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**Risk of recurrence (ROR) after neoadjuvant ribociclib plus ET in clinically high-risk ER+/HER2- BC: Preliminary analysis of the SOLT-RIBOLARIS trial**

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**Background**

The CDK4/6 inhibitors (CDK4/6i) are approved for early-stage HR+/HER2- breast cancer (BC). The randomized neoadjuvant NeOPAL and CORALLEEN trials provided proof of concept that CDK4/6i in combination with endocrine therapy (ET) have similar activity to multi-agent chemotherapy in pts with luminal B-PAM50 based- BC subtype. The PAM50-derived ROR score was identified as an endpoint of interest after neoadjuvant CDK4/6i-ET. The RIBOLARIS trial was designed to evaluate whether pts with ROR-low disease following neoadjuvant ribociclib (RIB) and ET can safely omit adjuvant chemotherapy.

**Methods**

RIBOLARIS is an open-label, single-arm, multicenter trial in pts with primary operable stage II, grade 2/3, Ki67  $\geq 20\%$ , HR+/HER2- BC who are candidates for adjuvant chemotherapy. The study evaluates safety and long-term efficacy of a non-chemo regimen (RIB-ET) in pts with tumors showing a ROR-low score after 6 neoadjuvant cycles of RIB-ET (600 mg/day 3 weeks ON/1 week OFF + ET: letrozol 2.5 mg/day) followed by surgery (within 10 days). Pts with ROR-med/high tumors will receive chemotherapy-based treatment followed by RIB-ET. This preplanned Interim Analysis analyzed safety and efficacy after 686 surgeries. We expected at least 40% of the pts to achieve a ROR-low score after neoadjuvant RIB-ET.

**Results**

Among the enrolled pts, baseline characteristics included: median age 57 (38-84), postmenopausal status 62%, tumor stage IIA 60%, node-negative 60%, and histological grade 2 74%. At data cut-off, 686 out of 1100 surgeries (62.4%) were performed. Interestingly, we observed that 361 pts (52.6%) achieved a ROR-low score (Mean 11.3, 95% CI 10.5-12.2), while 325 pts (47.4%) had a med/high ROR score (Mean 36.9, 95% CI 34.2-39.5). The most common grade 3-4 severity TEAEs were neutropenia (grade 3: 46.3%; grade 4: 3.5%) and transaminases increased (grade 3: 10.4%; grade 4: 1.5%).

**Conclusions**

These preliminary results from the RIBOLARIS trial confirm and extend the findings from CORALLEEN and NeOPAL trials, demonstrating that a subset of pts with early-stage HR+/HER2- BC achieve ROR-low disease after neoadjuvant RIB-ET and may be candidate to spare chemotherapy. There was no new safety signal.

**Clinical trial identification**

NCT05296746.

**Legal entity responsible for the study**

SOLTI Cancer Research Group.

**Funding**

Novartis.

**Disclosure**

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