Why are Breast Units and Multidisciplinary care indispensable for BC management?

F. Cardoso, MD
Director, Breast Unit, Champalimaud Clinical Center, Lisbon, Portugal
ESMO Board of Directors & NR Committee Chair
ESO Breast Cancer Program Coordinator
EORTC Breast Group Chair
THE BURDEN OF CANCER IN THE 21st CENTURY

Mortality
Cancer is a leading cause of death worldwide, with 7.6 million deaths (around 13% of all deaths) in 2008. Half of all cancer deaths each year are due to lung, stomach, liver, colorectal and female breast cancers¹.

13% of all deaths in 2008: 7.6 million people!

IARC 2008
THE BURDEN OF CANCER IN THE 21st CENTURY

2030: an estimated **13.1** million deaths/year

Soon, **1 OUT OF 2 PEOPLE** WILL GET CANCER IN THEIR LIFETIME

Globocan 2012
THE BURDEN OF CANCER IN THE 21st CENTURY

561,334 deaths worldwide in 2015 and an estimated **805,116 by 2030**, representing a 43% increase in absolute number of deaths from BC.

Most prevalent cancer by country – females

1. **Breast** 145 countries worldwide
2. **Cervix** 37 countries in South & Central America, West & Southern Africa, Asia
3. **Thyroid** South Korea, Vanuatu
Breast Cancer

Despite ↑ incidence - ↓ mortality

* Screening & early diagnosis
* Education & advocacy
but also
* Better treatment options
* Better treatment strategies
Only 1 out 4 ABC pts are alive at 5 years!

Median OS: 2 to 3 years!

In Europe:
1 diagnosis every 2,5 minutes
1 death every 6,5 minutes
MULTIDISCIPLINARY TEAM
Indispensable for EBC
LABC
MBC

In CLINICAL PRACTICE & RESEARCH
MULTIDISCIPLINARY TEAM MEETING (MDT)

DEFINITION FROM THE UK DEPARTMENT OF HEALTH
(in the UK, MDTs are MANDATORY by law)

“A group of people of different health care disciplines which meets together at a given time (whether physically in one place or by video or teleconferencing) to discuss a given patient and who are each able to contribute independently to the diagnostic and treatment decisions about the patient.”

DECISION MAKING TEAM

Taylor et al, Breast Cancer: Targets and Therapy 2013:5 79–85
What a multidisciplinary meeting should NOT be:

- SURGERY
- MEDICAL
- ONCOLOGY
- PATHOLOGY
- RADIOTHERAPY
Guidelines on the standards for the training of specialised health professionals dealing with breast cancer


The requirements of a specialist Breast Centre

Breast core team member: Radiologist, radiographer, surgeon, reconstructive surgeon, pathologist, medical oncologist, radiation oncologist, breast care nurse and data manager consistently spending at least part of their working time in breast cancer
The requirements of a specialist Breast Centre

The Breast Centre must hold at least weekly a multidisciplinary case management meeting (MDM) to discuss diagnostic preoperative and postoperative cases, as well as any other issue related to breast cancer patients, which requires multidisciplinary discussion. The Breast Centre must discuss at least 90% of all breast cancer cases at MDM.

... the following team members must be present: radiologist, pathologist, medical oncologist, surgeon/oncoplastic surgeon, breast care nurse and radiation oncologist. ... The other team members should be encouraged to attend and, in any case, should be reachable for consultation.
MULTIDISCIPLINARY TEAM MEETING (MDT)

• Many studies have shown the benefits of receiving treatment from a **specialist center**, and evidence continues to accrue from comparative studies of **clinical benefits of an MDT approach**, including **improved survival**.

• Yet we **lack randomized controlled trials** (very difficult to perform since MDTs are already implemented)

Taylor et al, Breast Cancer: Targets and Therapy 2013:5 79–85
Contemporaneous comparative design (thereby overcoming temporal bias); provided by the introduction of MDT-work in one but not other health boards in a region of Scotland.

Adjusting for case mix (including year of incidence, age at diagnosis, and deprivation), breast cancer mortality was 11% higher in the intervention area compared with other areas in the region, but after MDTs were introduced, mortality was 18% lower than the other areas.
CRUCIAL IMPORTANCE OF EXPERIENCE

Effect of hospital volume on processes of care and 5-year survival after breast cancer: A population-based study on 25 000 women

France Vrijens a,*, Sabine Stordeur a,*, Koen Beiren b,d, Stephan Devriese a,c, Elizabeth Van Eycken b,d, Joan Vlayen a,c

a Belgian Health Care Knowledge Centre (KCE), Boulevard du Jardin Botanique, 55, B-1000 Brussels, Belgium
b Belgian Cancer Register, Koningstraat 215, B-1210 Brussels, Belgium

< 50 bcp  vs  > 150 bcp
75%  vs  84% survival at 5 years

Conclusion: Survival benefits reported in high-volume hospitals suggest a better application of recommended processes of care, justifying the centralization of breast cancer care in such hospitals.
One of the most important recommendations: **DISCUSS ALL EBC CASES IN A MDT!**

Hebert-Croteau, et al. JCO 2004
MULTIDISCIPLINARY TEAM MEETING (MDT)

• **BARRIERS** to effective teamwork and poor decision-making: excessive caseload, low attendance at meetings, lack of leadership, poor communication, role ambiguity, and failure to consider patients’ holistic needs.

• Existent **PROBLEMS**:
  • a) MDT are **not universally present**;
  • b) **most lack national or regional guidelines** regarding composition or practice to ensure consistency of provision;
  • c) often are **solely “medically” focused** (forgetting nurses, social workers, nutritionists, or palliative care specialists)

Taylor et al, Breast Cancer: Targets and Therapy 2013:5 79–85

MOST FREQUENTLY ONLY EBC CASES ARE DISCUSSED!
MULTIDISCIPLINARY TEAM
Indispensable for EBC
NEOADJUVANT SETTING

15 days

4 - 6 months

Systemic therapy
Overall survival as a function of response to neoadjuvant PCT

Liedtke C et al, J Clin Oncol, 2008, 26:1275
Evaluate Clinical-Pathological risk and 70-gene signature risk

- Clinical-pathological and 70-gene both HIGH risk
  - Discordant cases
    - Clin-Path HIGH
    - 70-gene LOW
    - Clin-Path LOW
      - 55%
  - Clinical-pathological and 70-gene both LOW risk
    - 32%
  - 13%

N=3300

RESULTS PRESENTED AT AACR 2016 & PUBLISHED IN NEJM 2016

Use Clin-Path risk to decide Chemo or not
Use 70-gene risk to decide Chemo or not

Chemotherapy
Endocrine therapy

Potential CT sparing in 10-15% pts

N=780
MOLECULAR CLASSIFICATION OF BREAST CANCER

THE ROLE OF THE MOLECULAR BIOLOGIST IN THE MULTIDISCIPLINARY TEAM
MULTIDISCIPLINARY TEAM
Indispensable for LABC
Systemic therapy (not surgery or RT) should be the initial treatment.

If LABC remains inoperable after systemic therapy and eventual radiation, “palliative” mastectomy should not be done, unless the surgery is likely to result in an overall improvement in quality of life.

(LoE: Expert opinion) (100%)

A combined treatment modality based on a multidisciplinary approach (systemic therapy, surgery and radiotherapy) is strongly indicated in the vast majority of cases. (LoE: I A) (100%)
INFLAMMATORY LABC

For inflammatory LABC, overall treatment recommendations are similar to those for non-inflammatory LABC, with systemic therapy as first treatment. (LoE: I B) (93%)

Mastectomy with axillary dissection is recommended in almost all cases, even when there is good response to primary systemic therapy. (LoE: I B) (95%)

Immediate reconstruction is generally not recommended in patients with inflammatory LABC (LoE: Expert opinion) (95%)

Loco-regional radiotherapy (chest wall and lymph nodes) is required, even when a pCR is achieved with systemic therapy. (LoE: I B) (98%)
MULTIDISCIPLINARY TEAM
Indispensable for MBC
The management of ABC is complex and, therefore, involvement of all appropriate specialties in a **multidisciplinary team** (including but not restricted to medical, radiation, surgical oncologists, imaging experts, pathologists, gynecologists, psycho-oncologists, social workers, nurses and palliative care specialists), is **crucial (LoE: Expert opinion). (100%)**
Treatment choice should take into account at least these factors:

- HR & HER-2 status,
- previous therapies and their toxicities, disease-free interval,
- tumor burden (defined as number and site of metastases),
- biological age, performance status, co-morbidities (including organ dysfunctions),
- menopausal status (for ET),
- need for a rapid disease/symptom control.

**INDISPENSABLE PRESENCE OF OTHER HEALTH CARE PROFESSIONALS (besides physicians) IN THE MULTIDISCIPLINARY TEAM**

TAILOR FOR THE PATIENT  TAILOR FOR THE DISEASE
both biologically and clinically

Target

INDIVIDUALIZED TREATMENT
To date, the removal of the primary tumor in patients with de novo stage IV breast cancer has not been associated with prolongation of survival, with the possible exception of the subset of patients with bone only disease. *(LoE: 1B)*

However, it can be considered in selected patients, particularly to improve quality of life, always taking into account the patient’s preferences.

Of note, some studies suggest that surgery is only valuable if performed with the same attention to detail (e.g. complete removal of the disease) as in patients with early stage disease. *(LoE: 2 B) (71%)*

 Additional prospective clinical trials evaluating the value of this approach, the best candidates and best timing are currently ongoing.
A small but very important subset of patients with ABC, for example those with oligo-metastatic disease or low volume metastatic disease that is highly sensitive to systemic therapy, can achieve complete remission and a long survival. A multimodal approach, including local-regional treatments with curative intent, should be considered for these selected patients. (LoE: Expert opinion) (91%)

A prospective clinical trial addressing this specific situation is needed.
A multi-disciplinary discussion including neurosurgeons, radiation oncologists and medical oncologists is indispensable in determining the optimal treatment for each patient.

The treatment plan can also be a combination of these three available therapeutic approaches (surgery, RT, radiosurgery).

THE SAME FOR BONE, LIVER, CHEST WALL METASTASES, ....
Optimal COLLABORATION is crucial

TEAM WORK

THE BEST EXPERTISE IN EACH FIELD
DECIDING TOGETHER, FOR THE
BENEFIT OF THE PATIENT!
European breast units manifesto

Theme:

Access to specialist, multidisciplinary breast cancer units (or centres or services)
European breast units manifesto

Manifesto – *CALL TO ACTION*

- **The 2016 deadline** for all patients in European Union countries to access specialist, multidisciplinary breast cancer units, or centres, will be missed by most countries, despite numerous resolutions and declarations issued since the year 2000 that have called for universal specialist services.

- This means that many women, and some men, do not receive optimal breast cancer care in Europe.

- We call on policymakers and politicians to ensure, as soon as possible, that all women and men with breast cancer in Europe are treated in a specialist breast unit.

- There is still time for a major step forward in 2016.
In 2013 started the collaboration with ITALCERT in order to develop a scheme called «Breast Centres Certification» according to EUSOMA requirements.

www.breastcentrescertification.com

Certification procedures in compliance with the European Regulation
UNI CEI EN 45011-1999
UNI EN ISO 19011-2003

Courtesy L. Cataliotti & L Marotti/EUSOMA
The European Commission (EC), in response to the Council of the European Union's conclusions on reducing the burden of cancer, initiated a ground-breaking project to develop a European quality assurance (QA) scheme for breast cancer services underpinned by accreditation and referring to high quality, evidence-based guidelines.

• Will still be volunteer-basis
• Will cover all spectrum of cancer services
There is nothing more fulfilling in your job than working with the best team in the world!
European breast units manifesto

To do this, we ask that policymakers and politicians, together with healthcare professionals and patient advocates:

- **Promote**, in public and professional settings, the evidence that breast units staffed with specialist multidisciplinary teams deliver superior care and quality of life to women and men with breast cancer.

- **Acknowledge** the evidence that treatment in multidisciplinary units leads to overall cost savings as well as higher quality of care.

- **Audit** the current national provision of breast cancer care using accredited auditors.

- **Implement mandatory reimbursement and care models** that mean treatment can only be carried out in specialist breast units.

- **Introduce** a breast unit quality scheme that is certified by accredited bodies.

- **Join** European-wide scientific societies and groups that promote the availability and quality of breast units, and together commit to providing access to such units for all patients.
Position Paper

Quality indicators in breast cancer care

M. Rosselli Del Turco a, *, A. Ponti b, U. Bick c, L. Biganzoli d, G. Cserni e, B. Cutuli f, T. Decker g, M. Dietel c, O. Gentilini h, T. Kuehn k, M.P. Mano j, P. Mantellini i, L. Marotti a, P. Poortmans l, F. Rank m, H. Roe n, E. Scaffidi h, J.A. van der Hage o, G. Viale p, C. Wells q, M. Welnicka-Jaskiewicz r, Y. Wengstöm s, L. Cataliotti t