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# AIRO2022

Radioterapia di precisione per un'oncologia innovativa e sostenibile

BOLOGNA, 25-27 NOVEMBRE  
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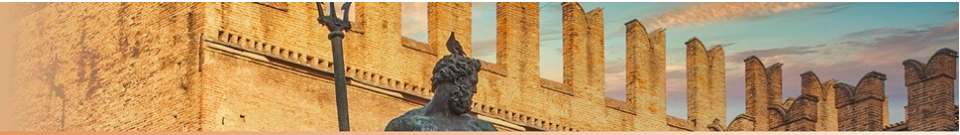
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## **INTRAOPERATIVE RADIOTHERAPY FOR EARLY BREAST CANCER: EVIDENCE FROM FERRARA'S BREAST UNIT**

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## DICHIARAZIONE

Relatore: **ANTONIO STEFANELLI**

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



## INTRODUCTION

## RESULTS

## CONCLUSIONS

### AIMS

To evaluate the clinical response rate after an intraoperative radiotherapy (IORT) in early breast cancer treated with conservaty surgery.

### METHODS

Pts with early breast cancer after lumpectomy plus IORT were included.

#### Inclusion criteria:

- >60 years old,
- tumor size  $\leq$  2 cm,
- luminal A carcinoma (positive hormonal receptors, negative HER2, low Ki67 value),
- pathological negative lymph nodes (pN0).

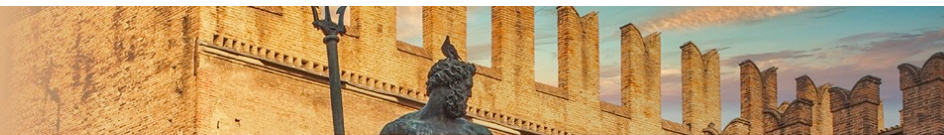
#### Exclusion criteria:

- lobular carcinoma

IORT was administered with a dedicated LINAC with the delivery of 21 Gy (E).

Clinical and/or instrumental follow-up were performed 45 days after IORT, 6 months after the first medical check, and thereafter every 12 months.





## RESULTS

### Treatments characteristics

	n	%
<b>Patients</b>	162	100
<b>Lumpectomy</b>	162	100
<b>IORT</b>	162	100
<b>Applicator (cm)</b>		
Median	6	
Range	5-6	
<b>Energy (mEv)</b>		
Median	8	
Range	6-8	
<b>Dose (Gy)</b>	21	
<b>Adjuvant therapy</b>		
Ormonotherapy	97	60.9
Chemotherapy	0	0.0



## INTRODUCTION

## RESULTS

## CONCLUSIONS

- 162 consecutive pts were included in this analysis (median follow-up: 54 months, range: 1-98 months).
- Post-IORT clinical and instrumental analyses showed an overall response rate in 96.9% of patients (CI 95%: 0.93 – 0.99%).
- Locoregional relapse occurred in 5 patients (3.1%), subsequently treated with mastectomy.
- No patient (0%) showed distant metastases.

### follow-up:

13 patients (8.0%) died for comorbidity.

(0%) showed radiation-related acute complications

(14.8%) experienced peri-operative complications as wound dehiscence, wound infection, and bleeding with hematoma.

Late G2-3 toxicity occurred in 3.7% of patients (moderate/severe tissues fibrosis).

No patient experienced G4 late toxicity.



Our data confirmed that IORT is a feasible and valid therapeutic option in low-risk breast cancer patients treated with lumpectomy.

LR control, and pts compliance were in agreements with those reported in literature.

These results encourage future prospective studies to validate this technique in the clinical routine practice.



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