

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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mpMRI SENSITIVITY IN DETECTING MACROSCOPIC LOCAL RECURRENCES IN PROSTATE CANCER PATIENTS WITH PLANNED SALVAGE RADIOTHERAPY: UPDATED RESULTS OF AN OBSERVATIONAL STUDY.

SENSIBILITÀ DELLA RMN MULTI-PARAMETRICA NELLA DIAGNOSI DI RECIDIVA LOCALE MACROSCOPICA IN PAZIENTI CON CARCINOMA PROSTATICO AVVIATI A RADIOTERAPIA DI SALVATAGGIO: RISULTATI AGGIORNATI DI UNO STUDIO OSSERVAZIONALE

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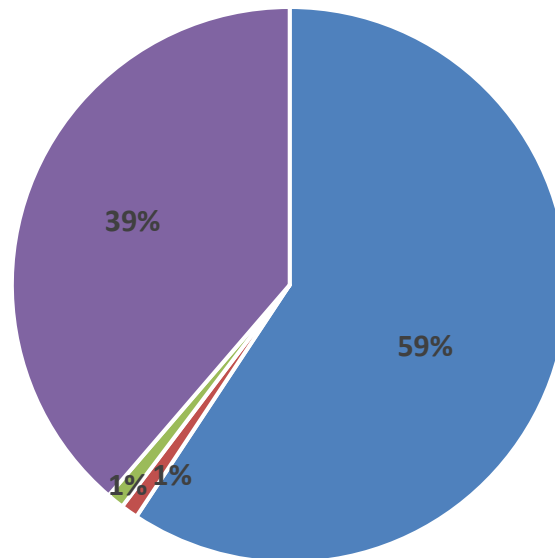
Aim

- Biochemical recurrence of prostate cancer after radical prostatectomy are recorded in approximately 20 to 50% of cases
- Treatment options: salvage radiotherapy (SRT), hormonal therapy, observation
- In patients eligible for SRT, current guidelines recommend **PSMA PET** to exclude distant metastases
- ICAROS, an observational study of our centre, was carried out to evaluate a possible role of **MRI before SRT**

Methods

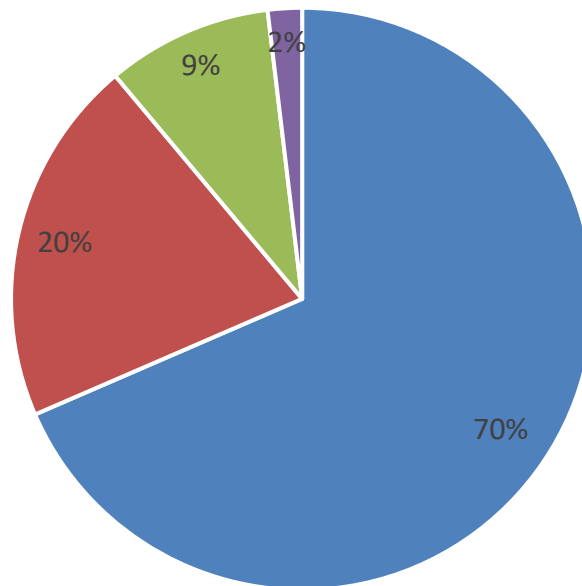
- 91 patients were evaluated over a 5-year period
 - Median age: 67 years (range: 41-78)
- Median PSA level at biochemical recurrence: 0.4 ng/ml (IQR: 0.22-1.04)
 - ISUP 3-5 (in 75.8% of patients)

Results: MRI pre-SRT



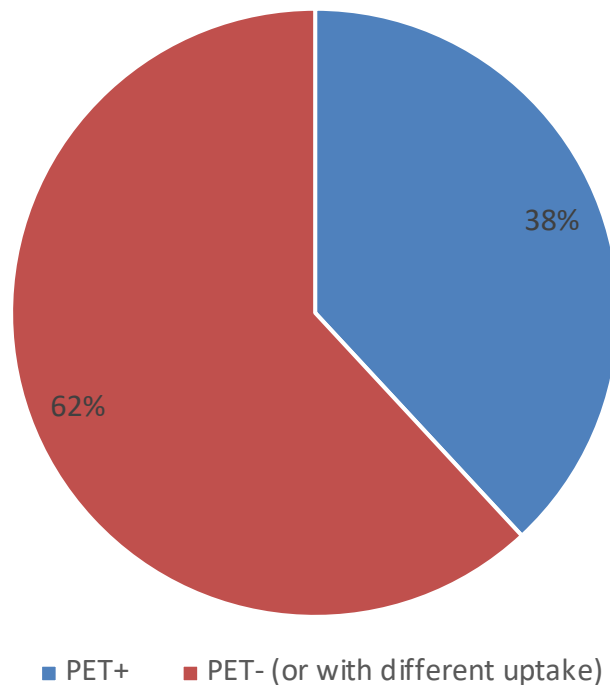
■ Local recurrence ■ Pelvic nodal metastases ■ Pelvic bone metastases ■ Negative

Results: Site of local recurrence



■ Bladder neck ■ Vesicourethral anastomosis ■ Rectovesical space ■ Prostatic fossa

Results: Patients with MRI+



Methods_II

•We compared **two cohorts** of patients screened or not with pre-SRT MRI and matched (case-control) based on:

- PSA before SRT
- Pathological tumour stage
- ISUP grade group
- Pelvic nodal irradiation
- Adjuvant hormonal therapy

Results_II

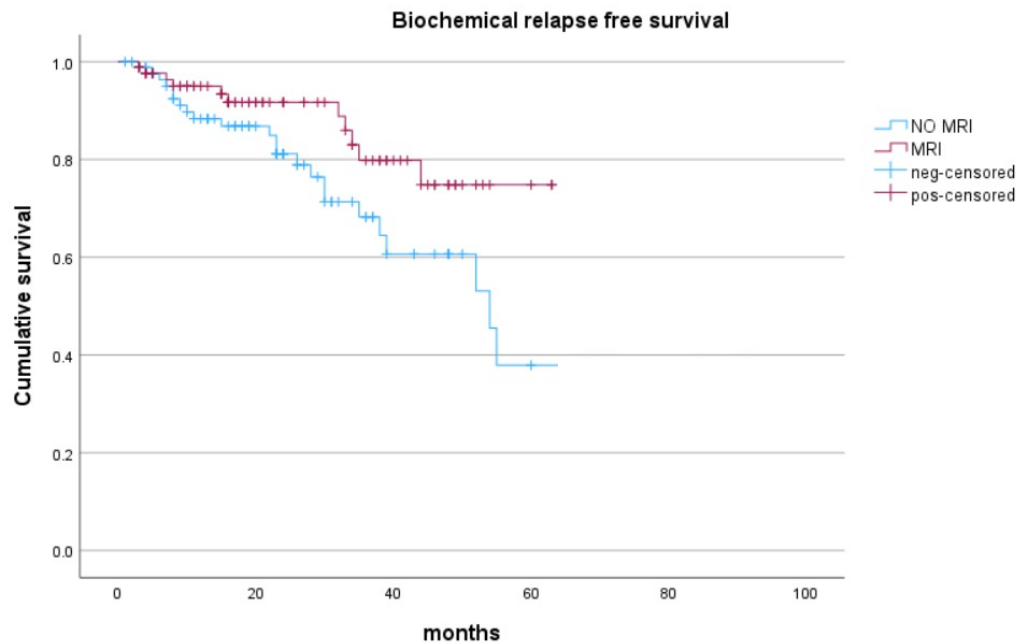
- 176 patients included:

- 88 MRI
- 88 no MRI

After MRI:

- 61.4% of patients had macroscopic locoregional relapse → median total dose of SRT: 70.4 Gy versus 66 Gy
- Higher rate of biochemical relapse-free survival in patients undergoing MRI before SRT:

4-year rates: 74.8% versus 60.7%; p = 0.039



Conclusions

- An unexpectedly high rate of macroscopic local recurrence was recorded by MRI evaluation in our cohort of patients with biochemical recurrence after prostatectomy. This allowed treatment modulation by delivering a boost to the site of recurrence, with a significant improvement in the early biochemical outcome.
- These results challenge current recommendations on the most appropriate imaging exams in this clinical setting

**Thanks
for your
Attention!**

