



Monitoring Blood Based Biomarkers As Early Predictors of Progression Free Survival in a Randomized Bria-ABC Phase 3 Trial for Advanced Metastatic Breast Cancer: An Ongoing Analysis



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ABSTRACT

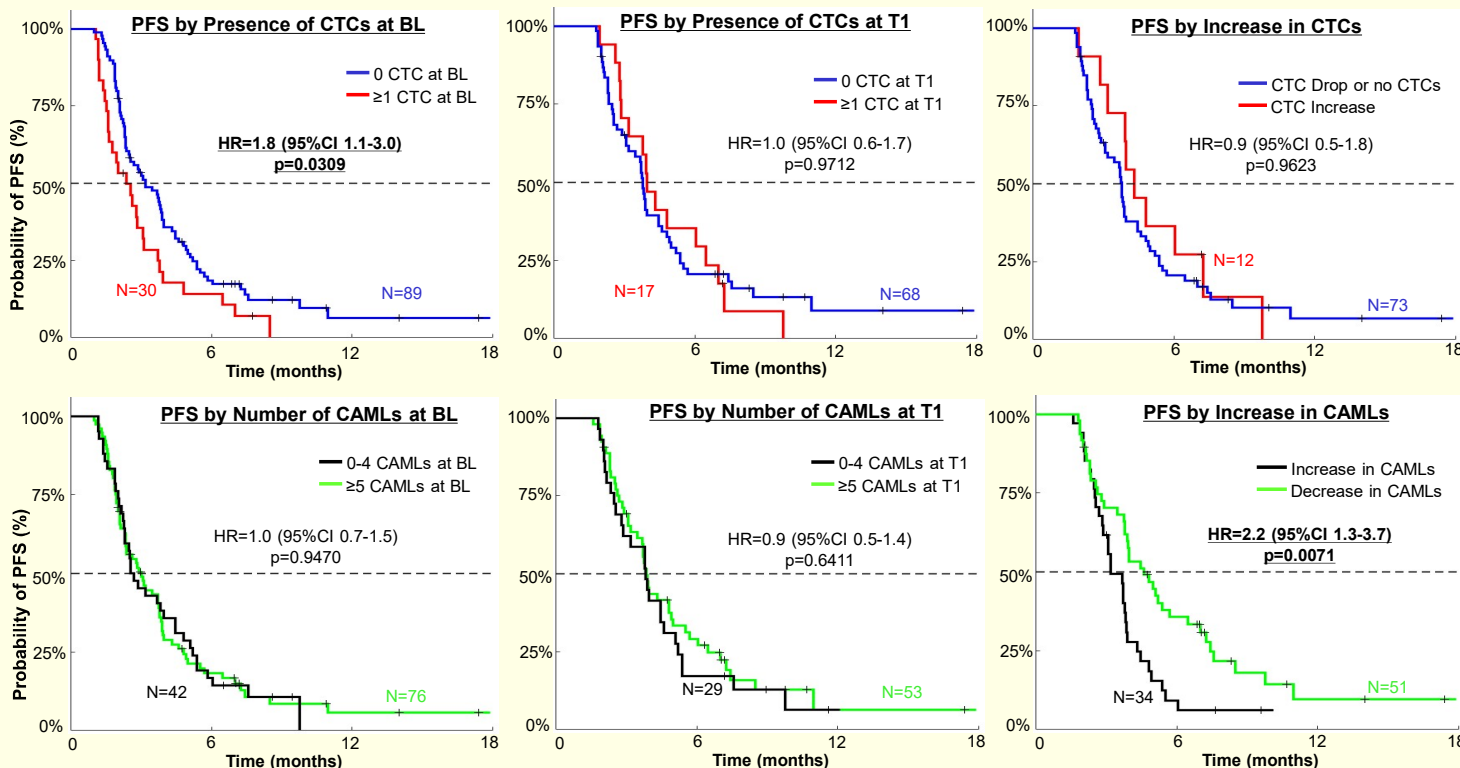
Circulating Tumor Cells (CTCs) are prognostic for poor outcomes in metastatic Breast Cancer (mBC). However, CTCs are uncommon in mBC (<20%) and many patients (pts) without CTCs often progress. Cancer associated macrophage-like cells (CAMLs) are prognostic inflammatory pro-tumorigenic PD-L1 expressing macrophages common in mBC pt blood (>90%). In a previous randomized phase II trial, CTC & CAML decreases post-Bria-IMT[™] induction correlated with clinical benefit. Bria-IMT[™] is an allogenic whole cell vaccine that expresses tumor associated antigens & engineered to express GM-CSF, promoting adaptive & innate immune responses. The ongoing Bria-ABC (NCT06072612) phase 3 study compares Bria-IMT to treatment of physician's choice (TPC) in late stage mBC. We present interim results, without treatment arm comparison, for Progression Free Survival (PFS) by CTC & CAML changes as the exploratory part of the trial.

Table 1: Demographic Table (n=140)	
Median Age (Range)	60 (26-91)
Median BMI (Range)	25.1 (8.7-45.7)
Median Prior Systemic Therapy (Range)	6 (2-14)
Race	White 118 (84%) Other/Not Reported 32 (16%)
ECOG	0 66 (47%) 1 63 (45%) 2 11 (8%)
Hormone	HR+ 87 (62%) HER2+ 21 (15%) TNBC 43 (31%) Not reported 16 (11%)
Prior ADC Exposure	119 (85%)
Prior CPI Exposure	40 (29%)
Prior CDK4/6 Exposure	90 (64%)
Median CTCs at BL (Range)	0 (0-260)
Median CAMLs at BL (Range)	12 (0-154)
Median CTCs at T1 (Range)	0 (0-28)
Median CAMLs at T1	8 (0-54)

MATERIALS & METHODS

This still blinded ongoing multicenter randomized open label Phase 3 trial evaluates Bria-IMT+ checkpoint inhibitor (CPI) vs TPC in mBC pts lacking approved therapies. Pts are randomized 1:1:1 to Bria-IMT+CPI, TPC, or Bria-IMT monotherapy (discontinued after 150 pts). The Bria-IMT regimen consists of low dose IV cyclophosphamide ~2 days prior to intradermal irradiated SV-BR-1-GM cells, then micro-dose pegylated IFN α ~2 days later in each inoculation site. CPI is administered day -3 to 3. Cycles are every 3 weeks. TPC followed standard of care. Blinded anonymized blood was taken at baseline (BL) & at cycle 3 (T1, ~6 weeks post initiation). CTCs & CAMLs, and PD-L1 expressions, were quantified using LifeTracDx liquid biopsy with analysis of PFS by censored univariate analysis.

Figure 1. PFS by Presence and Change of CTCs and CAMLs in Patients Blood



RESULTS

- At time of analysis, >250 pts consented, 170 pts randomized, and 140 pts were treated. With 119 pts having a BL and 85 pts having a T1
- ≥ 1 CTCs were found in 25% (n=30/119) at BL & 20% (n=17/85) at T1
- ≥ 1 CAMLs were found in 93% (n=111/119) at BL & 93% (n=79/85) at T1
- ≥ 1 CTC was significant for PFS at BL, but not at T1, (Fig 1)
- A decrease in CTCs was seen in n=12 pts but did not correlate with PFS (Fig 1)
- ≥ 5 CAML at BL or T1 did not correlate with PFS at BL or T1
- 51 pts (60%) had a decrease or stable CAML counts between BL and T1 which did significantly correlate with better PFS (Fig 1)

FUNDING SOURCE

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CONCLUSIONS

- In an ongoing analysis of a heavily treated mBC pts, we observed that in the entire blinded population, 60% of pts had stability or drop in CAMLs which significantly correlated with better PFS.
- The presence of CTCs at BL was an indicator of rapid progression
- Treatment arm specific comparisons will not be unblinded until completion of the designated milestone (144 mortalities).

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