## Letter to the Editor

## **Expanding definitions of HER2 positivity**

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To the Editor: Stewart *et al.* nicely proved that based on the ASCO/CAP 2013 expert panel guideline, a large percentage of breast cancers with microvascular features would now be defined as HER2 positive, whereas before 2013 many of these same tumors would have been classified as HER2 negative. The authors concluded that their findings supported the 2013 ASCO/CAP panel's recommendation.<sup>1</sup>

However, the 2013 ASCO/CAP panel's recommendations were made 'to ensure that the right patient receives the right treatment.' (2, page 4000) While the study by Stewart et al. does demonstrate that, compared to before 2013, more patients will be defined as having HER2-positive disease, it does not prove that for the patients with cancers defined only as HER2 positive by the 2013 definition (and not the 2007 definition) the 'right treatment' is anti-HER2 therapy. Clinical trials are needed to support the ASCO/CAP panel's recommendation to expand the definition of HER2-positive breast cancer. Only such trials can prove that anti-HER2 therapy is effective for patients with tumors defined as HER2 positive since 2013, but HER2 negative before that time, and thereby validate the panel's recommendations.

## Disclosure/conflict of interest

The author declares no conflict of interest.

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## References

- 1 Stewart R, Caron JE, Gulbahce EH. HER2 immunohistochemical and fluorescence in situ hybridization discordances in invasive breast carcinoma with micropapillary features. Mod Pathol 2017. doi: 10.1038/ modpathol.2017.65.
- 2 Wolff AC, Hammond EH, Hicks DG et al. Recommendations for human epidermal growth factor receptor 2 testing in breast cancer: American Society of Clinical Oncology/College of American Pathologists Clinical Practice Guideline Update. J Clin Oncol 2013;31: 3997–4013.