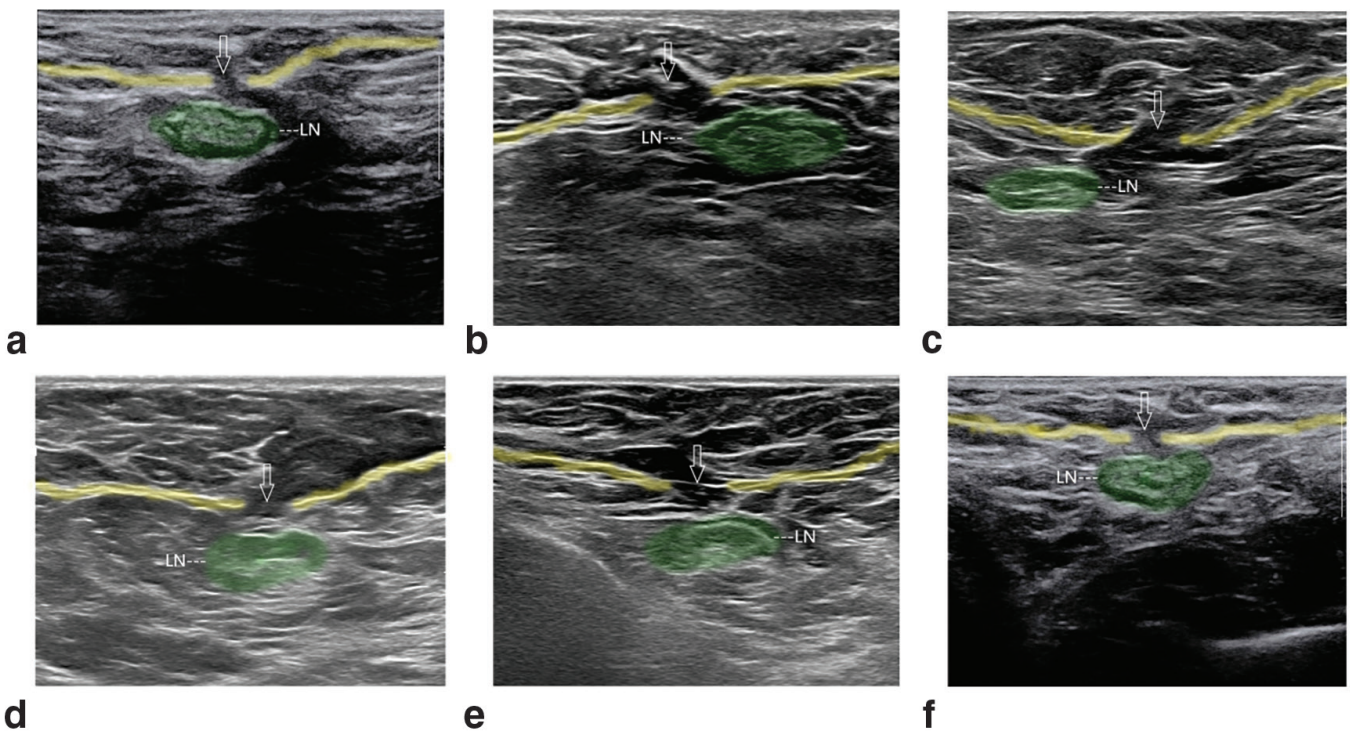
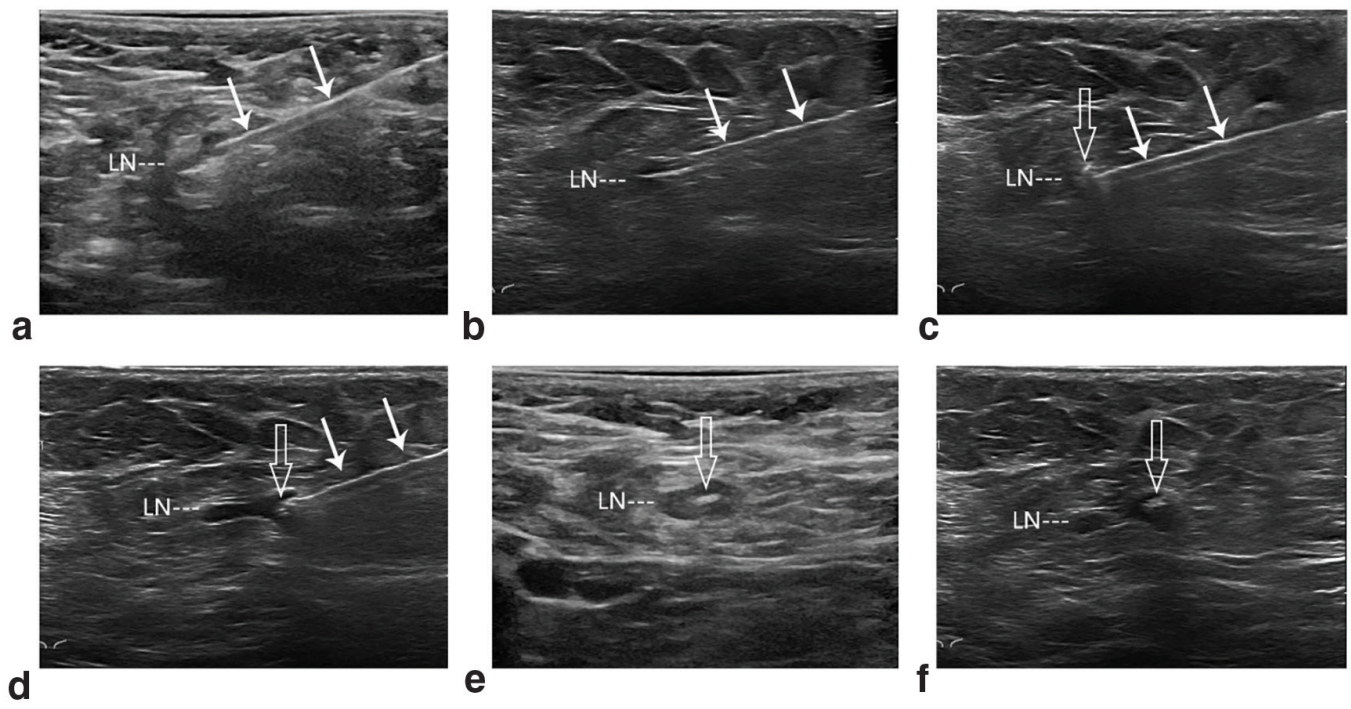
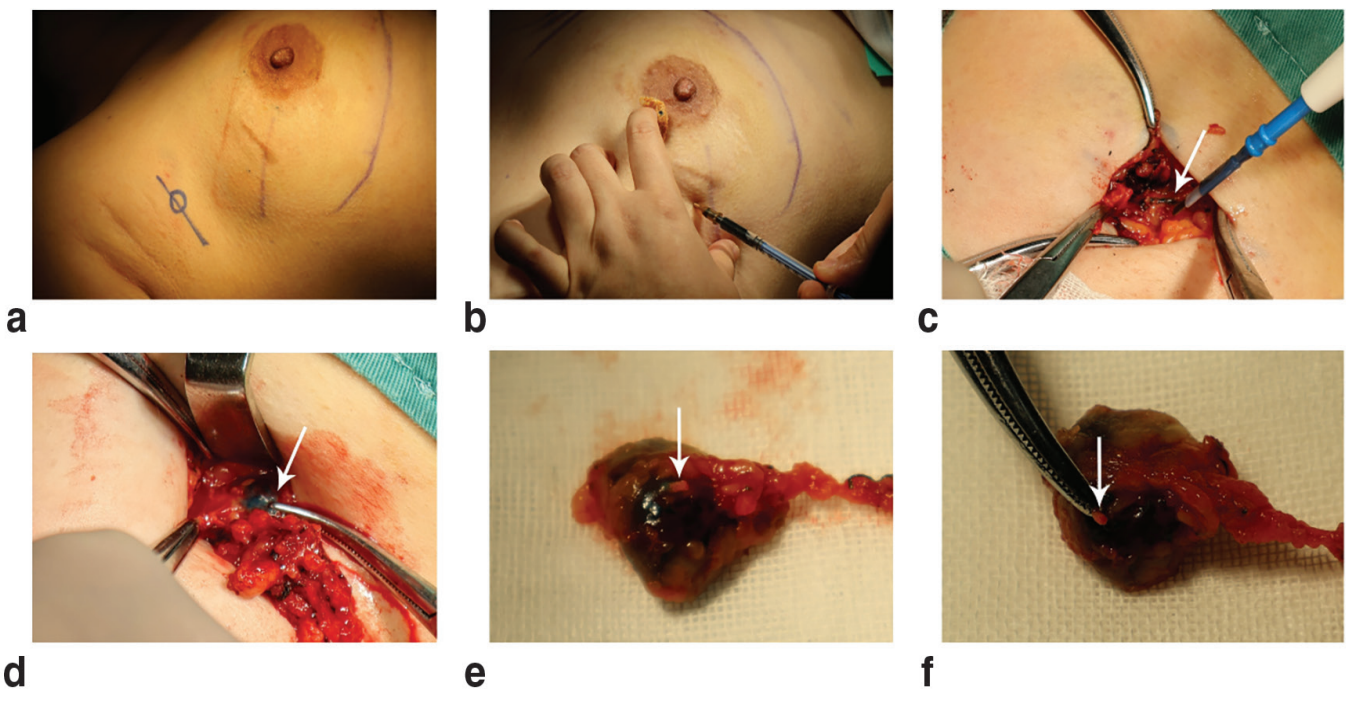


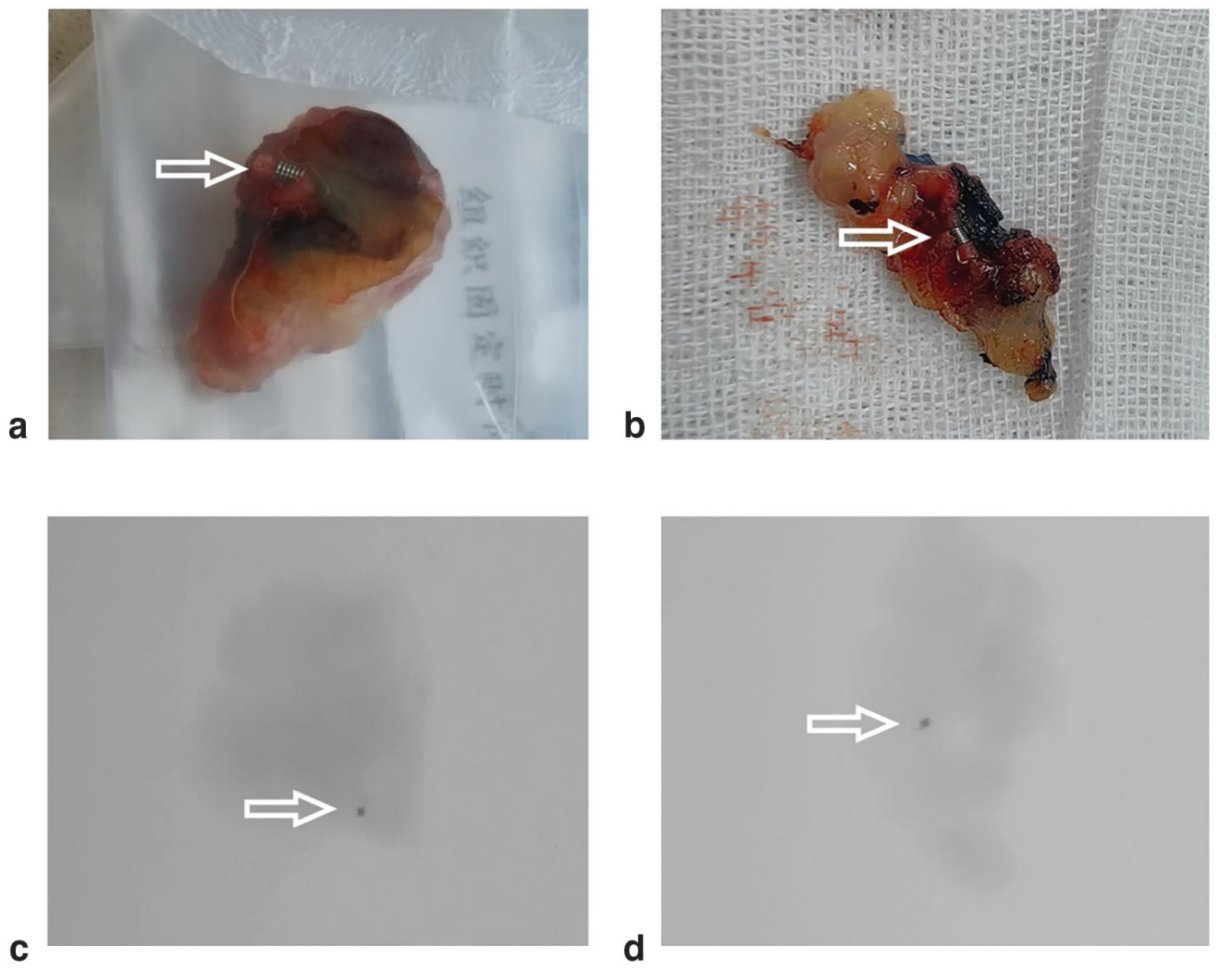
Supplementary Figure 1. US images of the axilla. 6 example images presenting the US images of the axilla **(a-f)**, among which the yellow band indicated the ACF, the arrow pointed to the cribriform foramen, and the green-labeled "LN" denoted the LN. US, ultrasound; LN, lymph node; ACF, axillary cribriform fascia.



Supplementary Figure 2. Needle insertion. 6 example images presenting needle insertion into the cortical margin of the selected LNs under the real-time US guidance **(a-f)**, among which the solid arrow indicated the shaft of the localization needle, while the hollow arrow indicated the marker placed within the cortical region of the LN, labeled "LN". US, ultrasound; LN, lymph node.



Supplementary Figure 3. Identification and excision of labeled SLNs. The skin surface marking of the LN after US-guided localization **(a)**. Methylene blue injection around the tumor **(b)**. Observation of a blue dye staining lymphatic vessel located deep in the incision **(c)**. Identification of a blue dye staining SLN (indicated by the white arrow) **(d)**. Identification of the US-guided marker in the blue dye staining SLN (indicated by the white arrow) **(e, f)**. SLN, sentinel lymph node biopsy; LN, lymph node; US, ultrasound.



Supplementary Figure 4. US-guided marker in the excised SLNs. US-guided marker found in the excised blue-stained SLNs (indicated by the white arrow) **(a, b)**. X-ray images of the excised SLNs and surrounding tissue, with white arrow highlighting the US-guided marker, which appears as a high-density shadow **(c, d)**. SLN, sentinel lymph node biopsy; US, ultrasound.