

**4th International Congress
of Breast Disease Centers 2014**

Diagnosis and surgical treatment of DCIS depending on women's age



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DCIS: Diagnosis

Main findings DCIS:

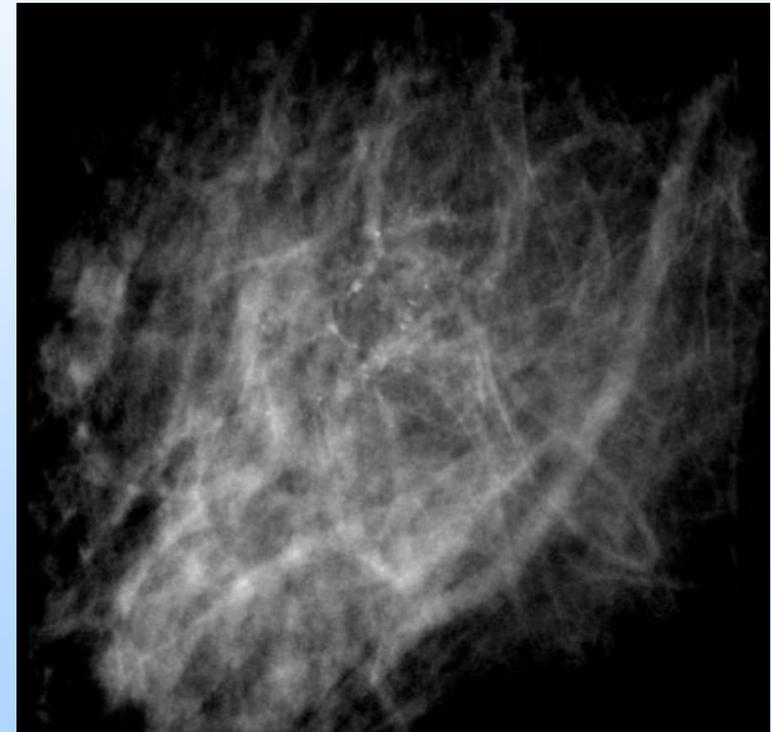
Microcalcification in Mammography

Objectivable by

- pattern, number and form of microcalcification

But also:

- DCIS without microcalcification
- difference in density compared to healthy side



Pretherapeutic clarification of suspicious lesions:

Mammography ++

Stereotactic breast biopsy ++



Interdisciplinary tumor board presentation ++

Magnetic resonance imaging?



- different experiences and opinions
- results depending on respective radiologist



- ▶ **Method not yet suitable as guideline**

Women > 50 and < 70 Years:

in Germany secured by mammographic-screening-program



- voluntary participation, invitation every 2 years
- in case of noticeable finding: Clarification by ultrasound, stereotactic breast biopsy

But what about Women



< 35 years?

> 70 years?



Germany:

General gynaecological early detection examination: Once a year above the age of 20

- detailed anamnesis
- gynaecological examination including pap smear
- inspection/palpation breast/lymph nodes
- instruction self-examination/-palpation

▶ Imaging methods no part of
general gynaecological early detection examination



DCIS-Detection < 35 /> 70 Years?



- **clarification in case of suspicious palpation or clinical symptoms** (nipple secretion, skin changes/ Paget's disease)
- **chance findings** (tissue histology in case of surgical correction (malformation, reduction surgery))
- **imaging diagnostics** in case of familial breast cancer or as private service



Women < 35 Years

Problems in diagnosis:

▶ **Ultrasound:**

- preferred method for dense breast tissue, not suitable for reliable detection of microcalcification
- no part of general gynaecological early detection
- just in case of clinical symptoms covered by health insurance



Women < 35 Years

Problems in diagnosis:

► **Mammography:**

- reliable detection of microcalcifications but not suitable for younger women with very dense breast tissue
- radiation exposure





Women > 70 Years

Problems in diagnosis:

- no longer target of mammography screening
- imaging methods no part of general gynaecological early detection examination
- elderly women often quit gynaecological early detection

Management of DCIS

DCIS: heterogeneous disease entity

→ Controversies

“over-diagnosed and over-treated”

versus

***“risk of invasive cancer with
potential development of distant metastasis
and subsequent death”***

High Relapse Risk?

- younger women
- tumor with comedo necrosis
- grading
- large tumor size
- multifocal lesions
- (positive margins)

Goals of DCIS treatment:

- prevention of ipsilateral invasive breast cancer and in situ recurrences
- minimization of treatment-related morbidity
- acceptable cosmetic outcomes

→ health & life quality



Radiation therapy?

Radiation therapy?

Antihormonal therapy?

Radiation therapy?

Antihormonal therapy?

Surgery? Surgery!

DCIS: Surgical Therapy

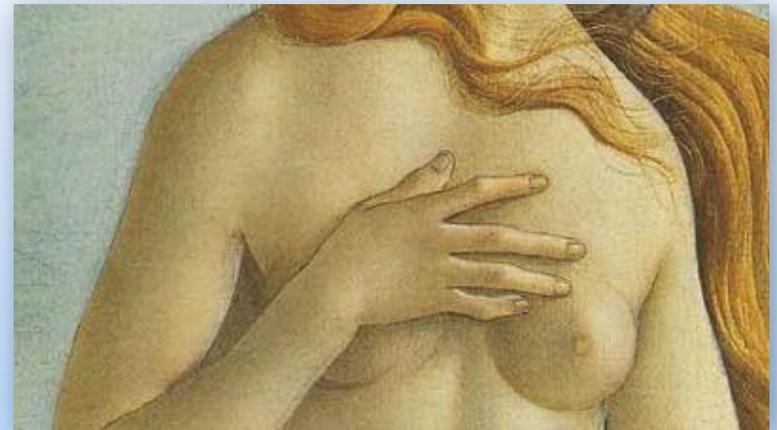
Surgical treatment of DCIS:



oncological safety \geq cosmetic result and quality of life

Oncological Safety:

- wide excision with
free margins ++
- wire marking ++
- sample radiography ++



Oncological Safety:

- sentinel node biopsy ?
- nipple removing ?
- mastectomy ?

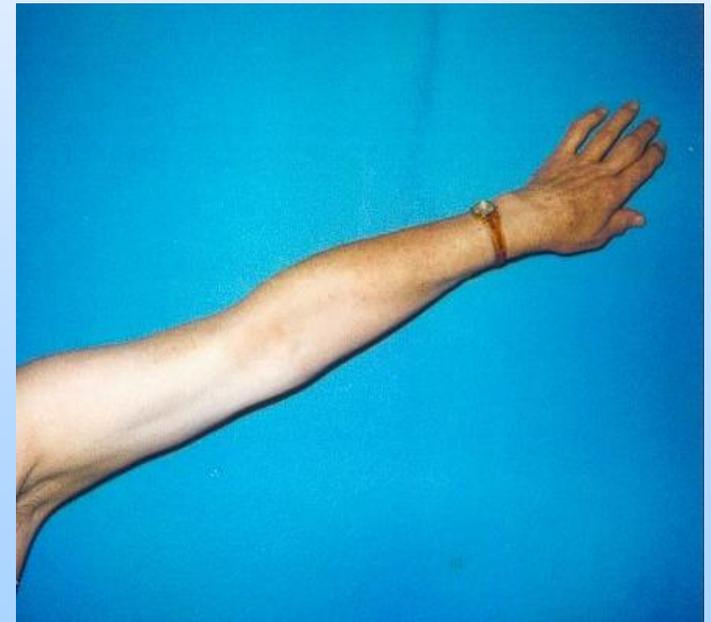


Benefits of early Stage: sentinel node biopsy or no node biopsy at all

**lymphedema after complete
axillary node dissection**



after sentinel node biopsy



Surgical Options:

- **breast-conserving surgery (BCS)**
- **modified radical mastectomy (MRM)**
- **skin sparing mastectomy (SSM)**

DCIS: Breast-Conserving Surgery (BCS)



Case Example: woman, 24 years old

▶ family anamnesis:

maternal great-grandmother
with breast cancer

▶ palpatory finding

2cm lump, upper quadrant

▶ ultrasound:

Lesion 14 x 11 x 20mm,
low echo, irregulär, BIRADS
IV, NO



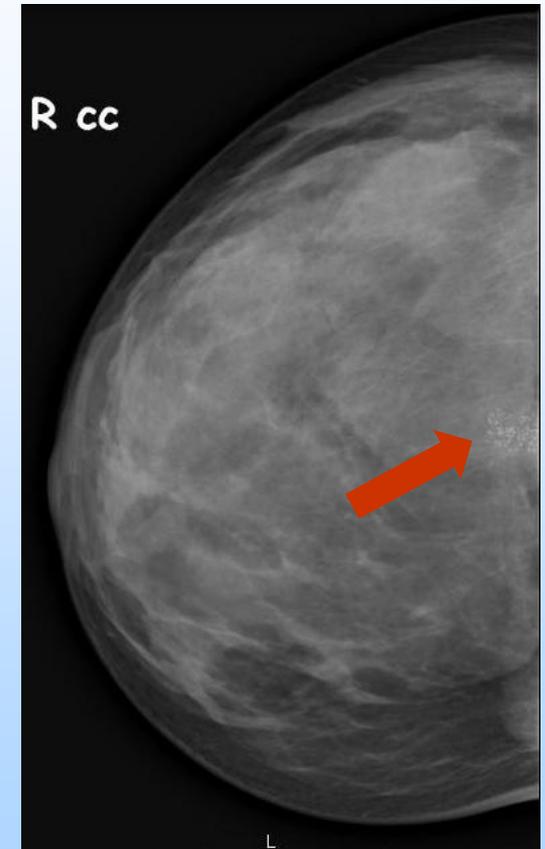
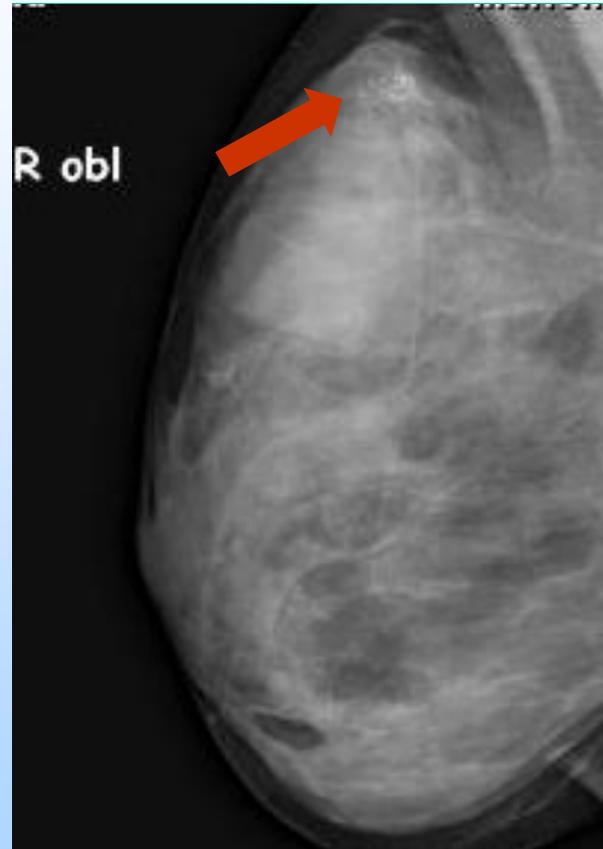
▶ histology: DCIS high grade, positive hormone receptor state



Case Example: woman, 24 years old

▶ **MGF:**
microcalcification,
polymorphe,
grouped, 2 cm

▶ **MRI:**
Corresponding
result



▶ **therapy recommendation tumorboard:**
BCS, radiation, genetic counseling



Examples BCS





Example BCS

**5 days post
operative**



DCIS:

Skin Sparing Mastectomy (SSM)



SSM





SSM & NAC-
reconstruction right,
prophylactic SSM left



SSM & NAC- reconstruction



DCIS:

Modified Radical Mastectomy

Modified Radical Mastectomy: crescent-shaped incision

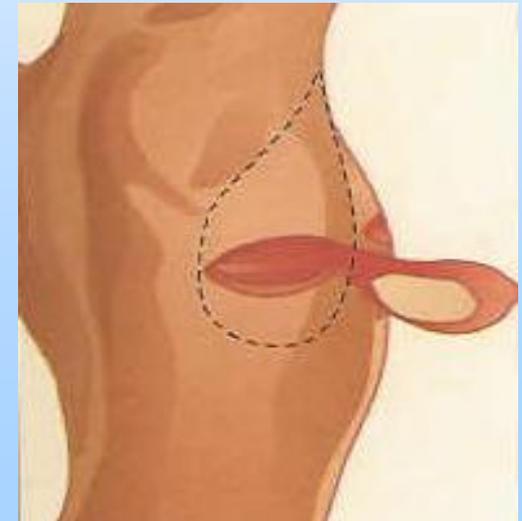
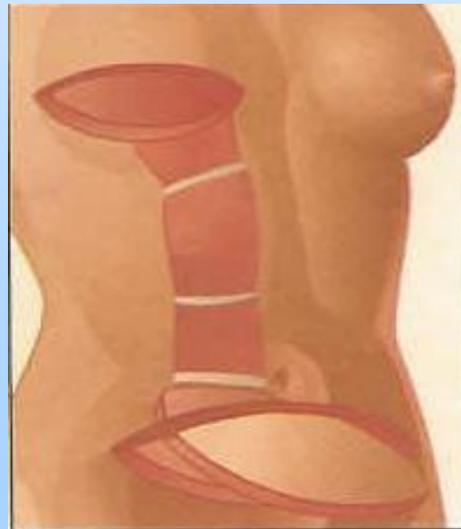


Two Possibilities of Volume Alignment:



Expander and Implant Technology

Autologous Tissue



DCIS:

Expander and Implant technology

Animation: Expander Technology





Mastectomy with prosthesis alignment & NAC-reconstruction





Mastectomy with Prosthetic Implant right & Alignment Reduction left Side





Prosthetic Implant after MRM left



Prosthetic Implant after MRM right & Alignment Reduction right





Prosthetic Implant after MRM



Prosthetic Implant after MRM



Mastectomy with Prosthesis Alignment



Reconstruction NAC





Mastectomy - Expander technology





Mastectomy with prosthesis alignment & NAC-reconstruction



Breast Reconstruction with autologous Tissue

DCIS: Indication autologous Tissue:

- substitution of large volume
- patient's wish
- insufficient skin cover
when using expander
- incompatibility of
implants/inflamed reactions



Advantages autologous Tissue:

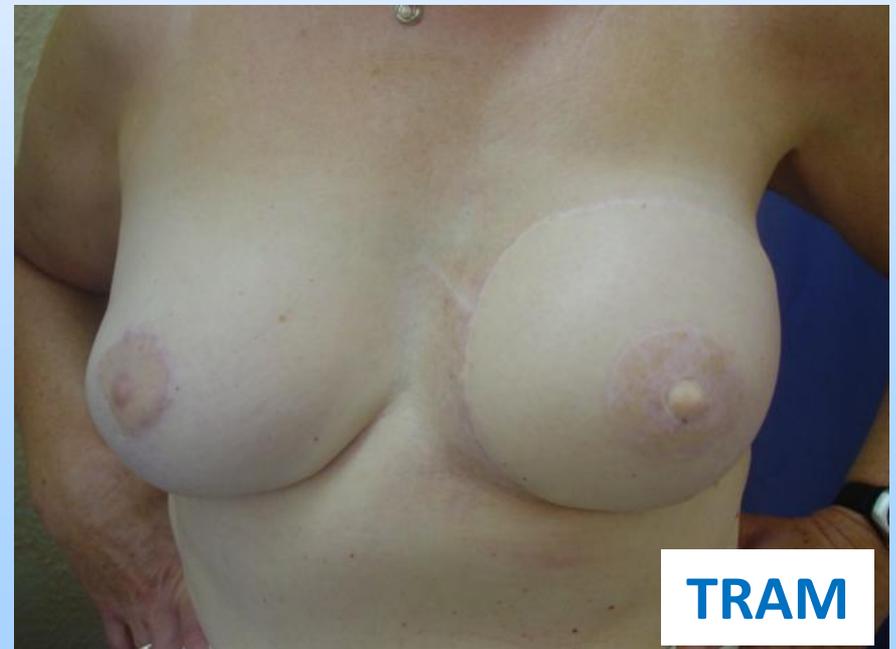


- **high oncological safety**
- **higher acceptance in the long term**

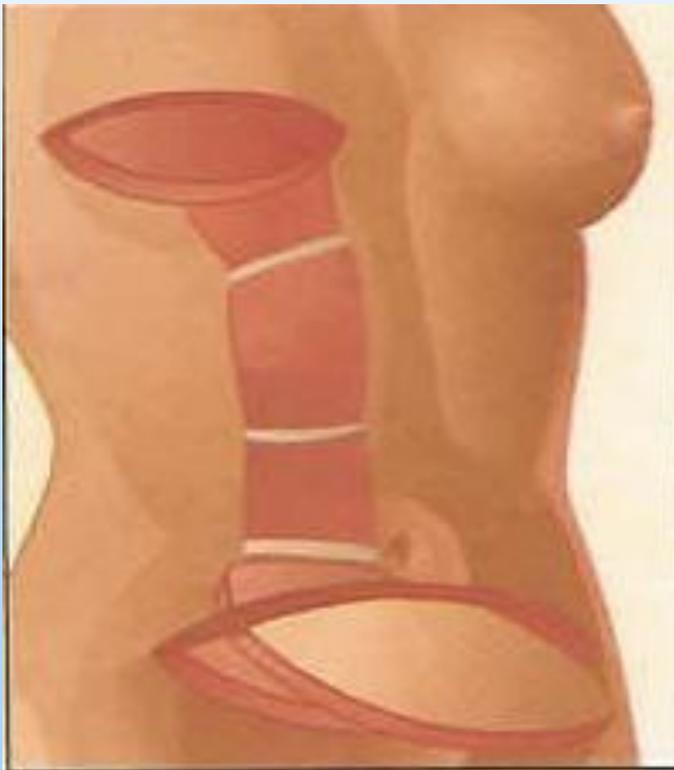
Handicap autologous Tissue:

- complex surgery
- long hospital stay
- additional cicatricials

TRAM:
suture within décolleté



Breast Reconstruction with autologous Tissue: TRAM-Flap (Transverse Rectus Abdominis Myocutaneus)



Autologous Tissue



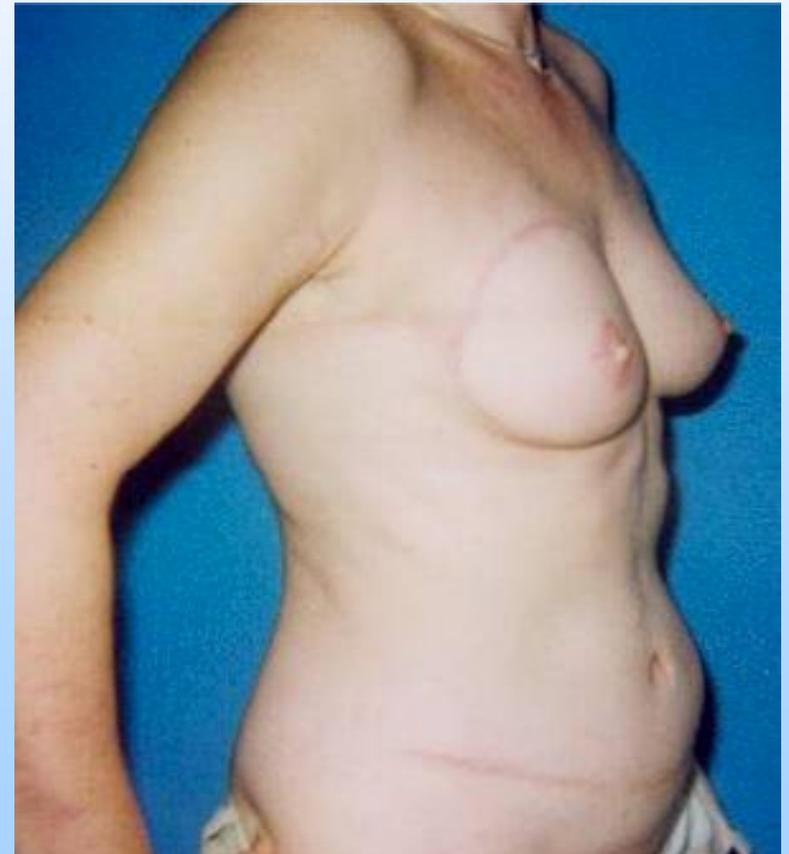
TRAM; Reconstructed NAC

Breast Reconstruction

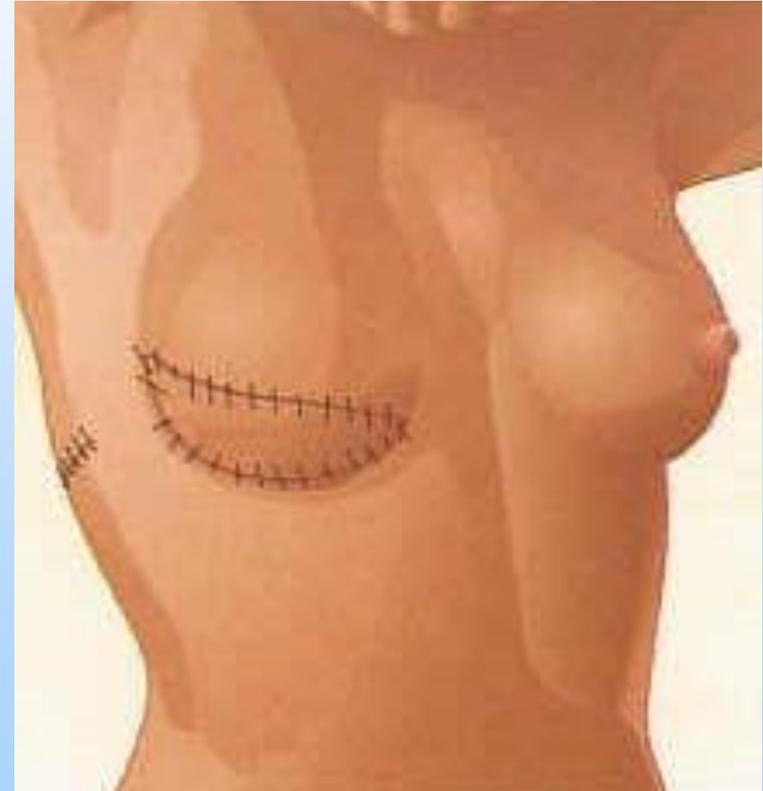
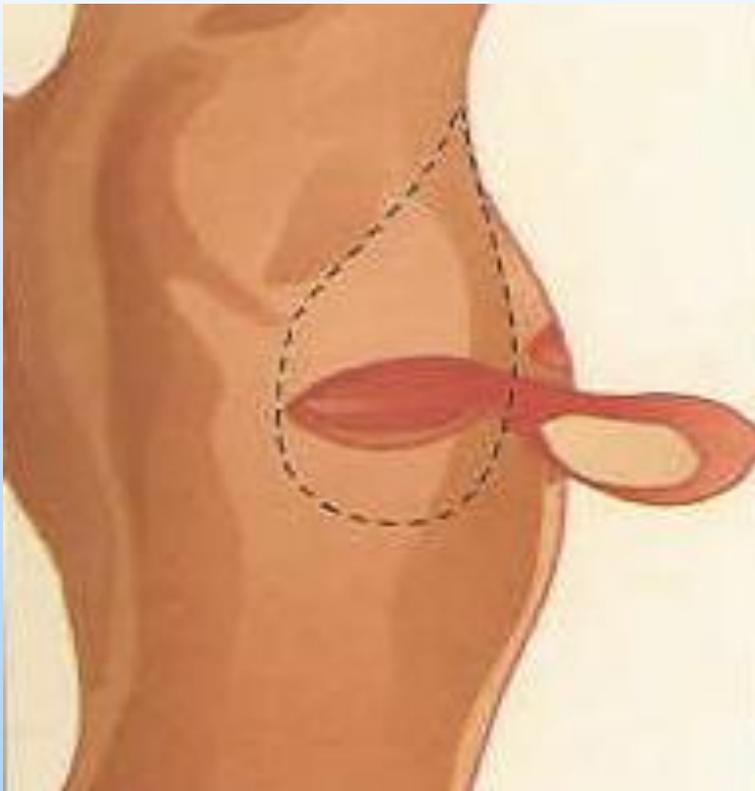
TRAM...



...and reconstructed
NAC



Latissimus Plastic Surgery



Skin Sparing Mastektomie - Reconstruction with Latissimus



Skin covering and volume alignment with Latissimus-technology



Combination:

**skin covering with Latissimus-technology,
volume alignment with implant**



Combination:

**skin covering with Latissimus-technology,
volume alignment with implant**



Conclusion

No single approach is appropriate for all patients

Decision has to consider the combination of:

- **clinical pathologic features of DCIS**
- **patient factors such as age, co-morbidities, breast size**
- **individual patient needs**



Necessary: Patient-based Decision Making