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

XXXIII CONGRESSO NAZIONALE AIRO

AIRO2023

BOLOGNA,
27-29 OTTOBRE 2023
PALAZZO DEI CONGRESSI

Radioterapia Oncologica: l'evoluzione al servizio dei pazienti

ARTO (NCT03449719), RANDOMIZED PHASE II TRIAL TESTING STEREOTACTIC BODY RADIOTHERAPY AND ABIRATERONE ACETATE IN OLIGOMETASTATIC CASTRATE-RESISTANT PROSTATE CANCER PATIENTS

L. Caprara, G. Frosini, L. Burchini, C. Orsatti, G. Francolini, B. Detti, V. Di Cataldo, S. Caini, A. Bruni, G. Ingrosso, R. M. D'Angelillo, A. R. Alitto, M. Augugliaro, L. Triggiani, S. Parisi, G. Facchini, L. Livi

Associazione Italiana
Radioterapia e Oncologia clinica

DICHIARAZIONE

Relatore: **Luisa Caprara**

- 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 **NIENTE DA DICHIARARE**

Background

Androgen Receptor Targeted Agents (ARTA) represent one of the main treatment options for metastatic castrate resistant prostate cancer (mCRPC).

Ryan, Lancet Oncol., 2015

ADT-free survival was longer with MDT than with surveillance alone for oligorecurrent Pca

Ost, JCO, 2018

Treatment with SABR for oligometastatic prostate cancer improved outcomes. These results underline the importance of prospective randomized investigation of the oligometastatic state

Phillips, JAMA, 2020

Addition of stereotactic radiation therapy (SBRT) to ablate metastatic foci may improve clinical outcomes in oligometastatic setting.

Chalkidou, Lancet Oncol., 2021

Evidence in oligometastatic CRPC setting?

Methods

- mCRPC
- < 3 lesions
- No visceral lesions
- No previous therapies for mCRPC

ARM A (Control)

Abiraterone acetate

ARM B (Treatment)

Abiraterone acetate+SBRT

on all metastatic sites of disease

-All staging methods (conventional, PSMA-PET, Cho-PET) allowed
-SBRT delivered in 1 to 5 fractions
-BED_3 ≳100 Gy was recommended

Primary endpoint of the trial: biochemical response (BR, defined as a PSA decrease ≥ 50% from baseline measured within 6 months from treatment start).

Secondary endpoint of the trial: Complete biochemical response (CBR, defined as PSA at 6 months ≤ 0.2 ng/ml); Progression Free Survival (PFS)

Methods

mCRPC patients with < 3 non visceral metastatic lesions without previous systemic treatment for mCRPC (n=157)

82 patients randomized to receive Abiraterone acetate alone

82 patients receiving Abiraterone acetate alone

75 patients randomized to receive Abiraterone acetate + SBRT on all sites of metastatic disease

74 patients receiving Abiraterone acetate + SBRT on all sites of metastatic disease

1 patient refusing SBRT and treated with Abiraterone acetate alone

Results: Population

Characteristics	AAP (n=82)	AAP+SBRT (n=75)	p
Median age (IQR)	74 (68-79)	74 (68-79)	0.61
ISUP grade (%) < 3 >3	 15 (18.3) 67 (81.7)	 13 (17.3) 62 (82.7)	0.87
Lesion number 1 >1	 25 (30.5) 57 (69.5)	 34 (45.4) 41 (54.6)	0.05
Metastatic sites Nodal only Bone	 44 (53.6) 38 (46.4)	 33 (44) 42 (56)	0.22
Staging Conventional Choline PET PSMA/Fluciclovine PET	 11 (13.4) 54 (65.9) 17 (20.7)	 4 (5.3) 48 (64) 23 (30.7)	0.12
Median Baseline PSA	3.42 (1.46-9.35)	3.42 (1.47-9.36)	0.14

Results: Biochemical response

BR was detected in 79.6% of patients

(90.6 *vs* 68.2% in the experimental *vs* control arm, respectively)

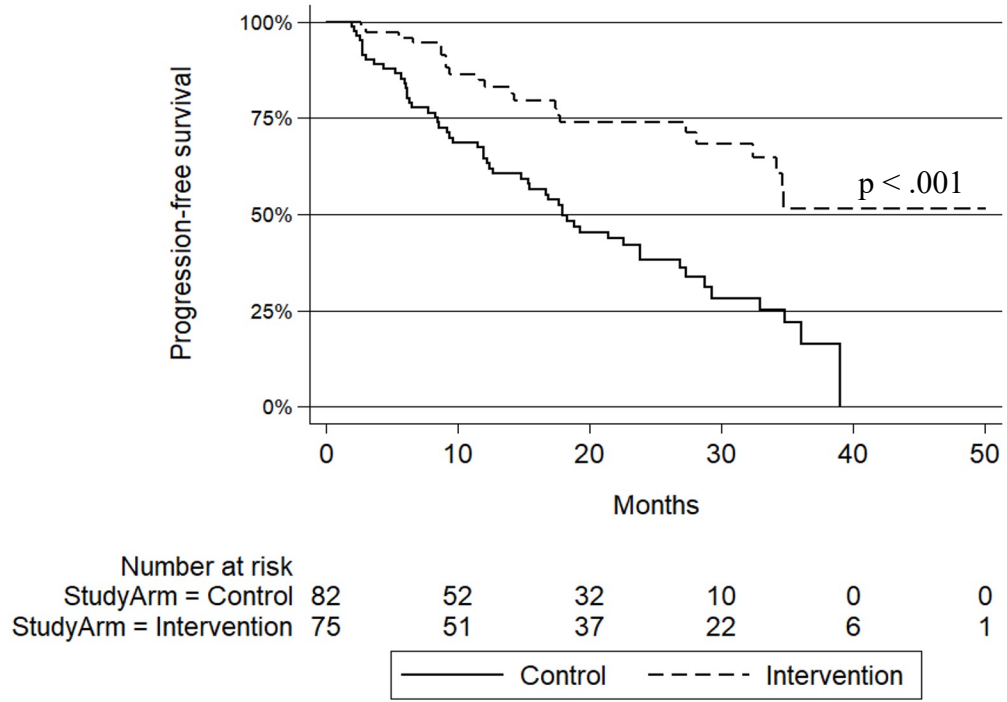
OR 4.5 (95%CI 1.7-11.9)
p = .003

CBR was detected in 38.8% of patients

(56% *vs* 23.2% in the experimental *vs* control arm, respectively)

OR 3.6 (95%CI 1.8-7.4)
p < .001

Results: Progression Free Survival



After a median follow up of 23 months PFS events were reported in 21 vs 47 pts in the treatment vs control arm

Median PFS was not reached vs 17 months in the treatment vs control arm

Hazard Ratio for progression was 0.35 (95% CI 0.21-0.57) in favour of the treatment arm

Results: Adverse Events

- Very low toxicities were observed across both arms
- Most common AE in the experimental arm was fatigue
- Only 8 G>2 toxicity, unrelated to SBRT
- No treatment related deaths were observed

	ARM A n((%)		ARM B (Exp) n((%)	
	G1/2	G>2	G1/2	G>2
Blood count anormalities	4 (4.9)	1 (1.2)	6 (8)	1 (1.3)
Other blood test anormalities	13 (15.8)	4 (4.9)	10 (13.3)	1 (1.3)
Osteoporosis/ Fracture	5 (6)	0 (0)	2 (2.7)	0 (0)
Fatigue	8 (9.7)	1 (1.2)	9 (12)	0 (0)
Hot Flashes	2 (2.4)	0 (0)	2 (2.7)	0 (0)
Hyperglicemia/ Diabetes	3 (3.6)	0 (0)	3 (4)	0 (0)
Lower Urinary Tract symptoms	4 (4.9)	3 (3.6)	2 (2.7)	1 (1.3)
Hematuria	3 (3.6)	1 (1.2)	2 (2.7)	2 (2.7)
Gastrointestinal disorders	1 (1.2)	0 (0)	2 (2.7)	0 (0)
Cardiovascular disorders	11 (13.4)	3 (3.6)	7 (9.3)	3 (4)
Limbs edema	0 (0)	0 (0)	3 (4)	0 (0)
Total	54 (65.8)	13 (15.8)	48 (64)	8 (10.6)

Conclusion

The trial reached its primary endpoint of biochemical control and PFS, suggesting a clinical advantage for SBRT in addition to first line AA treatment in mCRPC patients

No relevant safety alerts were detected for concomitant administration of SBRT in these patients, especially in terms of adverse events of interest like fractures, hematuria or rectal hemorrage

PERSIAN trial (NCT05717660) is a second italian randomized phase II trial enrolling oligometastatic hSPC patients randomized to receive either ADT+Apalutamide vs ADT+Apalutamide+SBRT on all sites of distant metastatic disease. The trial started its enrollment on March 2023 and end of accrual is planned for 2025.

Grazie per l'attenzione

Luisa Caprara MD
Email: luisa.caprara@unifi.it

FONDAZIONE RADIOTERAPIA ONCOLOGICA