

Response letter to: Questions about Ki67 staining in luminal breast cancer

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To the Editor,

Many thanks to Dr Altundang et al. for your comments about reproducibility of Ki67 usefulness in clinical practice.

It is true that the American Comprehensive Cancer Network Guidelines do not provide any information regarding Ki67 immunohistochemical assessment. However, the Saint Gallen Consensus meeting [1–3] had suggested several times the use of Ki67 for classifying Luminal breast carcinomas since 2011. Different cut-off values have been proposed: initially it was 14% and more recently it was upgraded to 20%, even Ki67 as a continuous variable has been suggested. Cheang et al. [4] used the Ki67 cut-off value of 14% to discriminate Luminal A and B molecular subtypes. Our study confirms that a cut-off value of 14% and Ki67 as a continuous variable can predict the prognosis of patients with luminal breast carcinoma. Furthermore, the use of this marker of proliferation is very common in breast and many other areas of pathology and it is frequently asked for oncologist before deciding several treatments, despite the well-known problems in their reproducibility, related with antibodies, methodological differences in immunohistochemistry, and the pathological evaluation.

Finally, we agree with you that reproducibility is a major concern about Ki67, but it was not the subject of our study. Of note, we expect that future recommendations based on digital pathology and better standardization of the technic

will allow more accurate results and reproducibility in clinical practice.

Compliance with ethical standards

Conflict of interest The authors declare no conflict of interest.

References

1. Goldhirsch A, Winer EP, Coates AS, Gelber RD, Piccart-Gebhart M, Thurlimann B, Senn HJ, Panel M (2013) 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* 24(9):2206–2223. doi:10.1093/annonc/mdt303
2. Goldhirsch A, Wood WC, Coates AS, Gelber RD, Thurlimann B, Senn HJ, Panel m (2011) Strategies for subtypes—dealing with the diversity of breast cancer: highlights of the St. Gallen International Expert Consensus on the Primary Therapy of Early Breast Cancer. *Ann Oncol* 22(8):1736–1747. doi:10.1093/annonc/mdr304
3. Coates AS, Winer EP, Goldhirsch A, Gelber RD, Gnani M, Piccart-Gebhart M, Thurlimann B, Senn HJ, Panel M (2015) Tailoring therapies—improving the management of early breast cancer: st Gallen International Expert Consensus on the Primary Therapy of Early Breast Cancer 2015. *Ann Oncol*. doi:10.1093/annonc/mdv221
4. Cheang MC, Chia SK, Voduc D, Gao D, Leung S, Snider J, Watson M, Davies S, Bernard PS, Parker JS, Perou CM, Ellis MJ, Nielsen TO (2009) Ki67 index, HER2 status, and prognosis of patients with luminal B breast cancer. *J Natl Cancer Inst* 101(10):736–750. doi:10.1093/jnci/djp082

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