Biomedical Research & Therapy

ISSN: 2198-4093
www.bmrat.org

ORAL

Evaluation of HER2 status in breast cancer: Current status and future directions

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Competing interests: The authors declare that no competing interests exist.

Received: 2017-03-06
Accepted: 2017-06-04
Published: 2017-09-05

Abstract

Human epidermal growth factor 2, (HER2) expression is observed in approximately 20% of invasive breast cancers and is associated with poor clinical prognosis. Accurate evaluation of HER2 gene amplification status is critical for optimizing breast cancer outcomes. Evaluation of HER2 status defines the eligibility for trastuzumab therapy and significantly improves the clinical outcome in a subset of patients who test positive for HER2. Last ten years the American Society of Clinical Oncology (ASCO) and the College of American Pathologists (CAP) was developed guidelines for HER2 testing to reduce inaccuracy. However, current ASCO/CAP criteria may restrict access to HER2-target therapy for some patient groups who would derive a clear clinical benefit. In the present study, we presented preliminary data by comparing the dual-color-dual hapten-brightfield in situ hybridization (DDISH) and fluorescence in situ hybridization (FISH) from formalin-fixed paraffin embedded (FFPE) of in invasive breast cancer. A third generation, fully automated, DDISH can detect both markers on a single slide using two double stranded probes labeled with two haptens. In this report, we would like to present the clinical results, the advantages and disadvantages, as well to utilize DDISH as a tumour molecular signature application for alternative method and to improve in clinical diagnosis outcomes, recurrence prediction and individualized treatment strategies.

Keywords

Funding

References

DOI 10.15419/bmrat.v4iS.234