



Reply to Letter to Editor: “HER2 positivity in patients with estrogen receptor (ER) positive breast cancer: Is it really prognostic?”



Dear Editor,

We appreciate Dr Atul Batra and Dr Akash Kumar for taking time to read our paper, and we thank the Editor for providing us an opportunity to make a response. Their comment helps us to further understand the prognostic significance of HER2 status in ER + breast cancer.

We agree that HER2 positivity predicted worse disease outcomes in breast cancer before the advent of anti-HER2 therapy such as trastuzumab [1–3]. However, clinical trials have demonstrated pronounced survival benefit of adding trastuzumab to standard chemotherapy in HER2+ patients [4]. Therefore, in the era of HER2-targeted therapy, prognostic role of HER2 status for ER + breast cancer warrants re-evaluation.

In the present clinical practice, trastuzumab is usually given concurrently with chemotherapy for HER2+ patients. Therefore, our prior report focused on ER + breast cancer patients at high risk to receive adjuvant chemotherapy, thus to reduce the bias of adjuvant chemotherapy treatment between HER2+ and HER2- groups. In current study, we found that ER+/HER2+ breast cancer patients treated with trastuzumab-based chemotherapy had superior outcome than ER+/HER2- patients receiving chemotherapy [5]. To thoroughly understand the prognostic value of HER2 status for ER + breast cancer, it is reasonable to compare the disease outcomes between ER+/HER2+ and ER+/HER2- patients irrespective of chemotherapy usage, thus to provide data about the question which Dr Atul Batra and Dr Akash Kumar asked. A total of 2137 patients were included from January 2009 to December 2015 in our center: 228 ER+/HER2+ patients (227 treated with chemotherapy) and 1909 patients with ER+/HER2- tumor (1079 treated with chemotherapy). After adjusting clinicopathological factors, multivariate analysis demonstrated that HER2 positivity was still associated with a superior DFS (HR 0.41, 95% CI: 0.23–0.71, $P < 0.01$) and OS (HR 0.39, 95% CI: 0.17–0.91, $P = 0.03$) compared with HER2 negativity in ER + breast cancer patients.

Taken together, our results indicated that, in the era of trastuzumab treatment, HER2 positivity itself should not be considered as an unfavorable factor for ER + patients.

References

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