Prognosis of medullary breast cancer: analysis of 13 International Breast Cancer Study Group (IBCSG) trials


BACKGROUND
To evaluate whether medullary breast cancer has a better prognosis compared with invasive ductal tumors.

METHODS
Among 12,409 patients, 127 were recorded as invasive medullary tumors and 8096 invasive ductal tumors. Medullary and ductal invasive tumors were compared with regard to stage, age at diagnosis, grade, hormone receptor status, peritumoral vascular invasion, and local and systemic treatment. Pattern of relapse, distant recurrence-free interval (DRFI), and overall survival (OS) were determined for both histological groups. Two cohorts were investigated: a full cohort including the pathologist-determined medullary histology without regard to any other tumor features and a cohort restricted to patients with ER-negative grade 3 tumors.

RESULTS
Fourteen-year DRFI and OS percents for medullary tumors (n = 127) and invasive ductal tumors (n = 8096) of the full cohort were 76% and 64% [hazard ratio (HR) 0.52, P = 0.0005] and 66% and 57% (HR = 0.75, P = 0.03), respectively. For the restricted cohort, 14-year DRFI and OS percents for the medullary (n = 47) and invasive ductal tumors (n = 1407) were 89% and 63% (HR 0.24, P = 0.002) and 74% and 54% (HR = 0.55, P = 0.01), respectively. Competing risk analysis for DRFI favored medullary tumors (HR medullary/ductal = 0.32; 95% confidence interval = 0.13-0.78, P = 0.01).

CONCLUSION
Medullary tumors have a favorable prognosis compared with invasive ductal tumors.
pages  2843-51