



# eTRAX™ Needle Tip Tracking of Superficial Kidney Biopsy Using Contrast

## BACKGROUND

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**Case:**  
Superficial Kidney Tumor Biopsy

**Featured Product:**  
eTRAX Needle Tip Tracking System

## CONSIDERATION FOR USE

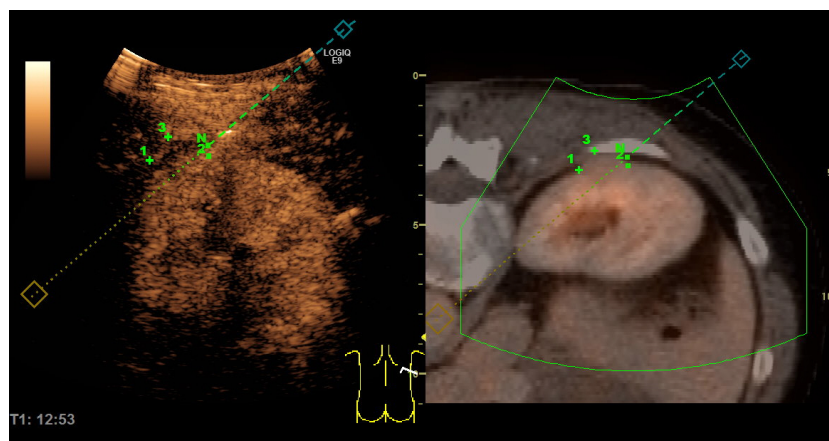
Patient presented with a small, superficial kidney lesion. The use of Volume Navigation on the LOGIQ E9, image fusion of ultrasound and CT was possible. Using an out-of-plane approach, eTRAX Needle Tip Tracking was useful for continuous visualization of the needle tip.

## REQUIRED EQUIPMENT FOR EXAMINATION

- GE Healthcare LOGIQ E9 with Volume Navigation
- Ultrasound contrast medium
- CIVCO eTRAX Needle Tip Tracking System

## APPROACH TO EXAMINATION

Electromagnetic needle tip tracking enabled a safe, out-of-plane biopsy approach. Shown below, the large dotted on-screen guideline represents the distance the needle has traveled, with "N" designating the needle tip and the small dotted line representing the future needle pathway. Using the LOGIQ E9, GPS markers are used to show tumor location or needle punctures and dynamically show the corresponding location simultaneously in ultrasound and CT, in any orientation.



On-screen guidelines reveal the location of the needle tip relative to the image plane in this out-of-plane biopsy. A small tumor is accurately targeted, illustrating the precision of the eTRAX needle tip in this case, within 2mm accuracy.

