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Response to: Intrinsic subtype distribution should vary according to institutions

We thank Horimoto et al. for their critical reading of our article and would like to address their concerns as follows:

In the period we examined, Ki-67 was routinely assessed on the surgical specimen and was only done on the pre-surgical biopsy on request, usually if there was doubt of aggressive carcinoma. This might explain the higher median Ki-67 values observed in the biopsy samples (in the analyzed period 21% of Ki-67 values came from biopsies). As Horimoto et al. correctly pointed out, Ki-67 staining is heterogeneous therefore pre-surgical biopsies harbor the risk of sampling error [1]. In daily practice we have to base decisions concerning neoadjuvant chemotherapy on pre-surgical Ki-67 values, nevertheless. In the period of 2010–2014, the administration of neoadjuvant chemotherapy was uncommon in our institution (only in selected cases of locally advanced tumors). We therefore deem the effect of neoadjuvant chemotherapy on our results as negligible.

We are aware of the fact, that intrinsic subtypes are based on gene expression profiles [2]. However, there are many regions in the world, where gene expression profiling is not widely available for monetary or logistic reasons. Even in Switzerland, a country with a well functioning health care system and mandatory health insurance for every citizen, gene expression profiling for every patient is not feasible (and not necessary!). Therefore, in daily practice we help ourselves with an approximation by the means of immunohistochemistry (IHC) (as well described in the St. Gallen Consensus [3,4]). We consistently used the term 'luminal-like' to make the distinction between gene expression based 'luminal type' and IHC-based 'luminal-like' clear. We also agree, that the comparison of different cohorts bears the risk of drawing unjustified parallels and should be done very carefully, as pointed out in our discussion section [5]. The patient selection was similar in Milano and in our institution: both centers are referral-centers for breast cancer patients and both data sets comprised all patients who had undergone surgery for early breast cancer [6]. However, we do agree, that this approach is just an approximation to a Ki-67 cut-off determined by outcome measures.

References

[1] Himuro T, Horimoto Y, Arakawa A, Tanabe M, Saito M. Ki67 Heterogeneity in Estrogen Receptor–Positive breast cancers: Which Tumor type Has the Most Heterogeneity? Int J Surg Pathol 2015;24:103–107. doi:10.1177/1066896915605179.

[2] Perou CM, Sørile T, Eisen MB, Van De Rijn M, Jeffrey SS, Ress CA, et al. Molecular portraits of human breast tumours. Nature 2000. doi:10.1038/35021093.

[3] Goldhirsch A, Winer EP, Coates AS, Gelber RD, Piccart-Gebhart M, Thürlimann B, et al. Personalizing the treatment of women with early breast cancer: Highlights of the st gallen international expert consensus on the primary therapy of early breast Cancer 2013. Ann Oncol 2013;24:2206–2223. doi:10.1093/annonc/mdt303.Pubmed Partial au6

[4] Curigliano G, Burstein HJ, Winer EP, Gnant M, Dubsky P, Loibl S, et al. De-escalating and escalating treatments for early-stage breast cancer: the st. Gallen international expert consensus Conference on the primary therapy of early breast cancer 2017. Ann Oncol 2017. doi:10.1093/annonc/mdx308.

[5] Maranta AF, Broder S, Fritzsche C, Knauer M, Thürlimann B, Jochum W, et al. Do YOU know the Ki-67 index of your breast cancer patients? Knowledge of your institution's Ki-67 index distribution and its robustness is essential for decision-making in early breast cancer. Breast 2020;51:120–126. doi:10.1016/j.breast.2020.03.005.-Pubmed Partial au5 atl doi

[6] Maisonneuve P, Disalvatore D, Rotmensz N, Curigliano G, Colleoni M, Dellapasqua S, et al. Proposed new clinicopathological surrogate definitions of luminal A and luminal B (HER2-negative) intrinsic breast cancer subtypes. Breast Cancer Res 2014;16:1–9. doi:10.1186/bcr3679.

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