

Marking of target lymph nodes with clips/coils in breast cancer patients undergoing neoadjuvant chemotherapy – first results from the AXSANA study (NCT04373655) [Abstract]

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Angaben zur Veröffentlichung / Publication details:

Fröhlich, S., S. Hartmann, M. Banys-Paluchowski, J. de Boniface, O. D. Gentilini, E. Stickeler, Nina Ditsch, et al. 2024. "Marking of target lymph nodes with clips/coils in breast cancer patients undergoing neoadjuvant chemotherapy –first results from the AXSANA study (NCT04373655) [Abstract]." *European Journal of Surgical Oncology* 50 (Supplement 2): 108921.
<https://doi.org/10.1016/j.ejso.2024.108921>.

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Background: Currently, the use of clips/coils is the most popular technique to mark target lymph nodes (TLN) in breast cancer patients before neo-adjuvant chemotherapy (NACT) although the reported detection rates (DR) vary significantly and patients require (in general) a preoperative wire localization.

Material and methods: The international multicenter non-interventional AXSANA study aims at prospectively evaluating different axillary surgical staging techniques after NACT. The DR of clip-marked TLNs and the rate of lost clips for patients with planned targeted axillary dissection (TAD) or target lymph node biopsy (TLNB) who converted from cN+ to ycN0 after NACT, and had undergone surgery until Jan 11th, 2024 are reported.

Results (For Surgical Trial Proposals fill in 'the Feasibility', for Surgical Trial in Progress fill in the 'Current status'): In 986 of 1274 (77.4%) patients with planned TAD or TLNB, clips were used for TLN marking before NACT. In 22.6% (n=288) magnetic seeds, radar markers, or carbon were utilized. In 885 (89.8%) of patients the clip-marked TLN was detected during TLNB or TAD. The rate of lost clips was 5.8% (n=57). The TLN was localized preoperatively in 465 (47.2%) patients, in 438 (94.2%) of them by wire. The median number of removed TLNs was 1 (range 0-9).

Conclusions (For Surgical Trial in Progress and Surgical Trial Proposals fill in 'NA'): In most patients of the large, prospective AXSANA cohort, the TLN was marked with a clip before NACT. This analysis confirms a DR less than 90%, similar to the results reported from previous studies. New, probe-guided localization techniques might improve the DR and patients' comfort.

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**EUROPEAN JOURNAL OF SURGICAL ONCOLOGY 50 (2024) 108921
MARKING OF TARGET LYMPH NODES WITH CLIPS/COILS IN BREAST
CANCER PATIENTS UNDERGOING NEOADJUVANT CHEMOTHERAPY –
FIRST RESULTS FROM THE AXSANA STUDY (NCT04373655)**

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