Supplementary Table S1. Representativenes Cancer type(s)/subtype(s)/stage(s)/condition	HER2+ MBC with brain metastasis
Considerations related to:	
Sex	HER2+ breast cancer, as all other subtypes of breast cancer, is a predominantly female disease and is rare in men. Breast cancer occurs in men as well, accounting for less than 1% of all breast cancer cases in the United States.
Age	Median age of metastatic breast cancer diagnosis is 62 years old. Our population median age is 50 yo, denoting a more aggressive cancer affecting younger women.
Race/ethnicity	Breast cancer incidence rates are highest among non-Hispanic White women, next highest for non- Hispanic Black women, followed by American Indian and Alaska Native women, then Hispanic, and Asian/Pacific Islander. Dana-Farber and Northwestern Hospital, in Boston and Chicago metropolitan area respectively, have higher percentage of white and non-Hispanic population. In this trial 89% of patients were white, and 100% non-Hispanic/Latino. Non-Hispanic Black women have the lowest cancer survival rate, despite having a lower incidence rate compared to non- Hispanic White women
Geography	In 2020, the incidence rate for female breast cancer in Massachusetts was 122.4 (per 100,000), in Illinois was 124.1 (per 100,000), and the national average was 119.2 (per 100,000).
Other considerations	Dana-Farber and Northwestern University have two of the largest brain metastasis programs in the country. Both Cancer Hospitals receive referrals from large area around New England and Midwest, and this phenomenon will likely select a higher percentage of White patients.
Overall representativeness of this study	Overall, our trial had a patient population of onlywomen younger than the average metastatic breastcancer population. Non-White population wasunderrepresented in our trial.

## **Supplementary Table S1. Representativeness of Study Participants**