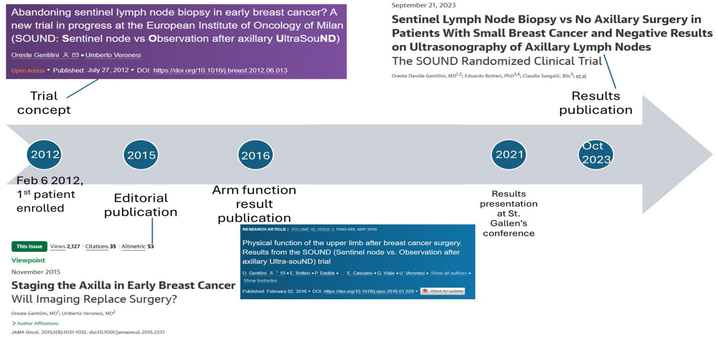
Does Early Awareness of Clinical Trials Translate to Increased Adoption of Results? Factors Associated with Intent to Omit Axillary Surgery Based on the SOUND Trial

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BACKGROUND

The SOUND (Sentinel node vs Observation after axillary UltraSouND) clinical trial timeline from first trial concept publication in 2012 to results publication in 2023.



- SOUND trial demonstrated omission of sentinel lymph node biopsy is oncologically safe in select patients with early-stage breast cancer.
- Anticipating clinical trial results may facilitate early implementation of clinical trial results into clinical practice.
- Hypothesis: Does early awareness of SOUND trial lead to higher intent to omit SLNB based on trial results?

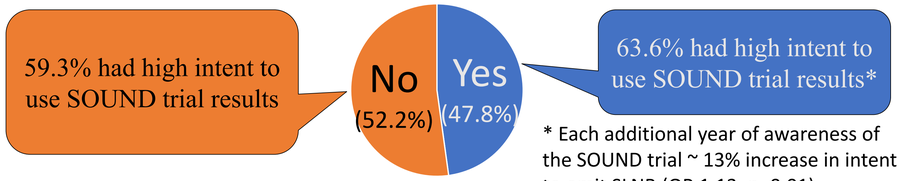
METHODS

- Cross-sectional survey study
- Purposive sample of North American breast medical, surgical, and radiation oncologists
- Snowball sampling and chain referral sampling
- Survey administered Aug-Dec 2024 (US) and March-May 2025 (Canada)
- Multi-step survey development process
  - Innovation-Specific Implementation Intentions (MISII): validated 3-item 5-point Likert scale based questions
  - Scenario based questions: intent to omit SLNB based on varying patient age and radiation therapy plan
- Outcome of interest: intent to omit SLNB to a 'high extent' (moderate to very great extent on Likert scale)

RESULTS

- Overall response rate: 21% (208/1004) → 73.6% practicing in US, 26.4% practicing in Canada
- 148 surgeons, 32 medical oncologists, 27 radiation oncologists
- Mean year respondents became aware of the SOUND trial was 2020 (range 2011-2024).
- N=127 (61.6%) planned to use the results of SOUND trial to guide clinical decision-making
  - Intent to change practice did not significantly increase with length of awareness of SOUND trial, years in practice, specialty, region of practice, or practice type.
  - Clinicians whose clinical practice was exclusively in breast care were more likely to use the results from the SOUND trial (OR 3.07 and OR 2.12, p<0.05).

Currently discuss SLNB omission in select patients <70 years old with early-stage breast cancer



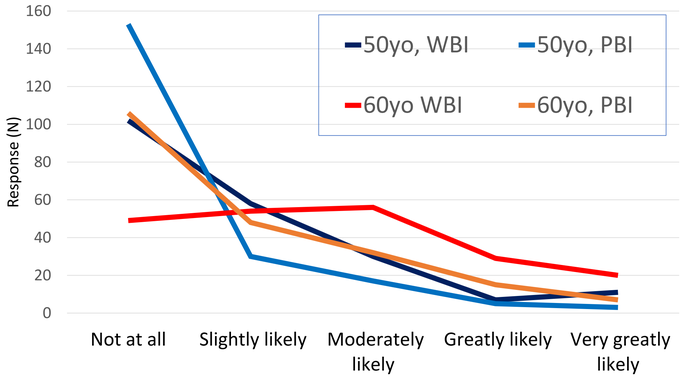
* Each additional year of awareness of the SOUND trial ~ 13% increase in intent to omit SLNB (OR 1.13, p=0.01)

Table. How participants first became aware of that there is a clinical trial (SOUND trial) on omission of SLNB in early-stage breast cancer after negative axillary ultrasound.

Method	N	Percent
Direct communication with colleague(s)	51	24.5%
Publication of trial concept/design (prior to the publication of results)	37	17.8%
National Conference	28	13.5%
Publication of results (JAMA Oncol paper)	26	12.5%
Local multidisciplinary conference (e.g. tumor board)	20	9.6%
Other	14	6.7%
During residency/fellowship training	9	4.3%
Clinical trial cooperative group: NRG, Alliance, ECOG, SWOG, CCTG	8	3.8%
Medical society bulletin board posting	5	2.4%
Email blast from specialty organization	5	2.4%
National Guideline	3	1.4%
Social media (e.g. Twitter/X, Instagram, etc)	2	1.0%

RESULTS

How likely are you to recommend omission of SLNB after a negative clinical exam and negative axillary US for the scenario of patient with 1.5cm grade 2 invasive ductal carcinoma undergoing lumpectomy, varied by patient age (50 vs 60 years old) and radiation (whole breast radiation, WBI versus partial breast radiation, PBI).



- Intent to omit SLNB not impacted by length of awareness of SOUND trial, years in practice, type of practice, proportion of clinical practice in breast or specialty.
- Regional differences in intent to omit SLNB: Southern region and Canada being less likely to omit SNB compared to the West (OR 0.3, p=0.04; OR 0.27, p=0.03)

CONCLUSIONS

- Variations exist in intent to omit SLNB based on awareness of SOUND trial result and region of practice.
- Further research needed on dissemination strategies of landmark clinical trial concepts while studies are underway.

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