Metastatic Breast Cancer (MBC) is associated with the greatest utility decrement of all breast cancer stages, supporting the high impact of MBC on quality of life (QOL) even when compared to earlier stages of breast cancer.1 Health state utilities significantly underestimate health state values and have resulted in approximately 475 published utilities in breast cancer based on severity, treatment, and side effects. Patient-level utility values for different stages of MBC and breast cancers commonly associated with breast cancer were collected to assess health economic outcomes.2, 3

Methods

Methods used to obtain values remain idiosyncratic to the population being studied and must correspond to a health state that is comparable to those within the QLQ-C30, generation of values through mapping to published algorithms, or values generated from population-based health state values.4

While each method has been presented in the literature, the variance between the values can derive from making value-driven decisions in modeling.

**OBJECTIVES**

- Patient-level utility values for different stages of MBC and breast cancers commonly associated with chemotherapy regimens are useful for health economic assessments.
- Three methods to estimate utilities were used when direct utility data are not available: utility mapping from existing disease-specific scales, vignette studies that describe the health state, or derivation of preference-based measure from an existing condition-specific scale.

**METHODS**

**Definition**

- The parent study was an open-label, two-arm, parallel, multicenter trial in which patients were treated and monitored by geographic region and the HER2 status of their cancer was determined.
- Patients were randomized (1:1) to receive 21-day cycles comprising weekly paclitaxel (135 mg/m^2) and carboplatin (AUC 6 mg/m^2 for 2-3 hours intravenously over 2-5 minutes on Days 1 and 8, or capcitabine 1,500 mg/m^2 twice daily on Days 1–8). Patients received study treatment and disease progression, unacceptable toxicity, or patient investigator request to discontinue.

**Efficacy Measures**

- Tumor response and disease progression in the clinical study were assessed with magnetic resonance imaging (MRI) and positron emission tomography (PET).

**Literature**

- The main limitation of this study is that utility values collected using other more preferred methods: direct utility data.
- As shown in Table 2, mapping and vignette utility estimates vary substantially and will provide different results based on the chosen methodology.

**RESULTS**

- The vignette study did not include all health states that were included in the QLQ-C30, generation of values through mapping to published algorithms, or values generated from population-based health state values.
- As shown in Table 2, mapping and vignette utility estimates vary substantially and will provide different results based on the chosen methodology.

**LIMITATIONS**

- Data from younger participants showed they were below zero.
- Because each method has been presented in the literature, the variance between the values can derive from making value-driven decisions in modeling.

**REFERENCES**