

# Axillary management in elderly women ( $\geq 70$ years) with breast cancer: 10-years follow-up

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**BACKGROUND:** BREAST SURGERY IS A SAFE PROCEDURE WITH CLEAR ONCOLOGICAL BENEFIT RECOMMENDED FOR ELDERLY PATIENTS, INDEED AXILLARY MANAGEMENT IS NOT ROUTINELY RECOMMENDED FOR THESE ELDERLY PATIENTS. THIS STUDY EVALUATED AXILLARY SURGERY (AS) TRENDS OVER A 10-YEAR FOLLOW-UP PERIOD AS WELL AS LOCOREGIONAL AND SURVIVAL OUTCOMES FOR ELDERLY WOMAN.

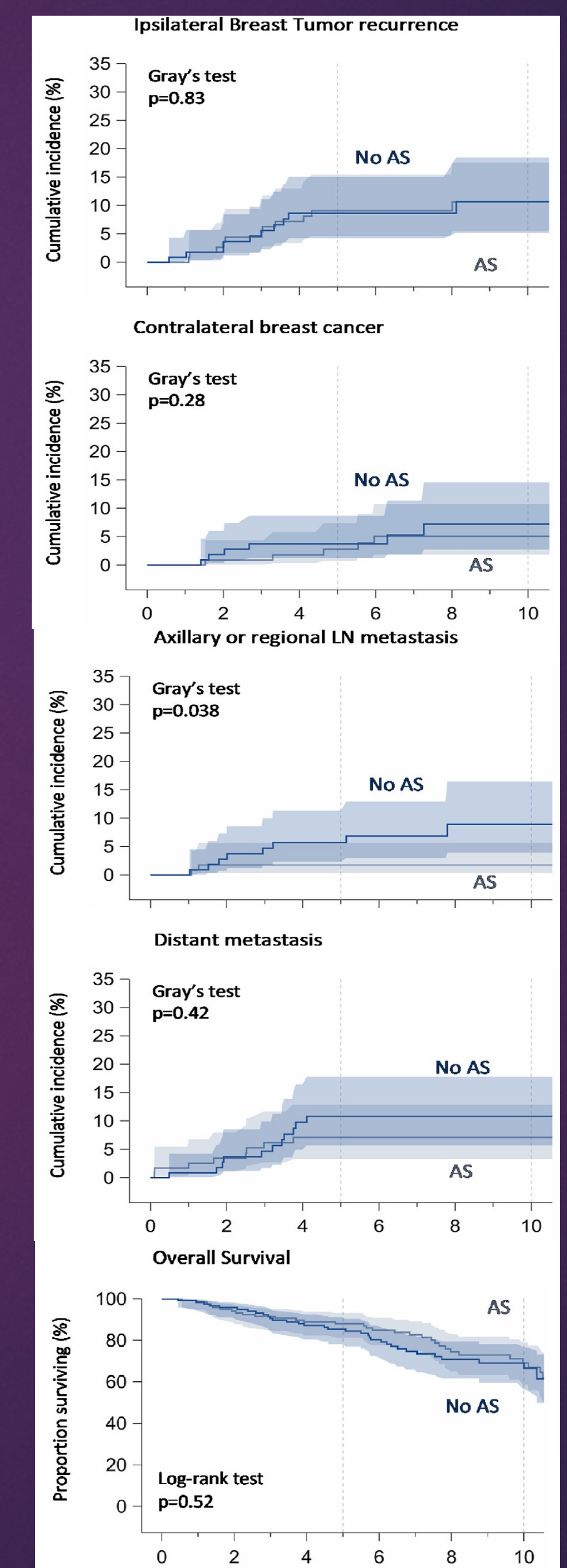
**METHODS:** INFORMATION REGARDING 1.748 CONSECUTIVE ELDERLY PATIENTS (RANGE AGE 70-84 YEARS OLD) OPERATED FOR A FIRST PRIMARY INVASIVE BREAST CANCER AT THE EUROPEAN INSTITUTE OF ONCOLOGY BETWEEN 1994 AND 2008, WERE SELECTED AND DIVIDED IN TWO GROUPS, DEPENDING ON WHETHER OR NOT AS WAS PERFORMED. A (1:1) MATCHED ANALYSIS FOR ALL RELEVANT CLINICOPATHOLOGICAL FEATURES WAS PERFORMED. OUTCOMES WERE ANALYZED USING THE KAPLAN MEIER METHOD AND UNIVARIATE COX-PROPORTIONAL HAZARD RATIO ANALYSIS

**RESULTS:** A TOTAL OF 1.748 PATIENTS WERE IDENTIFIED AND STRATIFIED BY AGE (70-74, 75-79, 80-84). A MATCHED ANALYSIS WAS PERFORMED FOR 252 PATIENTS: 122 WHO UNDERWENT AS AND 122 WHO DID NOT. AT 10-YEAR FOLLOWUP, IPSILATERAL BREAST TUMOR RECURRENCE, DISTANT METASTASIS AND CONTRALATERAL BC WERE SIMILAR,  $P < 0.83$ ,  $P < 0.42$  AND  $P < 0.28$ , RESPECTIVELY.

IN THE NO-AS GROUP, A SIGNIFICANT INCREASED RISK OF AXILLARY LYMPHNODE RECURRENCE WAS IDENTIFIED AT 5- AND CONFIRMED AT 10-YEARS ( $P < 0.038$ ), WITHOUT IMPACT ON OVERALL SURVIVAL AT 5- AND 10-YEARS ( $P < 0.52$ ).

IN THE NON-AS GROUP, HIGHER RATE OF AXILLARY RECURRENCE AT 10-YEARS WAS OBSERVED IN PATIENTS WITH POORLY DIFFERENTIATED (24.1%, 95% CI 7.2E46.2), HIGHLY PROLIFERATIVE (KI67 20%: 17.1%, 95% CI 0.6E33.3) AND LUMINAL B TUMORS (16.8%, 95% CI 5.9 35.5).

**CONCLUSIONS:** AXILLARY STAGING IN ELDERLY WOMEN DOES NOT IMPACT IPSILATERAL OR CONTRALATERAL BC RECURRENCE AND LONG-TERM SURVIVAL. OMISSION OF AXILLARY SURGERY WAS NOT ASSOCIATED WITH WORSE OVERALL SURVIVAL BUT WAS SIGNIFICANTLY ASSOCIATED TO AN INCREASE IN REGIONAL RECURRENCE, SLNB AND ALND MIGHT BE OMITTED IN ELDERLY WOMEN WITH LOW RISK TUMORS (T1, ESTROGEN RECEPTOR-POSITIVE TUMORS), HOWEVER SURGICAL DECISIONS SHOULD BE MADE AFTER PREOPERATIVE DETERMINATION OF BC MOLECULAR TUMOR PROFILE THROUGH BREAST CORE NEEDLE BIOPSY. IN CASE OF UNFAVORABLE BIOLOGY PURSUING AS MAY BE THE RIGHT CHOICE TO AVOID REGIONAL RECURRENCE. THE CHOICE SHOULD BE MADE AFTER MULTIDISCIPLINARY DISCUSSION AND GERIATRIC ASSESSMENT. TAILORING SURGERY ACCORDING TO TUMOR BIOLOGY AND AGE MAY IMPROVE LOCOREGIONAL OUTCOME



Oncological Events and Overall Survival in older women (70-84 years) with breast cancer according to axillary surgery. The shaded areas correspond to the 95% confidence bands