BCIRG 007: RANDOMIZED PHASE III TRIAL OF TRASTUZUMAB, PERCEPTIN® PLUS DOCETAXEL WITH OR WITHOUT CARBOPLATIN AS FIRST-LINE THERAPY IN HER2-AMPLIFIED METASTATIC BREAST CANCER

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ABSTRACT

Objectives
- To assess the efficacy and safety of TH (docetaxel, carboplatin and trastuzumab) versus TCH (docetaxel, carboplatin, trastuzumab and capecitabine) in patients with HER2 FISH+ metastatic breast cancer.

Methods
- Randomised, double-blind, multicentre, phase III trial comparing TH with TCH in women with HER2-positive MBC.
- Eligible patients had HER2 FISH+ metastatic breast cancer who had previously received no chemotherapy.
- Patients were randomised 1:1 to receive TH or TCH for 6 cycles.
- Treatment was continued until disease progression, unacceptable toxicity, or patient decision.

Results
- Median overall survival was longer in the TH arm than in the TCH arm (26.7 vs 21.6 months, p = 0.046).
- Overall survival was 40.8 months in the TH arm vs 33.4 months in the TCH arm.
- Median progression-free survival (PFS) was 20.5 vs 15.7 months.
- Significant improvements in response rates were observed in the TH arm compared to the TCH arm (53% vs 37%, p = 0.003).
- Cardiac events were more common in the TCH arm (5% vs 2% in the TH arm).

Conclusions
- TH is a promising first-line therapy for HER2 FISH+ metastatic breast cancer.

Key terms: HER2, docetaxel, carboplatin

INTRODUCTION

HER2-positive breast cancer is a highly aggressive and potentially lethal disease. Trastuzumab (Herceptin®), a monoclonal antibody against HER2, improves survival in women with metastatic breast cancer when given as monotherapy or in combination with chemotherapy.1

The primary objective indicated that docetaxel (Taxotere®) and platinum salts are highly synergistic when combined with H. In two Phase II studies, this combination resulted in 71% of first-line patients progressing and 22% of patients progressing and alive at 18 months.2

In a randomised Phase II trial, 90 patients with HER2-positive metastatic breast cancer were treated with either TH; best supportive care plus trastuzumab (TH); or TH followed by capecitabine (THC). TH was found to be superior to both the control arm and THC. TH is a promising first-line therapy for women with HER2-positive metastatic breast cancer.

OBJECTIVE

The randomised, Phase II BCIRG 007 trial was initiated to evaluate the efficacy and safety of TH compared with TCH as first-line therapy for women with HER2-positive metastatic breast cancer.

METHODS

Study design
- This was a multicentre, prospective, non-blinded, randomised, Phase II trial in women aged at least 18 years with HER2-positive disease (confirmed by fluorescence in situ hybridisation (FISH)-positive metastatic breast cancer).
- Eligible patients had HER2 FISH+ metastatic breast cancer who had previously received no chemotherapy according to Response Evaluation Criteria in Solid Tumours (RECIST) guidelines.
- Patients were randomised 1:1 to receive TH or TCH for 6 cycles.
- Treatment was continued until disease progression, unacceptable toxicity, or patient decision.

RESULTS

Patients were stratified at inclusion according to prior adjuvant chemotherapy, and their randomisation to TH or TCH was guided by randomisation minimisation. Both arms were well balanced for prior therapies and for other modifiable baseline characteristics (Table 1).

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