ANALYSIS OF OLAPARIB AND TALAZOPARIB AS POSSIBLE THERAPEUTIC ALTERNATIVES IN ADVANCED BREAST CANCER AND A GERMLINE BRCA MUTATION

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PURPOSE

To establish whether olaparib and talazoparib can be declared equivalent therapeutic alternatives (ETA) in patients with ABC and a BRCA mutation, through an indirect treatment comparison (ITC) using a common comparator.

MATERIAL AND METHODS

A bibliographic search was conducted to identify phase III clinical trial with olaparib or talazoparib in similar ABC population (with BRCA mutation), duration and endpoints. An ITC was done according to Bucher’s method, using the ITC calculator from the Canadian Agency for Health Technology Assessment.

Delta value (Δ), maximum acceptable difference as a clinical criterion of no-inferiority.

If the 95% confidence interval (95%CI) deviated from the delta margin, this probability was calculated using Shakespeare method.

Phisician’s choice (capecitabine, eribulin or vinorelbine) was used as comparator.

RESULTS

Clinical trial included were: open-label, randomized, HER 2 negative, capecitabine, eribulin or vinorelbine as comparator, ECOG 0-1, pretreated with taxane, anthracycline or both, and if platinum was used without progression to this one.

Primary end point was radiologic progression–free survival (PFS).

<table>
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<tr>
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<th>PFS: HR (95%CI)</th>
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<tbody>
<tr>
<td>Reference</td>
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<tr>
<td>Olaparib</td>
<td>0.58 (0.43-0.80)</td>
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<tr>
<td>Talazoparib</td>
<td>0.54 (0.41-0.71)</td>
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<tr>
<td>ITC</td>
<td>1.074 (0.71-1.626)</td>
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Two trials were included, one of each drug.

Differences were found in the percentage of patients with ECOG 0-1 (olaparib 72.2% vs. talazoparib 53.3%), excepting this characteristic the population of both studies was similar.

The 95%CI was broad (high level of uncertainty) and exceeds the equivalence margin, and the probability of a result falling out the delta margin was < 4.5%.

CONCLUSION

ITC showed no statistically differences in PFS between olaparib and talazoparib. There is a probable clinical equivalence between both drugs. Although a fraction crosses the confidence interval, this is not statistically significant. Olaparib and talazoparib could be considered as ETA in most patients with advanced breast cancer.