

# 221P – EARLY AND LATE BREAST CANCER RECURRENCE – DIFFERENCE AND THE RELATION WITH ADHERENCE TO

## MEDICAL STANDARDS

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### Background:

Breast cancer recurrences (BCR) are among the leading causes of deaths related to this malignancy's progression.

To these date no analyses have reported differences in the characteristics between early and late local recurrences and the relation to their rate according to the level of adherence to medical standards (MS).

### Methods:

Prospective comparison study - 132 patients with early BCR and 131 patients with late BCR (> 5 years after primary surgery)

Primary breast cancers (BC) were treated in many different hospitals.

The level of adherence to MS was assessed by some of quality indicators (QIs) adopted by EUSOMA - 4a, 10a, 10b, 10c, 11a, 11c, 12, 13a, and 13b.

### Results:

Time interval between the primary tumor (PT) and EARLY BCR - from 1 month to 5 years.

Time interval between the PT and LATE BCR - from 6 to 36 years.

Median age - 45,2 years at the time of first diagnosis.

Table 1. Hormonal characteristics of early and late BCR

	Early BCR	Late BCR
ER (+) with high titers (≥50 %)	60,5%	71,3%
PgR (+)with high titers (≥50 %)	33,2%	41,6%
HER2 (-)	83,3%	87,02%

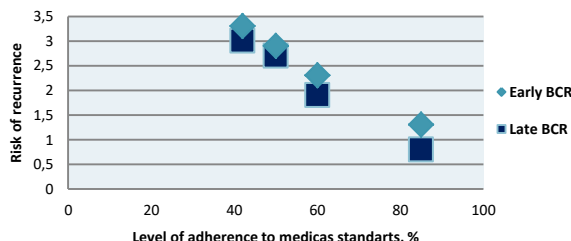
Figure 1. Family history for breast cancer of patients

Family history for BCR	Early BCR	Late BCR
	39,4%	49,6%

Table 2. Quality indicators and level of adherence to them

Quality indicators (EUSOMA)	Minimum standard	Primary tumor of early BCR: Level of adherence to QIs	Primary tumor of late BCR: Level of adherence to QIs
4a. Proportion of invasive cancer cases for which the following prognostic/predictive parameters have been recorded: histological type (according to WHO Classification of Tumours of the Breast), grading (according to WHO and EU Guidelines: Elston and Ellis modified Bloom and Richardson-Grading system Elston, CWet al. 1991), ER, PgR*, HER-2/neu, Proliferation index (Ki67)*	>95%	75.6%	83.6%
10a. Proportion of patients with invasive BC (M0) who received postoperative radiation therapy after surgical resection of the primary tumour and appropriate axillary staging/surgery in the framework of BCT	90%	87,4%	92.7%
10b. Proportion of patients with involvement of axillary lymph nodes (≥pN2a) who received post-mastectomy radiation therapy to the chest wall and all (non-resected) regional lymph-nodes	90%	80.1%	82.8%
10c. Proportion of patients with involvement of up to three axillary lymph nodes (pN1) who received post-mastectomy radiation therapy to the chest wall and non-resected axillary lymph-nodes, including level IV (supraclavicular), and in medially located tumours, the internal mammary lymph-nodes	70%	88%	91%
11a. Proportion of patients with invasive cancer and clinically negative axilla who underwent sentinel lymph-node biopsy (SLNB) only (excluding patients who received PST)	90%	20.7%	24.6%
11c. Proportion of patients (BRCA1 and BRCA2 patients excluded) with invasive breast cancer not greater than 3 cm (total size, including DCIS component) who underwent BCT as primary treatment.	70%	75%	84.5%
12. Proportion of patients with endocrine sensitive invasive cancer who received endocrine therapy	85%	81%	83,6%
13a. Proportion of patients with ER (T >1 cm or Node+) invasive carcinoma who received adjuvant chemotherapy	85%	80.4%	81,7%
13b. Proportion of patients with HER2+ (IHC 3+ or in situ hybridisation positive FISH-positive) invasive carcinoma (T>1 cm or N+) treated with chemotherapy who received adjuvant trastuzumab	85%	55.8%	62,2%

Figure 2. Risk of recurrence according to level of adherence to medical standards



### Results:

T-stage in primary tumors - 68.82% (T1a - 1,5%, T1b - 49%, T1c - 18,3%), T2 - 23,95%; 0.8% of them are in T3; T4 - 3,42%

The majority of PTs were in T1 stage: 75,76% of early recurrence and 61,8% of late BCR

N-status: Nx in 13,6% of patients with PTs and early BCR; Nx in 11,9% of patients with PTs and late BCR which leads to significant decrease in level of adherence.

PTs of early BCR: Level of adherence to MS - 71,56%

PTs of late BCR: Level of adherence to MS - 76,3%

### Conclusion:

Despite the many efforts that have been made in the quality of BC care, it would be greatly improved if we reduce recurrences. Noting the differences in characteristics between early and late local BCR and the relation to their rate according to the level of adherence to MS, can aid in the development of treatment strategies and follow-up in these at-risk patients.

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