Università “G. D’Annunzio” Chieti
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RADIOTERAPIA ESCLUSIVA ASSOCIATA AD ORMONOTERAPIA NEI PAZIENTI AFFETTI DA CARCINOMA DELLA PROSTATA AD ALTO RISCHIO: ANALISI RETROSPETTIVA DEI RISULTATI A 10 ANNI

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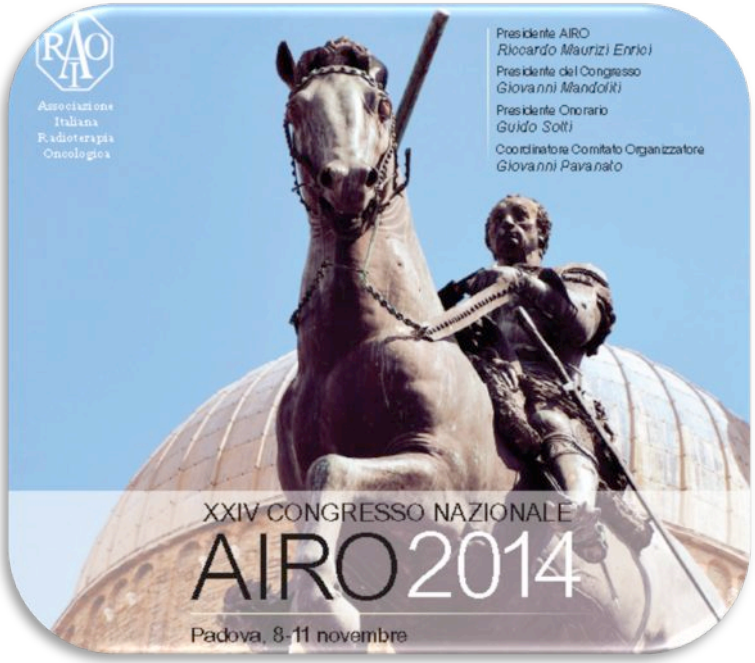
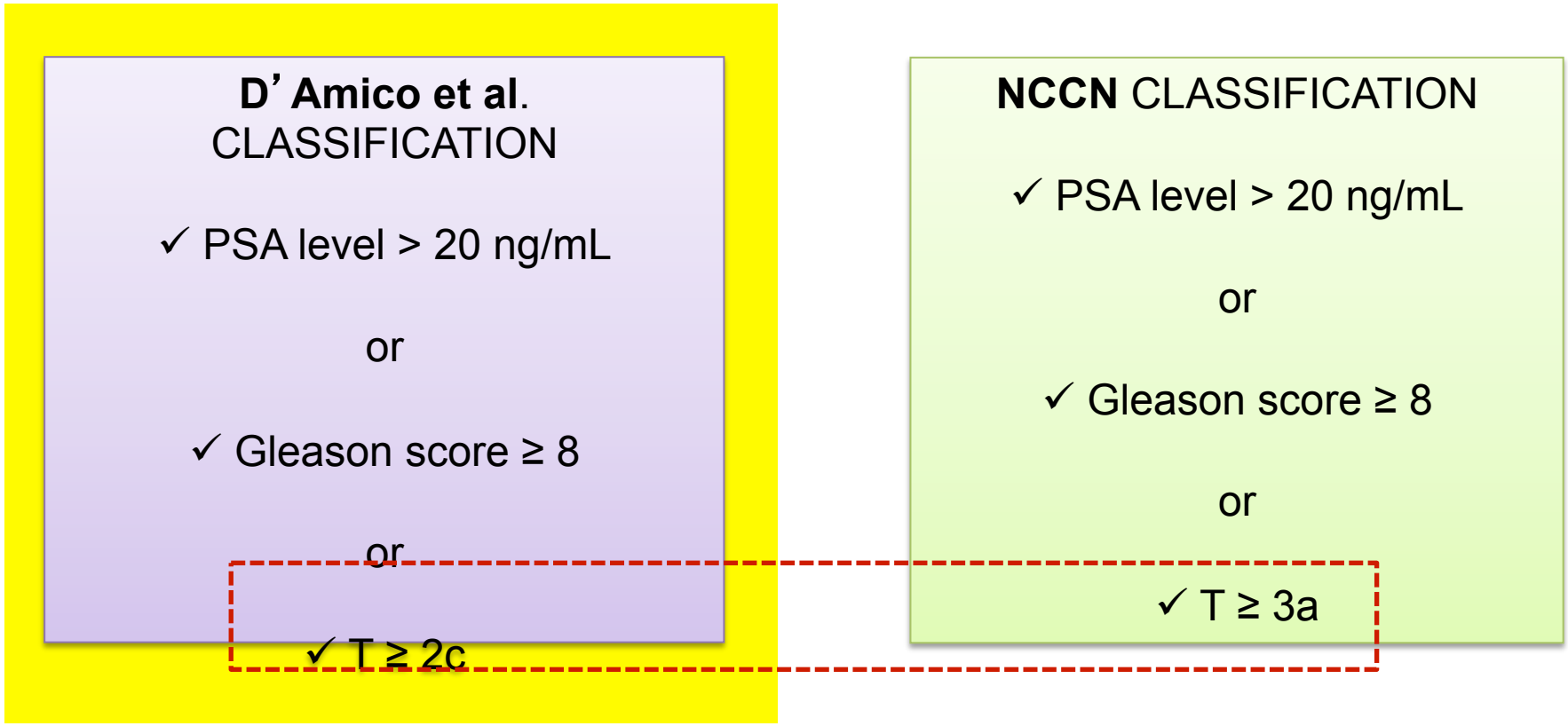


HIGH RISK PROSTATE CANCER



D'Amico AV et al. JAMA 1998;280(11):969–74.
NCCN Prostate cancer. Version 2.2014. National comprehensive cancer network guidelines. http://www.nccn.org/.

HIGH RISK PROSTATE CANCER: standard of care

- RT + ADT (2-3 anni)
- PROSTATECTOMIA RADICALE + LINFADENECTOMIA

HIGH RISK PROSTATE CANCER: standard of care

➢ **RT + ADT (2-3 anni)**

Table 1
Clinical trials of radiation therapy for high-risk prostate cancer.

Trials (authors)	Category of trials	No. of total patients	Treatment arms (subgroup)	Total dose/ fractions	Type of radiation	Treatment outcomes
RTOG75-06	Phase III (RT field)	523	Arms			5y-DFS
			WP + PALN	65 Gy/35fr.	Photon	37%
			WP	65 Gy/35fr.	Photon	42%
RTOG77-06	Phase III (RT field)	445	Arms			5y-DFS
			WP	65 Gy/35fr.	Photon	64%
			Prostate bed	65 Gy/35fr.	Photon	67%
MDACC Pollack et al.	Phase III (RT dose)	305	Arms			6y-FFF
			Low-dose	70 Gy/35fr.	Photon	24%
			High-dose	78 Gy/39fr.	Photon	10%
MSKCC Zelefesky et al.	Phase III (RT dose)	2047	Arms (High-risk)			5y-bRFS
			Low-dose	⩽70.2 Gy	Photon	45%
			High-dose	75.6–86.4 Gy	Photon	65%
RTOG94-06	Phase III (RT dose/fraction size)	1051	Arms (High-risk)			5y-bRFS
			Low-dose	68.4 Gy/38fr.	Photon	42%
			Intermediate-dose	73.8 Gy/41fr.	Photon	62%
			High-dose	79.2 Gy/44fr.	Photon	68%

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HIGH RISK PROSTATE CANCER: standard of care

➢ **RT + ADT (2-3 anni)**

Table 2
Clinical trials on hormonal therapy combined with definitive radiotherapy for intermediate- to high-risk prostate cancer.

Trials	Category of trials	Treatment arms	Duration	Timing	Treatment outcomes
RTOG83-07	Randomized phase II	Arms			7y-LCR
(1995)		Megestrol	4 months	Neoadjuvant	16%
		DES	4 months	Neoadjuvant	21%
RTOG85-31	Phase III	Arms			5y-bRFS*
(1997)		ADT (+)	Indefinitely	Adjuvant	57%
		ADT ( )	–	–	28%
RTOG86-10	Phase III	Arms			8y-bRFS
(2001)		ADT (+)	4 months	Neoadjuvant	24%
		ADT ( )	–	–	10%
EORTC22863	Phase III	Arms			5y-DFS
(2002)		ADT (+)	3 years	Adjuvant	74%
		ADT ( )	–	–	40%
RTOG92-02	Phase III	Arms			5y-bRFS
(2003)		Short-term ADT	4 months	NeoAdjuvant	28%
		Long-term ADT	⩾24 months	NeoAdjv. and Adjv.	46%
NIRS 9904 (1)	Phase II	Arms (High-risk)			5y-bRFS
(2005)		Long-term ADT	⩾18 months	NeoAdjv. and Adjv.	80.5%

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Scopo dello studio

✓OS

✓bDFS

✓DMFS

✓ DFS

✓ tossicità acuta e tardiva (sec. RTOG)

Materiali e metodi

✓Dal **2002** al **2012**: 254 pazienti trattati per adk prostata

✓**149 pazienti high risk** (*sec D'Amico*).

✓3D-CRT (dose 70-76 Gy in frazionamento convenzionale)

✓Ormonoterapia.

✓Follow-up: PSA, visita urologica.

Caratteristiche del campione

Variable	
Overall	149
Age (yr), mean±SD (range)	72.0±6.5 (54-84)
Pre-treatment PSA (ng/mL), mean±SD (range)	24.5±33.3 (1.1-260)
T stage, n(%)	
T1	4 (2.7)
T2a-b	28 (18.8)
T2c	97 (65.1)
T3-T4	19 (12.7)
Unknow	1 (0.7)
N stage, n(%)	
N0	138 (92.6)
N1	11 (7.4)
Gleason's Score, n(%)	
≤ 6	60 (40.3)
7	54 (36.2)
≥ 8	30 (20.1)
Unknow	5 (3.4)
NCCN risk classification, n(%)	
Intermediate	70 (47.0)
High	79 (53.0)

Caratteristiche del trattamento radioterapico

Variable	
RT Volume	n(%)
Prostate + vescicles	115 (77.2)
whole pelvis + boost	34 (22.8)
RT Dose	n(%)
70 Gy	45 (30.2)
72 Gy	29 (19.5)
74 Gy	14 (9.4)
76 Gy	61 (40.9)

Caratteristiche della terapia ormonale

Variable	
ADT	**n(%)**
Yes	137 (91.9)
No	12 (8.1)
Type	
BAT	78 (56.9)
LHRH analogue	44 (32.1)
AA	8 (5.8)
Unknow	7 (5.2)
Duration	
< 12 months	22 (16.0)
12 - 36 months	70 (51.1)
> 36 months	12 (8.7)
Unknow	33 (24.2)

Risultati: outcomes clinici

Outcomes	Failures n. (%)	Estimated rate 60 months±SE
bDFS, n (%)	19 (12.7)	81.2±5.4
DMFS, n (%)	6 (4.0)	93.3±3.5
OS, n (%)	11 (7.4)	89.9±3.3
DFS, n (%)	30 (20.1)	69.8±5.5

Follow-up*:* 41 months (*range* 4-112)

Risultati: outcomes clinici

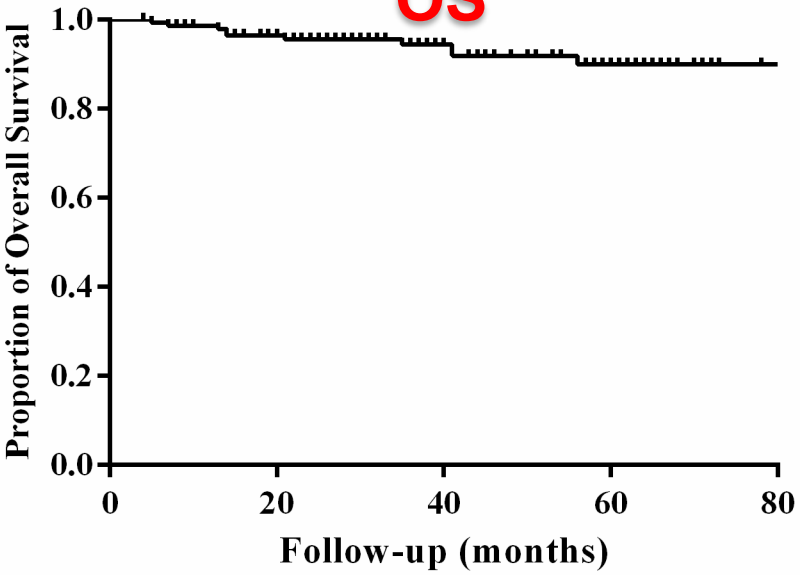
✓ **NCCN Risk Classification**

Outcomes	**High** (n=79)	60 months ±SE
bDFS, n (%)	10 (12.6)	84.6±6.8
DMFS, n (%)	5 (6.3)	95.0±4.9
OS, n (%)	6 (7.6)	90.9±3.7
DFS, n (%)	17 (21.5)	72.3±6.8

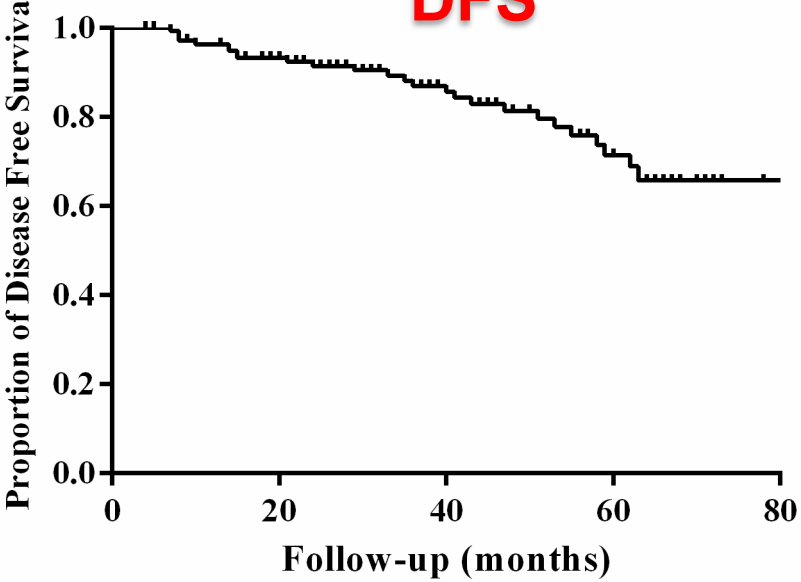
Follow-up: 41 months (*range* 4-112)

Risultati: outcomes clinici

OS

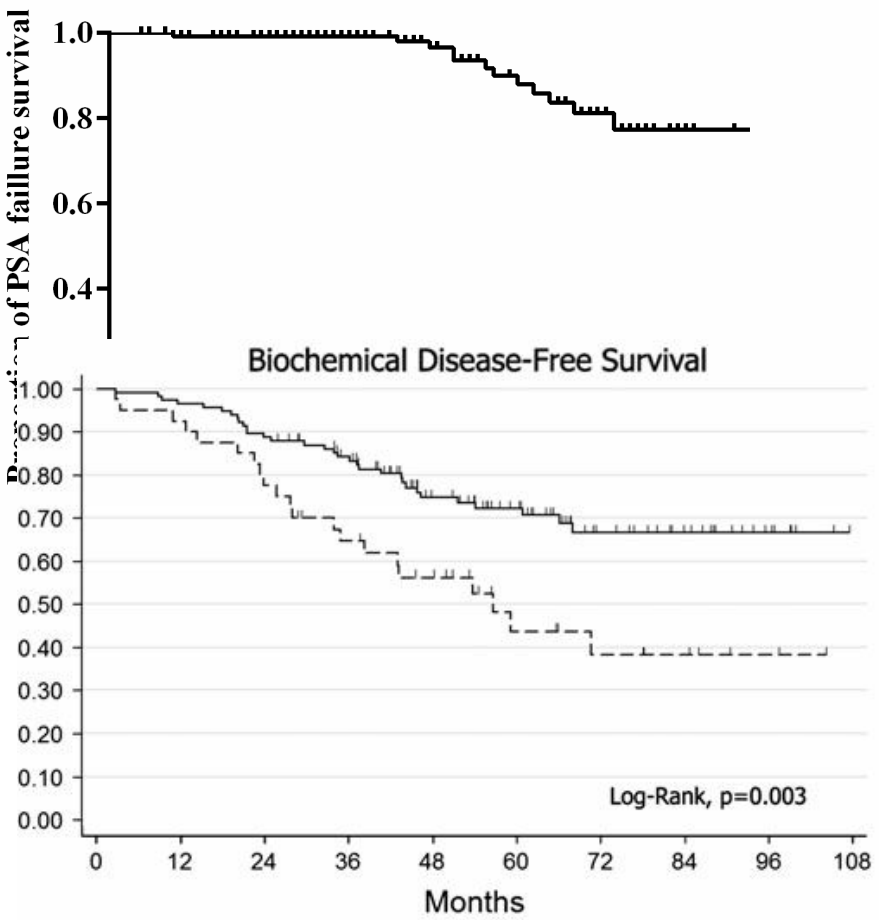


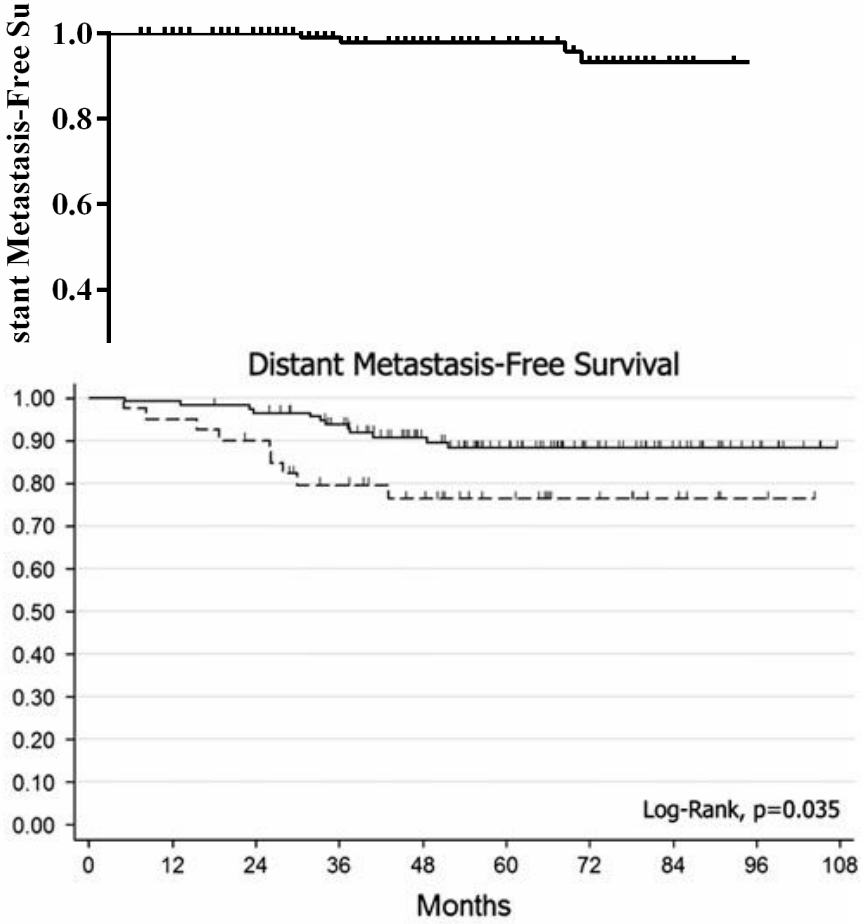
DFS



Risultati: outcomes clinici

DMFS





Guarnieri A, et al. J Cancer Res Clin Oncol 2013

Risultati: tossicità

RTOG toxicity scale	Tossicità acuta, n(%)		Tossicità cronica, n(%)	
	Gastrointestinale (GI)	Genitourinario (GU)	Gastrointestinale (GI)	Genitourinario (GU)
G0	86 (57.7)	64 (42.9)	101 (67.8)	101 (67.8)
G1	42 (28.2)	77 (51.7)	16 (10.7)	24 (16.1)
G2	19 (12.7)	3 (2.0)	18 (12.1)	9 (6.0)
G3	-	3 (2.0)	1 (0.7)	2 (1.4)
G4	-	-	-	-
Unknow	2 (1.4)	2 (1.4)	13 (8.7)	13 (8.7)

Conclusioni

✓Tassi di sopravvivenza elevati

✓Tossicità acuta e tardiva limitata

✓Conferma delle evidenze di letteratura

✓Analisi univariata e multivariata: ongoing.

Grazie dell'attenzione!