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HÔPITAUX
DE PARIS

Hôpital Saint-Louis
Centre Hospitalo-Universitaire et de Recherche

REQUIREMENTS-ROLES-BENEFITS OF THE RADIOTHERAPY DEPARTMENT IN THE BREAST CENTERS APPROACH

Use of ^{18}F -FDG PET/CT for radiotherapy planning Case Reports

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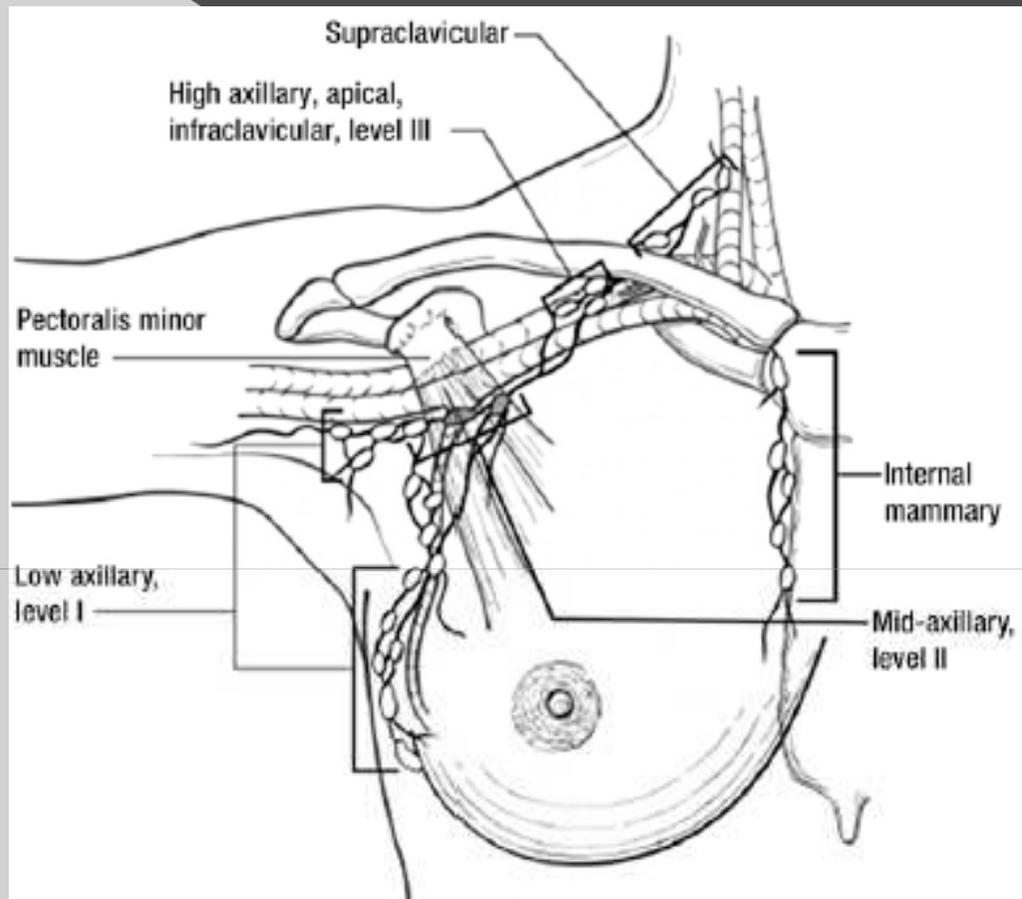
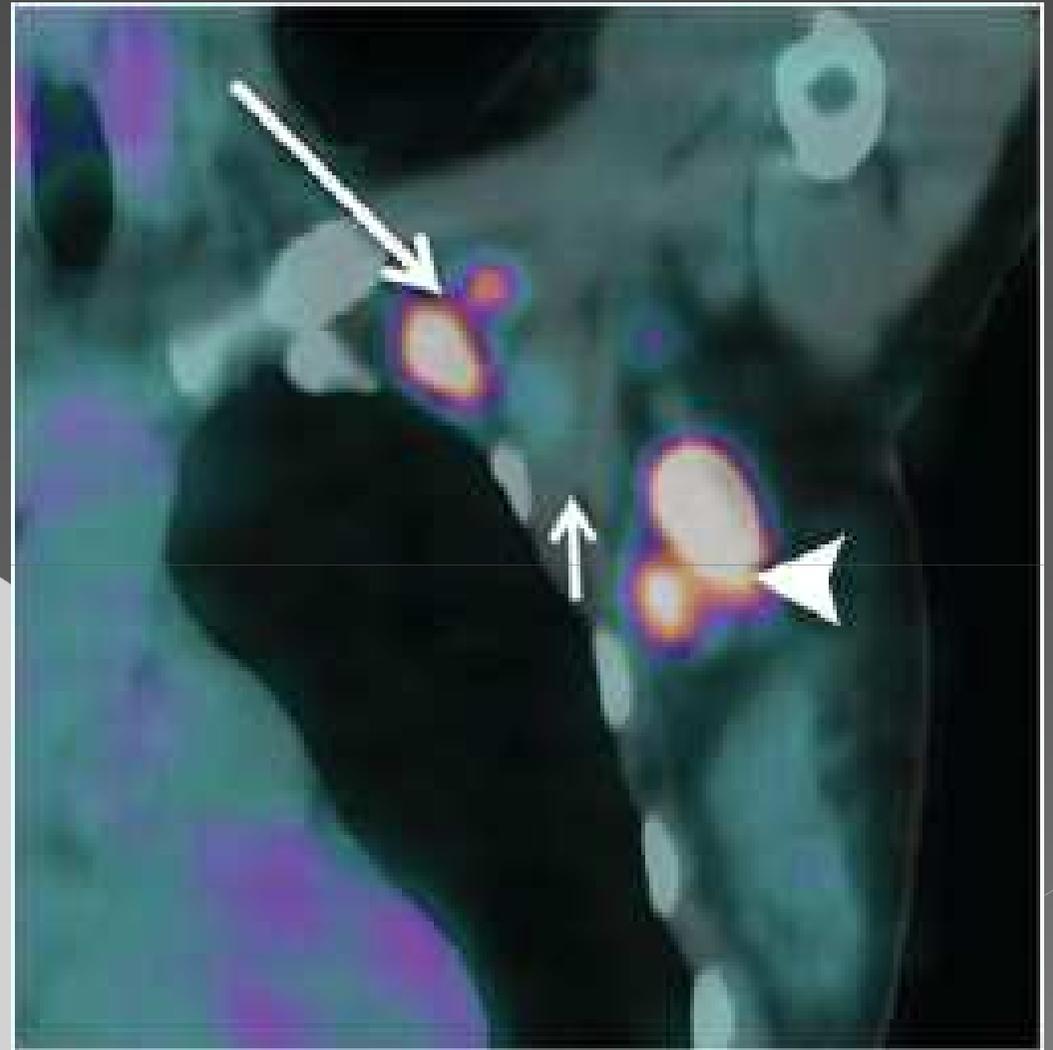
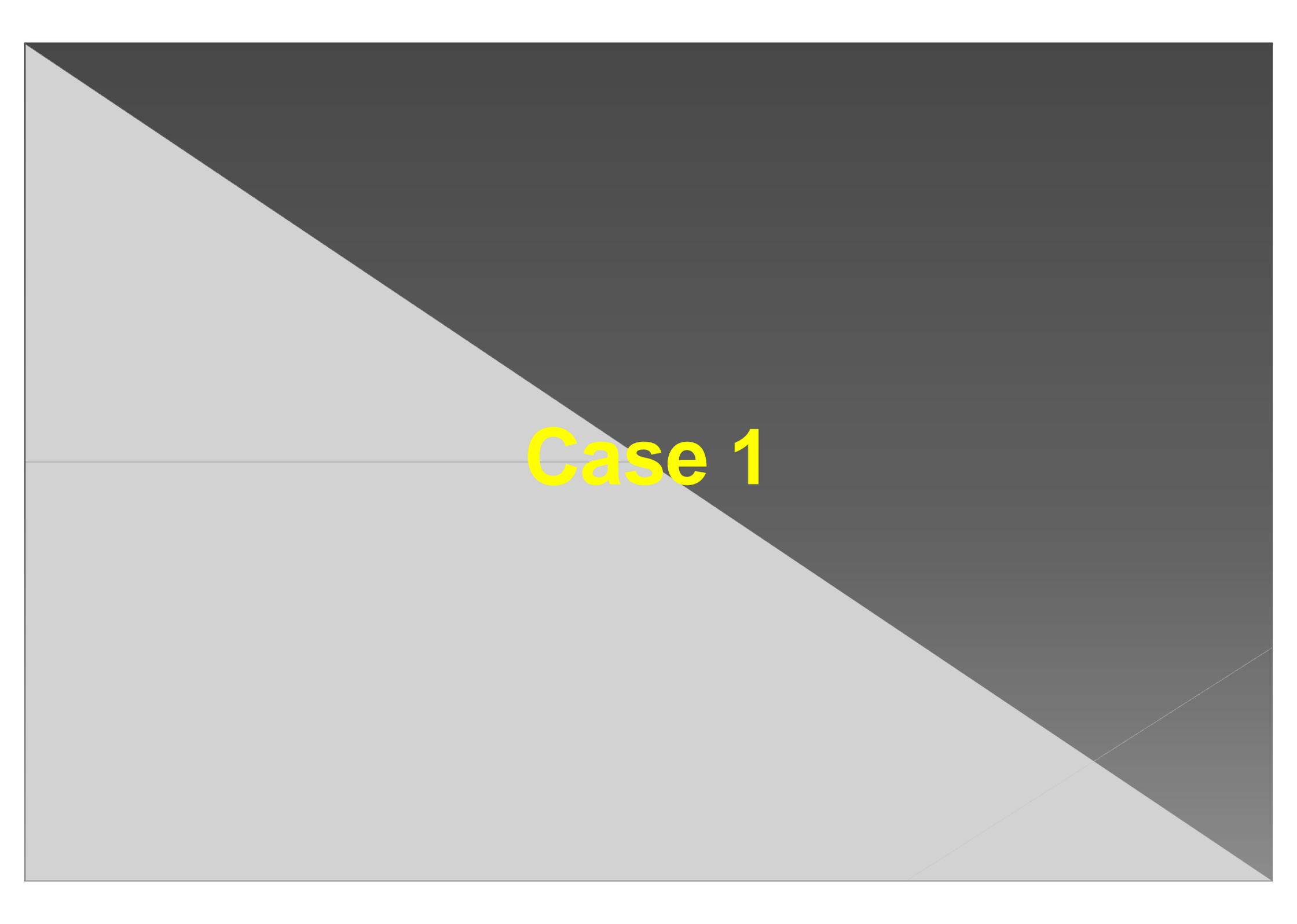


Figure 2: Schematic of the breast and regional lymph nodes according to the *AJCC Cancer Staging Manual* (36). (Reprinted, with permission, from reference 36).

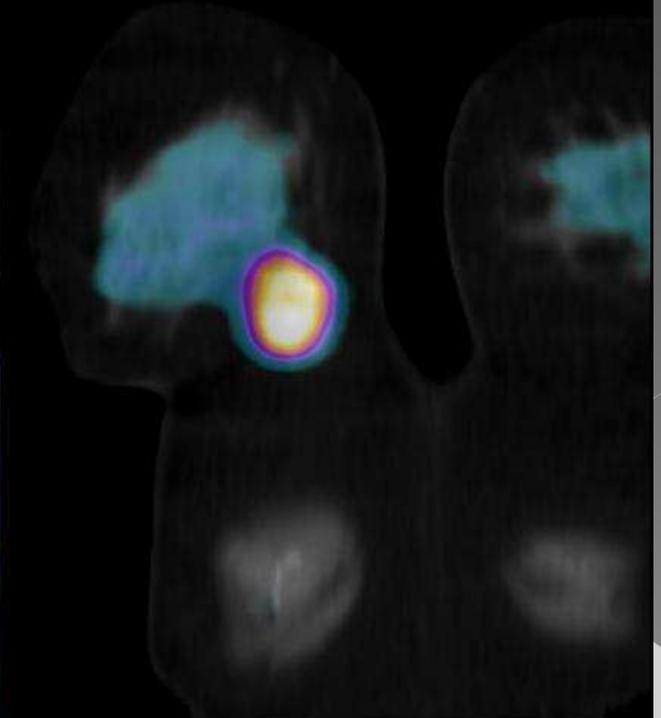
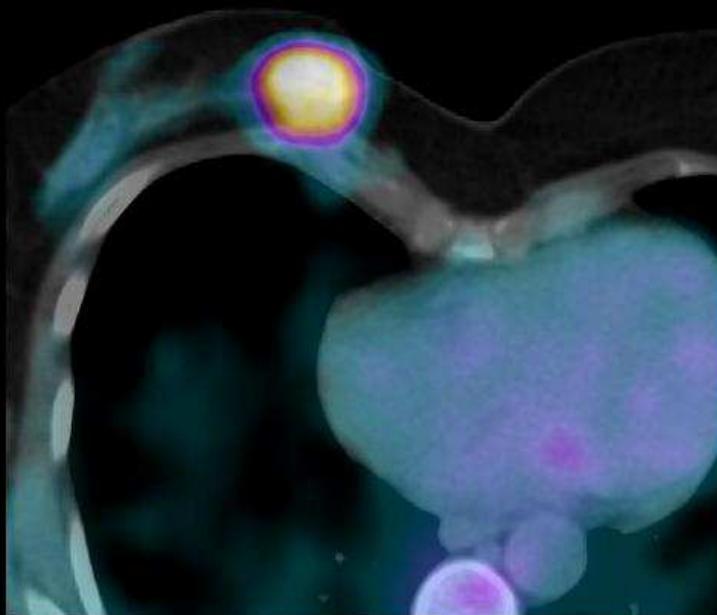
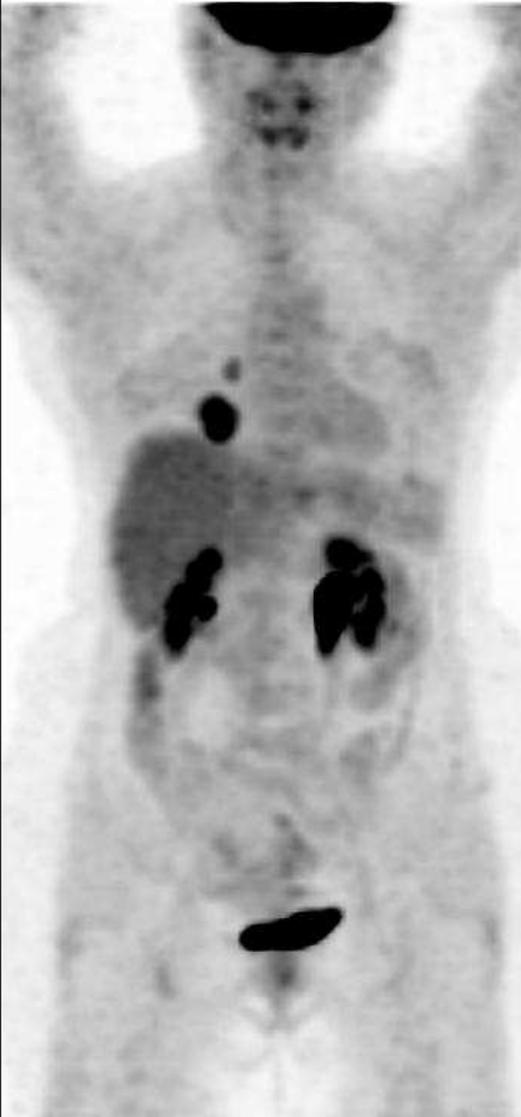


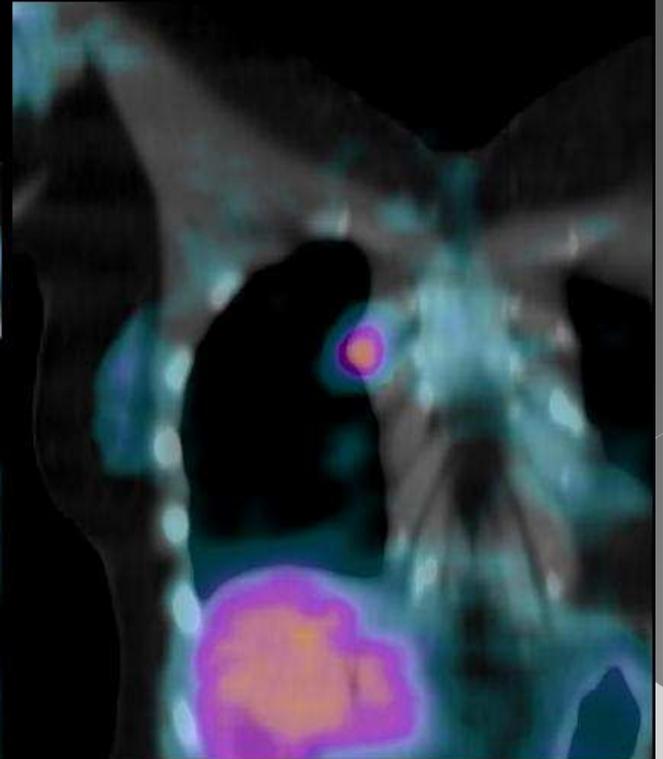
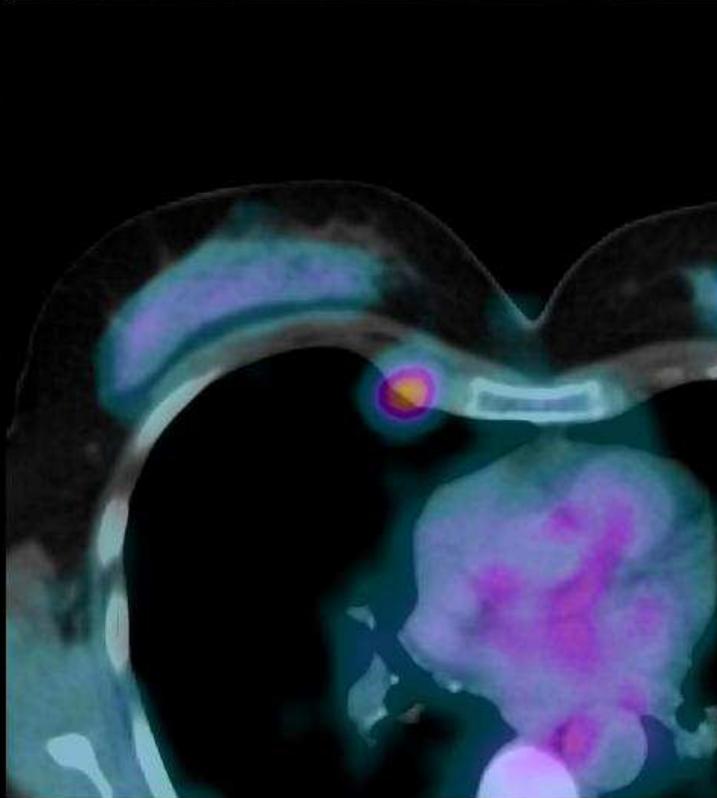
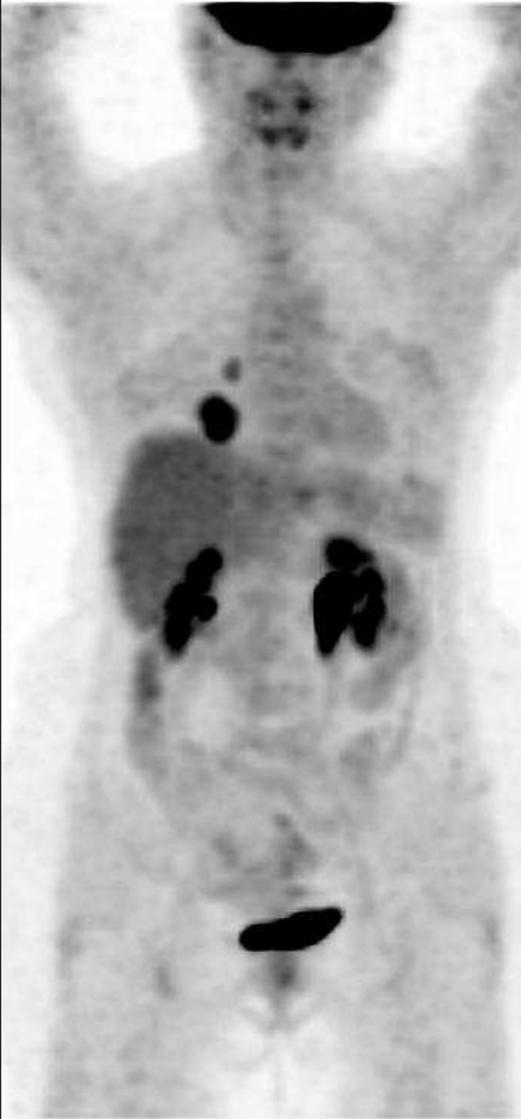


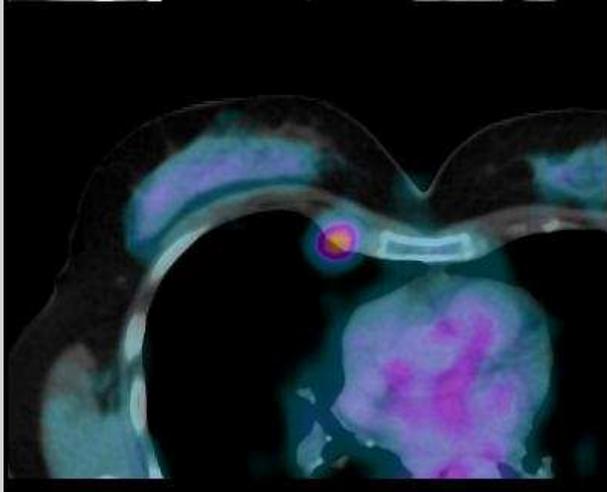
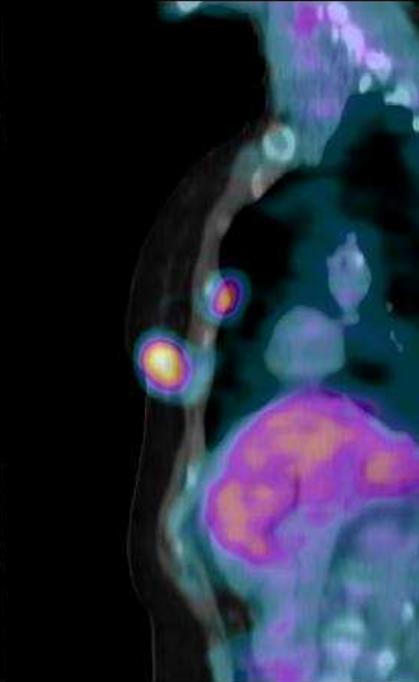
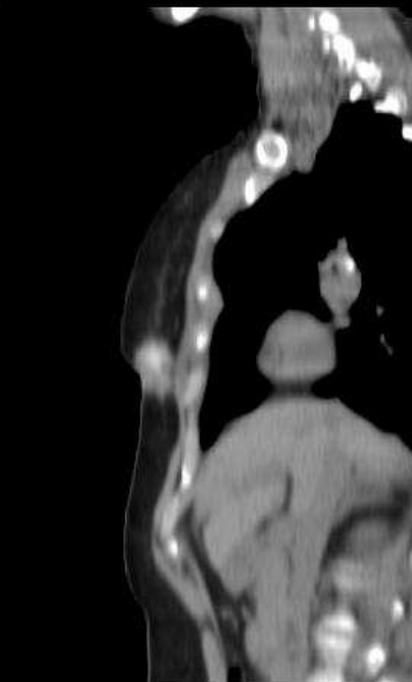
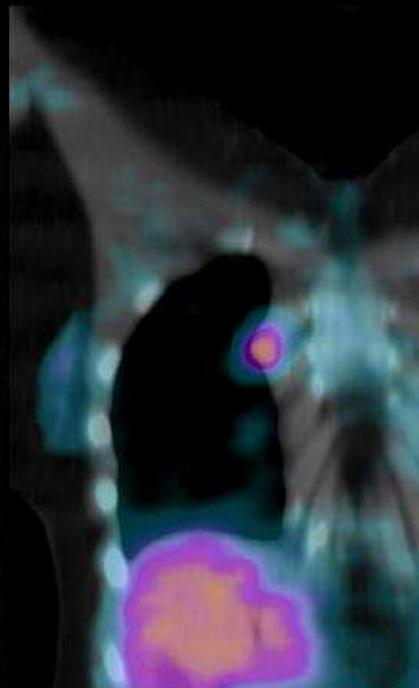
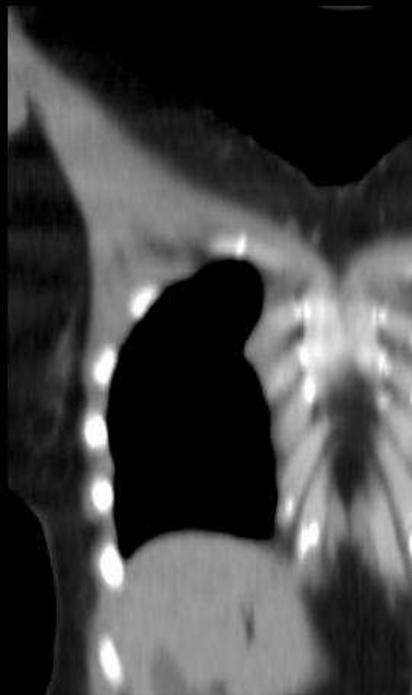
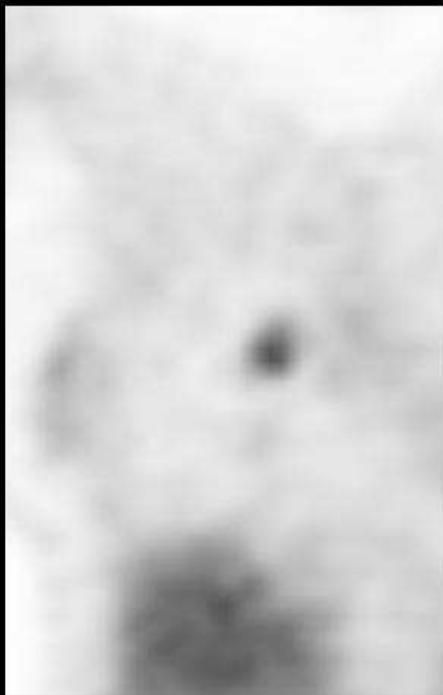
Case 1

Case 1

- 65 years, menopausal
- IDC of the breast, grade 1, ER+, PR+, HER2-
- Examination, palpation, mammography, US :
 - Mass of 50mm
 - Extension to the chest wall and to the skin
 - No regional lymph nodes metastasis
 - cT4c cN0 cM0





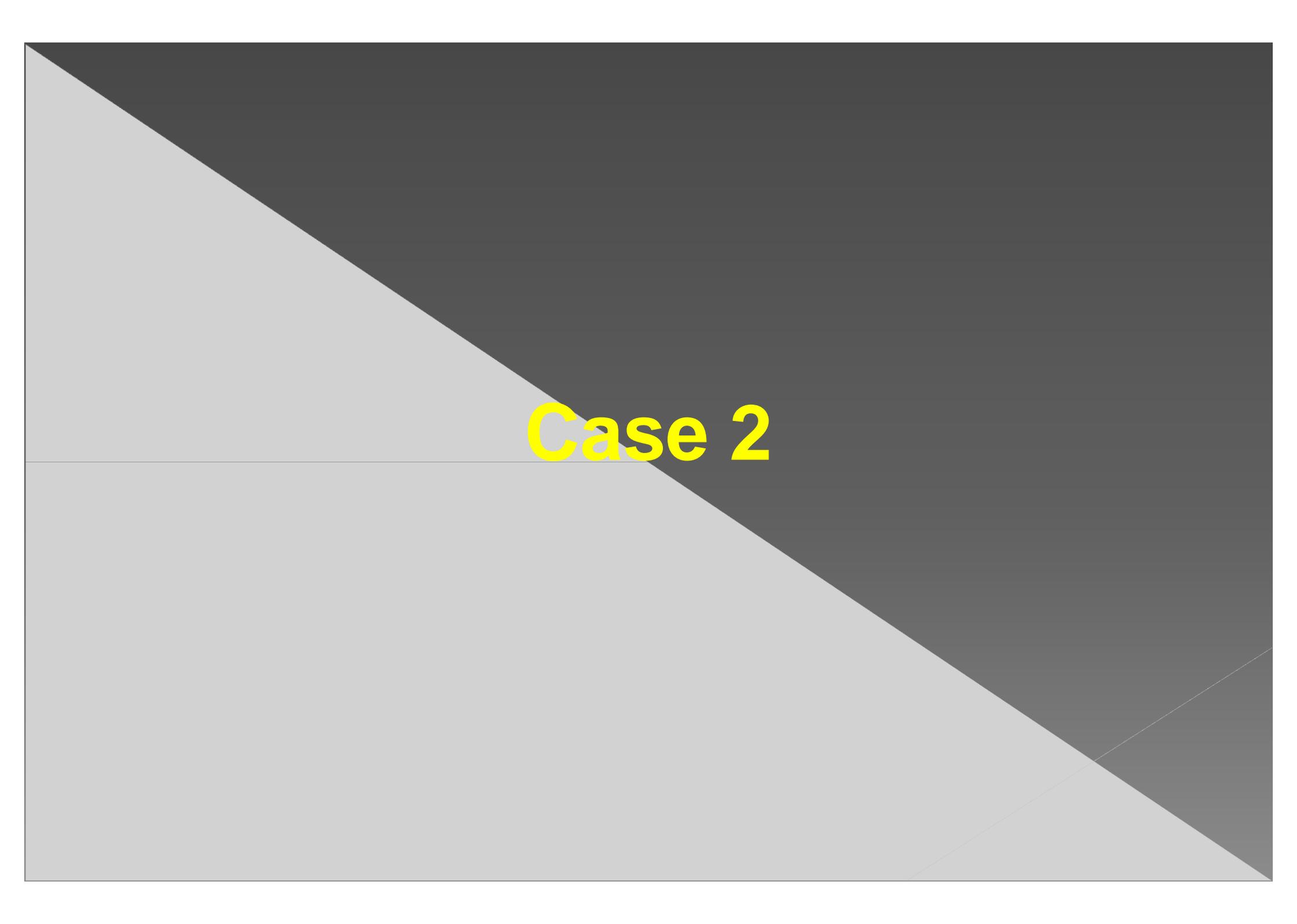


Case 1

- Classification after PET/CT: T4 N2b M0
- Neoadjuvant chemotherapy : 8 courses
- Mastectomy + resection of the pectoralis major + axillary lymph nodes dissection:
 - IDC, 30mm, extension to the pectoral
 - 2N+/5N

Case 1 – adjuvant treatment

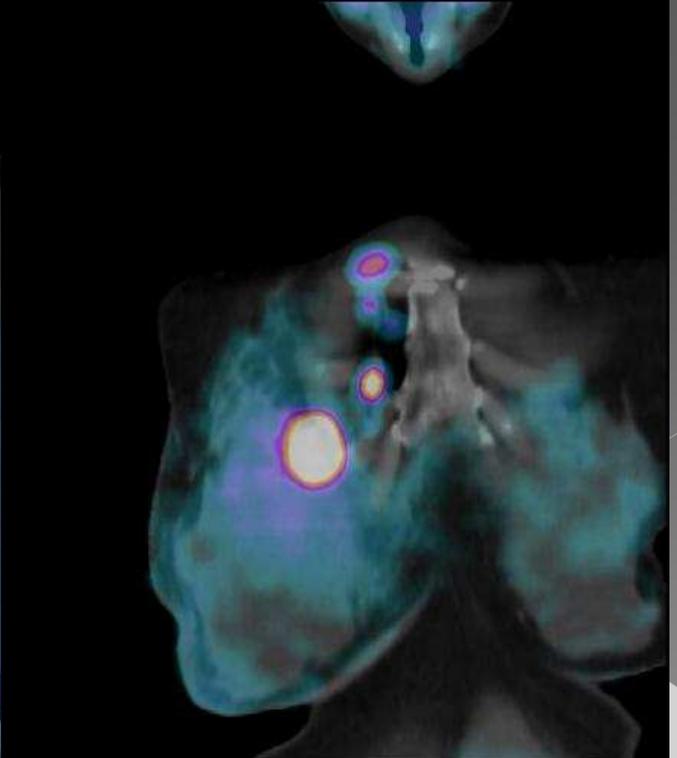
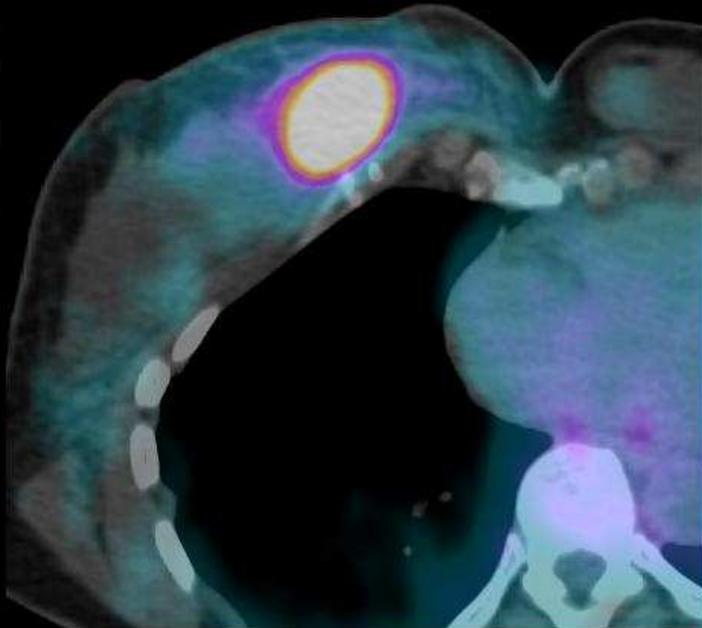
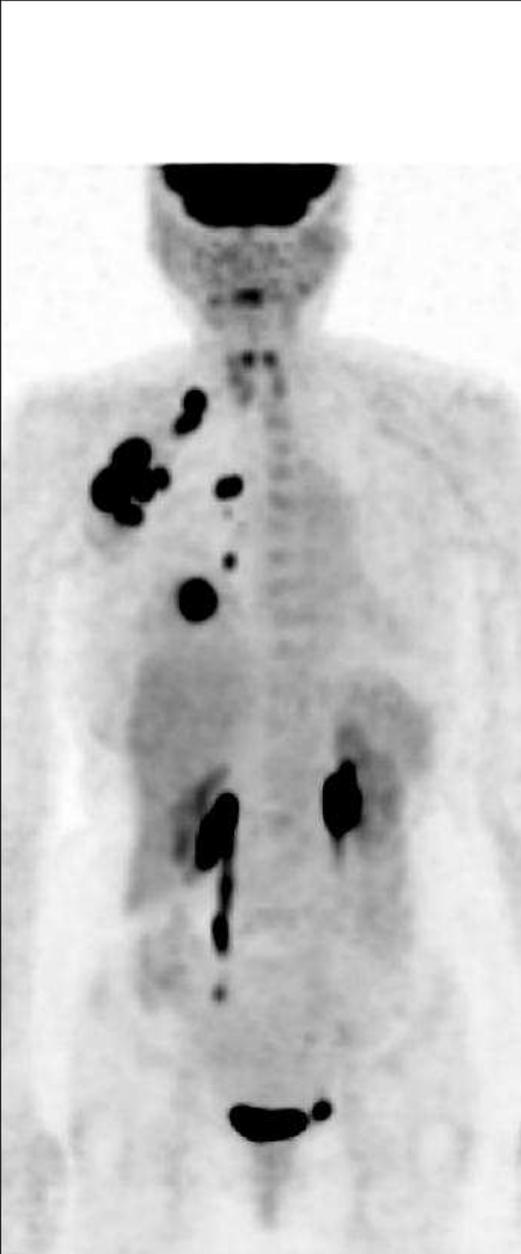
- ⊙ Radiation therapy
 - ⊙ Chest
 - ⊙ Right Axillary area , right supraclavicular area and right internal mammary chain
- ⊙ Hormonotherapy (femara)
 - ⊙ No recurrence 4 years later

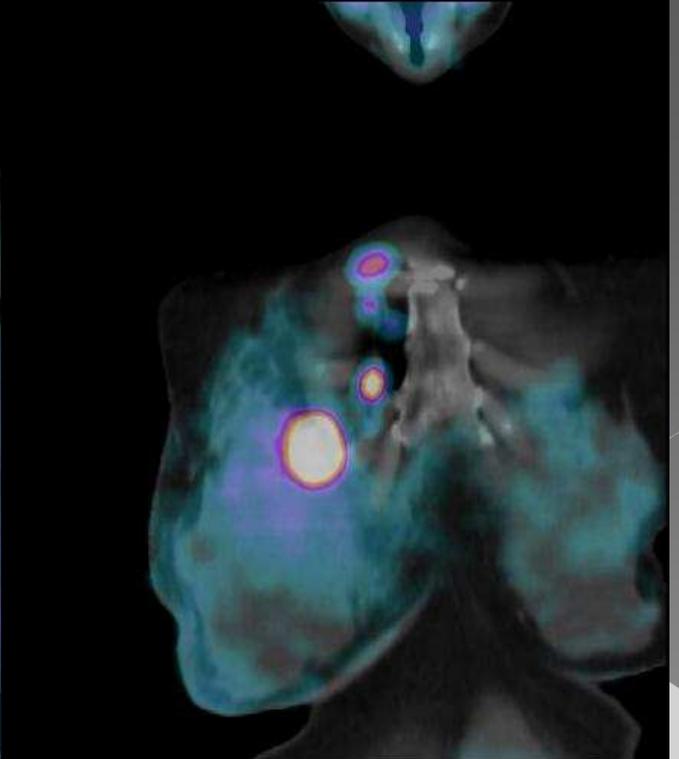
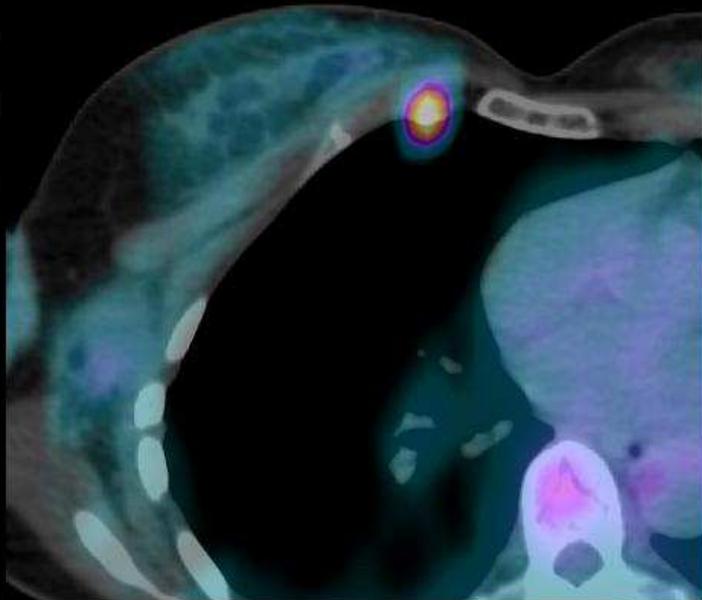
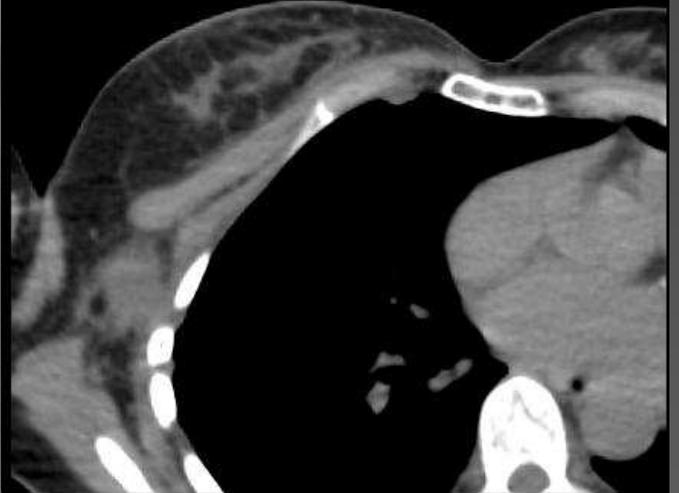
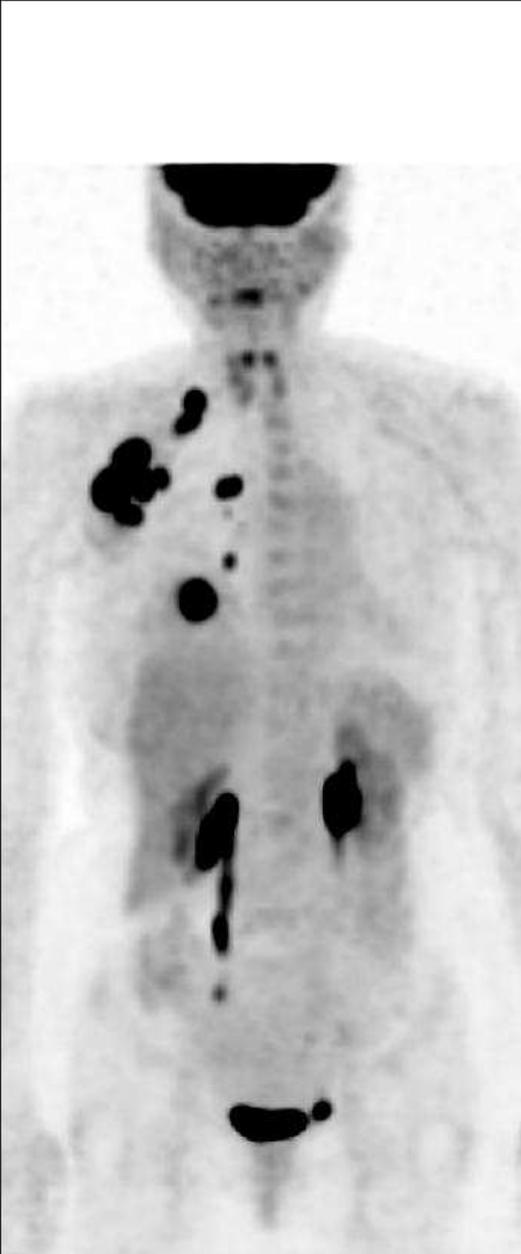


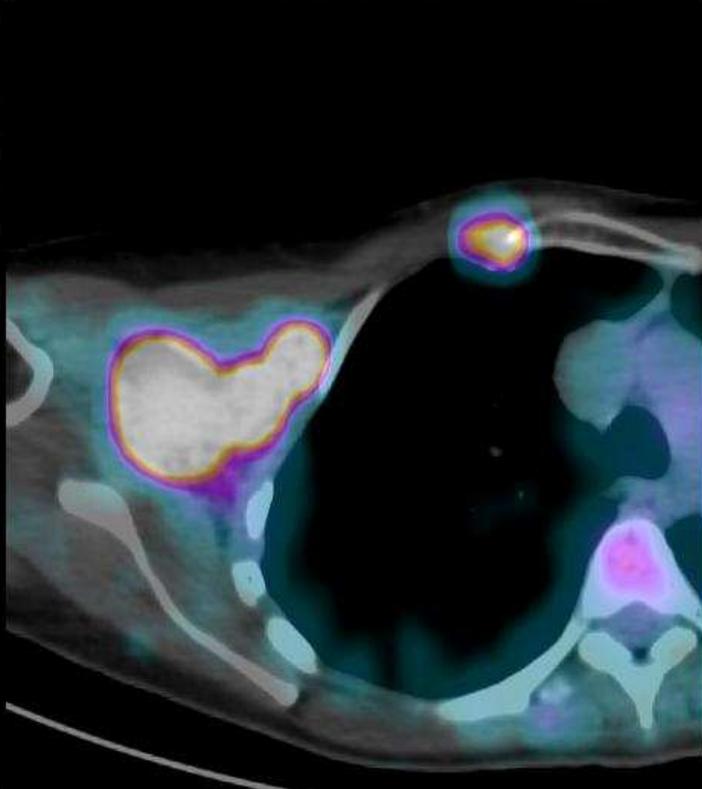
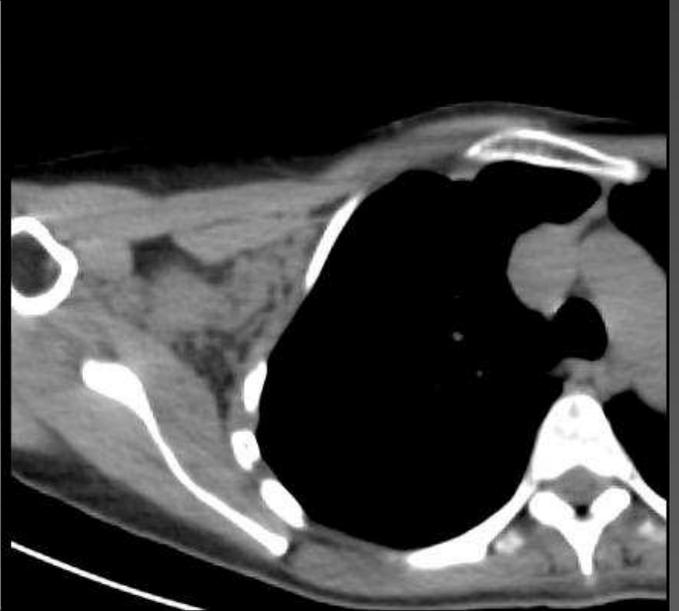
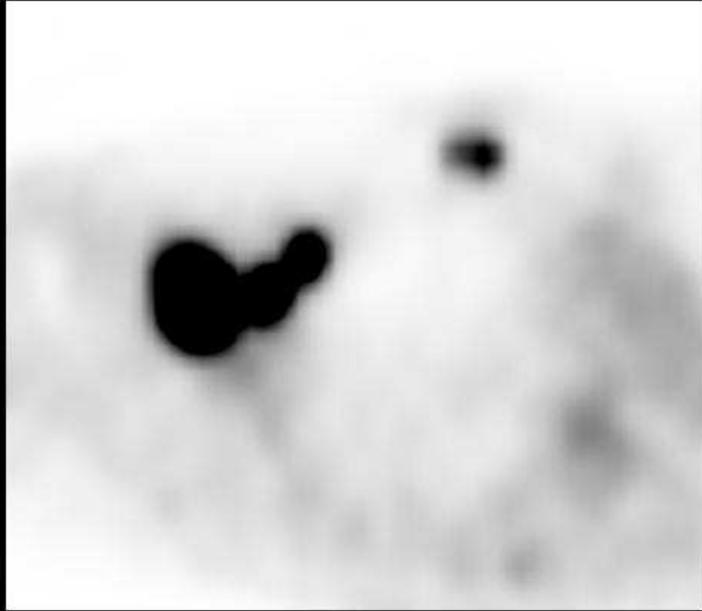
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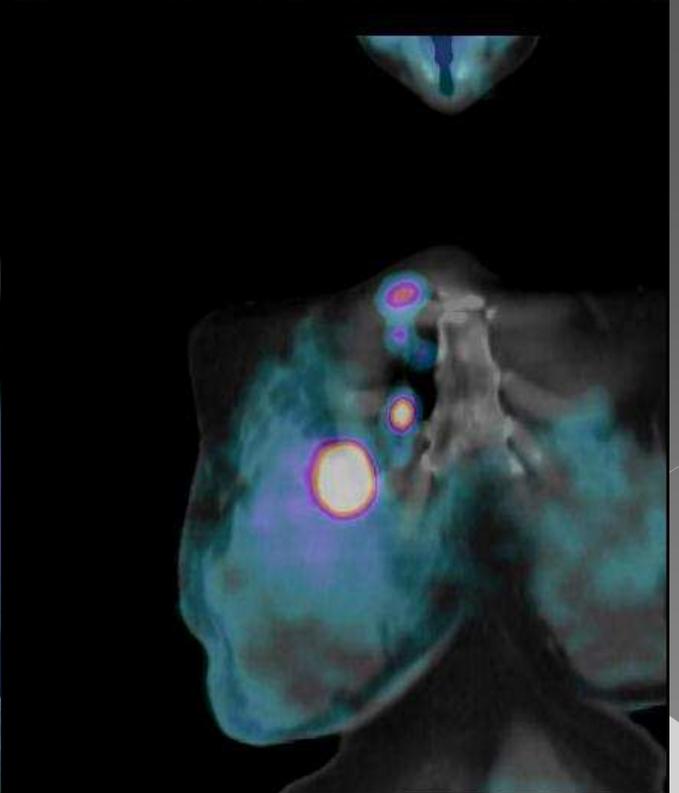
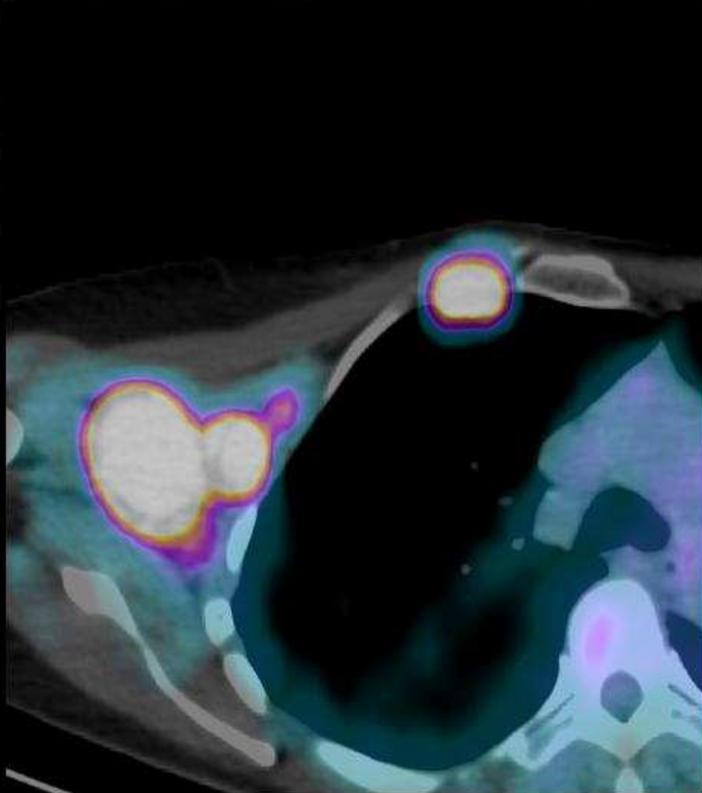
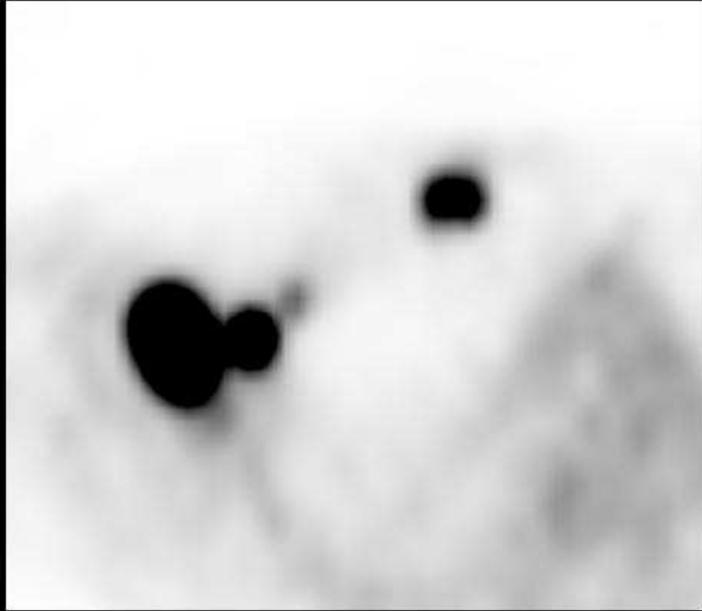
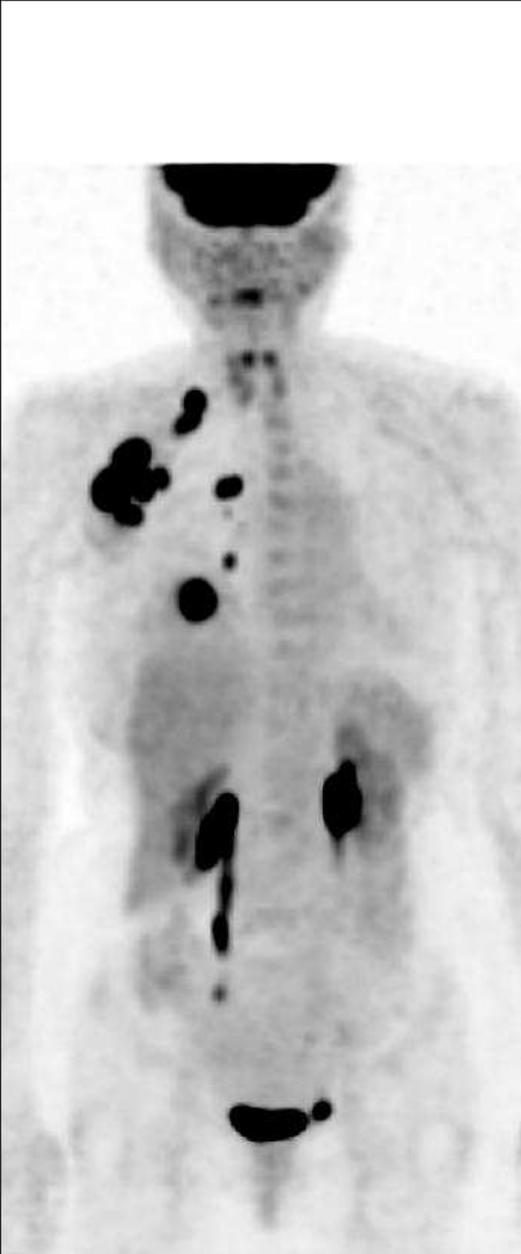
Case 2

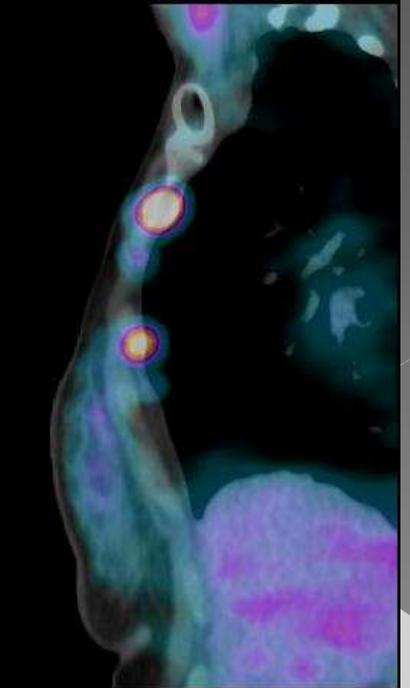
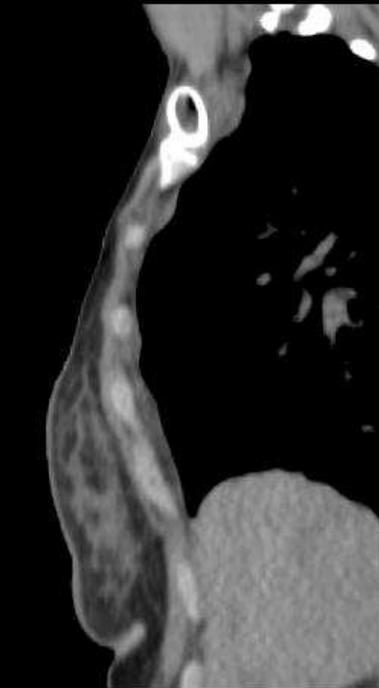
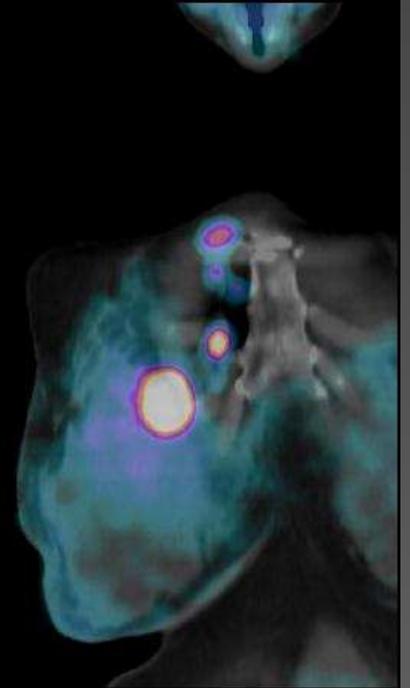
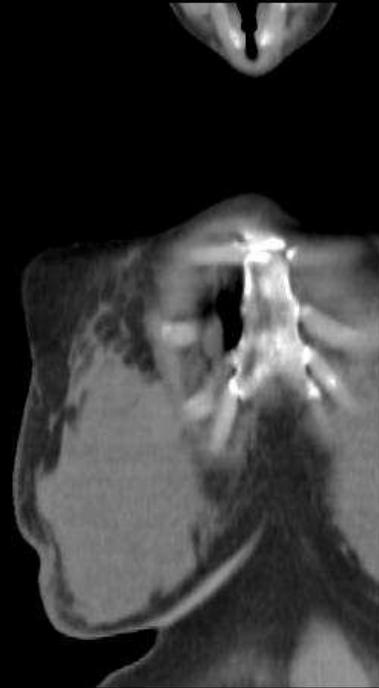
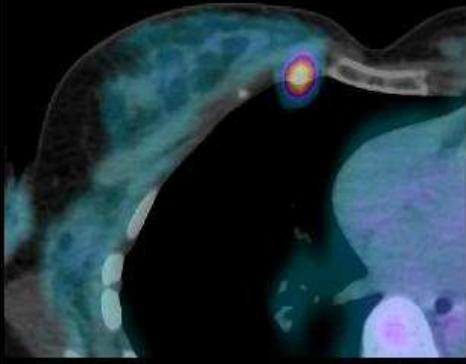
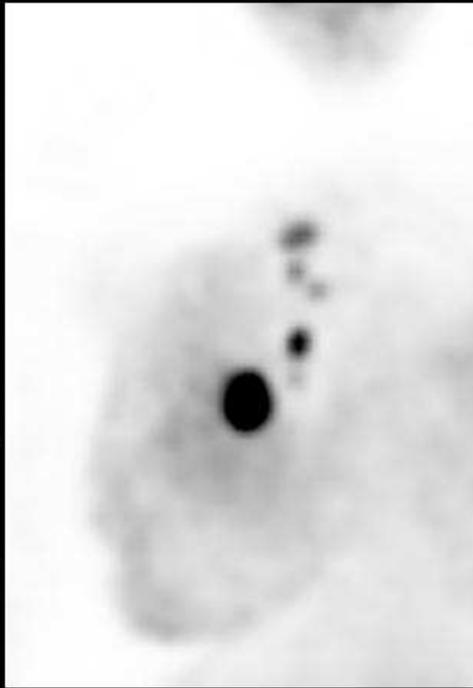
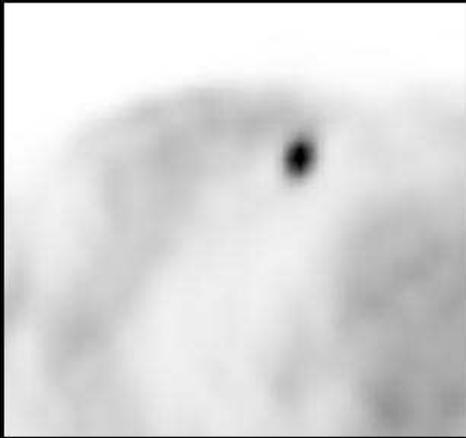
- 54 years, menopausal
- IDC of the right breast, grade 3, ER-, PR-, HER2+
- Examination + palpation:
 - Mass of 80mm
 - Inflammation of the skin
 - Fixed axillary lymph nodes metastasis
 - No supraclavicular lymph nodes
 - cT4d cN2a cM0

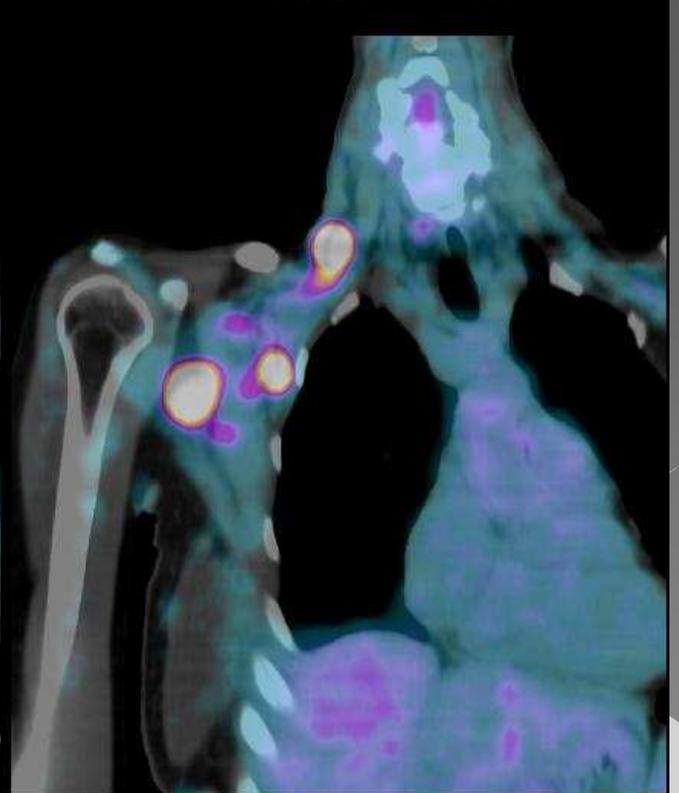
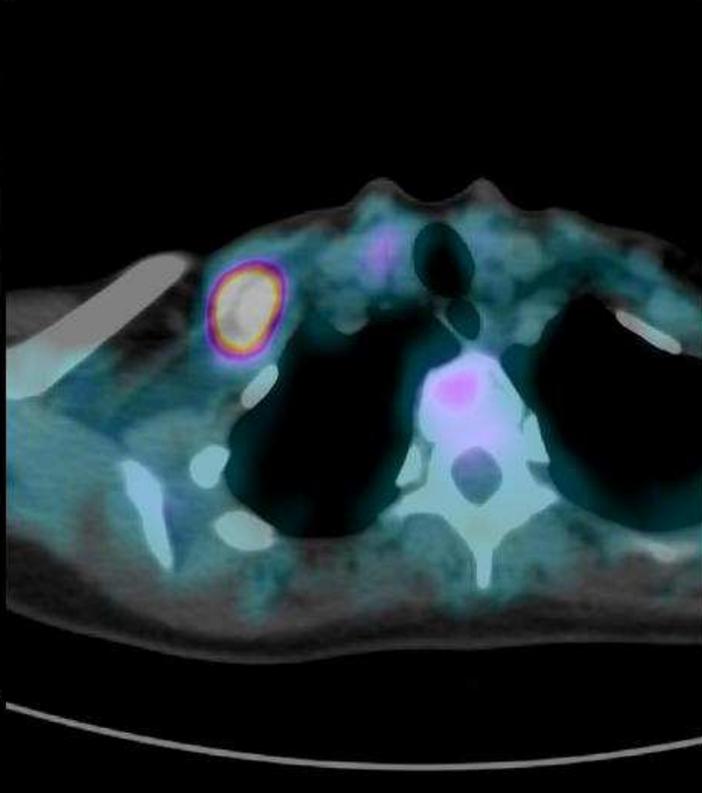
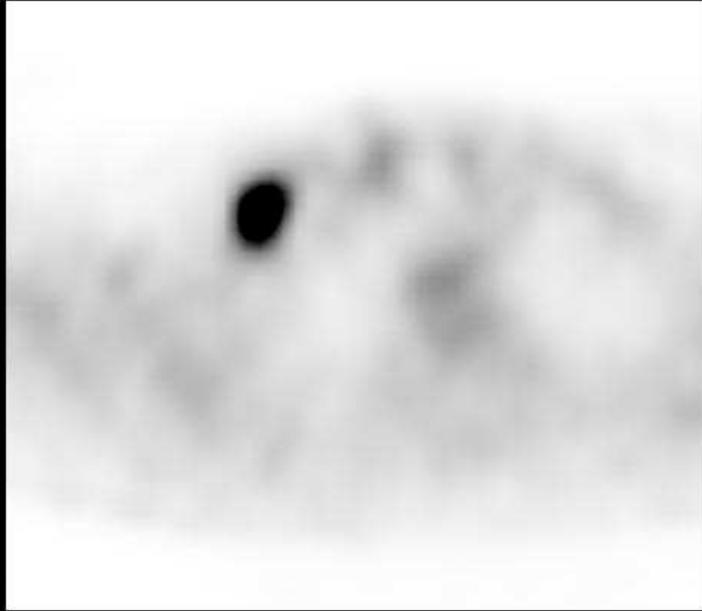










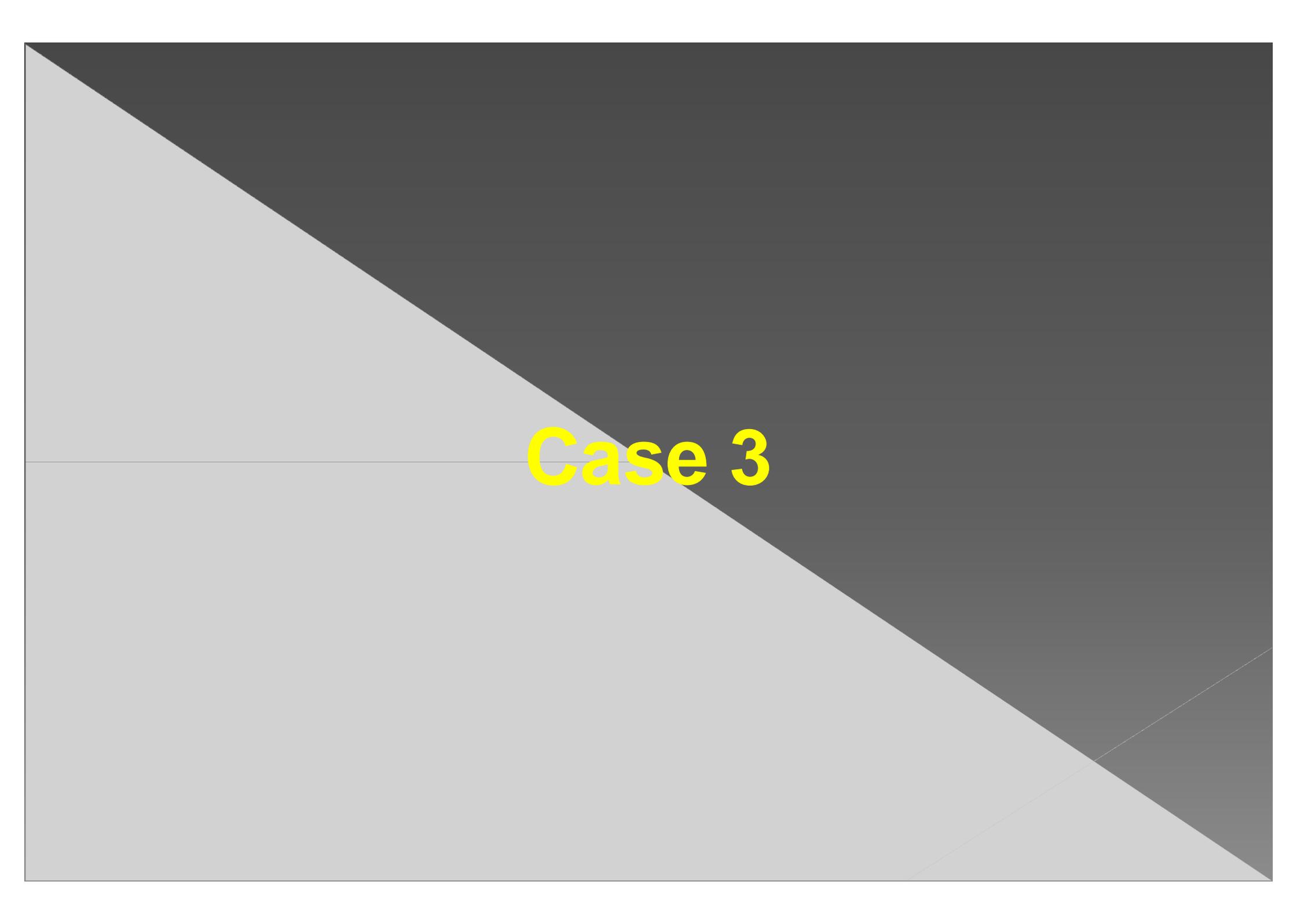


Case 2

- Classification after PET/CT: T4 N3c M0
- Neoadjuvant chemotherapy
- Mastectomy + axillary lymph nodes dissection:
 - IDC, 25mm
 - 2N+/12N

Case 2 – adjuvant treatment

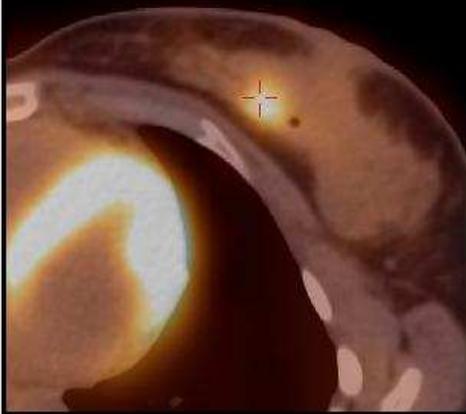
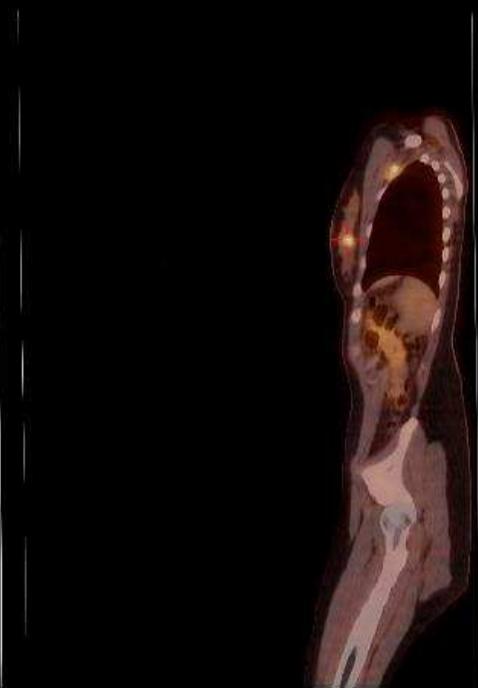
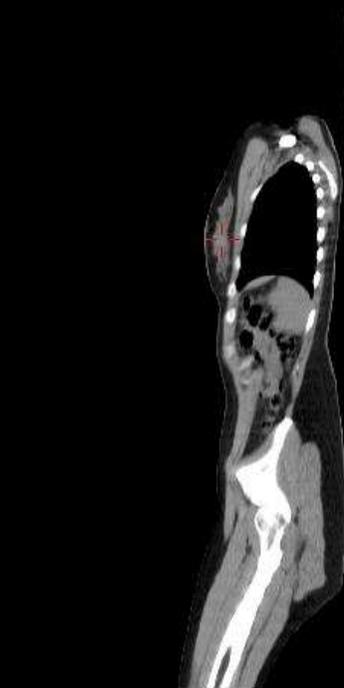
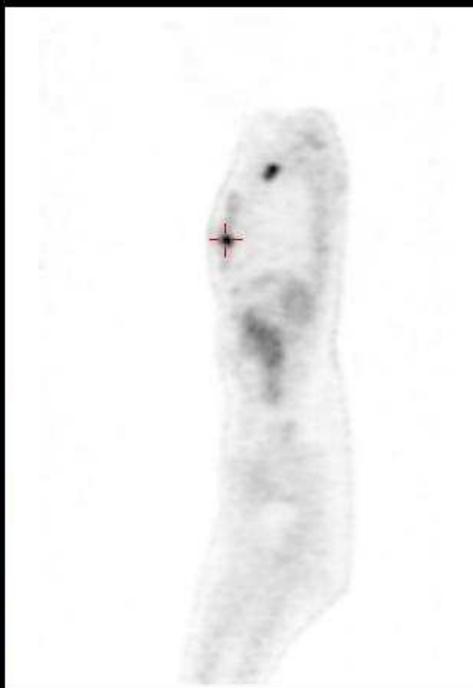
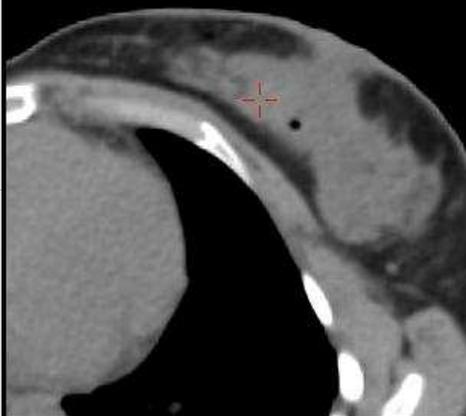
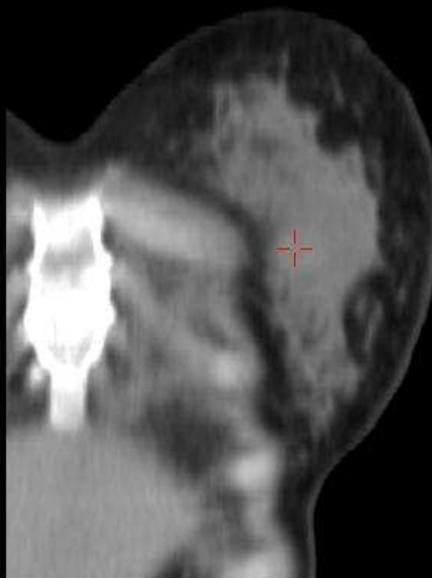
- Radiation therapy
 - Chest
 - Right axillary area , right supraclavicular area and right internal mammary chain
- Trastuzumab
- Recurrence 2 years later : sternum + lung + mediastin + liver

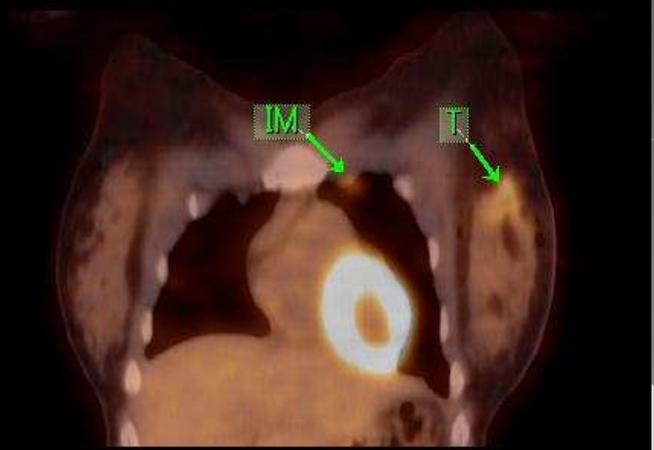
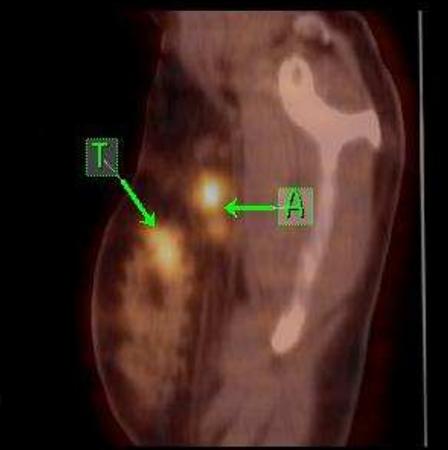
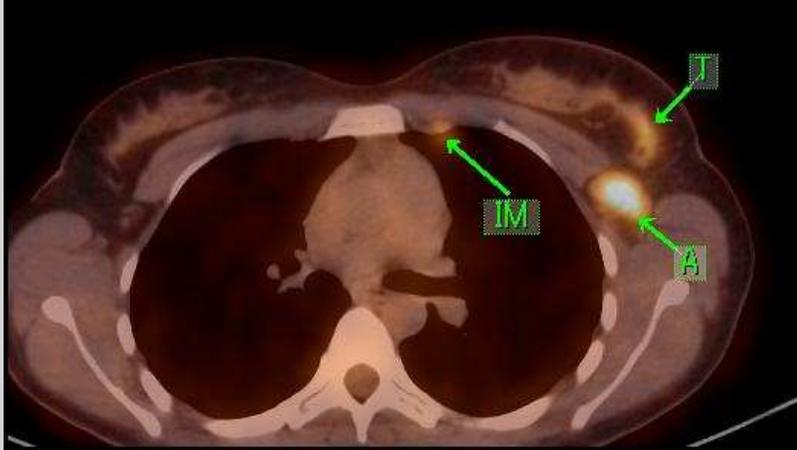
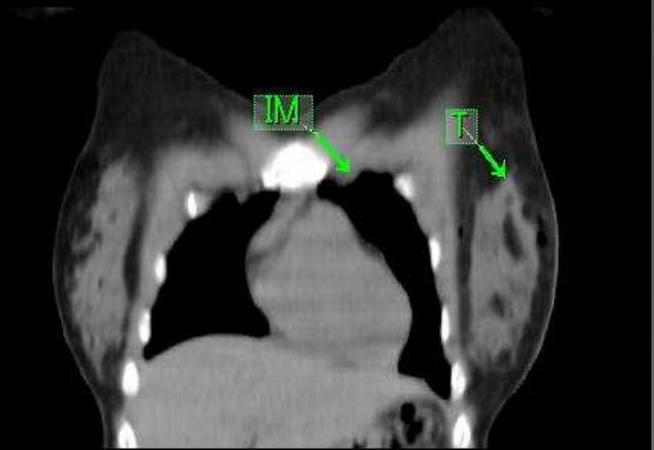
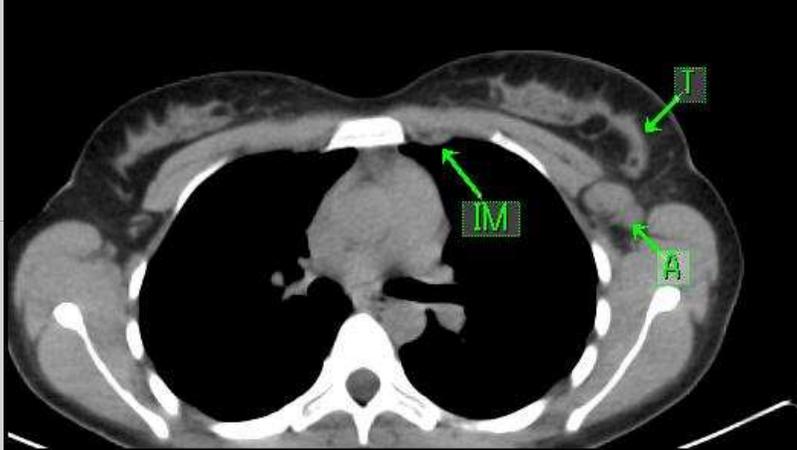
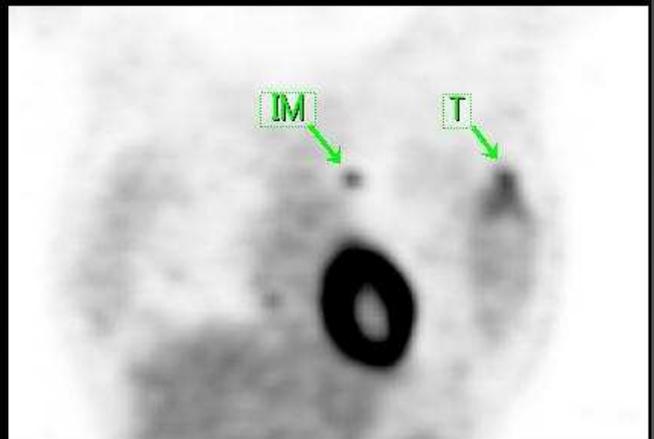
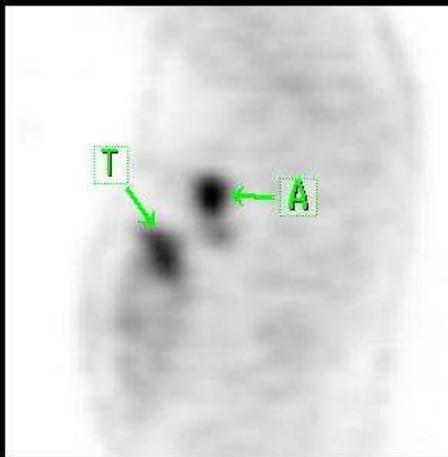
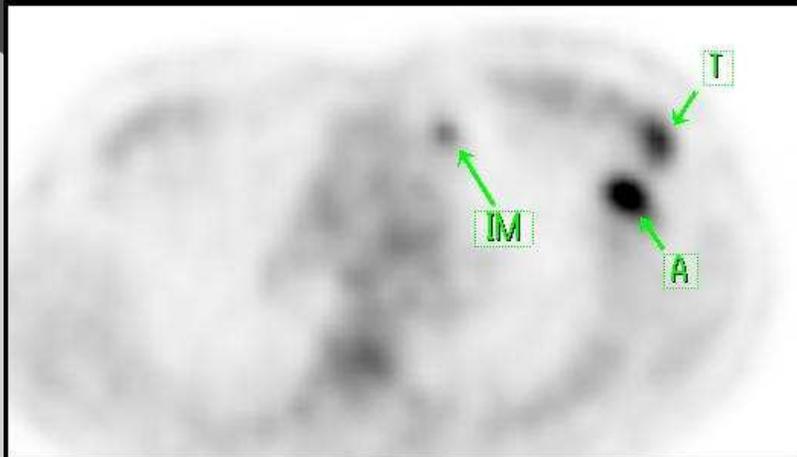


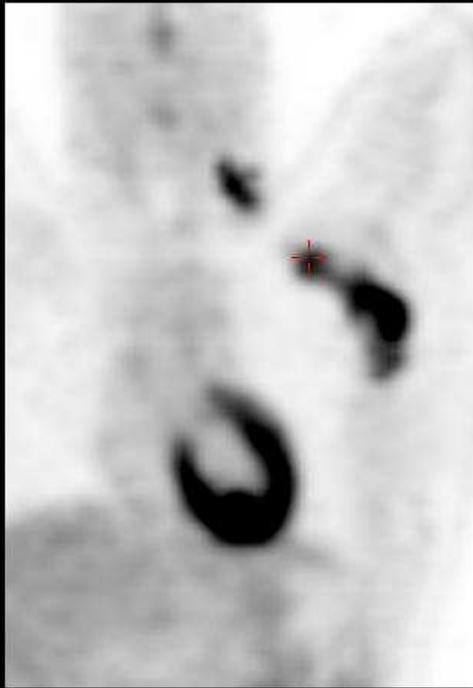
Case 3

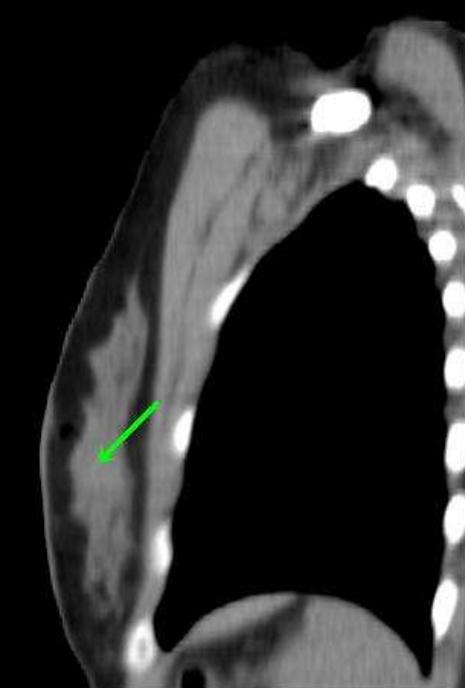
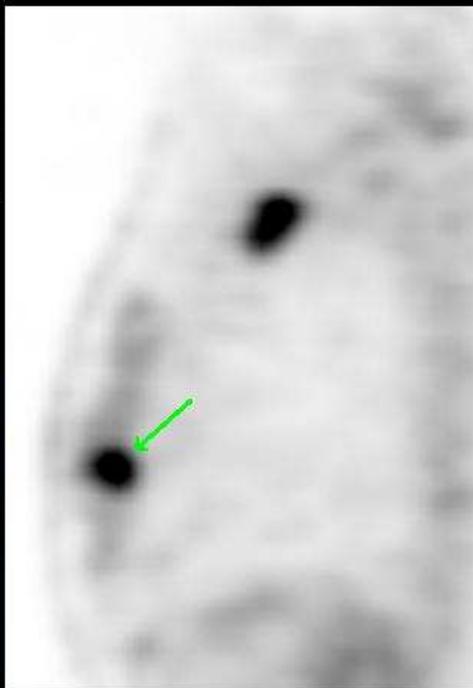
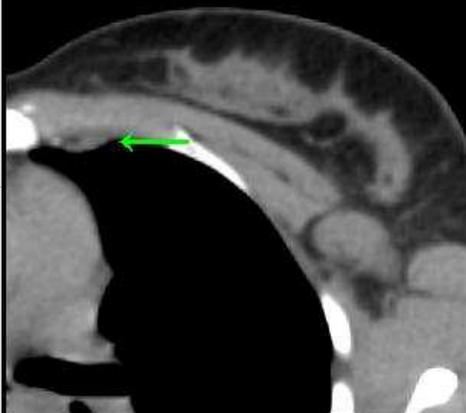
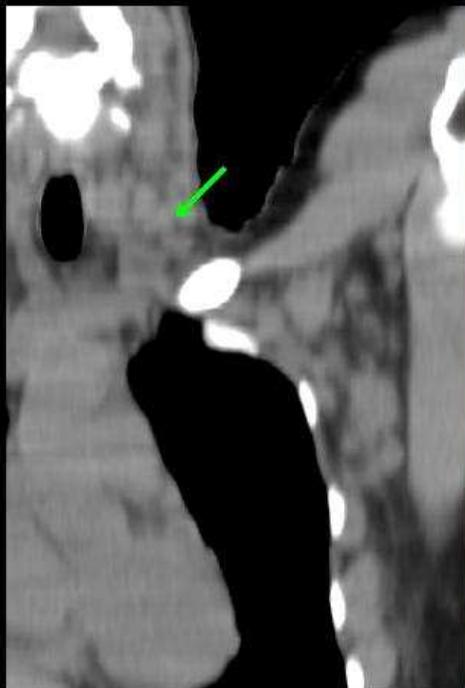
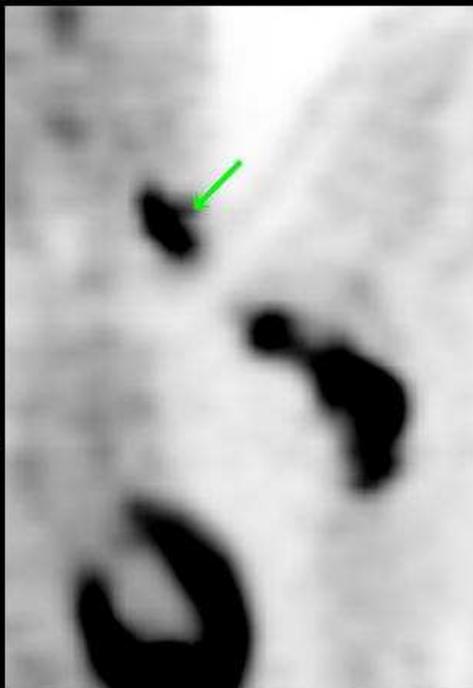
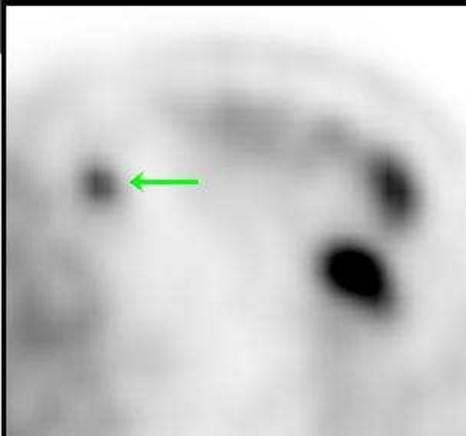
Case 3

- 32 years, not menopausal
- 2 IDC of the left breast, same phenotype (ER+, PR+, HER2-)
- Examination + palpation + mammography + US:
 - 2 Masses in the left breast (50mm each)
 - 2 left axillary lymph nodes
 - 2 left supraclavicular lymph nodes
 - 3 left cervical lymph nodes









Case 3

- Classification after PET/CT: T4 N3c M0/1 (left cervical lymph nodes)
- Neoadjuvant chemotherapy
- Mastectomy + axillary clearance + supraclavicular lymph nodes dissection:
 - IDC (several foci)
 - Axillary dissection: 7N+/7N
 - Supraclavicular dissection: 4N+/7N

Case 3 – adjuvant treatment

- Radiation therapy
 - Chest
 - left axillary area , left supraclavicular area, left cervical area and left internal mammary chain
- Tamoxifen
- Recurrence 30 months later (right axillary lymph nodes)

⦿ *Thank You*