

Multidisciplinary conference on neo-adjuvant chemotherapy

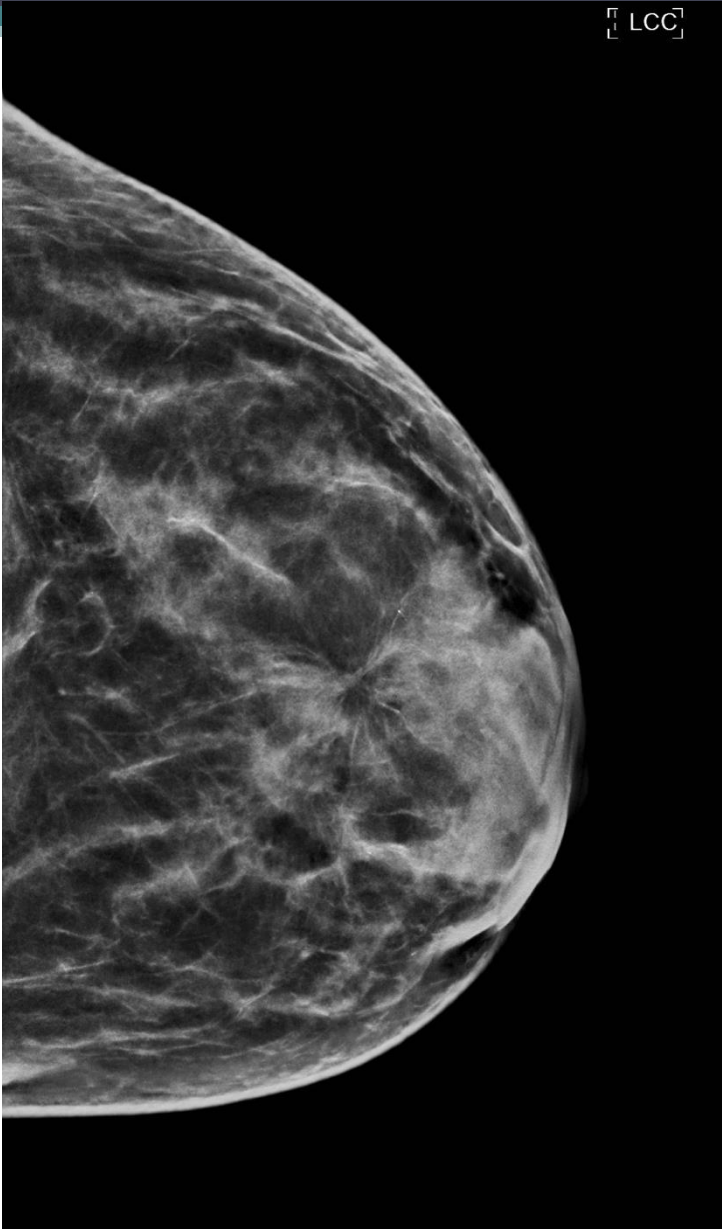
Chairs: C Ngo, M Danaei, H Junkermann, R Rouzier
Expert panel: S Masood, C Bordonne, M Hivelin, J Medioni, F Pêne

6th International Congress of Breast Disease Centers
Paris, February 4th-6th, 2016

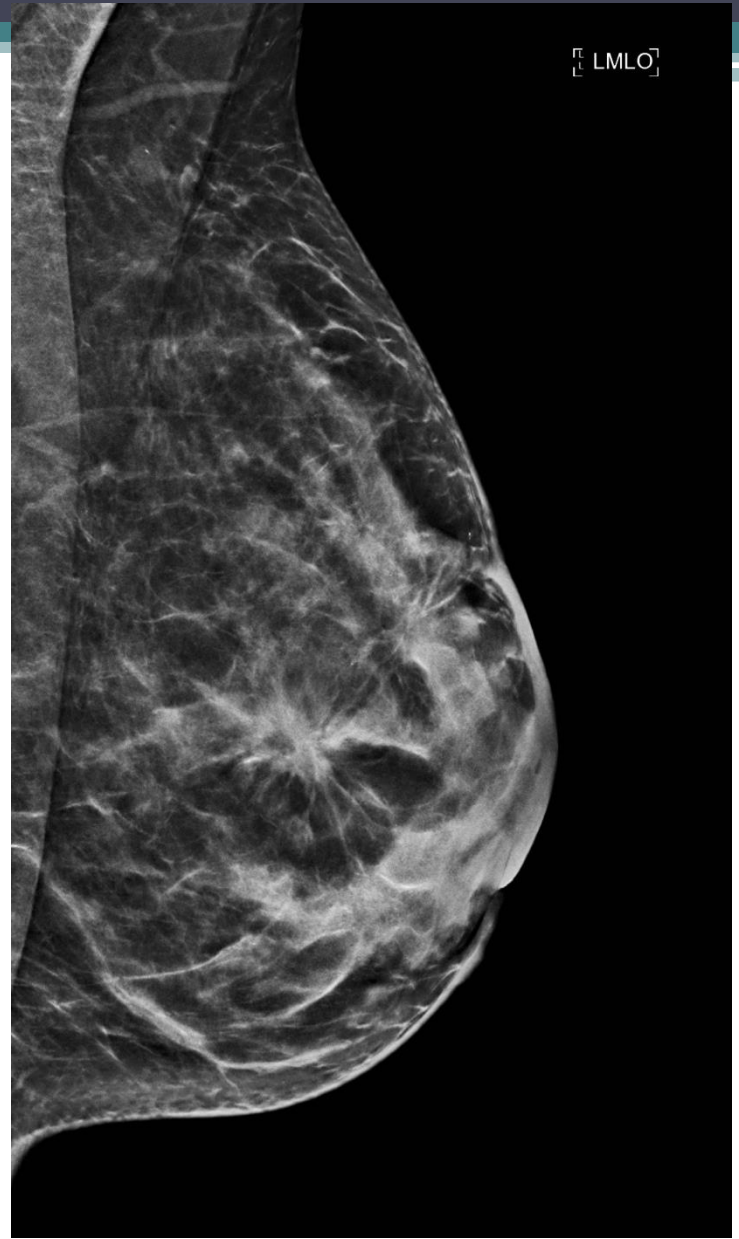
Case 1

- 43 y
- Palpable mass in the left breast with normal mammography and ultrasound
- First biopsy: atypical ductal hyperplasia
- 2 months later: rapid growth with a mass of 5 cm with nipple retraction and axillar adenomegaly
- Mammography with tomosynthesis: 2 masses
- Biopsy: IDC, triple negative, Ki67 90%, N+

LCC



LMLO



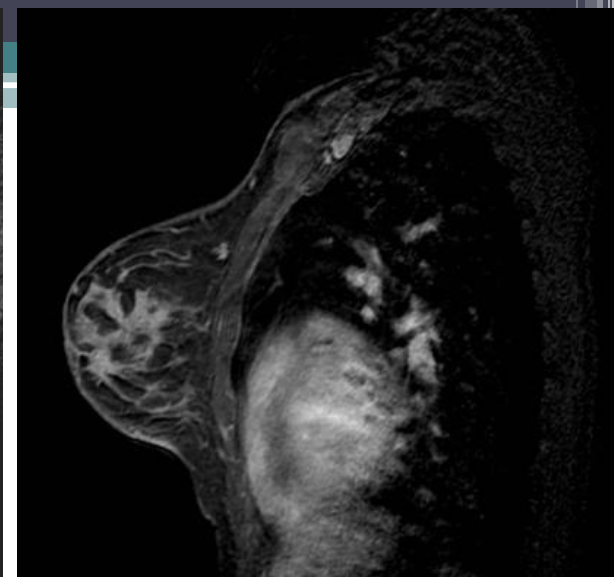
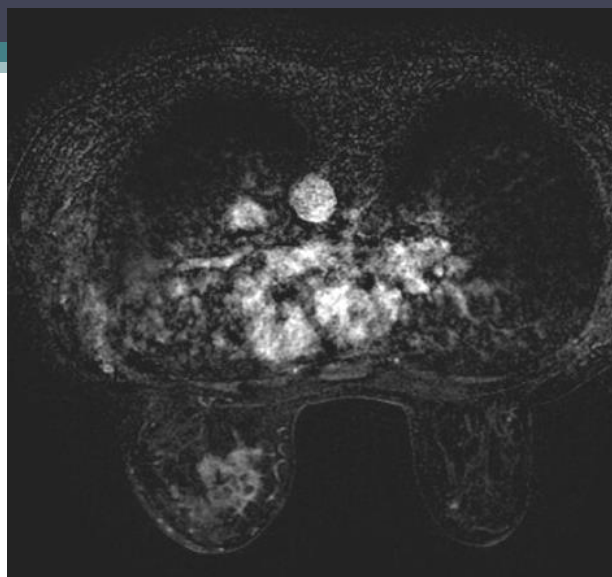
C-View

Case 1

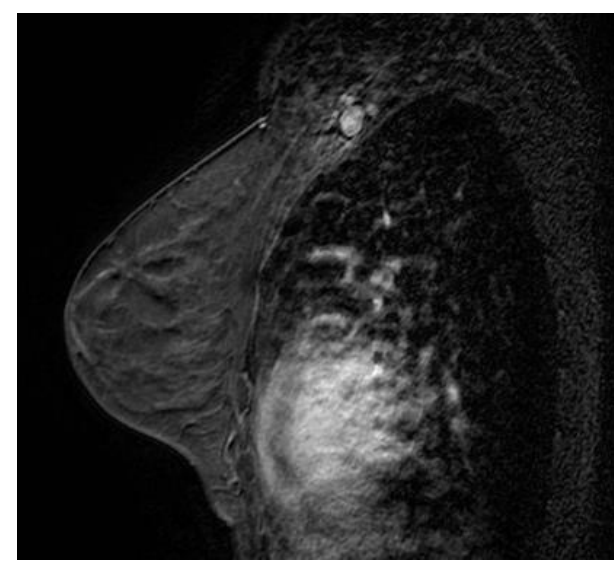
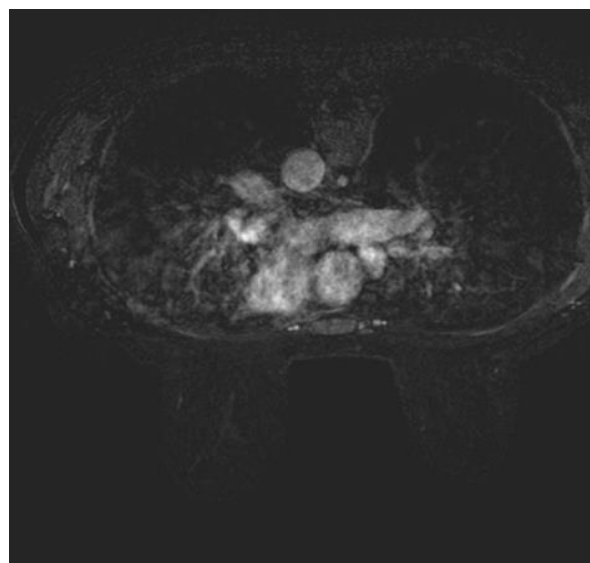
- MRI findings: Retro-areolar mass of 50mm with rapid and early enhancement, with plateau and washout
- PET-CT: 4 lesions in the left breast with hypermetabolic adenomegaly in the ipsilateral axilla
- Neoadjuvant chemotherapy: 6 EC75 + 4 Taxotere
- Partial clinical response: 2 cm versus 5 cm
- MRI post NAC: almost complete response



Before NAC



After NAC



Case 1

- **What kind of surgery do you offer to this patient with a complete radiological response and a good clinical response (> 50%)?**
- Multidisciplinary decision: according to initial assesement with multifocality in PET-CT, indication of total mastectomy with axillary lymph node dissection (ALND)
- Patient underwent total mastectomy with ALND
- Final pathology: no residual tumor, limited residual lymphovascular invasion, 18N-

Case 1

- **What adjuvant treatment do you propose to this patient with aggressive initial disease (grade III, triple negative, ki67 90%) with complete pathological response to NAC?**
- Patient received radiotherapy alone

What are the decision parameters in advanced breast cancer after NAC



CASE 1

This patient is classified IIIC because of extensive nodal disease and then, even ypNo statistically benefit from postoperative radiotherapy

Liu et al, NCDB, Am College of Surgeons and the Am Cancer Society, Oncotarget, Dec 2015

What are the decision parameters in advanced breast cancer after NAC



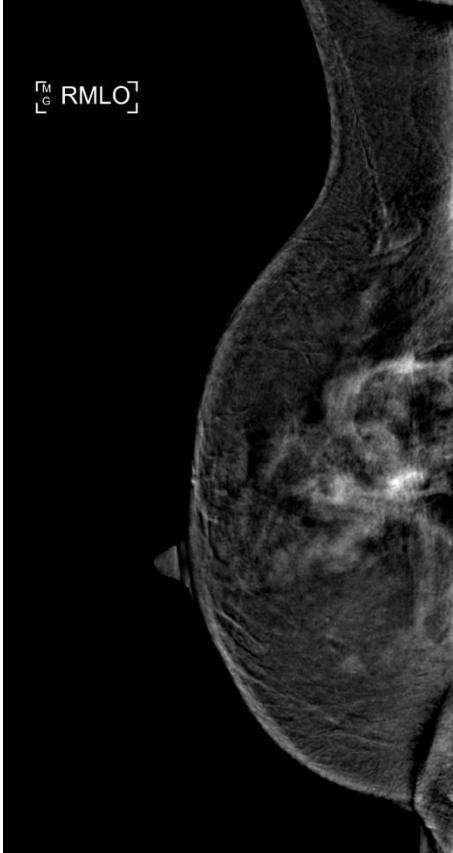
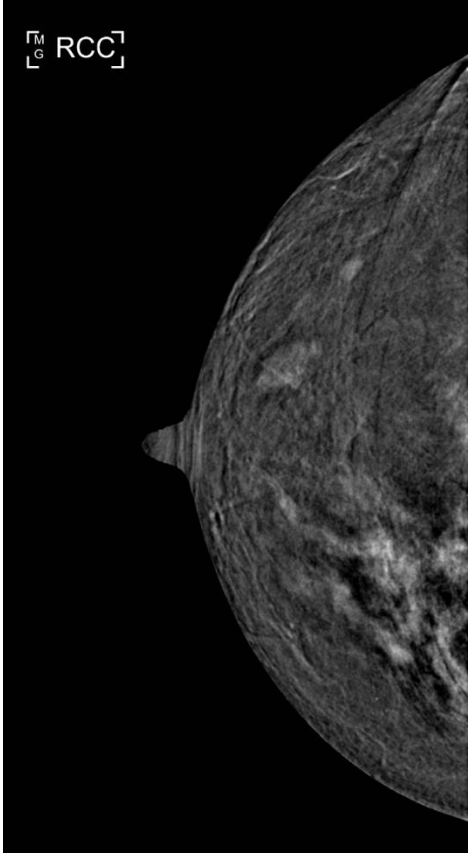
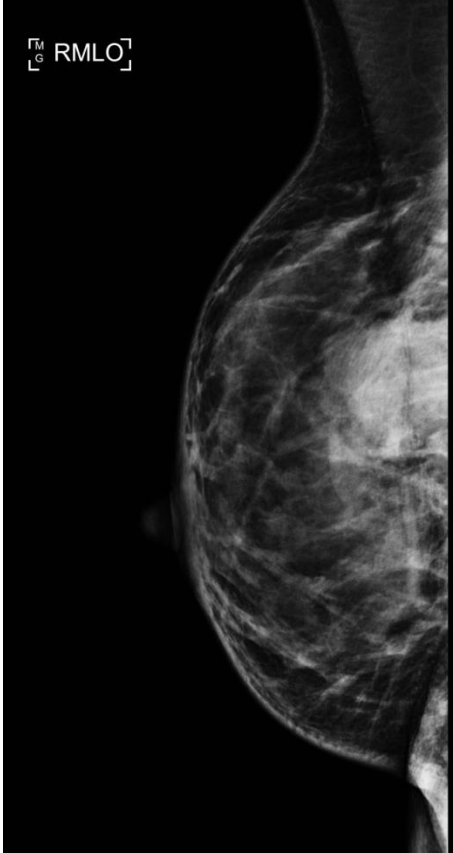
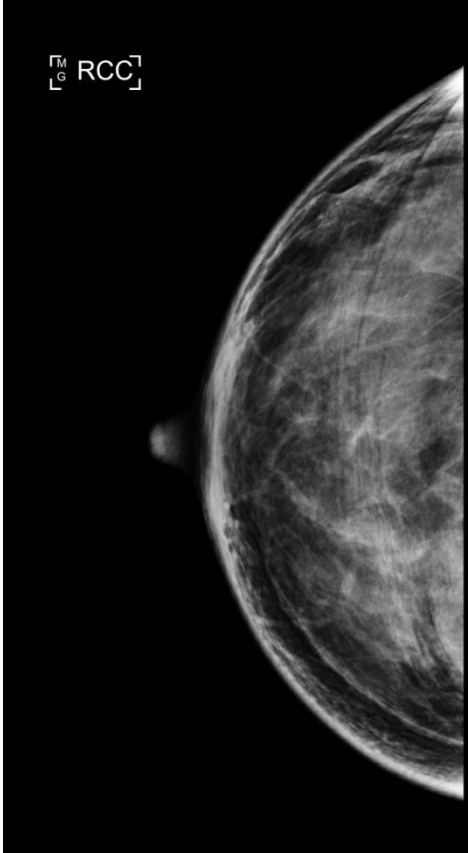
CASE 1

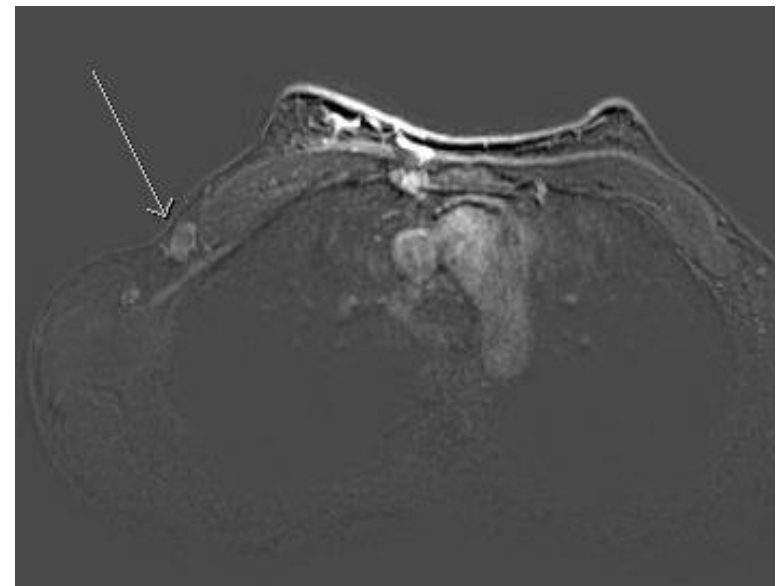
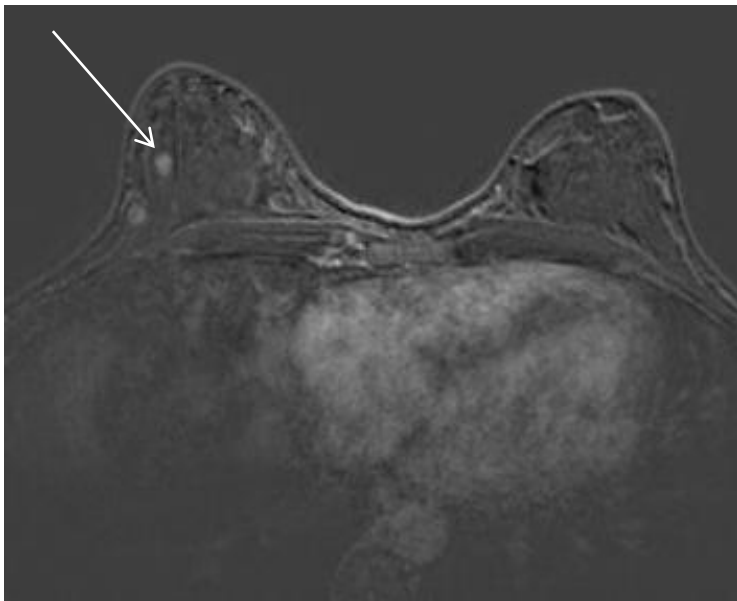
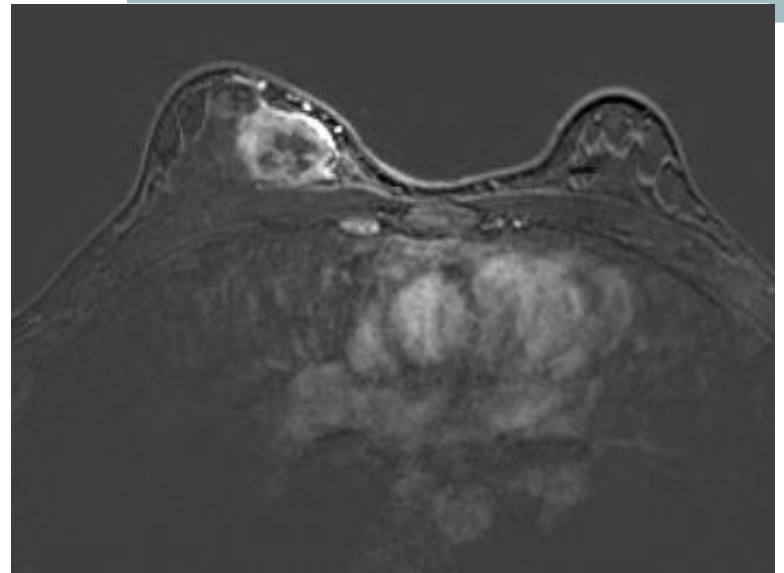
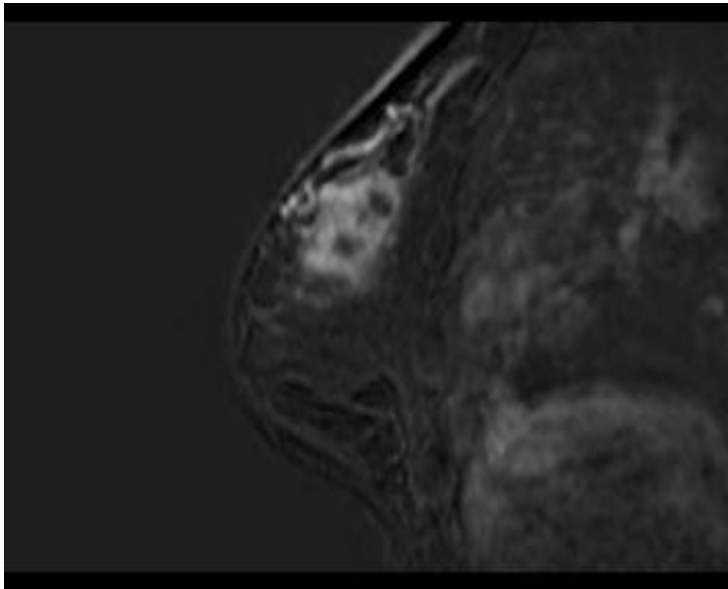
TN status is only significant for Local Recurrence
Free Survival only for non pCR patients

Zhang et Connolly, SpringerPlus, 2015 (Columbia University NY)

Case 2

- 41 y
- Palpable mass in the right breast, UpperInner Quadrant, 2-3cm
- Mammography-ultrasound: ACR5, 25mm
- Biopsy: IDC, grade III, triple negative, ki67 60%
- Decision of neoadjuvant chemotherapy
- MRI findings: 45mm mass in the upper-inner quadrant and 2 other masses in the lower-outer quadrant < 1 cm
- Second biopsy in the lower-outer quadrant: DCIS





Case 2

- Neoadjuvant chemotherapy: 6 EC 75 + Taxol
- Complete clinical response after 6 EC75
- Under taxanes, resurgence of the lesion with rapid growth to 2 cm
- PET-CT: isolated hypermetabolic lesion in the right breast

Case 2

- **What treatment do you propose to this patient after the resurgence of the tumor under taxanes?**
- Multidisciplinary decision: surgery without delay
- Patient had a total mastectomy with ALND
- Final pathology: residual IDC 15mm, grade III, triple negative, ki67 70%, 10N- including 1 N with fibrosis, second tumor DCIS 15mm
- **What adjuvant treatment do you propose?**
- Patient had 3 more cycles EC75 followed with radiotherapy.



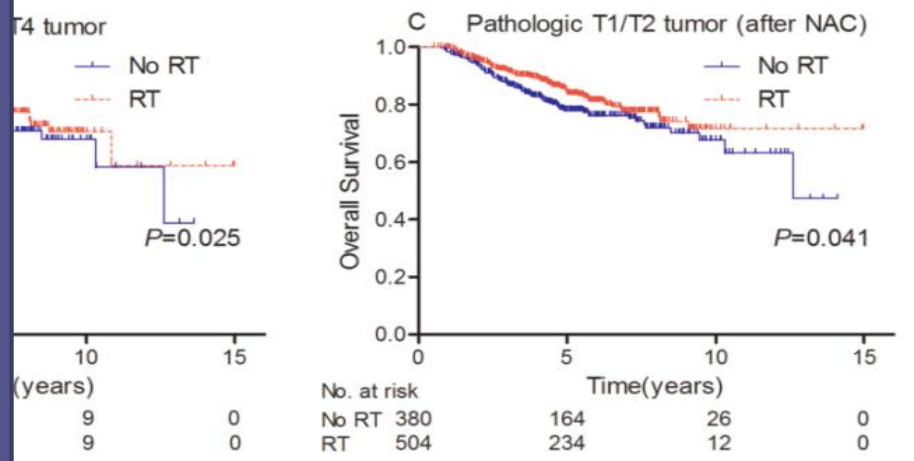
CASE 2

- residual IDC 15mm after resurgence, grade III, triple negative, ki67 70%, 10N- including 1 N with fibrosis, second tumor DCIS 15mm



CASE 2

Pathological T₁/T₂ after CT would benefit from radiotherapy (statistically significant)

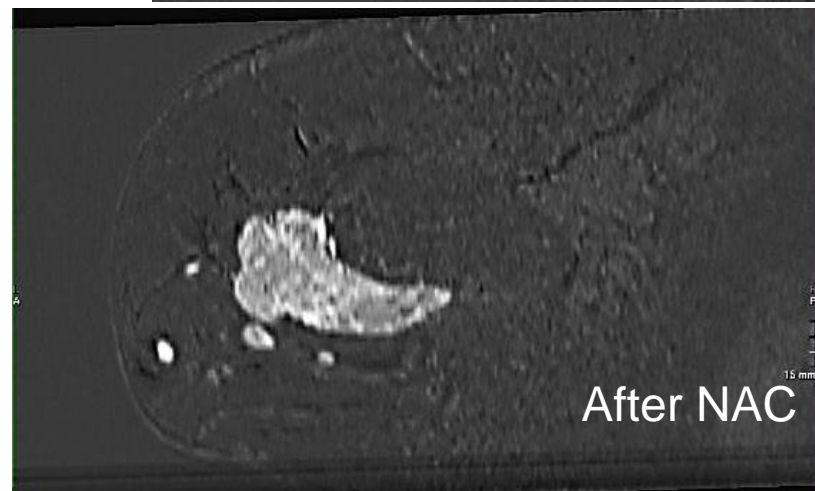
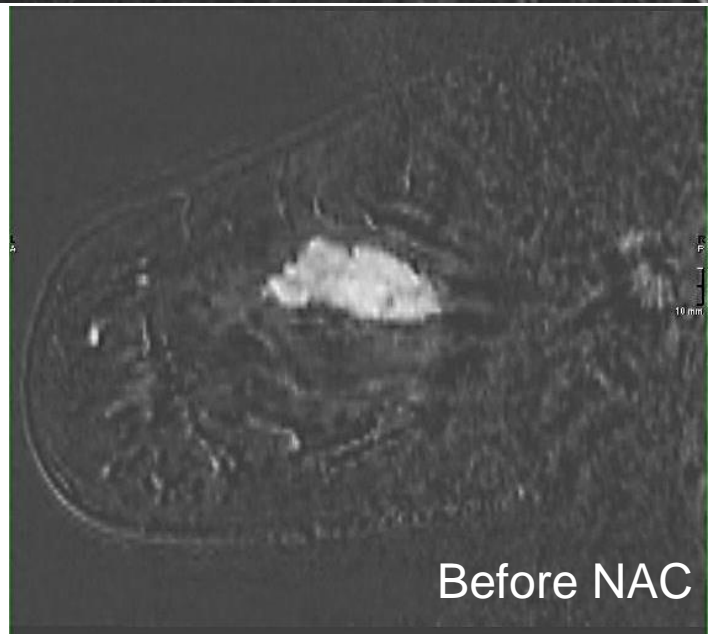
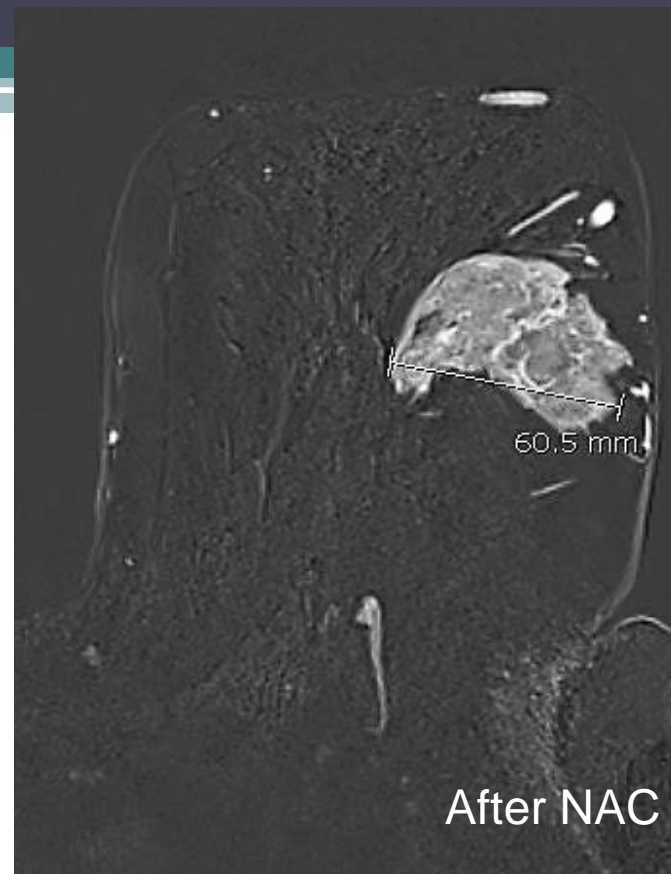
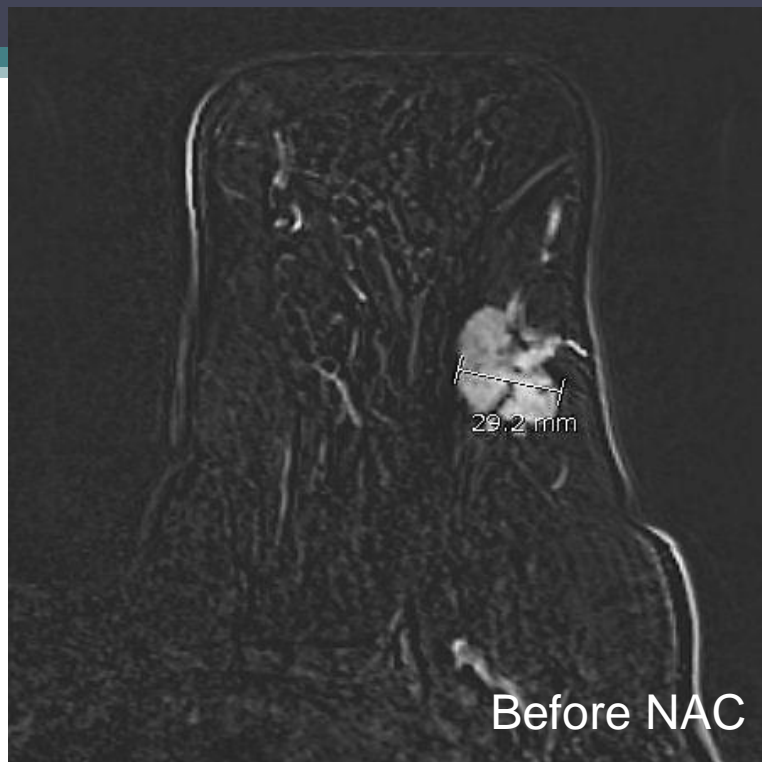


IIB/IIIC disease, **B.** clinical T₃/T₄ tumor, or **C.** pathologic T₁/T₂

Liu et al, NCDB, Am College of Surgeons and the Am Cancer Society

Case 3

- 64 y
- T3N1 Upper outer Quadrant left breast, bra cup size E
- Biopsy: IDC, grade III, ER+, PR+, Her2 -, Ki67 35%
- MRI findings: 48*32mm mass with early enhancement and washout
- Neoadjuvant chemo: 4 FEC 100, Taxol
- Good clinical response
- MRI findings post NAC: 66*32mm mass with early enhancement and washout



Case 3

- **What treatment do you offer now before this discordance between clinical and radiological response?**
- Multidisciplinary decision: total mastectomy and axillary lymph node dissection (ALND)
- The surgeon decided a conservative treatment with large lumpectomy with oncoplastic technique and ALND
- Specimen: 10*17*3 cm, 403g

- Final pathology: Residual IDC, grade II, 6cm, free margins, no LVI, ER+, PR-, Her2 -, Ki67 5%, 8N-

Case 3

- **What adjuvant treatment do you propose?**
- Patient received radiotherapy and aromatase inhibitors



CASE 3

In case of conservative treatment specially after concoplastic surgery radiotherapy is mandatory for breast

Concerning nodes area, I would not irradiate them (N- LVI -) but it can be discussed

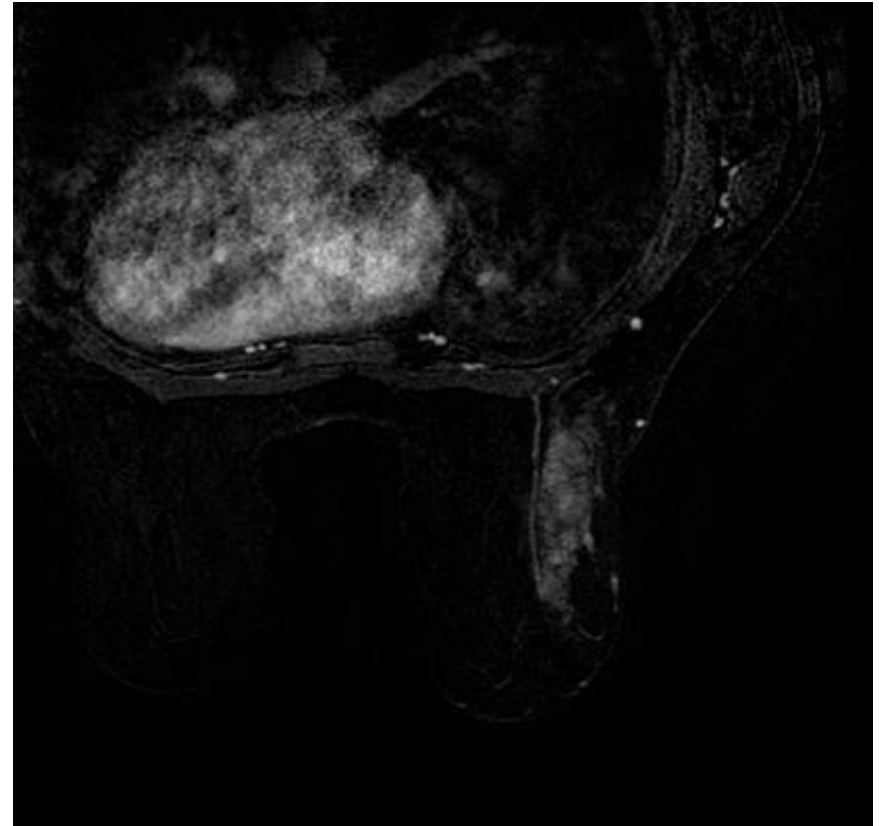
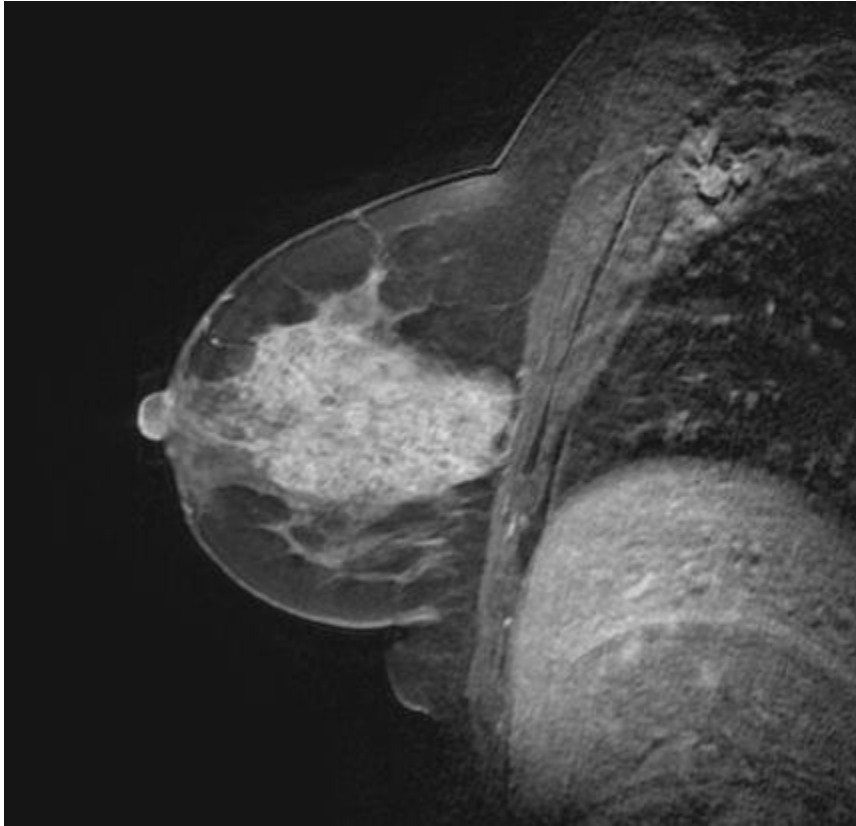
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The role of Postmastectomy Radiation Therapy in patients with breast Cancer Responding to NAC

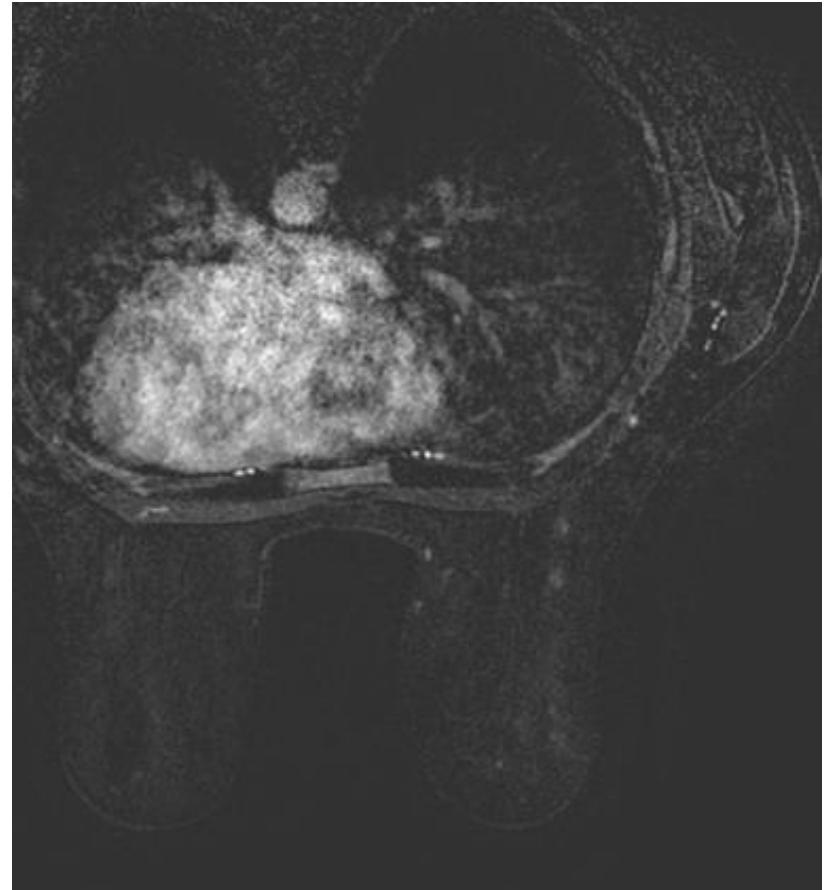
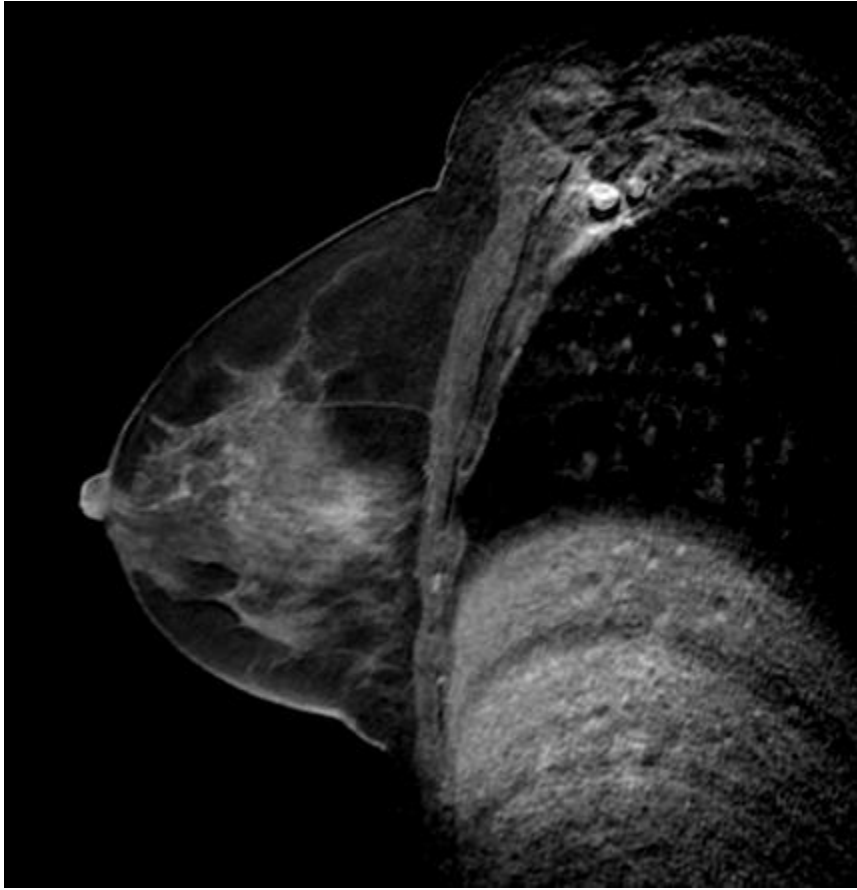
Bazan, Radiat Oncol 2015

Case 4

- 42 y, previous history of radiotherapy for Hodgkin lymphoma 12 years ago
- Just after a breastfeeding, occurrence of a mass in the right breast, upper-outer quadrant, 4cm
- Biopsy: IDC, grade III, ER-, PR+, Her2 -, Ki67 50%
- MRI findings: mass and non-mass enhancement of 9 cm
- Neoadjuvant chemotherapy: 3 EC 100, Taxotere followed with Taxol because of high toxicity
- Clinical examination after NAC: almost complete response
- MRI post NAC: complete response



Before NAC



After NAC

Case 4

- **What kind of surgery do you propose in this situation of clinical and radiological good response but with an initial non-mass enhancement of 9 cm?**
- Multidisciplinary decision: total mastectomy with axillary lymph node dissection, immediate breast reconstruction with DIEP-flap followed with radiotherapy if possible (previous irradiation)
- Final pathology: no residual disease
- What adjuvant treatment do you propose?
- Patient received hormone therapy



CASE 4

No radiation therapy: ypNo TO
Previous radiation for HL

Secondary malignancies **after treatment** for indolent non-**Hodgkin's** lymphoma: a 16-year follow-up study.

Sacchi S, Marcheselli L, Bari A and al
Haematologica. 2008