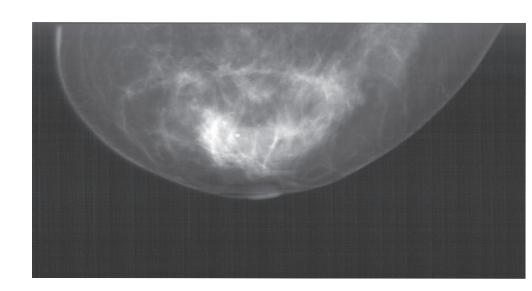
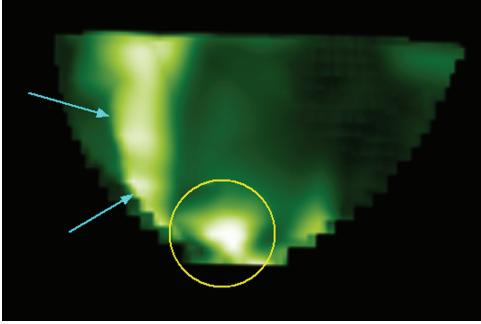
European Institute of Oncology

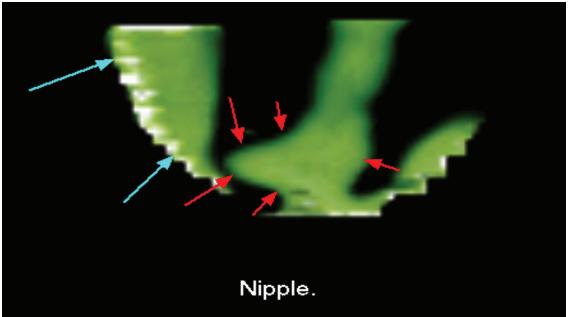
Francesca Abbate, M.D.



Case 1 Invasive Ductal Carcinoma







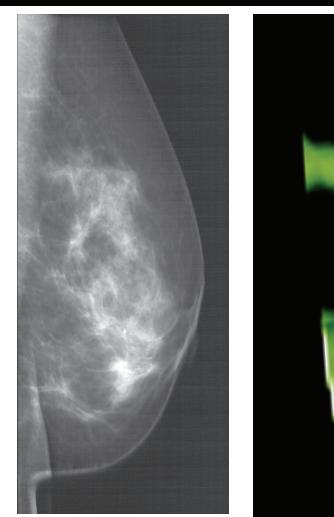
Patient Age: 45 years

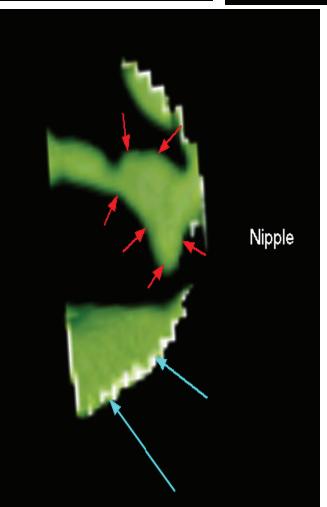
Mammography: Craniocaudal and mediolateral views of the left breast demonstrate a non-palpable questionably spiculated lesion at 5 o'clock (lower inner quadrant).

CTLM: Area of angiogenesis at the site of the mammographic lesion.

Pathology: Invasive ductal carcinoma

IDSI Comment: CTLM reveals sub-areolar angiogenesis at 3 o'clock, confirming malignancy. The slight difference in position is due to the breast compression and obliquity of the medio-lateral view.





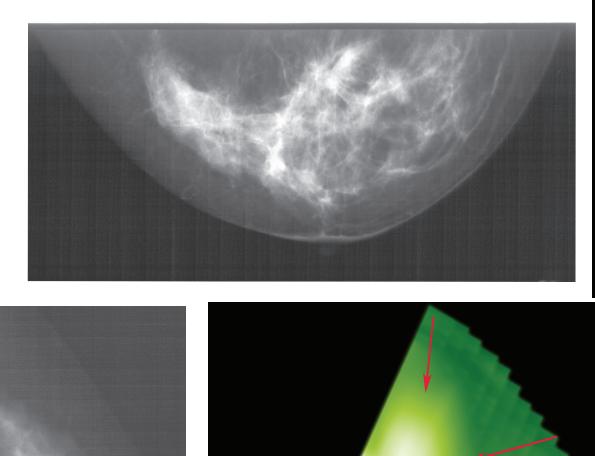
Case 2 Invasive Ductal Carcinoma

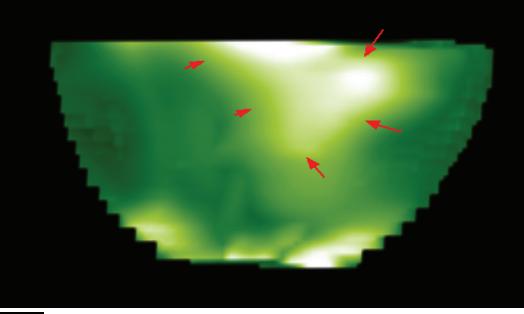
Patient Age: 44 years

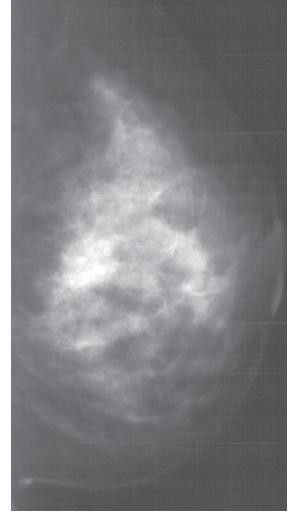
Mammography: Cranio-caudal and medio-lateral mammograms of the left breast show a 4.0 mm lesion situated at 12 o'clock, posterior segment. CTLM: Both cranio-caudal and mediolateral CTLM views show a very large volume of angiogenesis, which is highlighted in the surface-rendered view. Normal tapering surface vein (blue arrows).

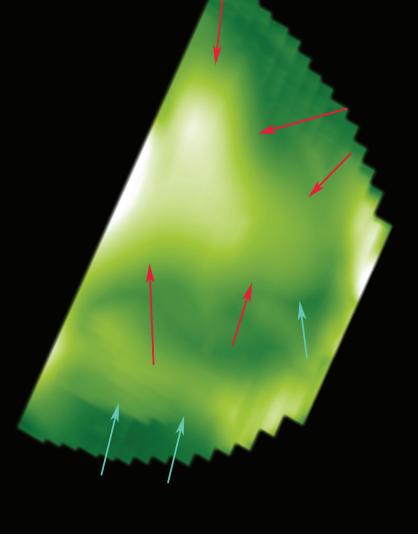
Pathology: Invasive ductal carcinoma

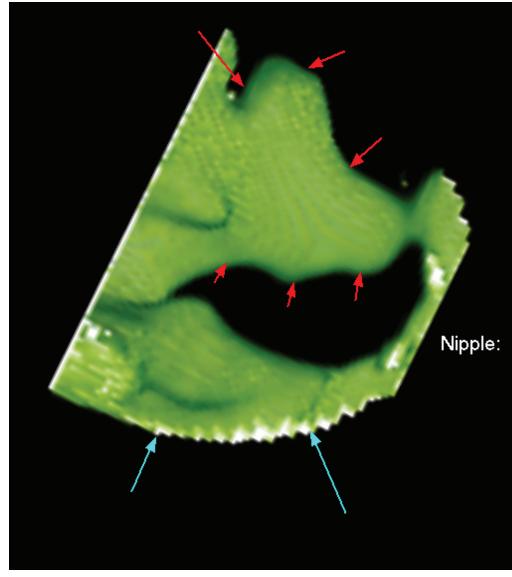
IDSI Comment: The volume of angiogenesis seen on CTLM is much larger than the lesion seen on the mammogram.























European Institute of Oncology

Francesca Abbate, M.D.



Case 3 Invasive Ductal Carcinoma

Patient Age: 48 years

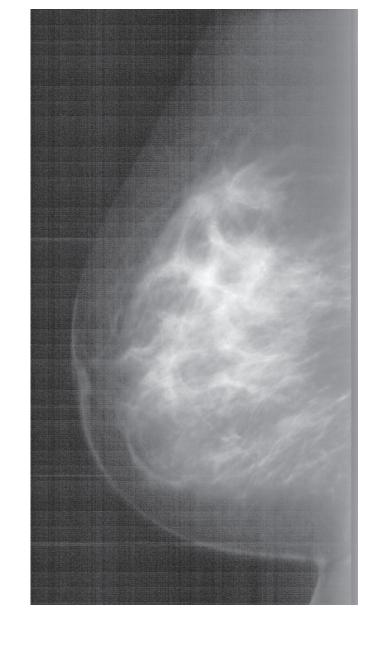
Mammography: Cranio-caudal and medio-lateral mammograms of the right breast show an ill-defined mass at 2 o'clock, middle segment.

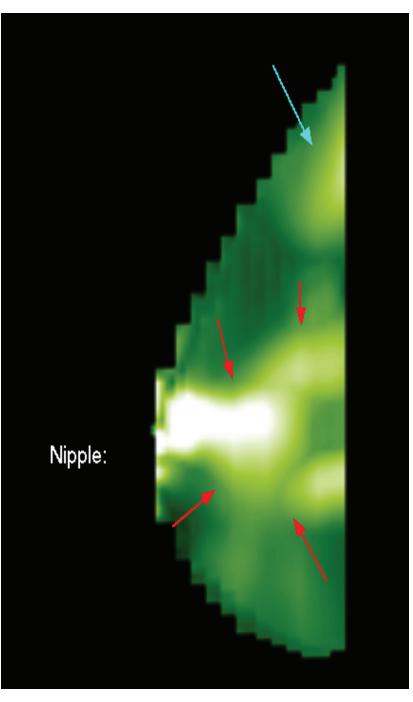
CTLM: CTLM shows a large volume of angiogenesis extending from the nipple to the base of the breast, occupying middle and posterior segments from 12 to 2 o'clock.

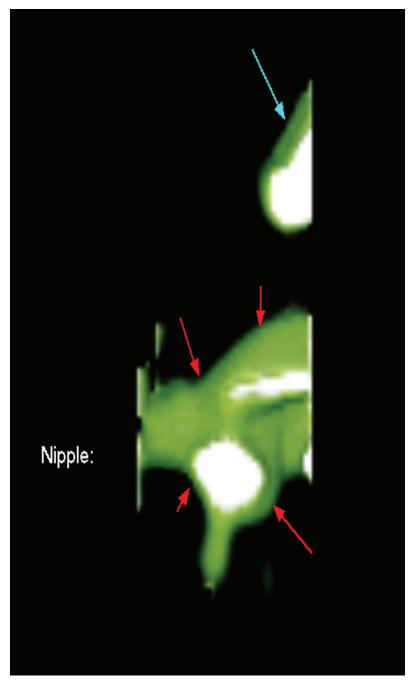
Pathology: Invasive ductal carcinoma

IDSI Comment: The red arrows demonstrate angiogenesis that is much larger than the mammographic abnormality. The blue arrows show a normal pyramid-shaped basal vein.









Case 4 Invasive Ductal Carcinoma T3 N1

Patient Age: 68 years

Mammography: Cranio-caudal and lateral mammograms of the left breast show nipple distortion and poorly defined irregular sub-areolar density.

CTLM: Cranio-caudal and Lateral CTLM views show asymmetric sub-areolar angiogenesis corresponding to the irregular density seen on mammography.

Pathology: Invasive ductal carcinoma T3 N1

IDSI Comment: The cranio-caudal and lateral CTLM studies show an area of sub-areolar angiogenesis. Its shape distinguishes it from normal sub-areolar vascularity.

