

Clinical solid tumor oncology

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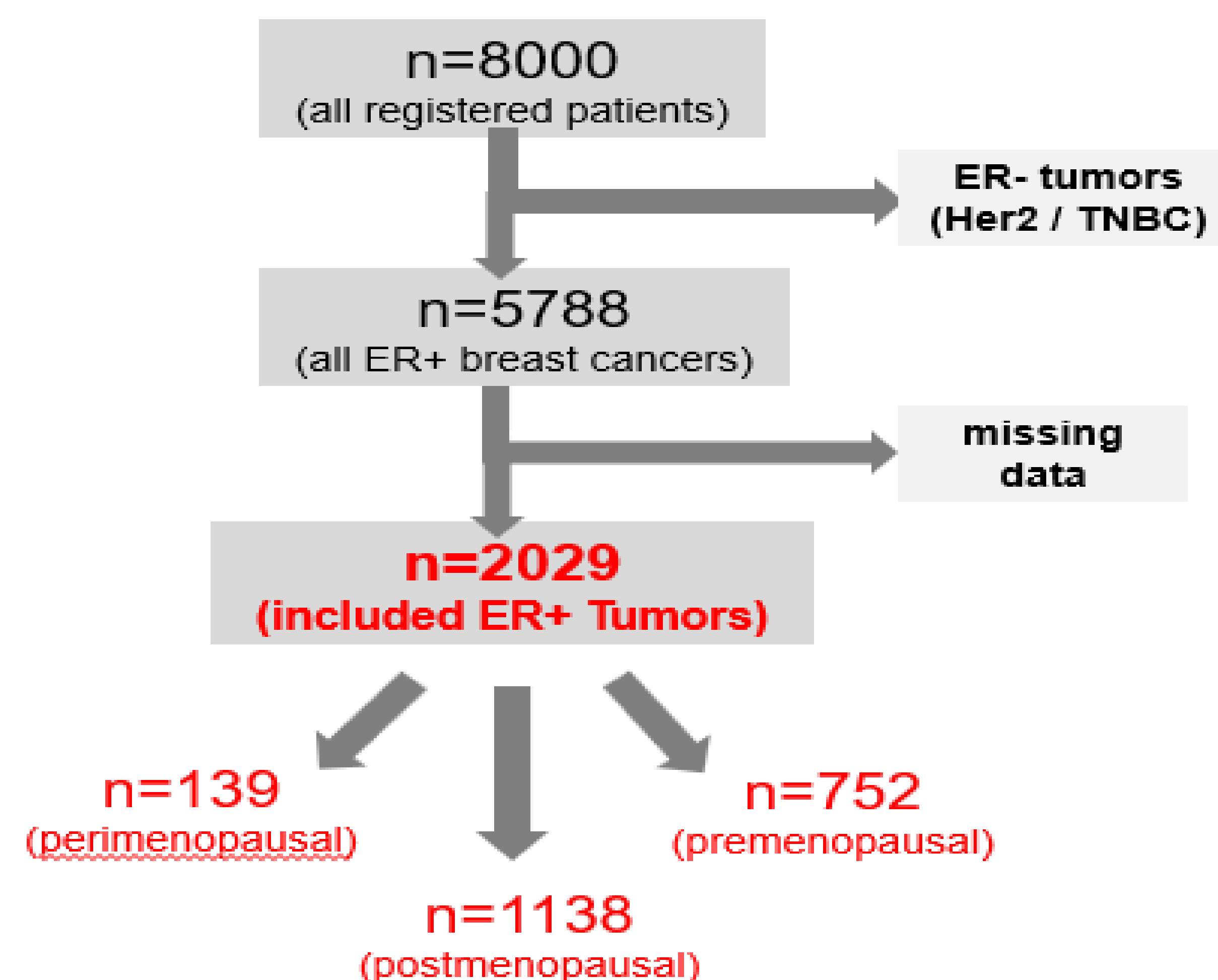
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Introduction

The significance of hormone status (pre- vs. postmenopausal) in ER+ breast cancer (BC), continues to be controversially discussed. However, clinical experience indicates that ER+ premenopausal tumors are more aggressive and genetic different than postmenopausal BC.

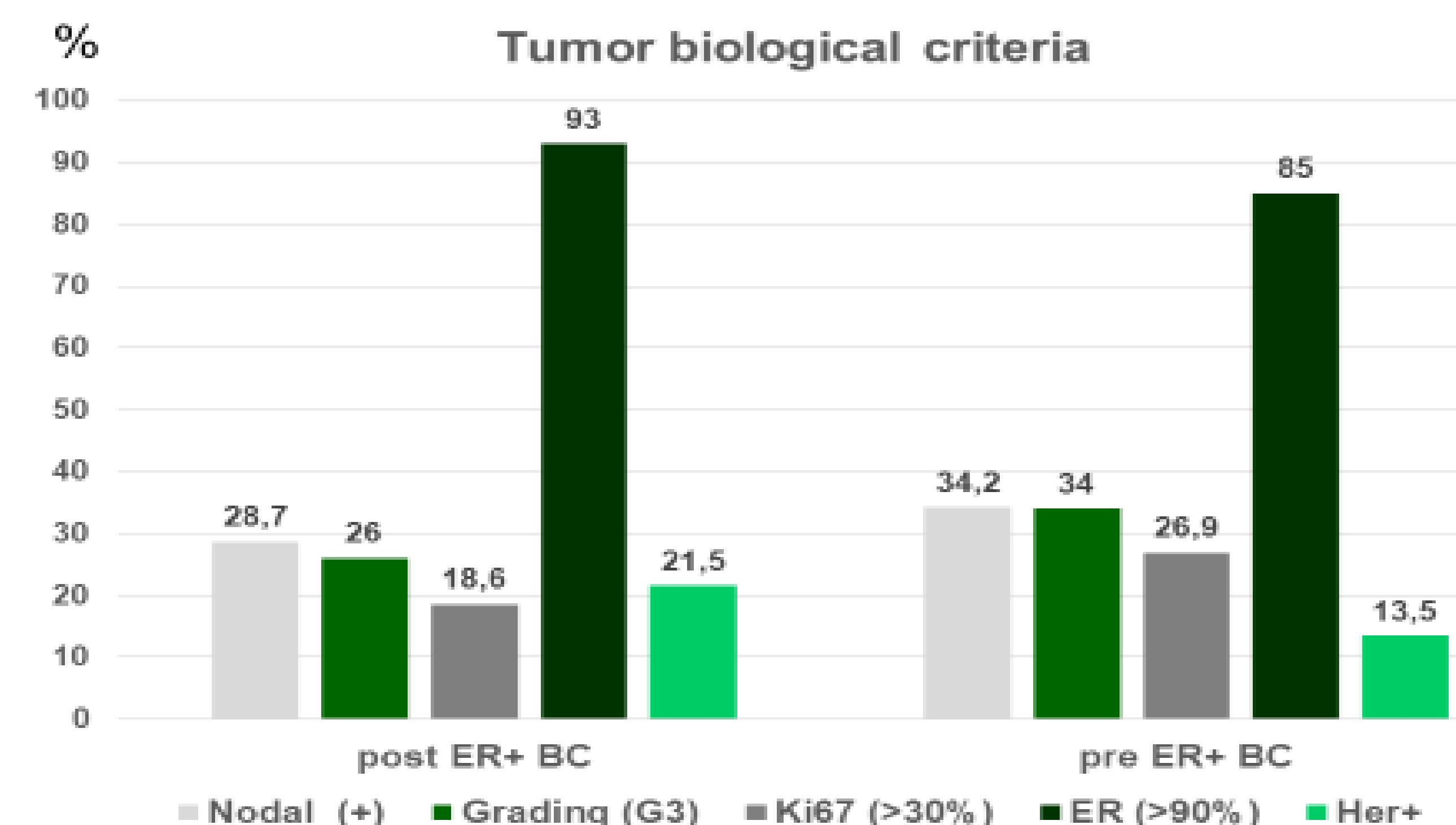
Methods

In this study, the significance of menopausal status in ER+ BC in relation to tumor biology and clinical criteria (> 40 parameters) was investigated. For this purpose, the statistical analysis (SPSS 22) of the "Scheidegger Breast Cancer Registry" (BreCaReg) of the Paracelsus Clinic in Scheidegg was carried out after written consent by the patients.



Results (I)

Due to a lack of data and exclusion criteria, 2029 cases (1138 post-, 752 pre-, 139 perimenopausal) could be evaluated. There were no significant differences in terms of tumor stage (p=0.3), but positive lymph node status was significantly more common in the premenopausal, ER+-BC group (p=0.008). In premenopausal women, aggressive tumor biology was also significantly more frequently detected (G3; p<0.001; Ki67 >30%; p<0.001). With regard to the estrogen and Her2 receptor, postmenopausal BC showed significantly stronger estrogen receptor expression (p<0.001), whereas premenopausal patients were significantly more likely to overexpress the Her2 receptor (p<0.001).



Offenlegung potenzieller Interessenkonflikte: Holger G. Hass & Co-Autoren

1. Anstellungsverhältnis oder Führungsposition	keine
2. Beratungs- bzw. Gutachtertätigkeit	keine
3. Besitz von Geschäftsanteilen, Aktien oder Fonds	keine
4. Patent, Urheberrecht, Verkaufslizenz	keine
5. Honorare	keine
6. Finanzierung wissenschaftlicher Untersuchungen	keine
7. Andere finanzielle Beziehungen	keine
8. Immaterielle Interessenkonflikt	keine

Results (II)

As a result of the different tumor biological parameters, a "luminal B-like" ER+ MCA could be detected, especially in the group of premenopausal women (44.3 vs. 34.7%; p<0.001).

In the subgroup of "perimenopausal" patients (n=139), a similar distribution was observed, with 50 patients (35.97%) formally classified as "Luminal B-like" carcinomas. Considering the menopausal status or patient age, there is an increasing "shift" from "premenopausal younger/ Luminal B-like" to "postmenopausal older/ Luminal A-like."

	Lum-A-like	Lum-B-like	
post	65,22%	34,77%	p<0,001
peri	64,02%	35,97%	
pre	55,67%	44,32%	

Conclusions

These data show that premenopausal ER+ BC has significantly more often lymphogenic metastasis and an aggressive tumor biology at diagnosis than the older, postmenopausal subgroup.