

## Uncommon breast malignancies: presentation pattern, prognostic issue and treatment outcome in an Italian single institution experience

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### ABSTRACT

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**Aims and background.** Often neglected by large clinical trials, patients with uncommon breast malignancies have been rarely analyzed in large series.

**Patients and methods.** Of 2,052 patients diagnosed with breast cancer and followed in our Institution from January 1985 to December 2009, we retrospectively collected data on those with uncommon histotypes, with the aim of investigating their presentation characteristics and treatment outcome.

**Results.** Rare histotypes were identified in 146 patients (7.1% of our total breast cancer population), being classified as follows: tubular carcinoma in 75 (51.4%), mucinous carcinoma in 36 (24.7%), medullary carcinoma in 25 (17.1%) and papillary carcinoma in 10 patients (6.8%). Whereas age at diagnosis was not significantly different among the diverse diagnostic groups, patients with medullary and papillary subtypes had a higher rate of lymph node involvement, similar to that of invasive ductal carcinoma. Early stage diagnosis was frequent, except for medullary carcinoma. Overall, in comparison with our invasive ductal carcinoma patients, those with rare histotypes showed a significantly lower risk of recurrence, with a hazard ratio of 0.28 (95% CI, 0.12-0.62;  $P = 0.002$ ).

**Conclusions.** According to our analysis, patients with uncommon breast malignancies are often diagnosed at an early stage, resulting in a good prognosis with standard treatment.

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**Key words:** rare breast cancer, monoinstitutional study, mucinous carcinoma, tubular carcinoma.

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