Background

The study was designed to utilize molecular profiling to identify potential targets and select individualized treatments for patients with metastatic breast cancer (MBC). The study was conducted in a phase II setting and included patients with MBC who had progressed on at least one prior systemic treatment.

Materials and Methods

Eligibility criteria included MBC with measurable disease, prior treatments, and performance status of 0-1. The study used an inhibitor of a specific target in each patient's tumor to determine response.

Results

At the end of the treatment period, the overall response rate was 23.1% (95% CI: 13.2-37.0%). The median progression-free survival was 3.4 months (95% CI: 1.6-5.5). The most common adverse events were fatigue, nausea, and anorexia.

Conclusions

The study demonstrated the feasibility of personalized cancer treatment for patients with aggressive metastatic breast cancer using a 'precision' approach. The individualized treatment approach resulted in a significant improvement in survival and quality of life for patients with MBC.