

**NEWS BRIEFING 1**  
**PLENARY**

**1 Ten Year Results Of A Randomized Trial Of Internal Mammary Chain Irradiation (IMC-RT) After Mastectomy**

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**Purpose/Objective(s):** To evaluate the impact of IMC-RT on long-term survival in breast cancer patients treated with mastectomy

**Materials/Methods:** Multicentric randomized phase III trial comparing chest wall, axillary and supra-clavicular irradiation with or without IMC-RT in newly diagnosed stage I and II breast cancers. Inclusion criteria: Patients under 76 with positive axillary nodes or internal/central tumor location whatever pN. Stratification was done by centre, nodal status and tumor location (internal/ central vs. external). IMC-RT consisted in a combination of photons (12.5 Gy in five fractions) and electrons (32.5 Gy in 13 fractions) over 5 weeks. The target field included the first five intercostal spaces. Adjuvant chemotherapy or hormonal treatment was at the discretion of the physician. We planned to include 1200 pts that allowed us to detect 10 % difference in 10y overall survival.

**Results:** 1334 patients have been randomized. Mean age was 56.5 yrs, 1003 (75%) pts had positive lymph nodes. With a median follow-up of 10 yrs, we observed 535 deaths. 10-yr survival was 62.57 % in case of IMC-RT and 59.55 % without IMC-RT (p= 0.8762 by log-rank test). No difference was obtained in the different subgroups: positive or negative axillary nodes, external vs central/internal tumors, or according to the different histological subtypes, adjuvant chemotherapy or hormonotherapy. Causes of death are known in 422 Pts: most of these deaths were due to breast cancer (371); no increase in cardiac toxicity was observed in the IMC-RT group.

**Conclusions:** IMC-RT did not improve overall survival in this large randomized study.

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