Response to dual HER2 blockade in a patient with HER3-mutant metastatic breast cancer.

**Summary**

HER3 activating mutations have been shown in preclinical models to be oncogenic and ligand-independent, but to depend on kinase-active HER2.

Francois-Clement Bidard, Jean-Yves Pierga (2015 Apr 15)

**Clinical utility of circulating tumor cells in metastatic breast cancer.**

**Summary**

The clinical validity of circulating tumor cell (CTC) count changes during chemotherapy in metastatic breast cancer patients has been validated, but its clinical utility remains to be demonstrated. We report here the non-randomized run-in phase of the CirCe01 trial which was designed to evaluate CTC changes and thresholds to other palliative prognostic scores and establish CTC thresholds to be used in the randomized part of the study. CTC count (CellSearch®) and other prognostic parameters (serum albumin level, lymphocyte level, LDH level, prognostic inflammatory and nutritional index (PINI) and Barbot’s score) were assessed in 56 metastatic breast cancer patients before the first cycle of third line chemotherapy. Early changes of CTC count were correlated with treatment outcome. Independent prognostic markers in multivariate analysis were: low serum albumin (HR = 11.1), poor performance status (HR = 3.8), ≥5 CTC/7.5 ml (HR = 3.8) and triple negative subtype (HER2+ and hormone positive vs triple negative: both HR = 0.2). Among patients with ≥5 CTC/7.5 ml at baseline, a composite criteria (<5 CTC/7.5 ml or relative decrease ≥-70% of the baseline
CTC count) showed better prognostication for PFS (p=0.002).

Year of publication 2014


Summary

The BEVERLY-2 single-arm phase II trial assessed the efficacy and safety of combining neoadjuvant chemotherapy with bevacizumab and trastuzumab for the treatment of HER2-positive inflammatory breast cancer (IBC). Here, we report the results of a preplanned survival analysis at 3 years of follow-up, along with the association between outcome and circulating biomarkers and pathologic complete response (pCR).