

## P337. Clinicopathological features of pure mucinous breast carcinoma: our experience of 35 cases

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### Context and objective

Pure mucinous carcinoma (PMC) is an uncommon cancer subtype characterized by production of variable amounts of mucin, with a good prognosis. We report a retrospective analysis of 35 breast PMC. Methods – Participants – Interventions – Main outcomes In this retrospective study we analysed 35 consecutive women, with operable breast PMC, underwent conservative surgery (n=31, 87%) or mastectomy (n=4, 13%) and sentinel lymph node biopsy (SLNB) at S. Anna Hospital (Turin, Italy) between December 2006 and October 2012. We investigated PMC characteristics: pathological tumour size (pT), nuclear grade, estrogen and progesterone receptor status (ER-PgR), HER-2 status and presence of lymphovascular invasion (LVI). We also reported adjuvant treatments: hormone therapy, chemotherapy and/or radiotherapy of each patient. Principal outcomes of our study were overall survival (OS) and relapse free survival (RFS).

### Results

Pathological pT1 stage was found in 23 patients (66%), pT2 stage in 11 patients (31%) and pT3 stage in only one patient (3%). SLNB was negative in all cases.

ER and PgR were positive in all 35 cases, none PMC expressed HER-2 and LVI was present in only one case. All patients have been treated with hormone therapy (tamoxifen or aromatase inhibitors), 33 patients (94%) were submitted to radiotherapy and none assumed chemotherapy.

After a median follow up of 91.1 months (interquartile range 61-120 months), the OS was 97.2% (one dead of disease) and RFS was 91.5% (3 cases with local recurrence).

The 3 PMC cases with local failure are all characterized by favourable prognostic factors (pT1, G1-2, ER/PgR+, HER2 negative, no LVI), however in one case of recurrence breast radiotherapy was not performed. The only dead of disease developed brain metastases (metastasectomy histology confirmed mucinous subtype) and the death happened 17 month from diagnosis; this PMC did not show unfavourable prognostic factors (pT1, G2, ER/PgR+, HER2 negative, no LVI).

### Conclusions

The characteristics of our patients affected by PMC appeared similar to those reported in the literature, however we need data from longer follow-up to support durability of outcomes and we need to find new prognostic factors to better predict local recurrence and development of distant metastases.

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