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AIRO2022

Radioterapia di precisione per un'oncologia innovativa e sostenibile

BOLOGNA, 25-27 NOVEMBRE
PALAZZO DEI CONGRESSI

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Radioterapia e Oncologia clinica

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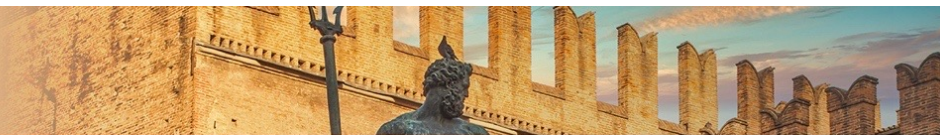
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AXILLARY LYMPH NODES INCIDENTAL DOSE WITH STANDARD 3D-CRT: A RETROSPECTIVE STUDY

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DICHIARAZIONE

Relatore: Marzia Borgia

Come da nuova regolamentazione della Commissione Nazionale per la Formazione Continua del Ministero della Salute, è richiesta la trasparenza delle fonti di finanziamento e dei rapporti con soggetti portatori di interessi commerciali in campo sanitario.

- Posizione di dipendente in aziende con interessi commerciali in campo sanitario **(NIENTE DA DICHIARARE)**
- Consulenza ad aziende con interessi commerciali in campo sanitario **(NIENTE DA DICHIARARE)**
- Fondi per la ricerca da aziende con interessi commerciali in campo sanitario **(NIENTE DA DICHIARARE)**
- Partecipazione ad Advisory Board **(NIENTE DA DICHIARARE)**
- Titolarità di brevetti in compartecipazione ad aziende con interessi commerciali in campo sanitario **(NIENTE DA DICHIARARE)**
- Partecipazioni azionarie in aziende con interessi commerciali in campo sanitario **(NIENTE DA DICHIARARE)**
- Altro



BACKGROUND

- **ACOSOG Z0011 Trial**, showed **ALND safely omission** in cN0 patients and, leading to focus on **incidental dose to the axilla eradicating occult axillary lymph nodes metastases, that remains debated.**
- We aim to evaluate the **incidental axillary dose in cN0 patients with SLNB+** treated with **whole breast radiotherapy without nodal irradiation.**

METHODS

- We retrospectively analyzed **cN0 Breast Cancer (BC) patients** submitted to **breast conservative surgery (BCS) without ALND and SLNB+** and treated in our Center with **breast conventional fractionated 3D-CRT using standard fields without "high tangential" fields and without prescribed axillary irradiation.**
- A retrospective delineation of **Axillary Level I and Axillary Level II** was performed according to **ESTRO contouring guidelines.**
- **A dosimetric evaluation was conducted.**
- Clinical outcomes as **Overall Survival (OS), Disease-Free Survival (DFS) and Local Control (LC)** were analysed.



RESULTS

- **52 patients** were analyzed.
- **PTV median maximal dose:** 5.328 cGy (range= 5.258-5.428 cGy)
- **PTV median mean dose:** 5.000 cGy (5.000-5.073 cGy).
- The median follow up was 52.7 months (13.8-87.4 months).
- The **4-year OS, DFS and LC** were **100%, 88.5% and 94.2%** respectively; one patient presented axillary relapse

Table 1. Incidental dose evaluation on Axillary Levels I and II.

	Volume cc (range)	Dmax cGy (range)	Dmean cGy (range)	V47.5		V45		V30		V5	
				cc (range)	% (range)	cc (range)	% (range)	cc (range)	% (range)	cc (range)	% (range)
Level I	58.97 (15.2-127.8)	4.921 (495-5.334)	1.791 (1.659-4.143)	1.7 (0-27.3)	2.9 (0-21.3)	8.14 (0-37.6)	13.8 (0-29.4)	18.4 (0-49.4)	31.3 (0-38.7)	37.9 (7.9-79.7)	64.4 (51.7-2.3)
Level II	9.7 (4.4-60.2)	4.649 (46.35-5.022)	1.021 (20.29-972)	0 (0-2.0)	0 (0-3.3)	0.2 (0-13.1)	2 (0-21.8)	1.3 (0-30.2)	13.5 (0-50.1)	4.1 (1.2-53.0)	41.6 (26.4-8.0)



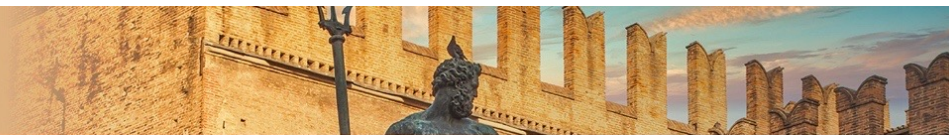
CONCLUSIONS

- ✓ Our experience confirms literature data: incidental dose to axillary levels with 3D-CRT is heterogenous and with standard irradiation technique **did not delivered a dose coverage to Axillary Level I and II in patients with SLNB+.**
- ✓ In this patient setting, "high tangential" fields could be improve dose coverage to Axillary Level I and II nodes.

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GRAZIE DELL'ATTENZIONE