all cases of multicentric BC (multiple foci located in different quadrants) excluding bilateral synchronous BC.

**Results** We recruited 159 cases of ISMBC representing 6.1% of all BC. The mean age was 51.6 years [26–85]. The sensitivity of breast MRI was superior to that of ultrasound-mammography in the detection of BC multiple locations. Invasive ductal carcinoma was the predominant histological type. The mean histological tumor size was 31 mm ± 16.6 mm. The most common SBR grade was grade II. There was a predominance of luminal subtype B. Mastectomy was performed in 81.8% of patients and 83% had axillary lymph node dissection. Locoregional recurrence was 5.96%. Distant metastases were found in 7.54%. The 5-year OS and DFS were 87.4% and 88.6%, respectively. In multivariate analysis, SBR grade was a significant prognostic factor for OS and DFS.

**Conclusion/Implications** The current ISMBC clinical and pathological staging system is perfectible in order to customize the treatment options to the reality of the disease especially regarding breast surgery.

**Introduction** Mutations in Breast Cancer Susceptibility Genes (BRCA) are associated with an increased risk of both breast and ovarian cancer. In previous studies, about 20% of ovarian cancer patients reported a BRCA gene mutation. However, there is currently no consensus on the incidence and risk management of breast cancer following ovarian cancer diagnosis in BRCA carriers. Therefore, we aimed to systematically review and perform a meta-analysis of the risk and management of breast cancer in ovarian cancer patients with BRCA mutation.

**Methods** For published studies, we searched PubMed, EMBASE, and Cochrane Library databases for published studies to October 2022. The number of BRCA carriers with ovarian cancer, rate of BRCA-1 or BRCA-2 mutation, incidence of breast cancer, time interval between ovarian cancer diagnosis to breast cancer, and the breast cancer detection method were extracted.

**Results** Eight studies met all inclusions and were included in the meta-analysis. Breast cancer incidence in BRCA-mutated ovarian cancer patients was 7.87% (160/2034). Breast cancer incidence with BRCA-1 or BRCA-2 mutation was 9.1% (90/991) and 8.65% (36/416), respectively. The primary breast cancer incidence following ovarian cancer was 7.52% (124/1648), and the recurrence rate was 10.31% (20/194) in patients with previous breast cancer history. The median time interval between ovarian and breast cancer diagnosis was 3.5–9 years. The most frequent screening method was mammography.

**Conclusion/Implications** The risk of breast cancer after ovarian cancer was lower than the risk of breast cancer alone in BRCA carriers. Routine mammography could be helpful for the diagnosis of breast cancer in BRCA-mutated ovarian cancer patients.