

XXXIII CONGRESSO NAZIONALE AIRO

AIRO2023

BOLOGNA,
27-29 OTTOBRE 2023

PALAZZO DEI CONGRESSI

Radioterapia Oncologica: l'evoluzione al servizio dei pazienti



Associazione Italiana
Radioterapia e Oncologia clinica

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The radiotherapy omission within the Sinodar One: Survival and Relapse Outcomes

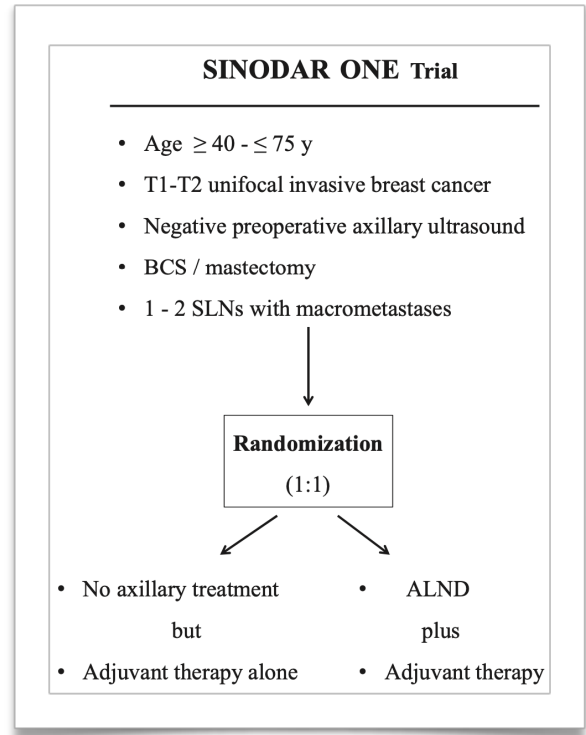
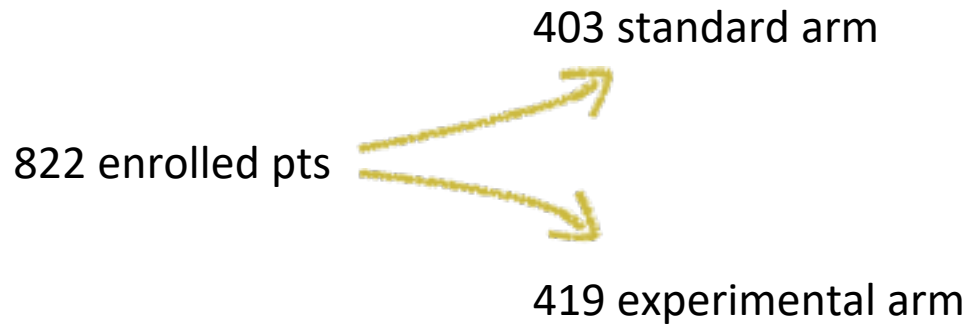
dott. Ruggero Spoto

Department of radiotherapy and radiosurgery, Humanitas research hospital

Background

Sinodar trial

From 04/2015 to 03/2018



Background

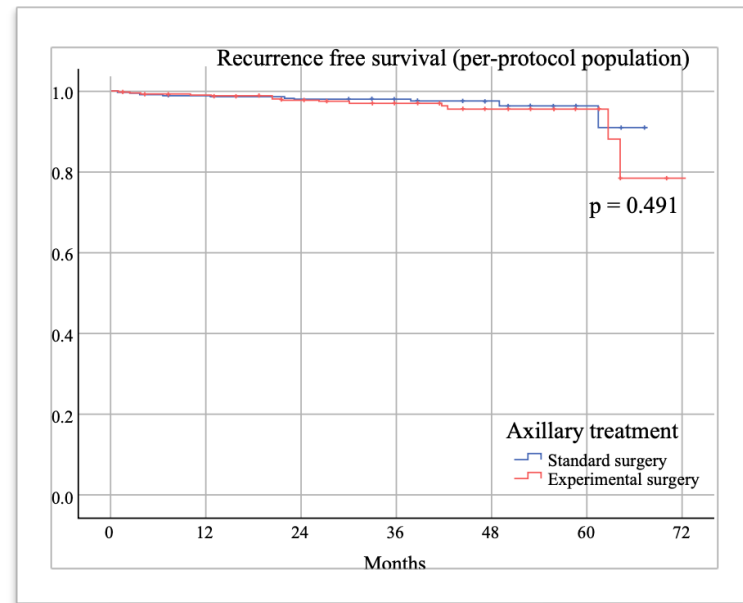
Median FUP: 3 y

5-year LR: 6.9% VS 3.3% ($p = 0.444$)

5-year OS: 98.9% VS 98.8% ($p = 0.936$)



These results do not support the use of routine ALND



Aims

- ✓ Re-analysis of SINODAR-ONE data focusing on the omission of radiotherapy
- ✓ Dosimetric study of axillary levels

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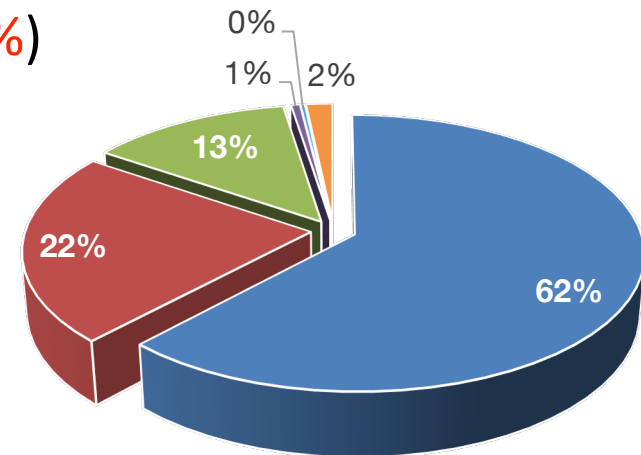
Results

Data confirmed by RT centers: 427 pts (51,9%)

355 patients underwent RT

The radiotherapy techniques:

- 220 3D conformal
- 80 VMAT
- 46 IMRT
- 2 Tomo
- 1 IORT
- 6 patients the technique used was not known



Results

Fractionation

- 5 fractions: 2 pts
- Hypofractionation: 218 pts
- Conventional: 134 pts
- IORT: 1 pts



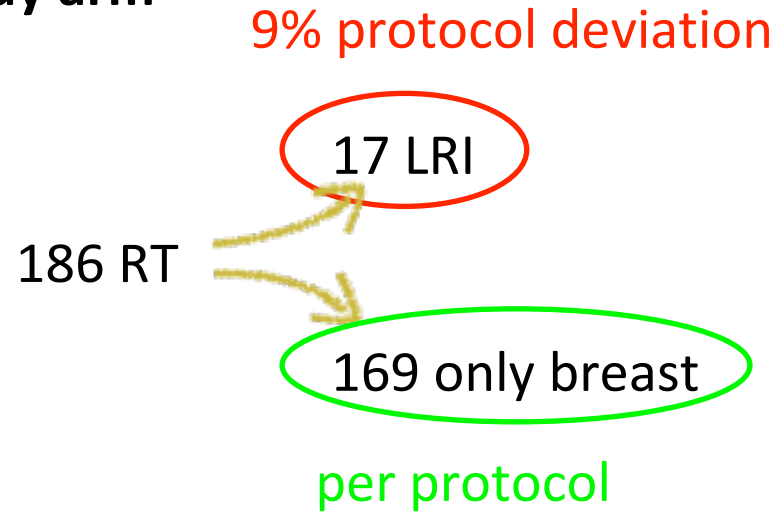
Different schemas
10-20 fractions

Results

Control arm



Study arm



Results

Control arm 169 pts

Study arm 169 pts

no significant differences

0 death
2 distant relapse

2 death
2 distant relapse
1 LR same QUAD
1 LR different QUAD



No axillary recurrence

Aims

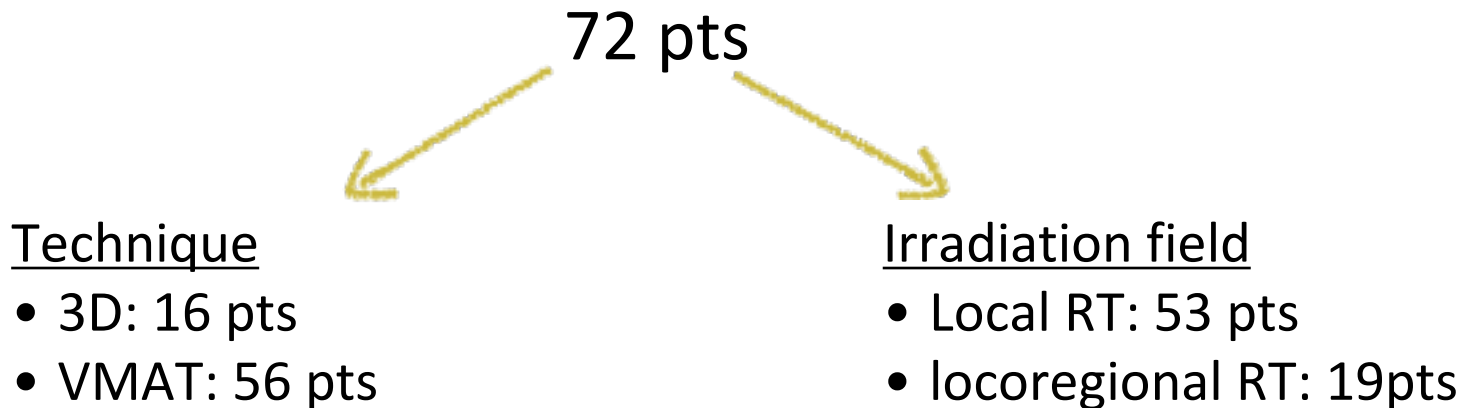
- ✓ Re-analysis of SINODAR-ONE data focusing on the omission of radiotherapy
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Materials & methods

- Dosimetric study was performed in 2 centers
- Retrospective contouring of 5 different levels (I-IV and IMC)
- Calculated EQD2 of for mean dose of all axillary levels ($\alpha/\beta=3$)
- Plans were not optimized for dose to axilla

Results

Dosimetric analysis



Results

Mean dose in EQD2

 $\alpha/\beta=3$

	Median I lev	Median II lev	Median III lev	Median IV lev	Median CMI
local RT	28.20 (DS 10.1)	33.13 (DS 6.7)	38.12 (DS 6.2)	41.99 (DS 4.2)	45.10.92 (DS 5.4)
locoregional RT	36.18 (DS 8.1)	39.42 (DS 11.0)	43.2 (DS 9.9)	48.47 (DS 5.2)	51.18,71 (DS 6.9)

The mean dose to I level is near half of prescription dose

Discussion

- Plans are not different to clinical practice
- Dose on I-II levels represent the normal dose diffusion
- The clinical impact of this dose is not known

but probably this dose has no impact



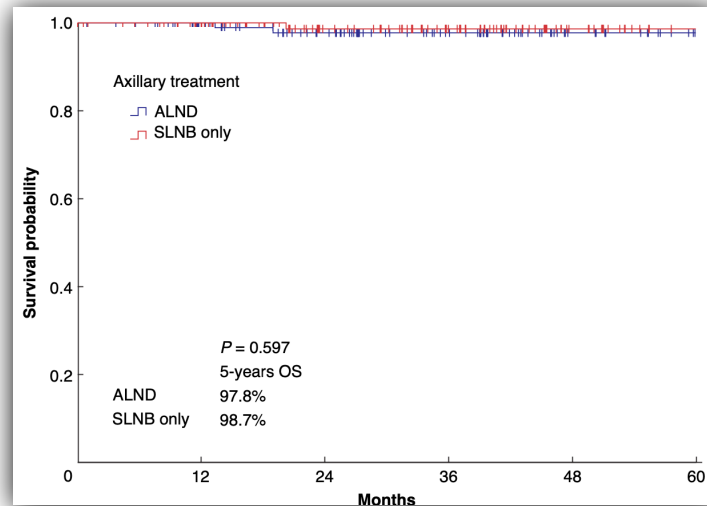
Discussion

In mastectomy subgroup there is NO differences in:

- 5-y OS
- 5-y DFS



Same results without RT



Take home message

→ SINODAR ONE is principally a surgical study

→ Regional radiotherapy could be omitted in selected cases

→ The dose to I level could be irrelevant

→ AIRO position paper is needed

Grazie

ai centri partecipanti per l'impegno...

...a tutti voi per l'attenzione