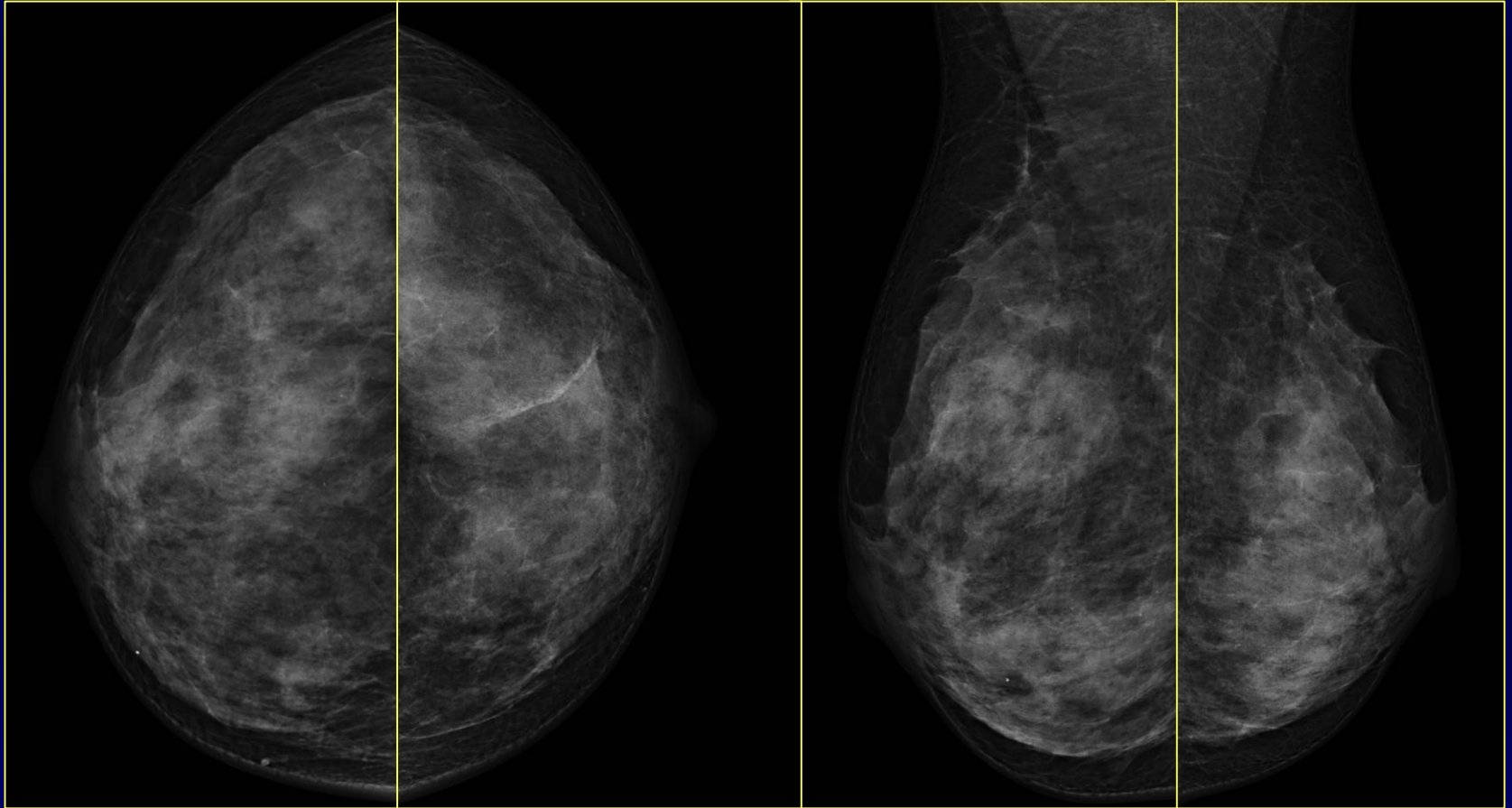


Anamnesi

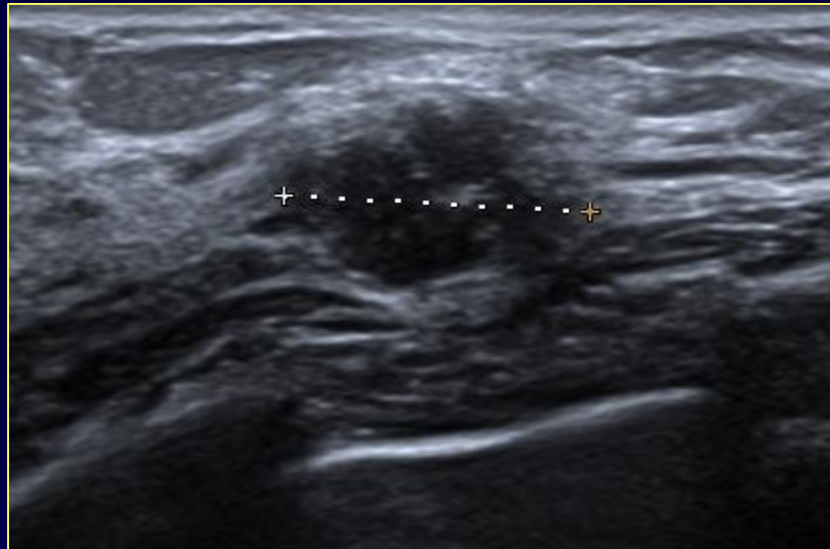
- ✓ 43 anni
- ✓ Non familiarità per neoplasia mammella / ovaio
- ✓ Prevenzione

Mammografia



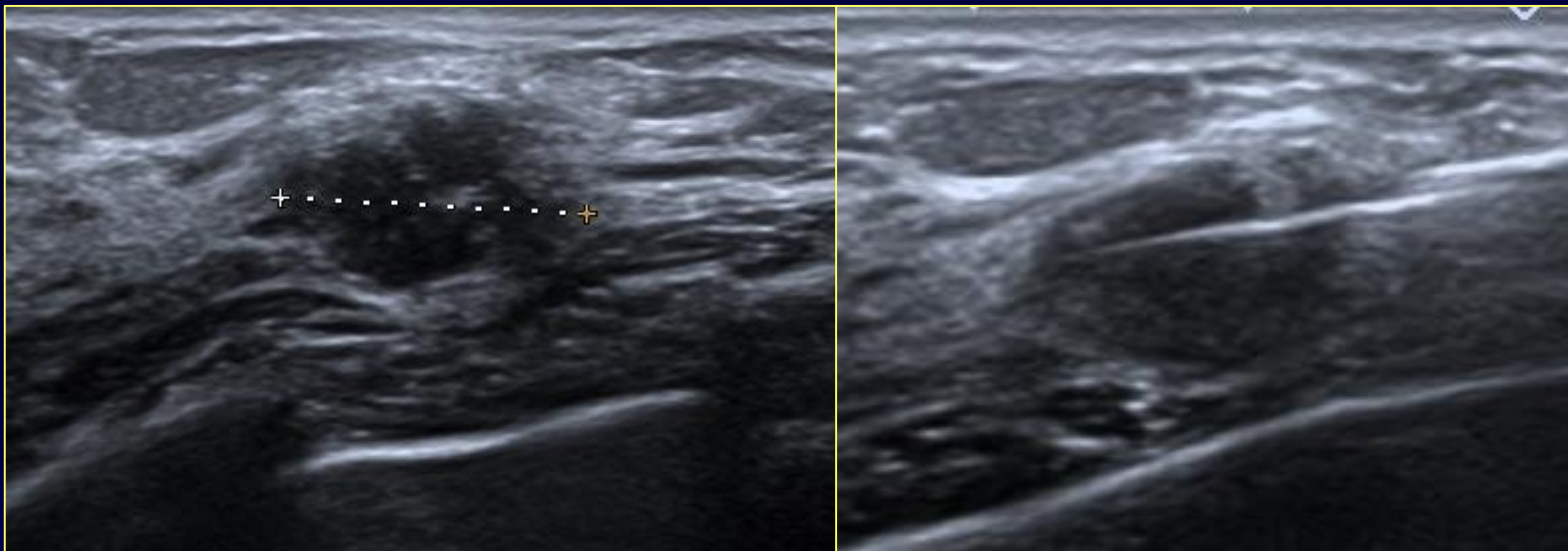
Ecografia mammaria

- ✓ **Formazione nodulare ipoecogena sospetta QQEE sinistra**



Agobiopsia sotto guida ecografica

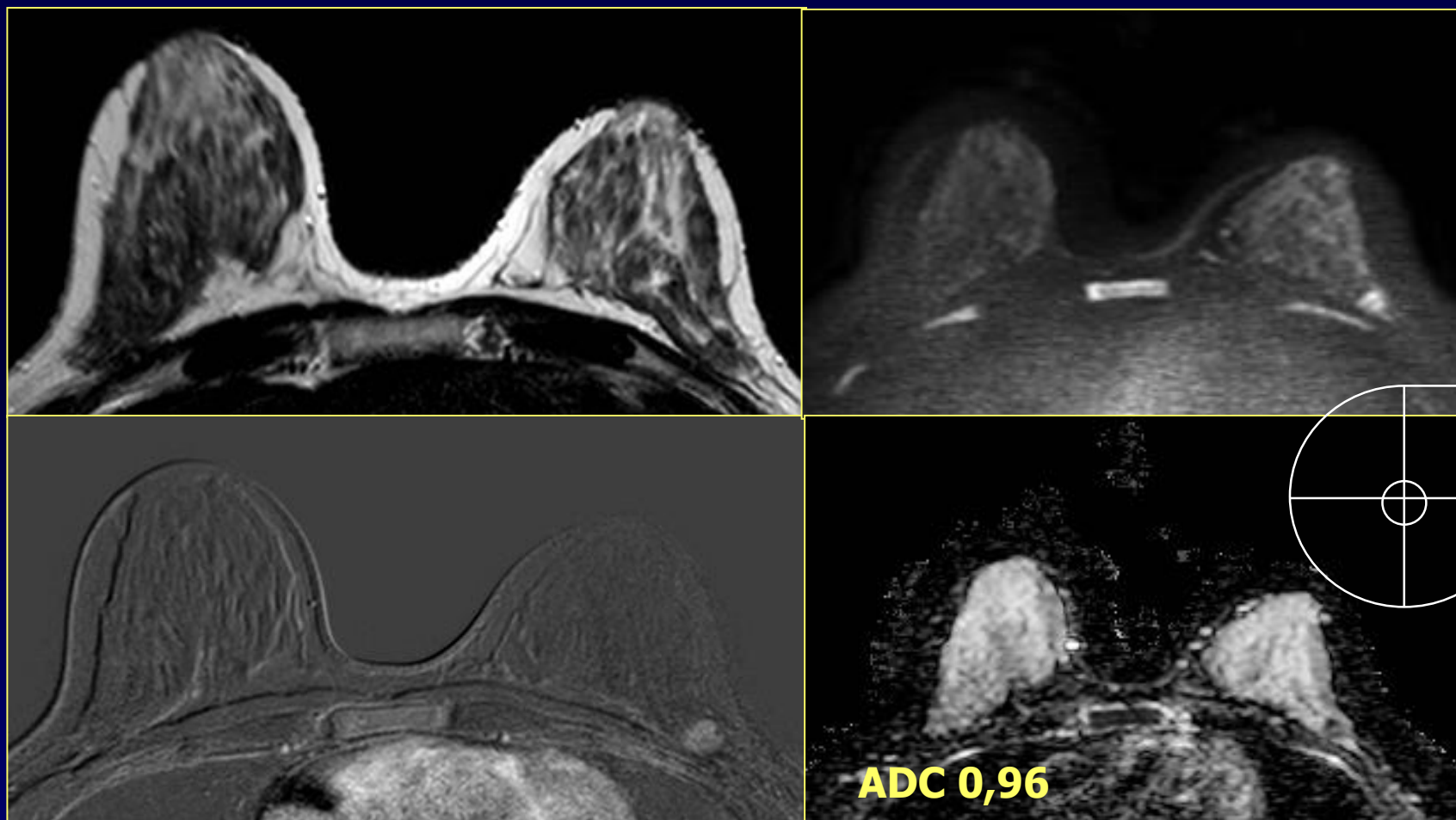
- ✓ **Formazione nodulare ipoecogena sospetta QQEE sinistra**



- ✓ **Esame istologico: Carcinoma duttale infiltrante G2
ER 90% PgR 80% HER2 10% 1+ Ki67 26%**

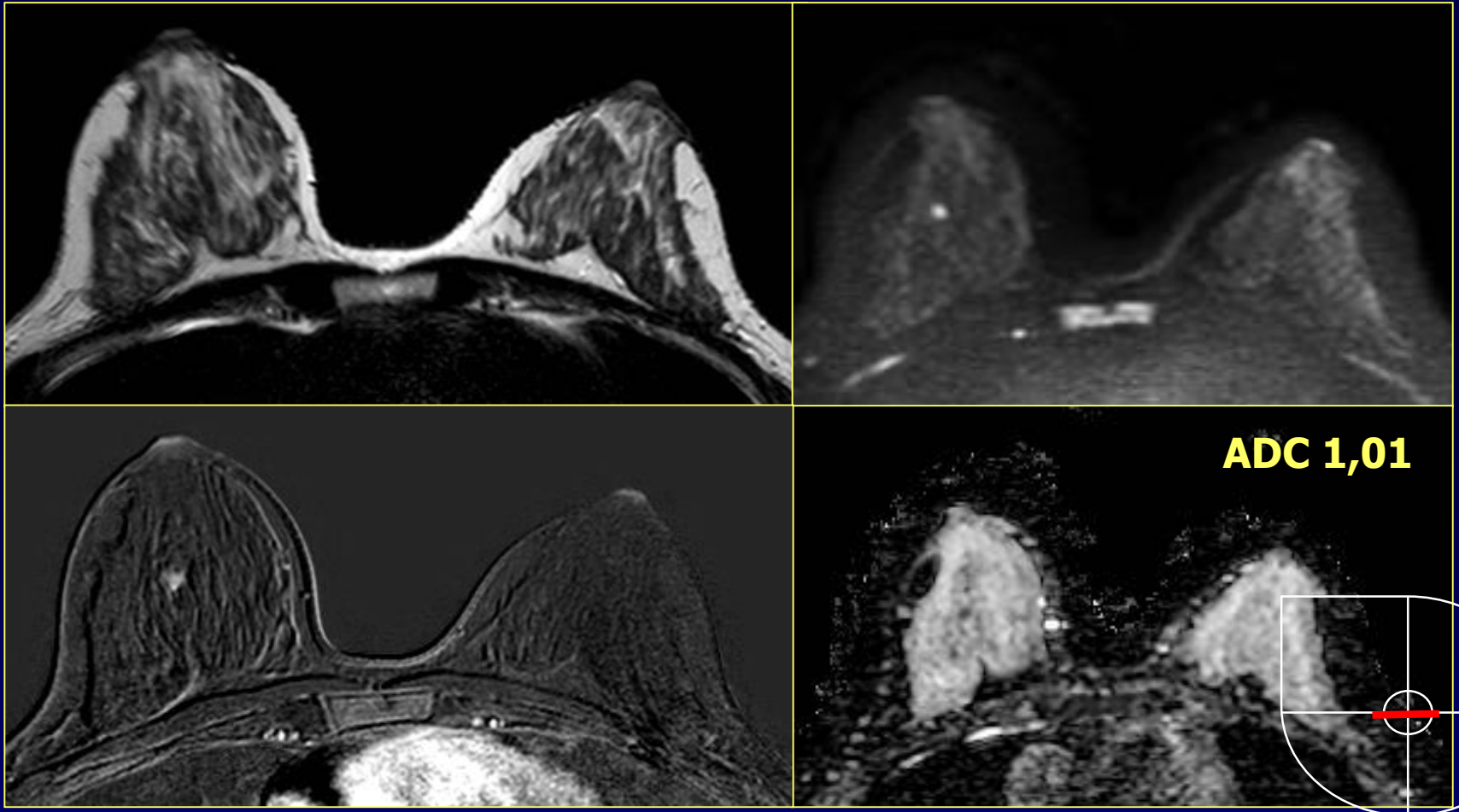
Risonanza Magnetica

- ✓ Enhancement mass-like al passaggio QQEE sinistra



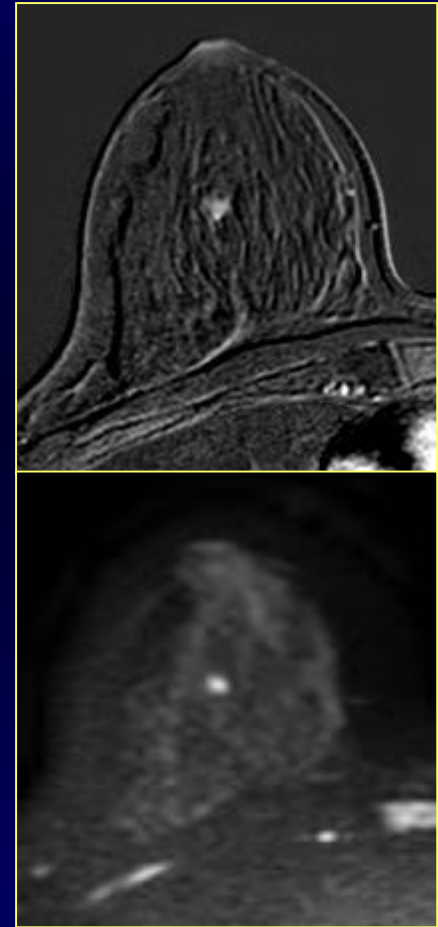
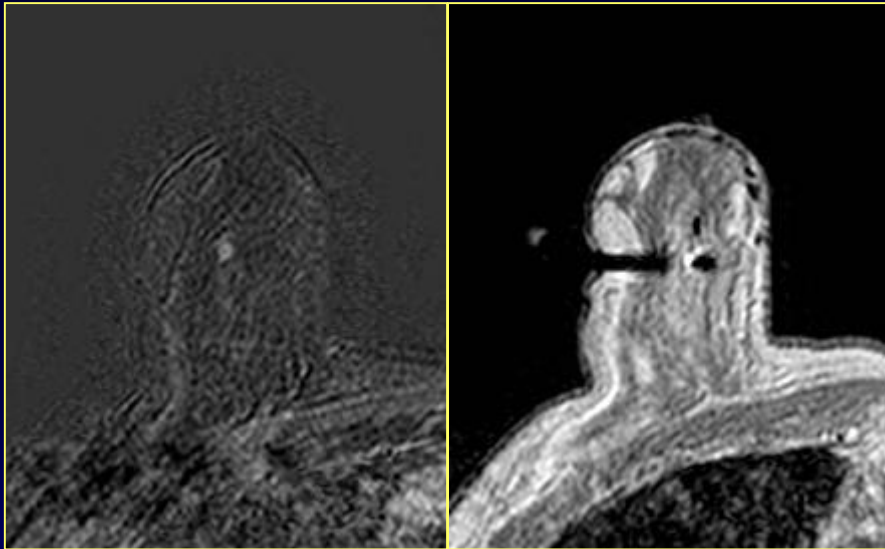
Risonanza Magnetica

- ✓ Focus enhancement in sede retroareolare destra



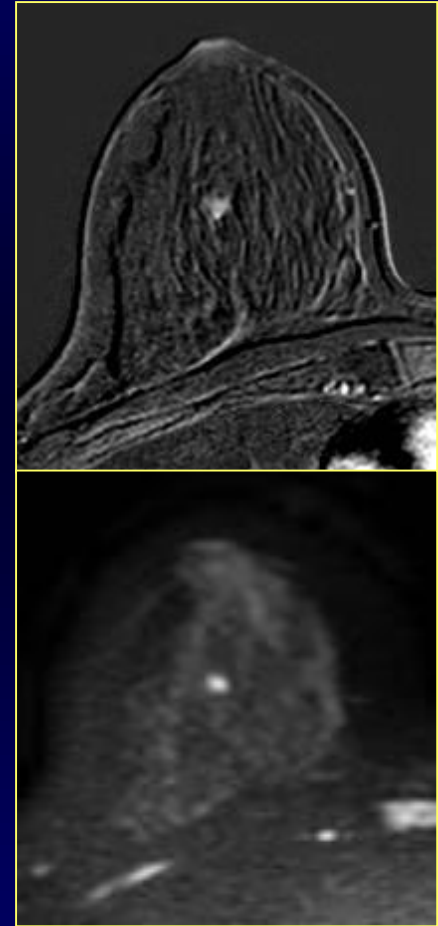
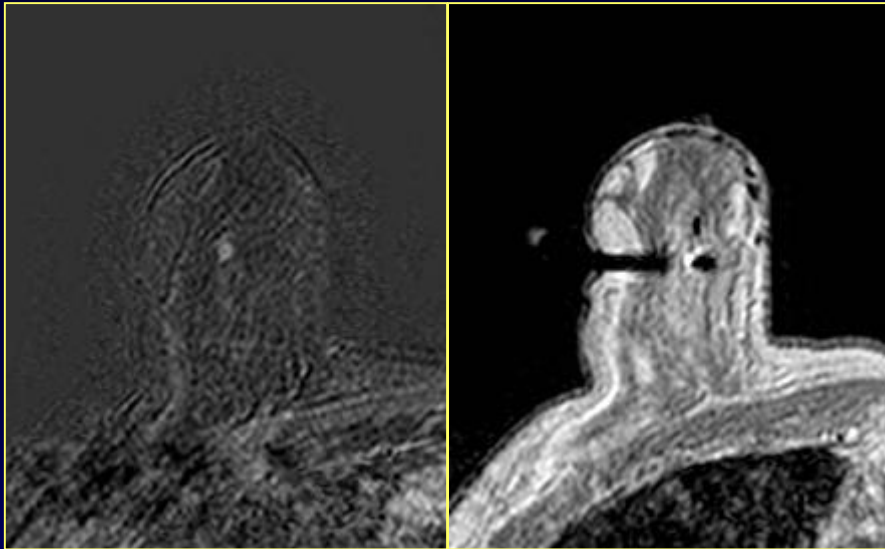
Biopsia RM-guidata

- ✓ Second look ecografico: negativo
- ✓ Biopsia RM-guidata



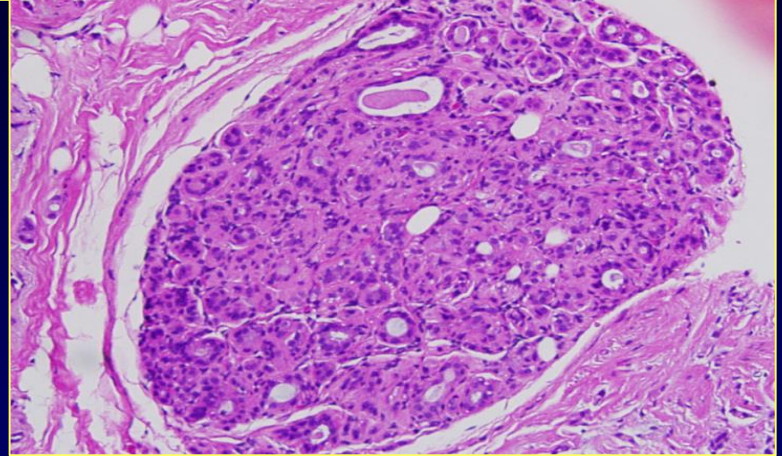
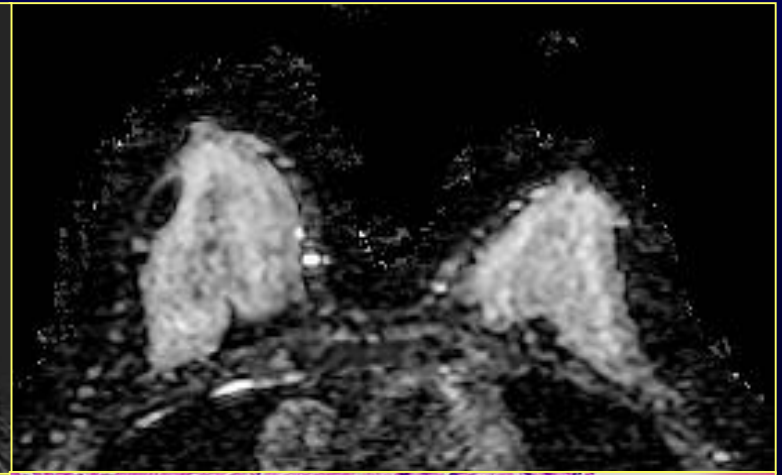
Biopsia RM-guidata

- ✓ Second look ecografico: negativo
- ✓ Biopsia RM-guidata



- ✓ Esame istologico: Carcinoma duttale in situ G2 di tipo solido

CDIS



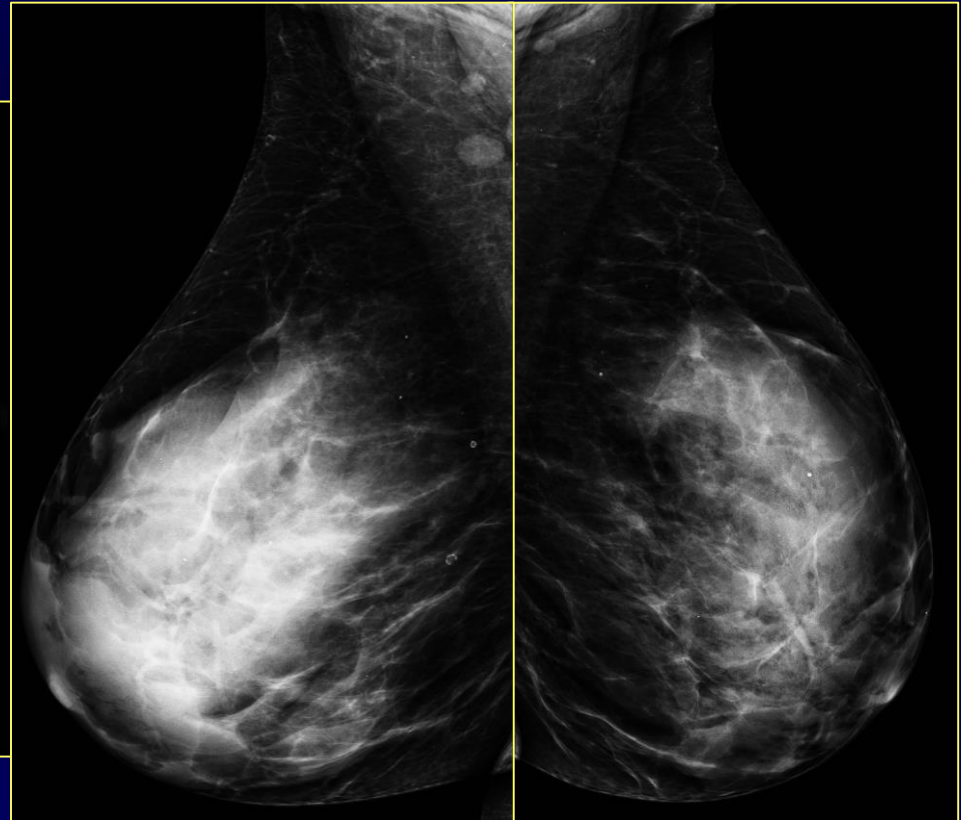
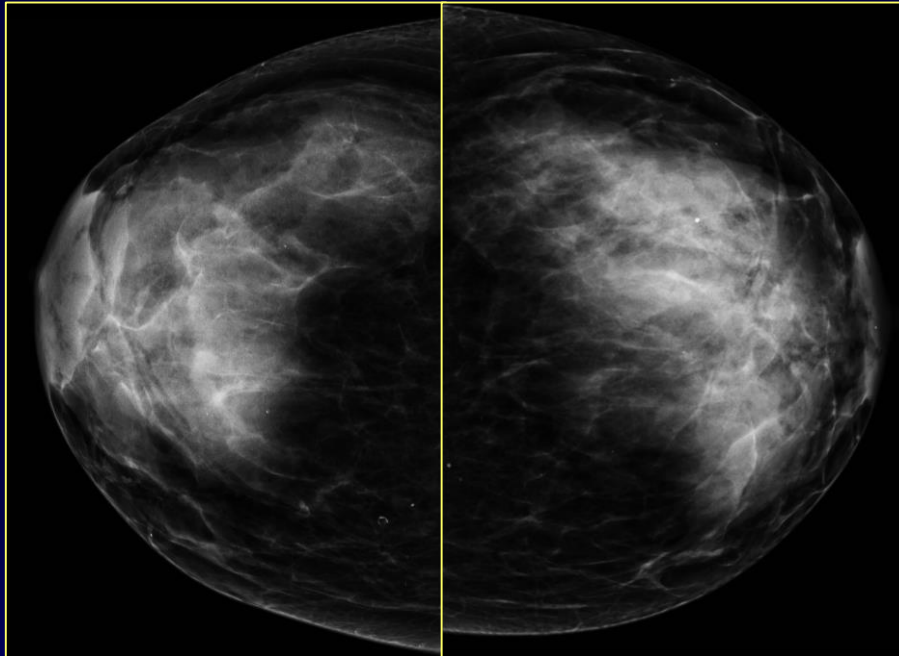
✓ VP DWI:
CDIS G2 tipo solido

Rahbar H, Partridge SC et al. Characterization of ductal carcinoma in situ on diffusion weighted breast MRI. Eur Radiol 2011;21:2011-2019.

Anamnesi

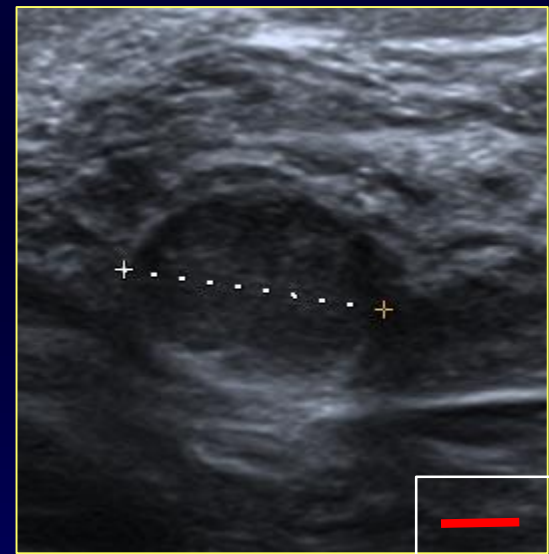
- ✓ 46 anni
- ✓ Non familiarità per neoplasia mammella / ovaio
- ✓ Controlli periodici mammografici ed ecografici negativi
- ✓ Riscontro palpatorio di nodulo mammario destro
sospetto

Mammografia

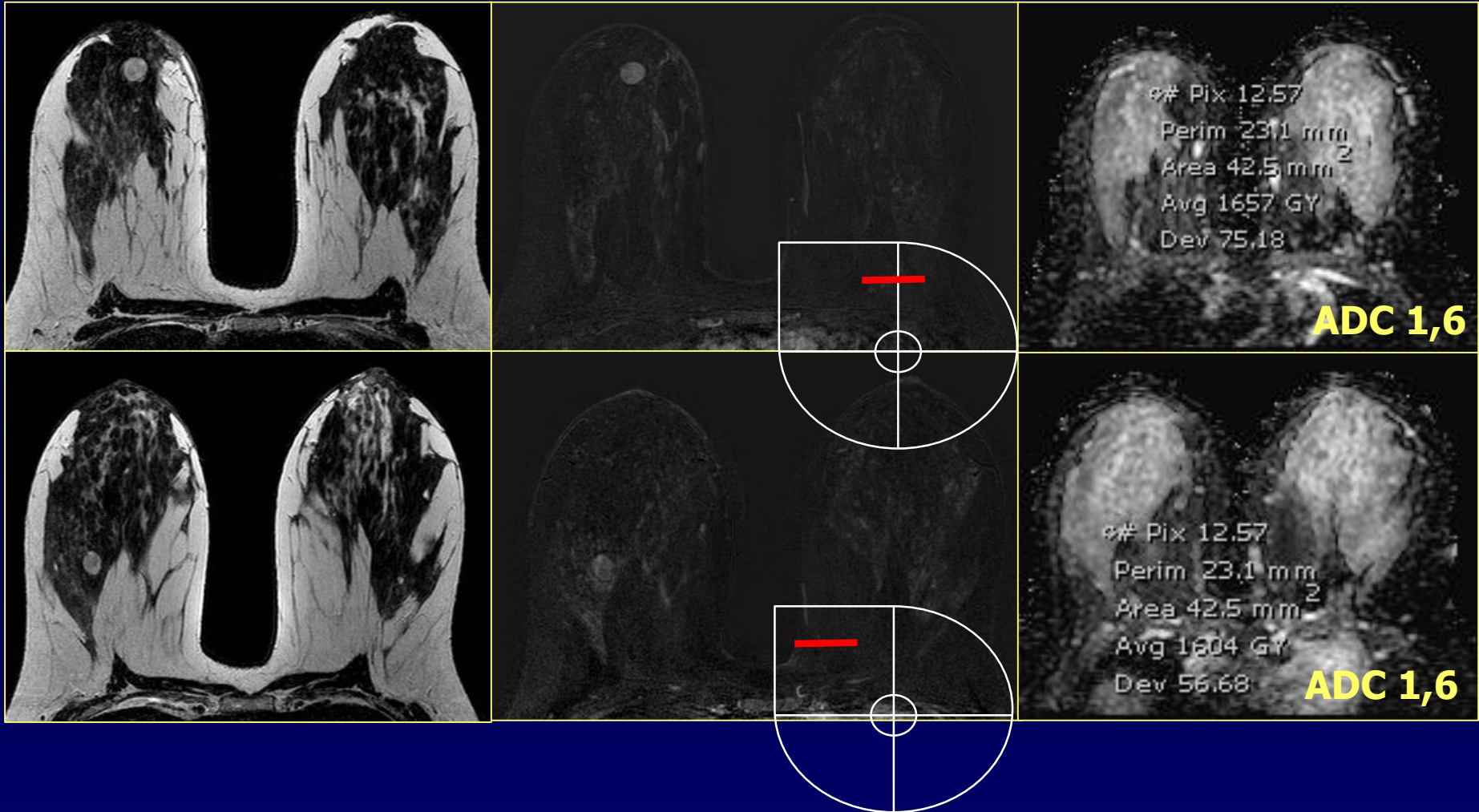


Ecografia mammaria

- ✓ Due formazioni nodulari ipoecogene QQSS e QSE destra di nuovo riscontro

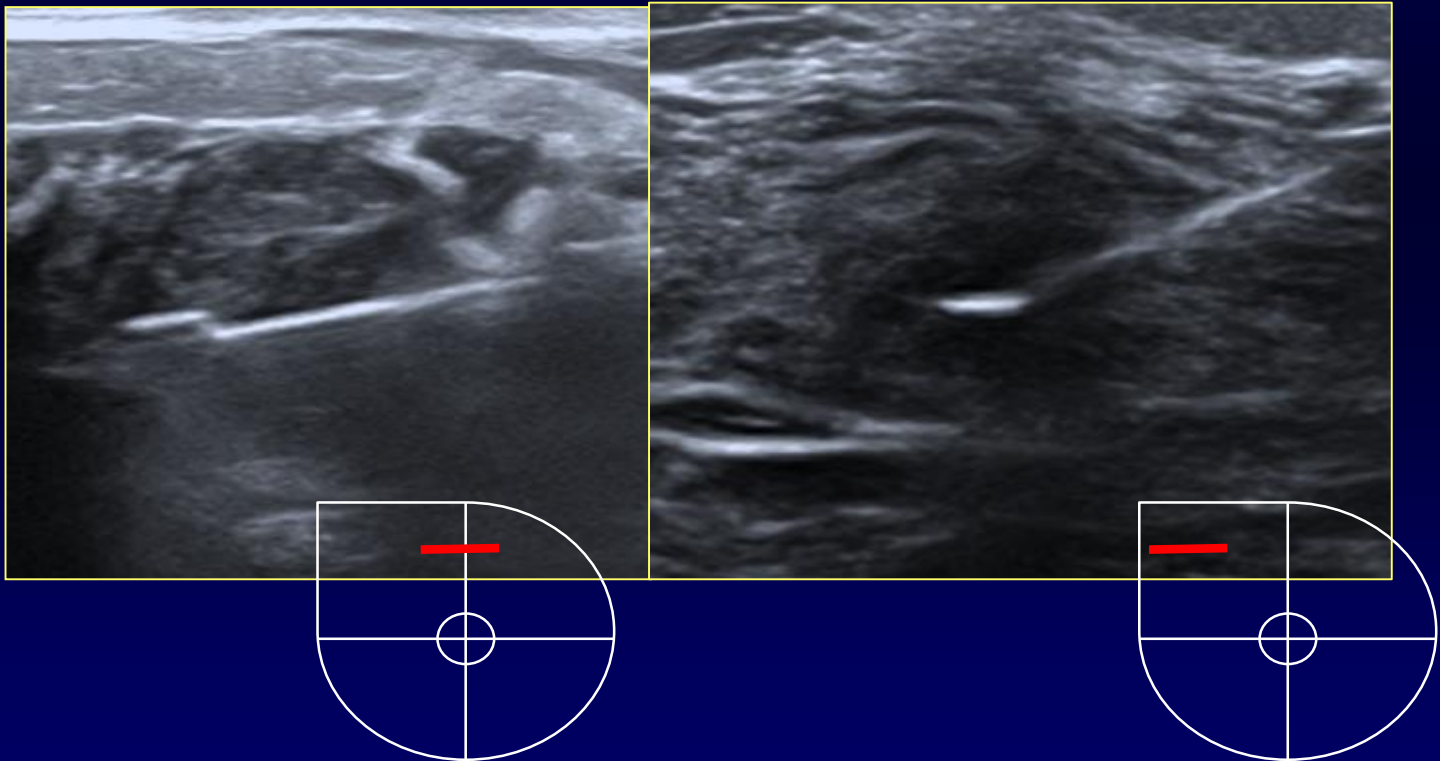


Risonanza Magnetica

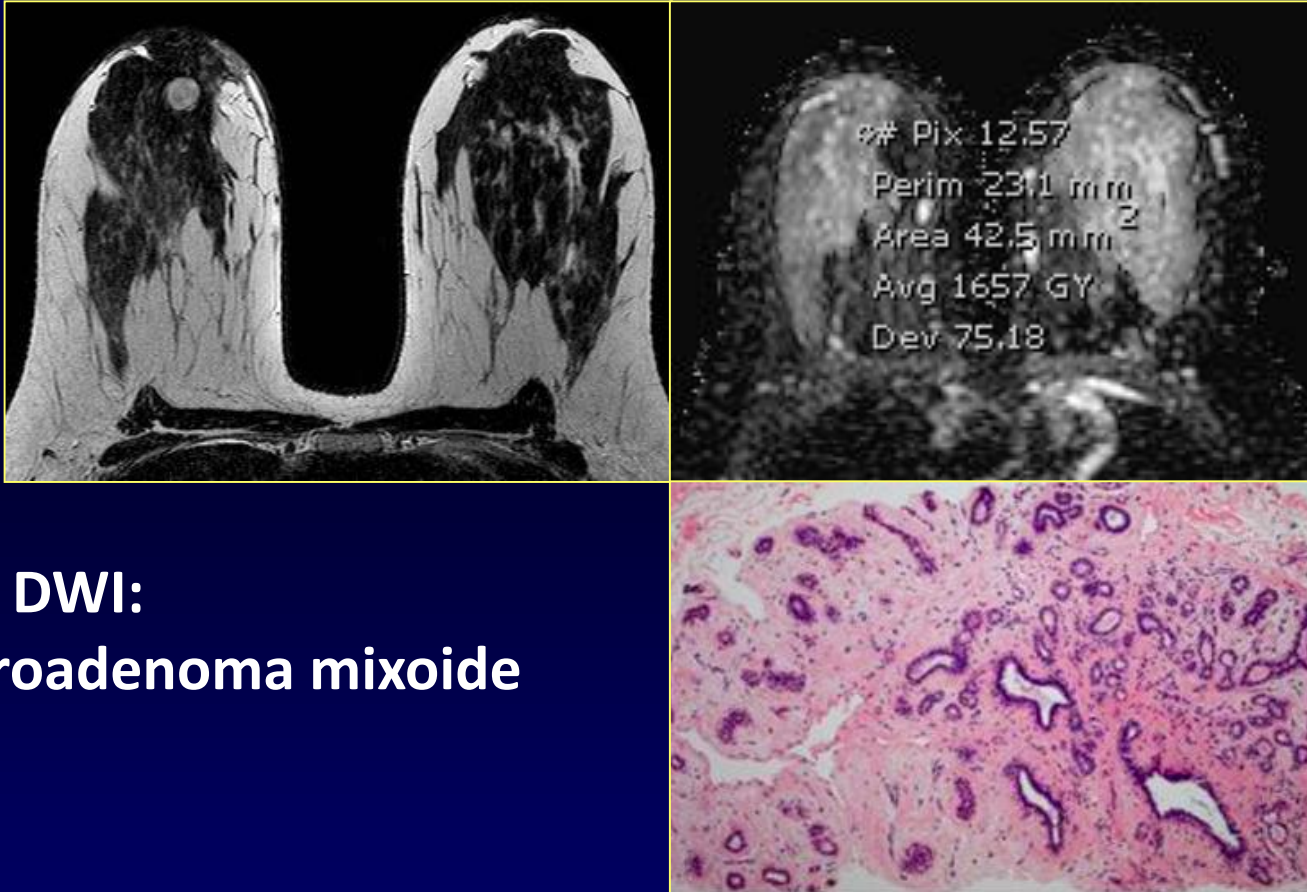


Agobiopsia mammaria

✓ Esame istologico: fibroadenoma mixoide



Fibroadenoma mixoide



- ✓ VN DWI:
fibroadenoma mixoide

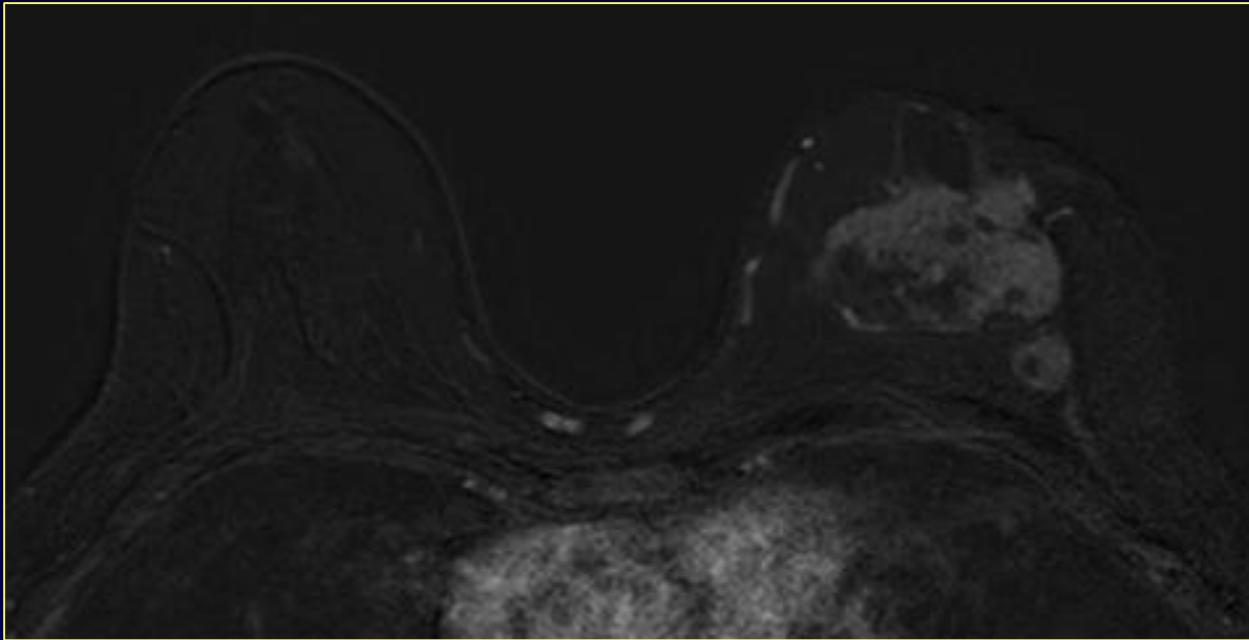
Parsian S, Partridge S et al. Diffusion weighted imaging reflects variable cellularity and stromal density present in breast fibroadenomas. Clin Imaging 2016;40:1047-1054.

Anamnesi

- ✓ 58 anni
- ✓ Non familiarità per neoplasia mammella / ovaio
- ✓ Neoplasia mammaria sinistra localmente avanzata
- ✓ Esame istologico: CDI G3 ER 70% PgR 70% HER2 1+ Ki67 30%

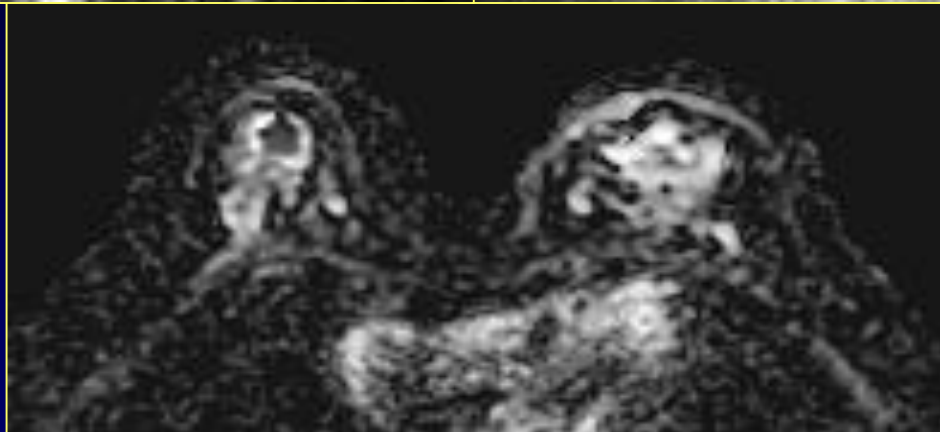
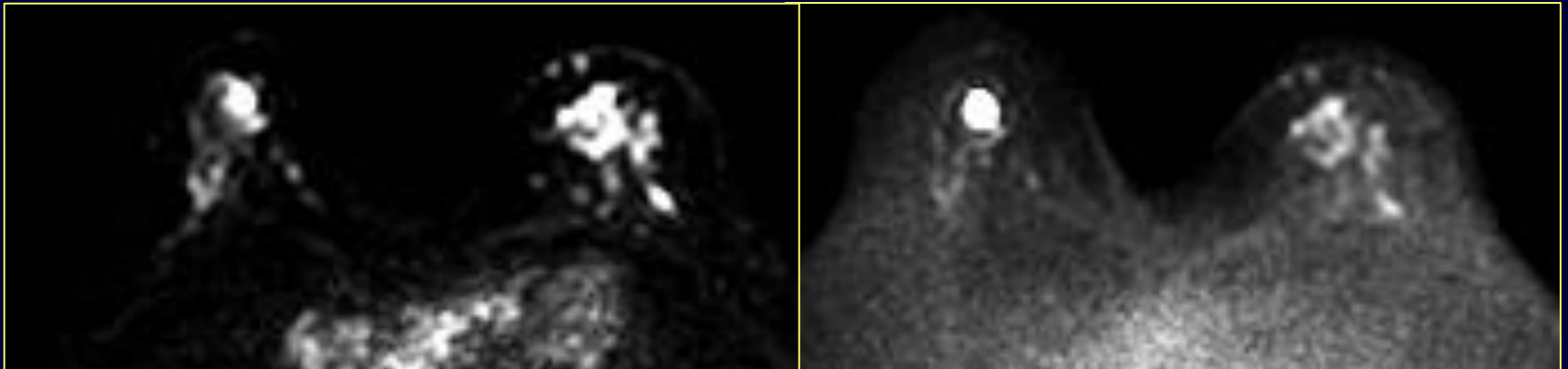
Risonanza Magnetica

- ✓ **Stadiazione di neoplasia mammaria sinistra localmente avanzata**



Risonanza Magnetica

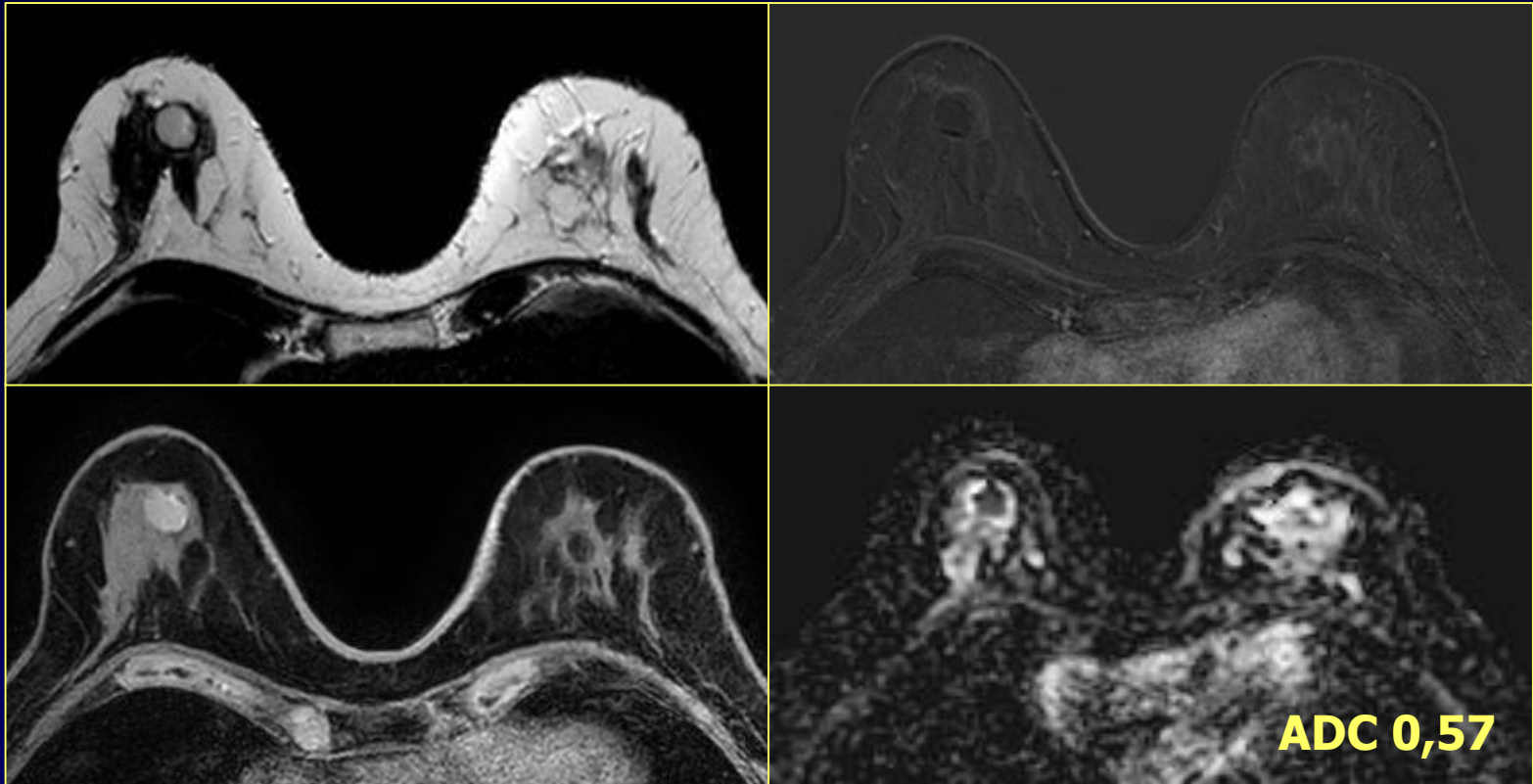
- ✓ **Formazione tondeggiante con restrizione della diffusività in sede retroareolare destra**



ADC 0,57

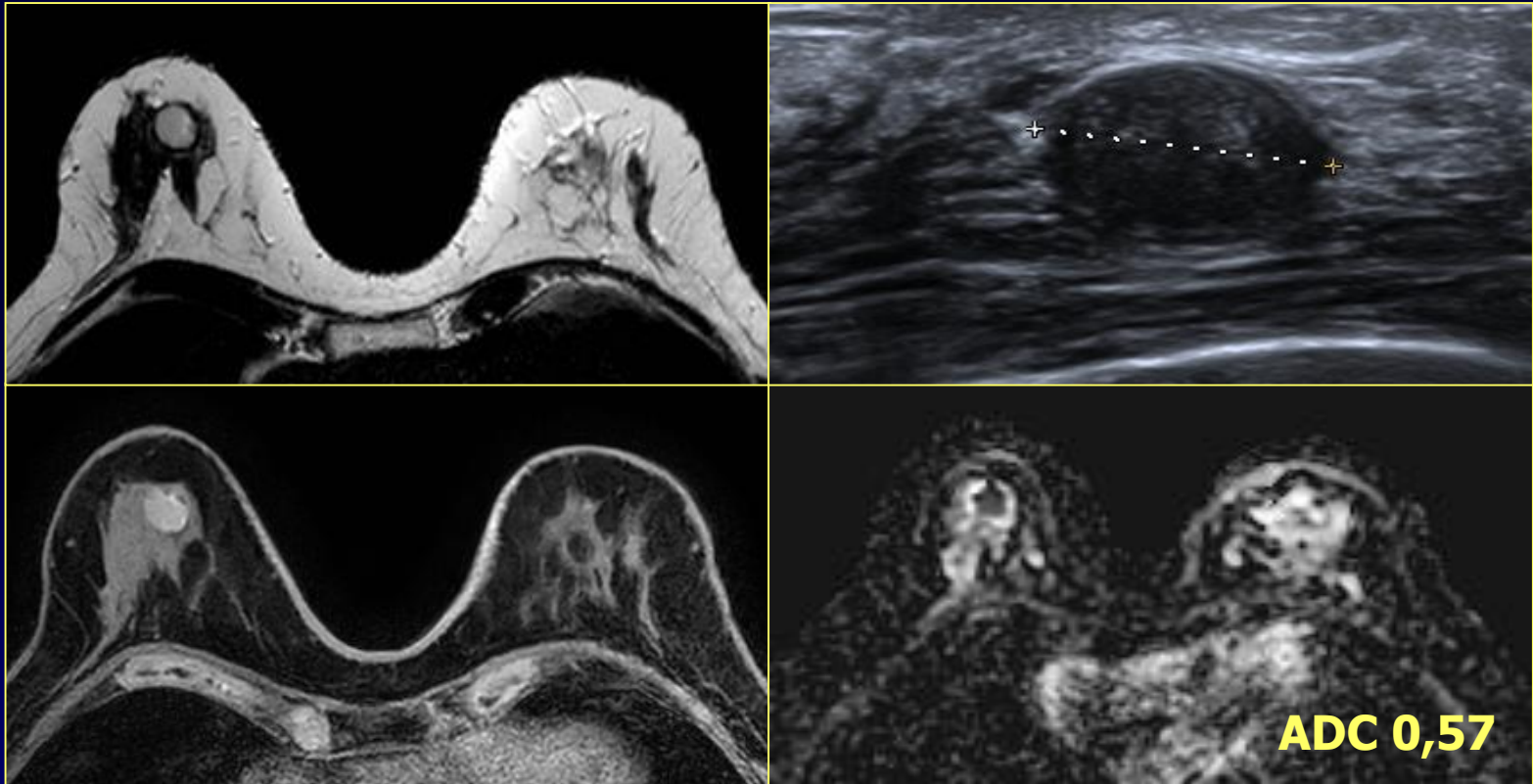
Risonanza Magnetica

- ✓ Formazione tondeggiante **iperintensa in T1 basale** con restrizione della diffusività in sede retroareolare destra

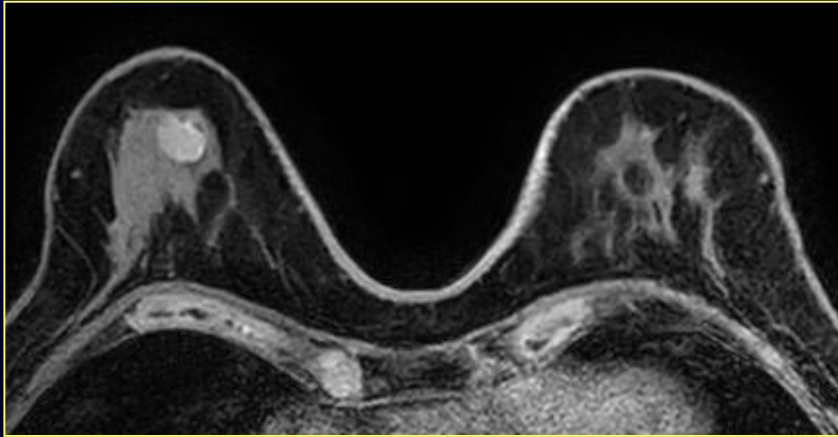


Risonanza Magnetica

- ✓ Formazione tondeggiante **iperintensa in T1 basale** con restrizione della diffusività in sede retroareolare destra

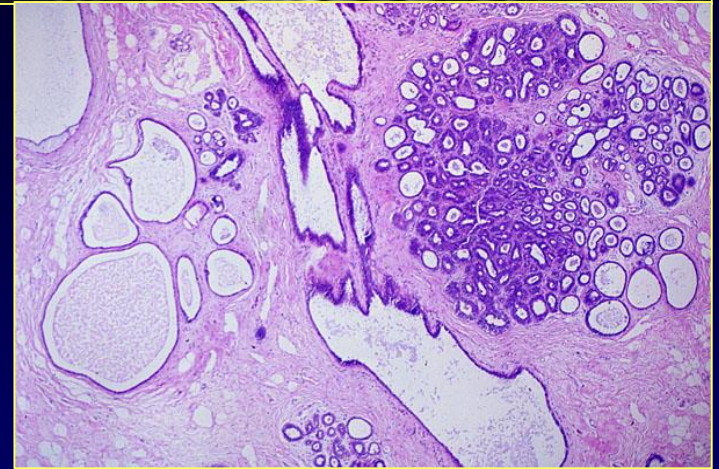


Cisti densa - emorragica



- ✓ **FP DWI:**
 - ✓ **Ematoma, cisti emorragica**
 - ✓ **Ascesso**

**a causa dell'elevata viscosità
compartimento extracellulare**

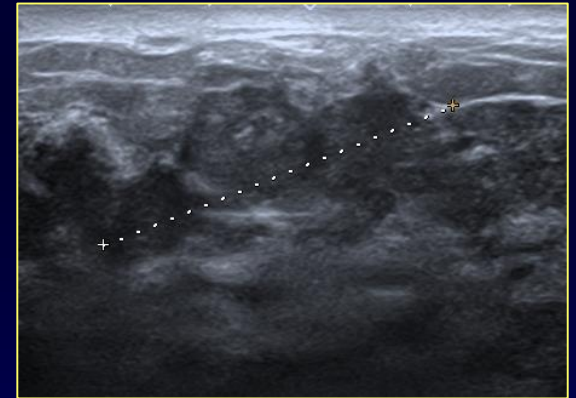
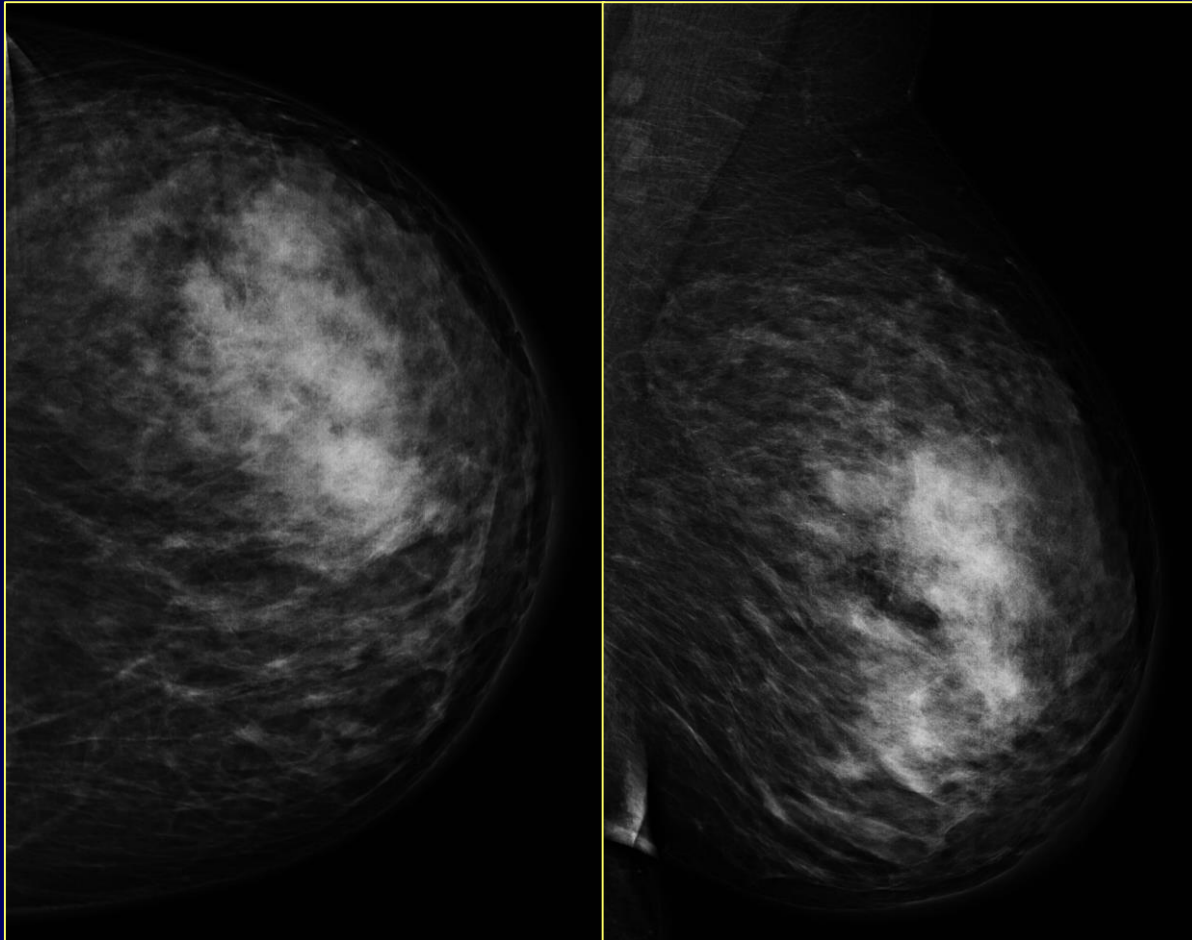


Brandao AC, Lehman CD, Partridge SC. Breast magnetic resonance imaging: diffusion-weighted imaging. Magn Reson Imaging Clin N Am 2013;21:321-336.

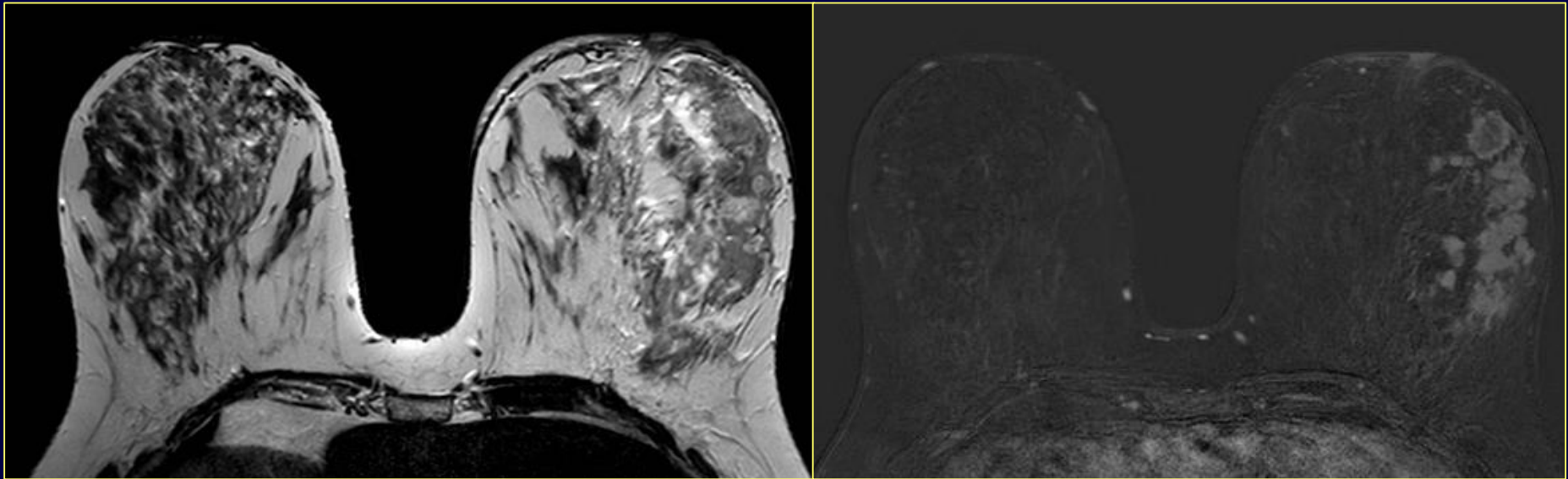
Anamnesi

- ✓ 49 anni
- ✓ Non familiarità per neoplasia mammella / ovaio
- ✓ Formazione nodulare mammaria sinistra sospetta di nuovo riscontro

Mammografia ed Ecografia mammaria

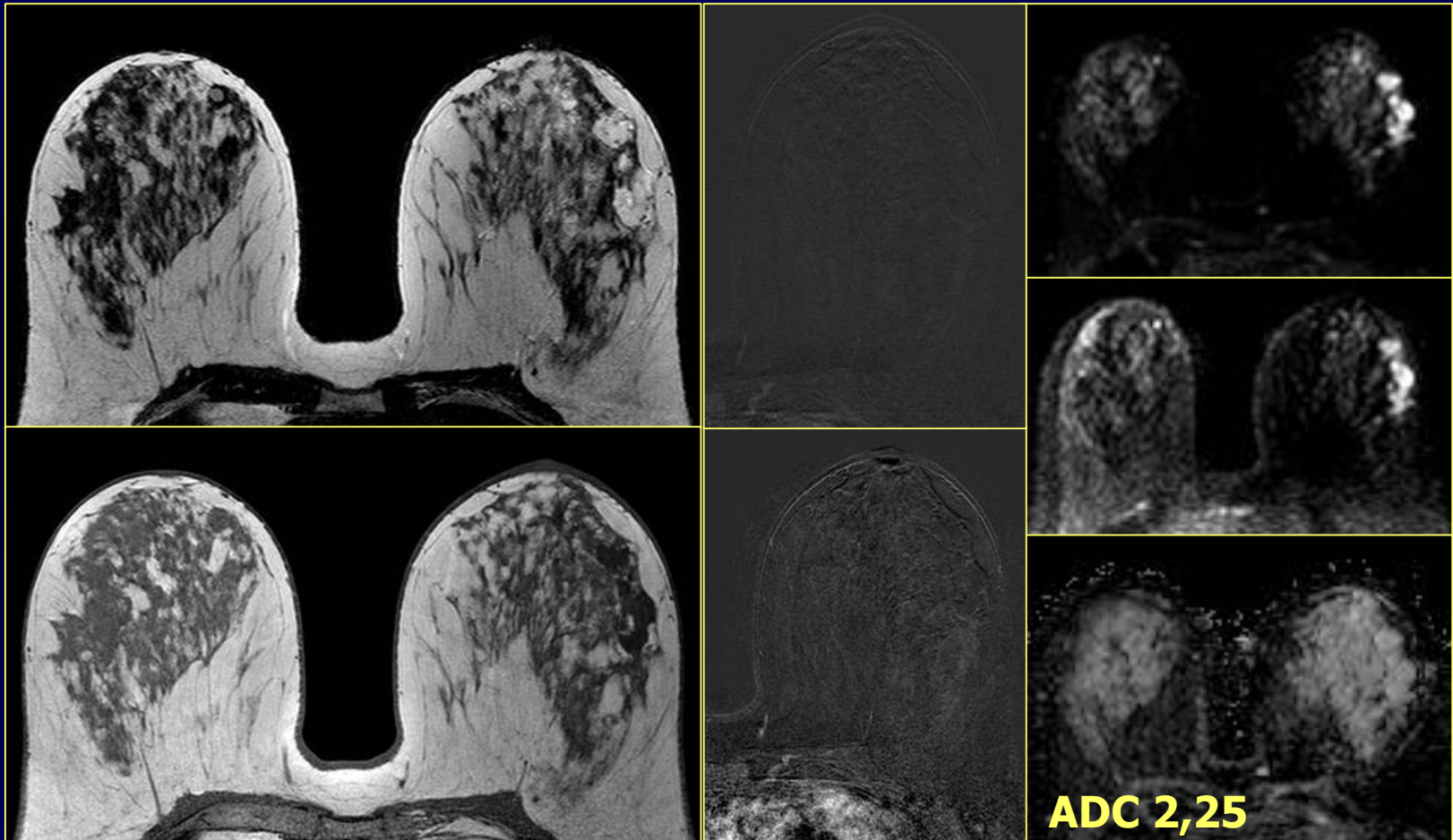


Risonanza Magnetica

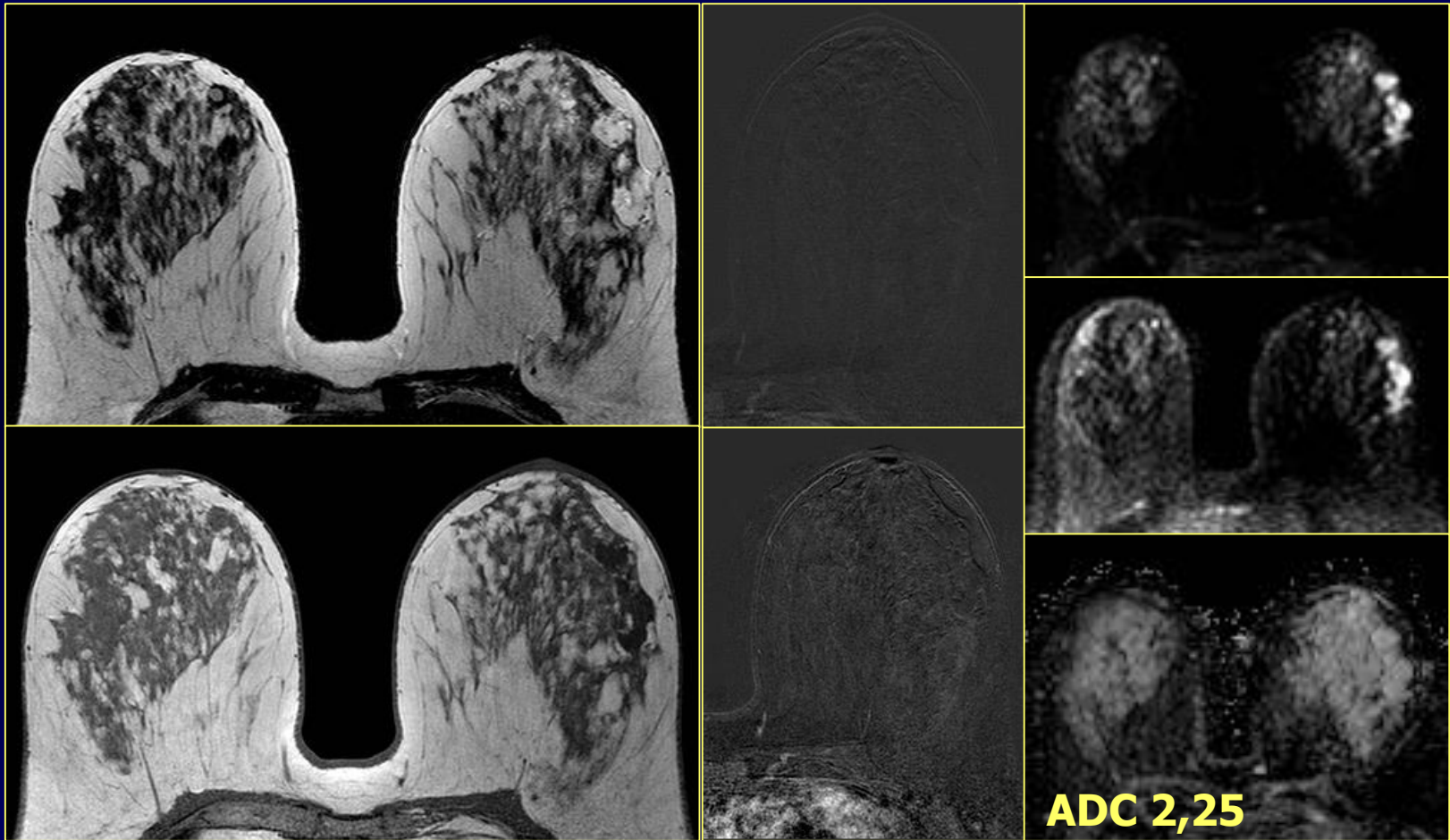


**E.I. Carcinoma duttale infiltrante prevalentemente mucinoso G2
ER 90% PgR 0% HER2 1+ Ki67 40%**

Risonanza Magnetica post CT

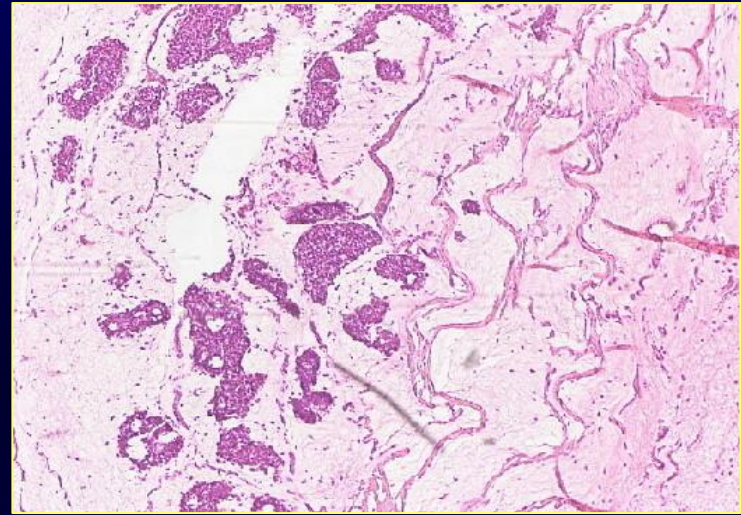
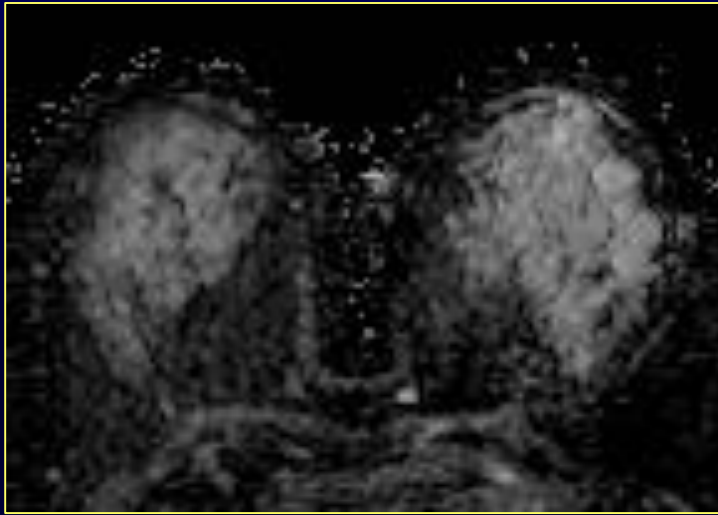


Risonanza Magnetica post CT

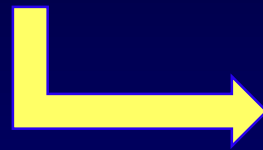


E.I. Microfocolai residui di carcinoma duttale infiltrante mucinoso con area mucinosa di 2,5 cm

Carcinoma Mucinoso



✓ FN DWI: incremento ADC in caso di Carcinoma mucinoso

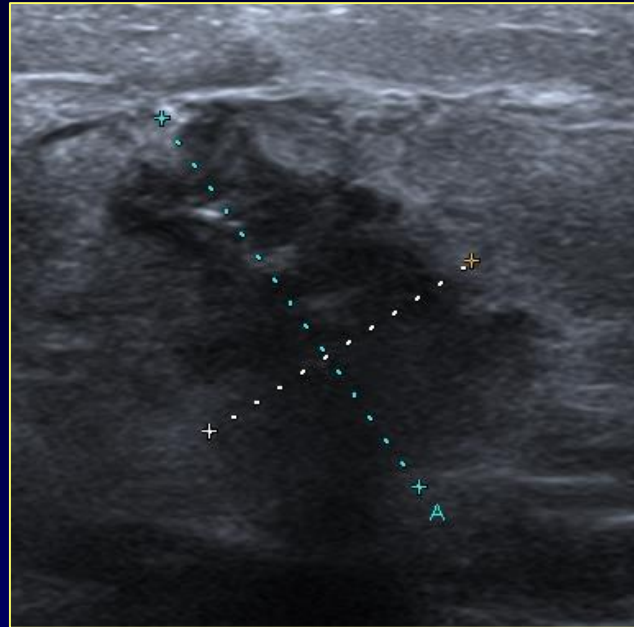
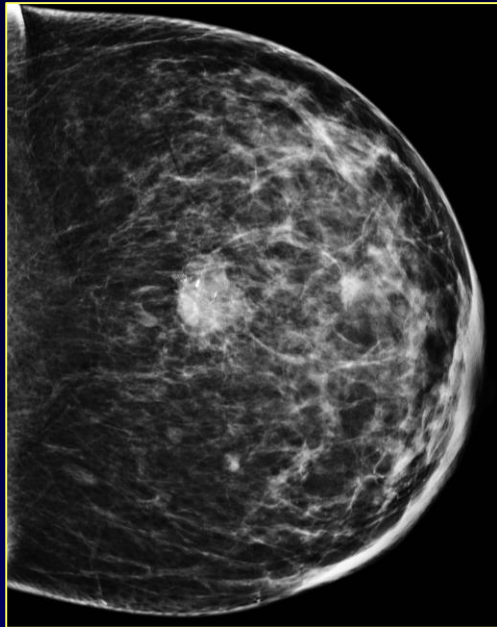


Bassa cellularità
Laghi di mucina

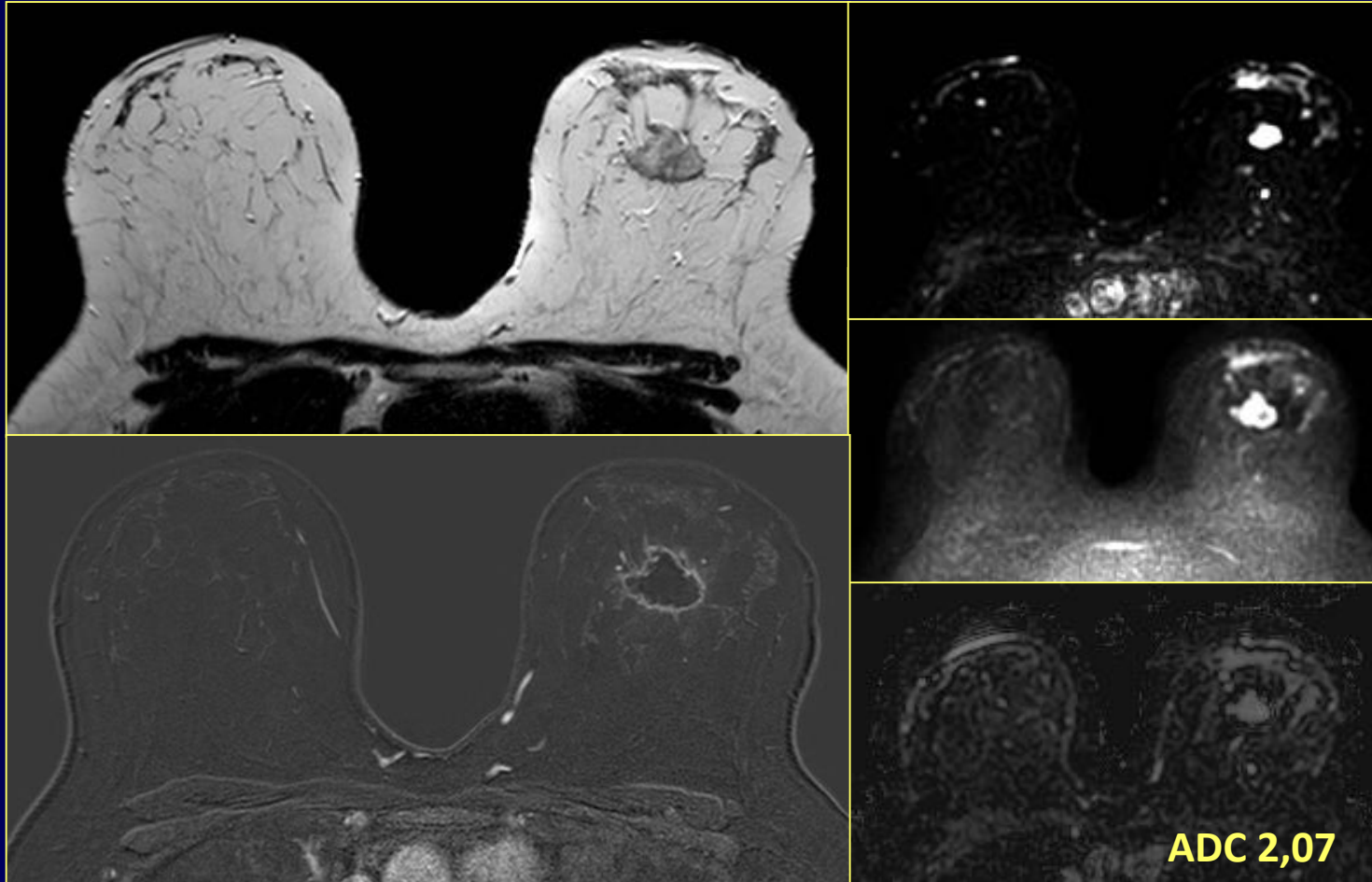
Brandao AC, Lehman CD, Partridge SC. Breast magnetic resonance imaging: diffusion-weighted imaging. Magn Reson Imaging Clin N Am 2013;21:321-336.

Anamnesi

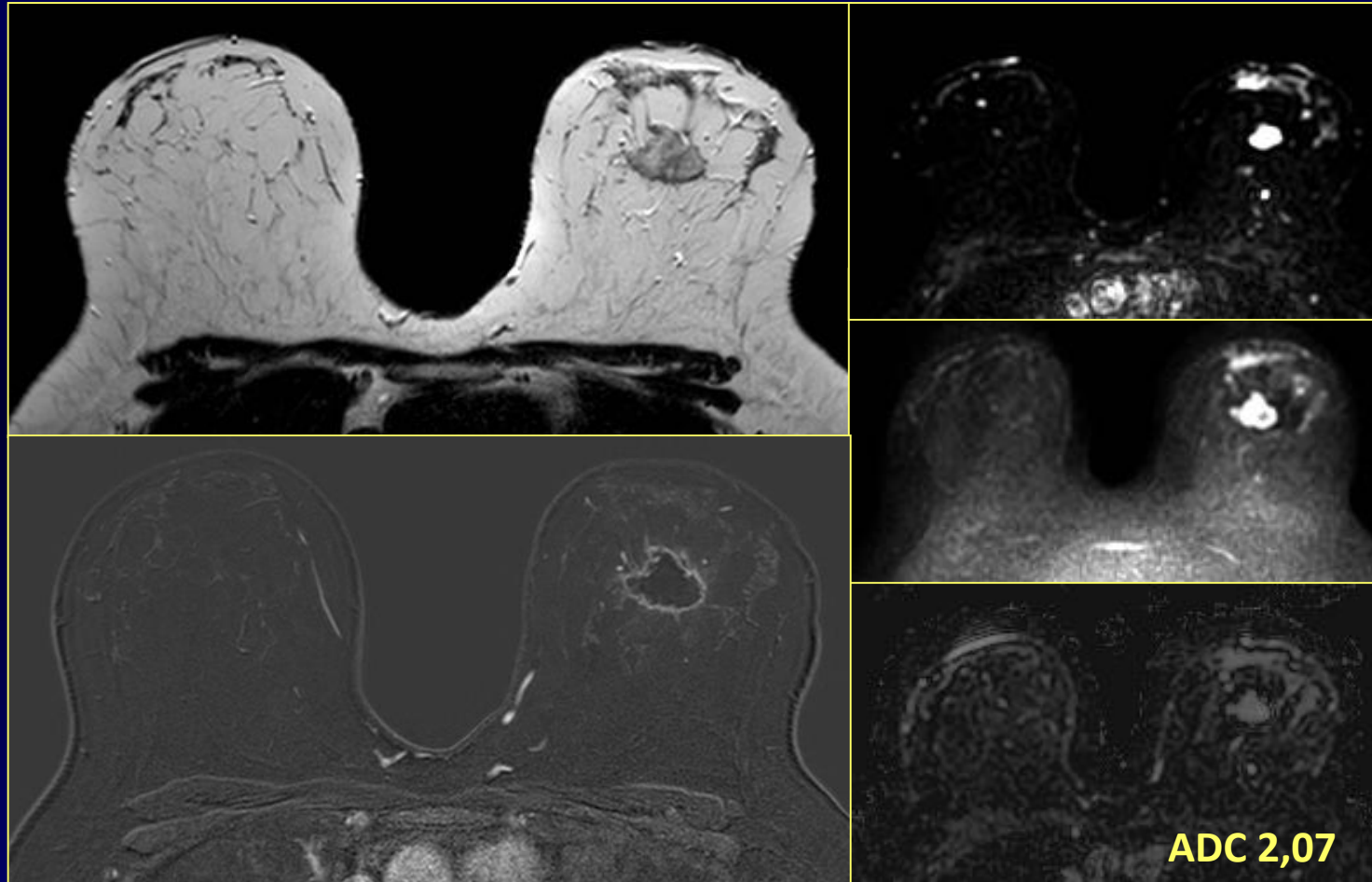
- ✓ 29 anni
- ✓ Riscontro di nodulo mammario sinistro in gravidanza



Risonanza Magnetica

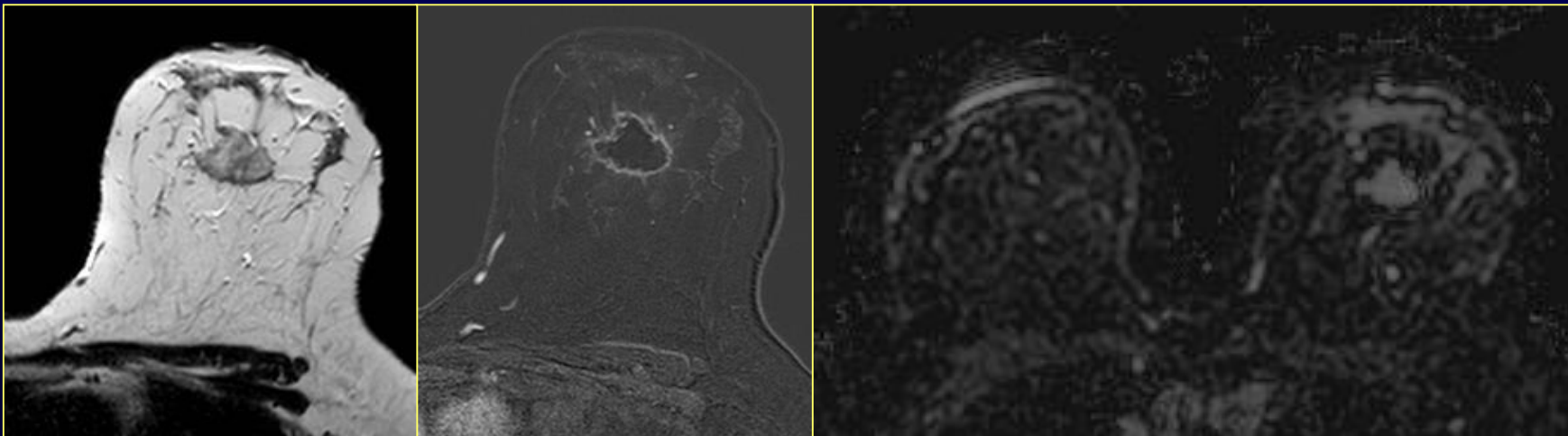


Risonanza Magnetica

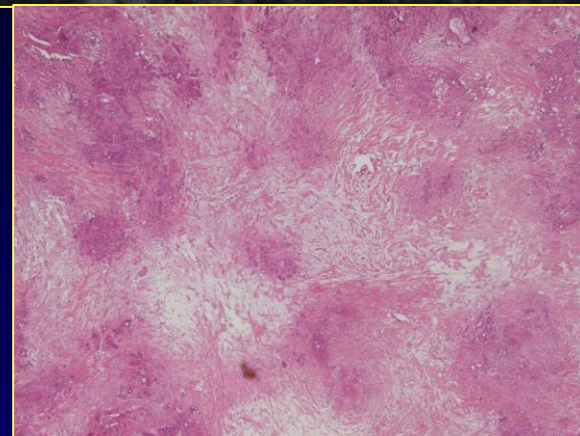


**Esame Istologico: Carcinoma Duttale Infiltrante G3
ER 0% PgR 0% HER2 0 Ki67 70 % con estesa necrosi centrale**

Tumore necrotico



- ✓ FN DWI: diffusione non ristretta in caso di tumore con ampia necrosi



Malayeri AA et al. Principles and applications of diffusion-weighted imaging in cancer detection, staging and follow-up. Radiographics 2011;31:1773-1791.

Grazie per l'attenzione!

Table 4
Signal Intensity and ADC Value for Various Pathologic Conditions of the Breast

Pathologic Condition	Signal Intensity at Diffusion-weighted Imaging*	Signal Intensity at T2-weighted Imaging	ADC Value	Interpretation of Findings
Cancer, intraductal papilloma, abscess	High	Intermediate	Decreased	High-cellularity tumor, fibrous tissue with high water content
Bloody cyst, abscess	High	Intermediate to high	Decreased	Hemorrhage, high-viscosity fluid
Fibroadenoma, cyst, fibrocystic disease	Intermediate	Intermediate to high	Intermediate to high	Medium cellularity, high water content, proteinaceous fluid
Cyst, fibroadenoma, mucinous carcinoma	Low	High	Increased	High water content, low cellularity
Fibroadenoma, central calcification, chronic hemorrhage	Low	Low	Decreased	Calcification, fibrous tissue hyalinization, hemosiderin

* $b = 1500 \text{ sec/mm}^2$. However, signal intensity may differ depending on the imaging parameters.

Woodhams R et al. Diffusion-weighted imaging of the breast: principles and clinical applications. Radiographics 2011;31:1059-1084.