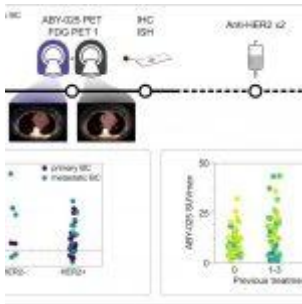


New imaging agent – improved prediction of HER2 positive metastatic breast cancer



In a recent study, researchers have unveiled a novel imaging agent, ^{68}Ga -ABY-025, capable of predicting the early metabolic response to HER2-targeted treatment in patients with HER2-positive metastatic [breast cancer](#) (Figure 1). By providing a comprehensive quantification of HER2 expression throughout the body, ^{68}Ga -ABY-025 PET/CT emerges as a valuable tool for treatment planning. Its use can spare patients from unnecessary side effects associated with HER2-targeted treatments that may not be effective.

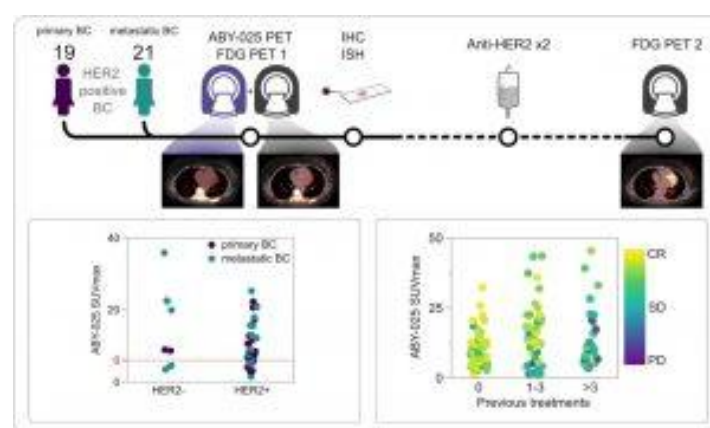


Figure 1: Graphical abstract

Assessing HER2 status through biopsy results is relatively straightforward in [early-stage breast cancer](#). However, in advanced disease, where multiple metastases can exhibit

varying HER2 expression, the process becomes far more intricate..

The researchers in this study explored ^{68}Ga -ABY-025 PET as a non-invasive means to quantitatively assess HER2 receptors throughout the body. Their results were nothing short of remarkable. ^{68}Ga -ABY-025 PET/CT successfully facilitated the quantification of HER2 expression, and this measurement demonstrated a significant correlation with metabolic response, particularly in metastatic breast cancer patients. Additionally, the research revealed an inverse relationship between the number of prior treatments and the metabolic response to the current treatment: the more prior treatments, the higher the ^{68}Ga -ABY-025 dosage required to induce a metabolic response.

^{68}Ga -ABY-025 PET/CT has emerged as a transformative tool for providing a panoramic visualization of HER2 expression, and, most importantly, for predicting metabolic responses. [In the realm of metastatic breast cancer](#), it surpasses the traditional biopsy-based approach, offering renewed hope and potential for more effective, [personalized treatments](#). This breakthrough marks a significant stride toward improving the outcomes and quality of life for patients facing HER2-positive metastatic breast cancer.

Journal article: Alhuseinalkhudhur, A., et al. 2023. [Human Epidermal Growth Factor Receptor 2–Targeting \[68Ga\]Ga-ABY-025 PET/CT Predicts Early Metabolic Response in Metastatic Breast Cancer](#). *Journal of Nuclear Medicine*.

Summary by Stefan Botha