

Cases of locally advanced breast cancer treated by chemoembolization.

Institute for Image Guided Therapy, Osaka Japan



Disclosures: No COI

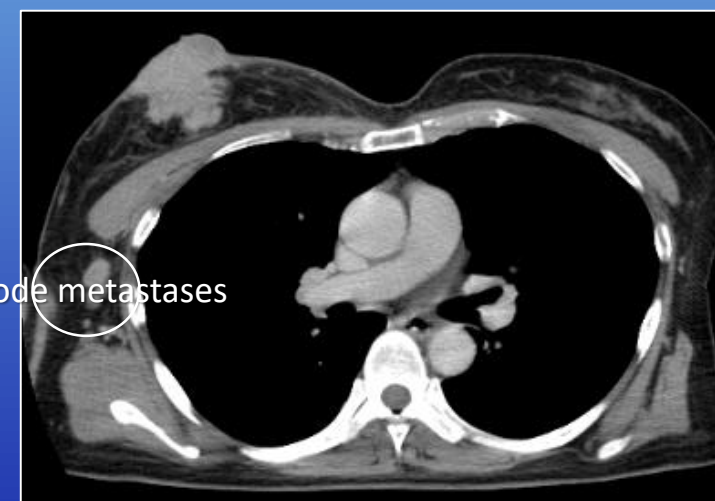
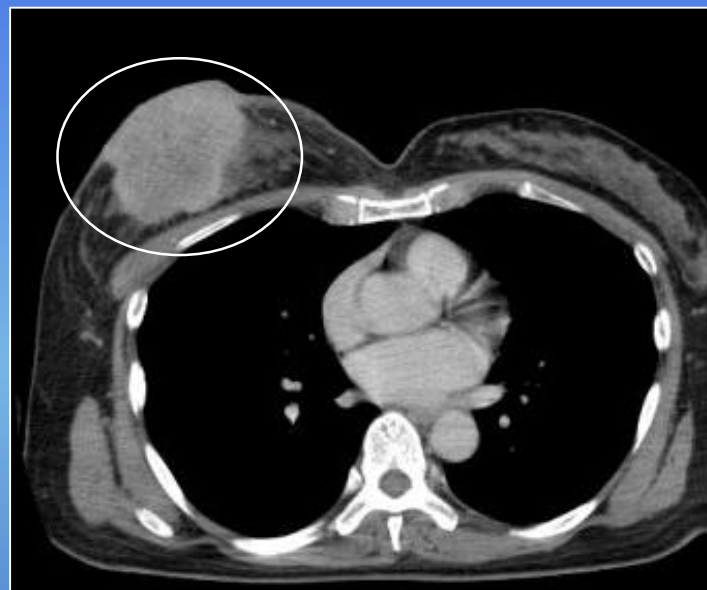
CASE 1; 51 y/o F T4N1M1 Clinical History / Pre-treatment Imaging

Clinical history

- A 51- year-old female
- 2019.09 Invasive ductal carcinoma, Ki-67:34% by core needle biopsy. Triple negative. She had never taken the standard therapy.
- 2021.11 Protruding tumor with active bleeding and tumor infection.
- 2022.01.26 Consulted IGT Clinic. Clinical symptoms; local pain, bleeding from tumor. tumor infection
- Blood tests; Alb;4.3 g/dl, WBC;49, Hg;11.2 g/dl, CEA;6.0 ng/ml, CA15-3;30 U/ml.
- CT examination; Extruding tumor;76X55mm, no chest wall invasion. Axillary lymph node metastases. Distant metastases; multiple small nodules in the right lung.
- UICC; T4N1M1

Symptoms

- Arterial bleeding
- Local pain
- Tumor infection
- Erythema



CASE 1; 51 y/o F T4N1M1 Treatment / Results

One month

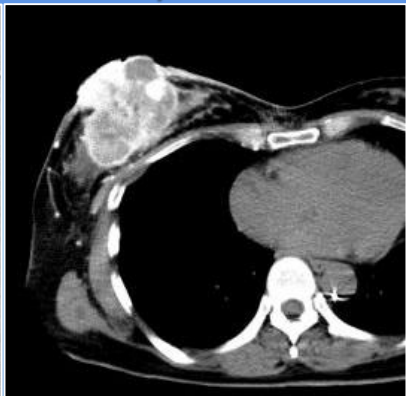
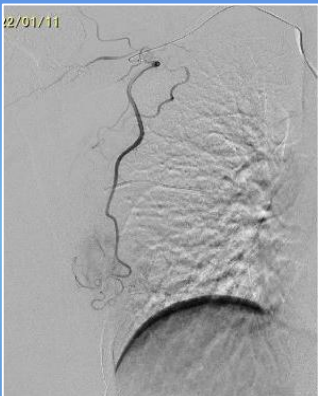
2 months

3 months

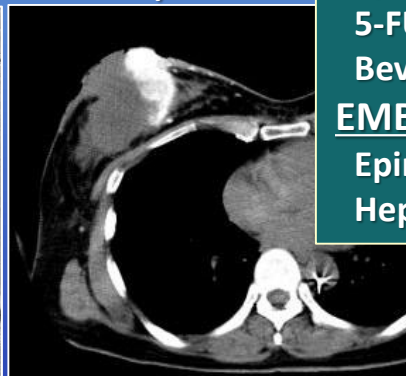
8 months

23 months

Pectoral branch of the thoracoacromial artery

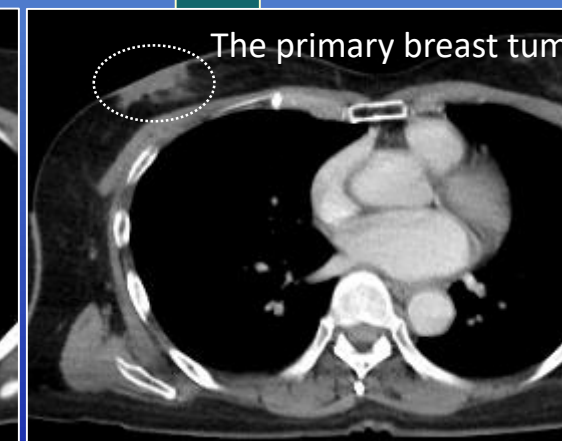
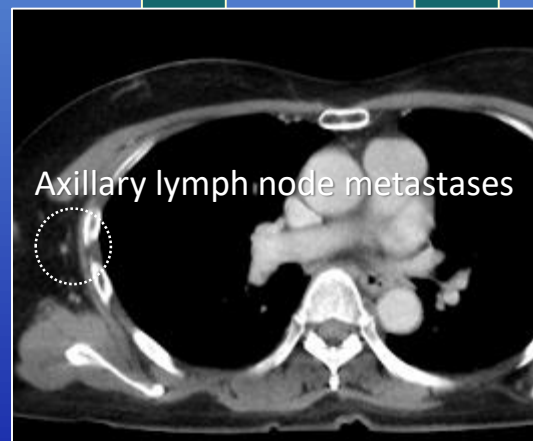


The 2nd mammary branch of internal thoracic artery



INFUSION
Epirubicin;20mg
5-FU;500mg
Bevacizumab;100mg
EMBOLOZATION
Epirubicin loaded
HepaSphere;12.5mg

27 months after the initial treatment



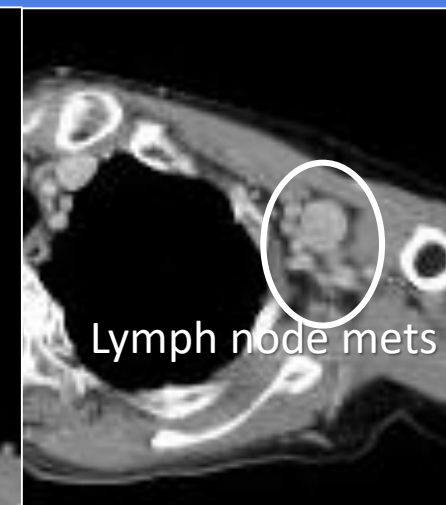
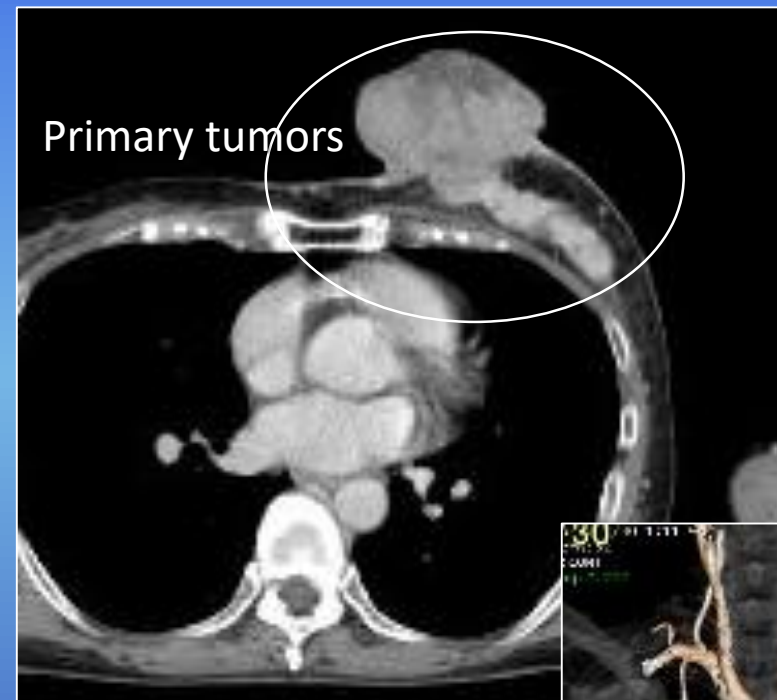
CASE 2; 68 y/o F T4N1M0 Clinical History / Pre-treatment Imaging

Clinical history

- Diagnosed in 2020
- Protruding tumor in 2022
- Previously untreated
- Invasive ductal carcinoma
- ER;(-), PgR;(-), Her2;(3+)
- No evidence of distant metastases

Symptoms

- Protruding tumor
- Arterial bleeding
- Local pain
- Tumor infection



INFUSION

Epirubicin;20mg
5-FU;500mg
Bevacizumab;100mg

EMBOLOZATION

Epirubicin loaded
HepaSpheres; 8.7mg

CASE 2; 68 y/o F T4N1M0 Treatment / Results



After one month

INFUSION
Docetaxel
5-FU;500
Bevacizumab
EMBOLO
Epirubicin
HepaSphere; 2.5mg

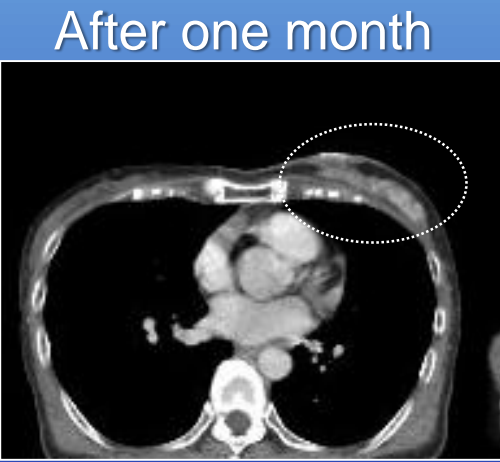


After 2 months

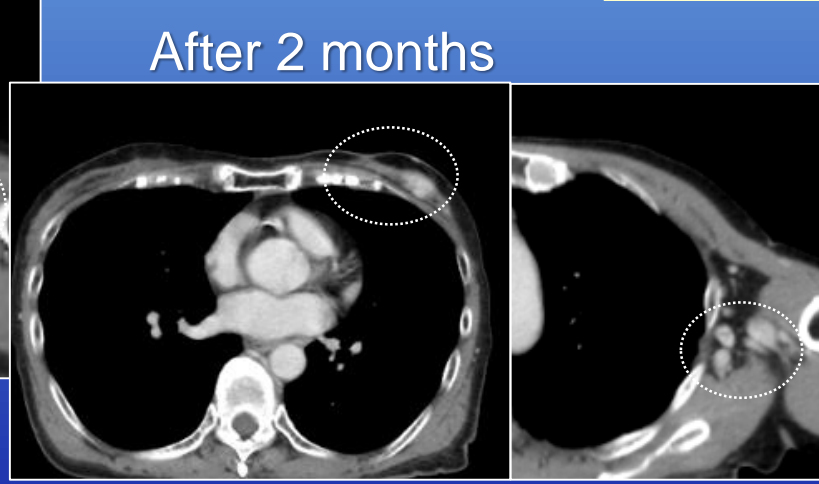
INFUSION
Docetaxel
5-FU;500
Bevacizumab
EMBOLO
Epirubicin
HepaSphere; 2.5mg



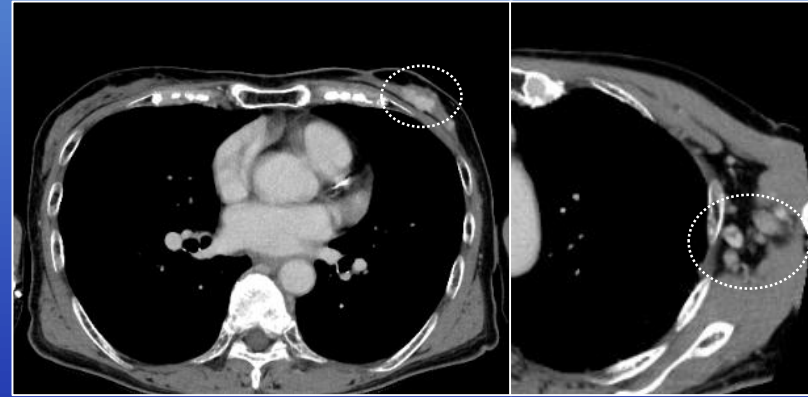
After 14 months



After one month



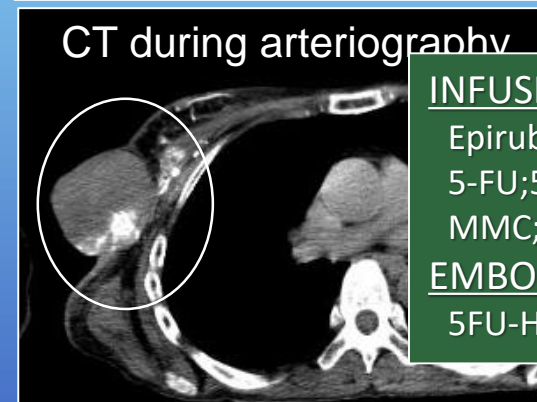
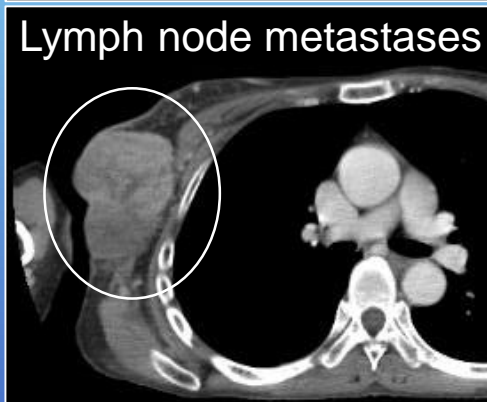
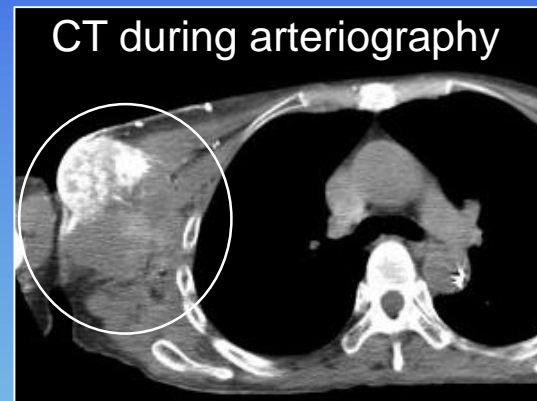
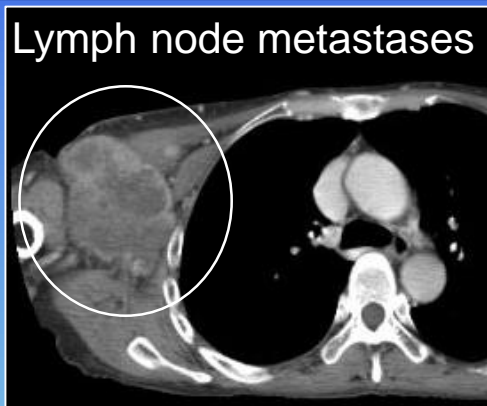
After 2 months



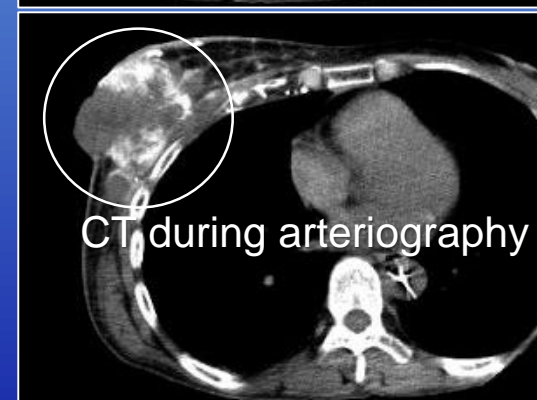
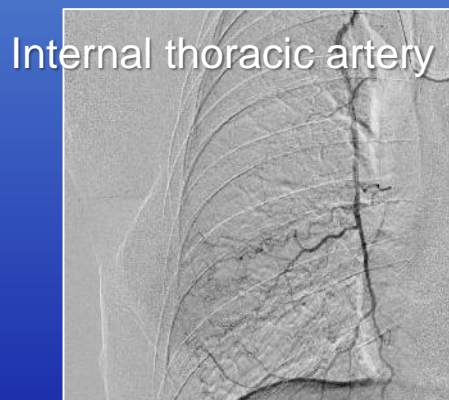
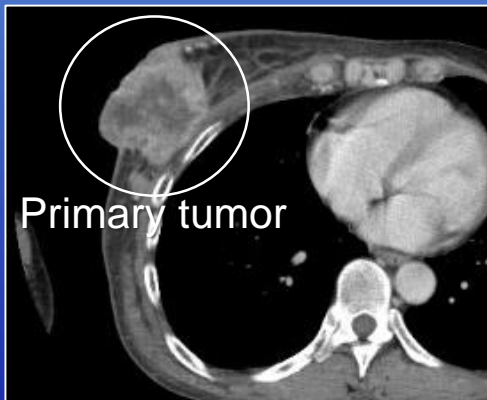
After 14 months

CASE 3; 57 y/o F T4N2M0 Clinical History / Pre-treatment Imaging

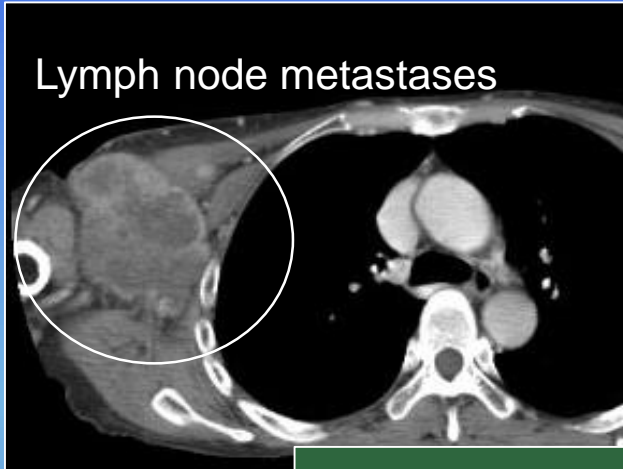
- Previously untreated
- No histopathological evaluation
- Extensive tumor with axial lymph node metastases
- No evidence of distant metastases



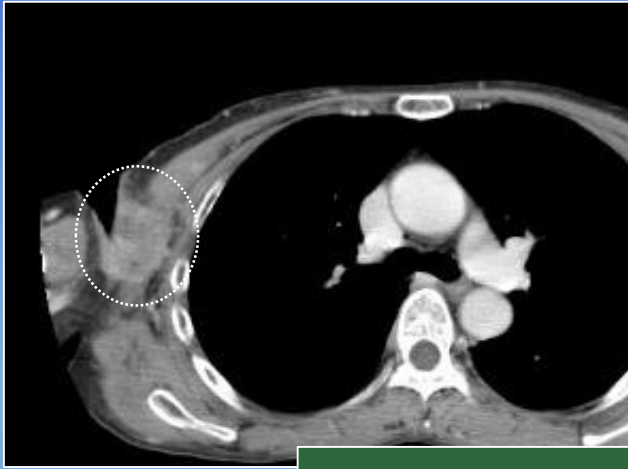
INFUSION
Epirubicin;30mg
5-FU;500mg
MMC;6mg
EMBOLOZATION
5FU-HS;9.0mg



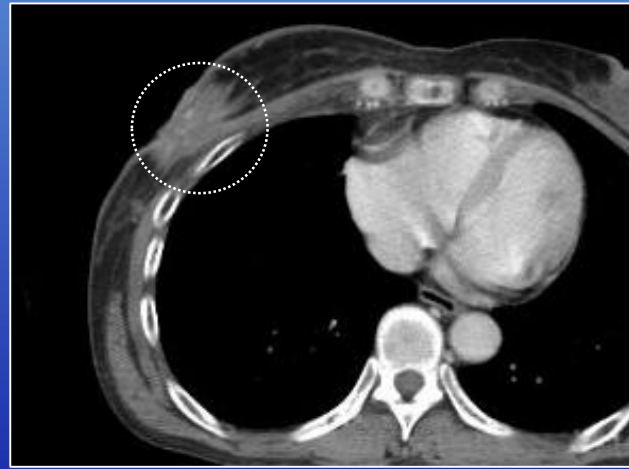
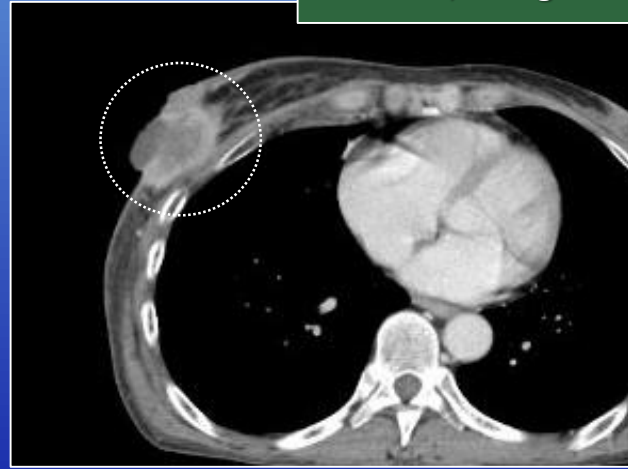
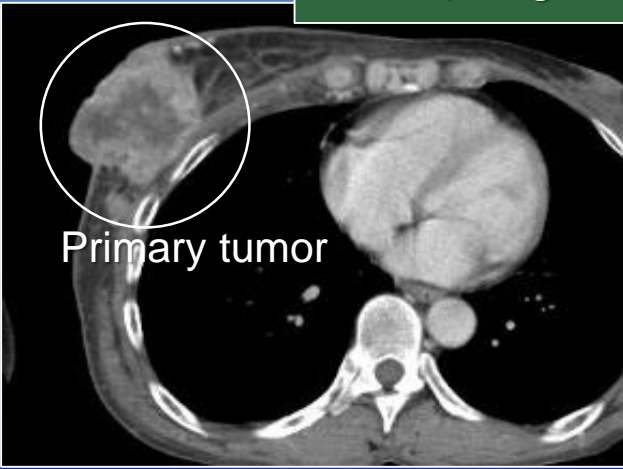
CASE 3; 57 y/o F T4N2M0 Treatment / Results



INFUSION
Epirubicin;30mg
5-FU;500mg
MMC;6mg
EMBOLOZATION
5FU-HS;9.0mg



INFUSION
Epirubicin;30mg
5-FU;500mg
MMC;6mg
EMBOLOZATION
5FU-HS;4.0mg



➔ In one month

➔ Two months after treatment

Discussion

- It is not uncommon to see patients who have locally advanced breast cancer without any standard treatments by some reasons.
- Standard therapies for T3 and T4 patients are usually not sufficient to improve symptoms and to extend prognosis.
- Trans-arterial treatment is still applicable for patients with many kinds of symptoms.
- Trans-arterial treatment can offer satisfactory results with minimum adverse events.
- Diagnostic imaging to identify the arterial anatomy to the tumors and lymph node is helpful to get good results.
- Infusion of anti-cancer drugs with a microcatheter to the target lesions is feasible.
- Angio-CT is useful to allocate drugs to the tumors.
- Anti-neoplastic agents are standard drugs for breast cancer with small doses.
- Spherical embolic material is indispensable to avoid adverse events.
- It is necessary to repeat the procedure to get better results.

Take Home points

- Diagnostic imaging including 3-D reconstruction of subclavian artery and Angio-CT during the procedure are indispensable.
- The lesions including breast tumor and lymph node metastases can be treated by chemoembolization therapy.
- Spherical embolic material is indispensable to get better results.
- Primary breast cancer in advanced stages can be managed by the transarterial approach improving the symptoms and extend patients' life span.