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Oligometastatic Landscape
Clinical Case
and
Evidence from Literature



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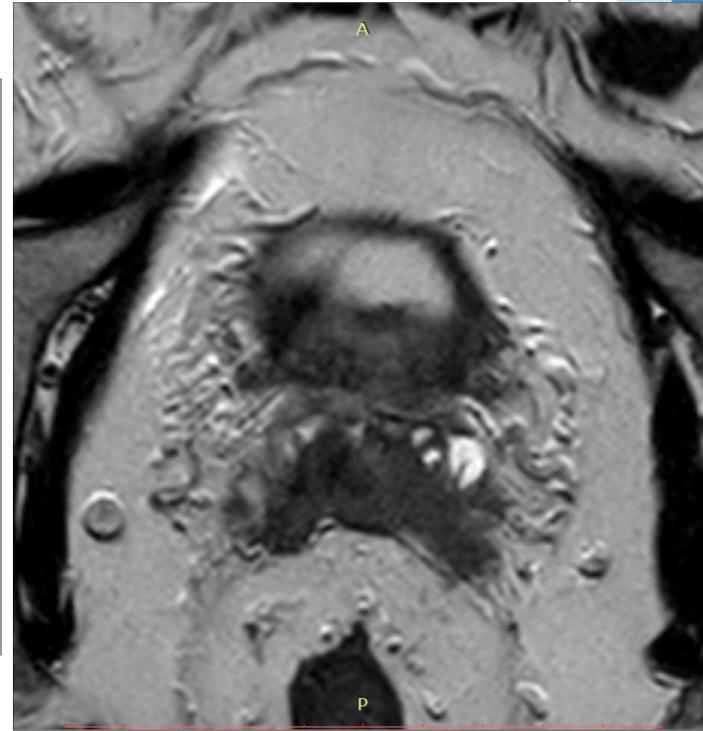
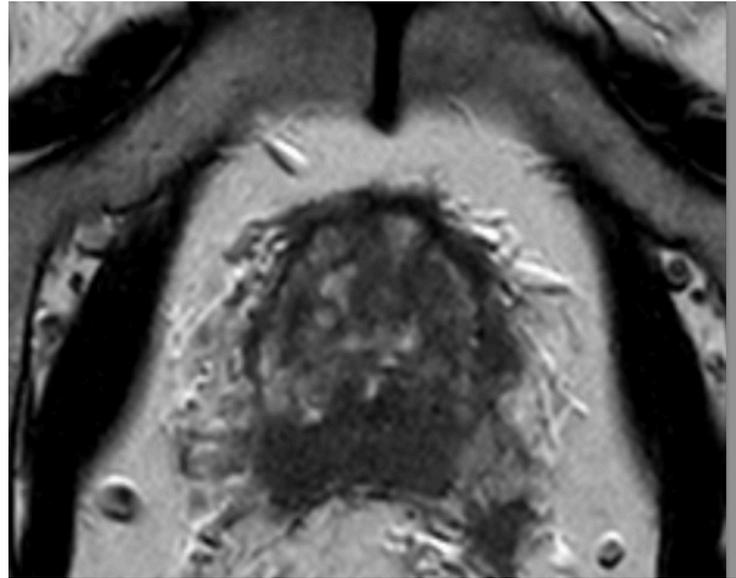
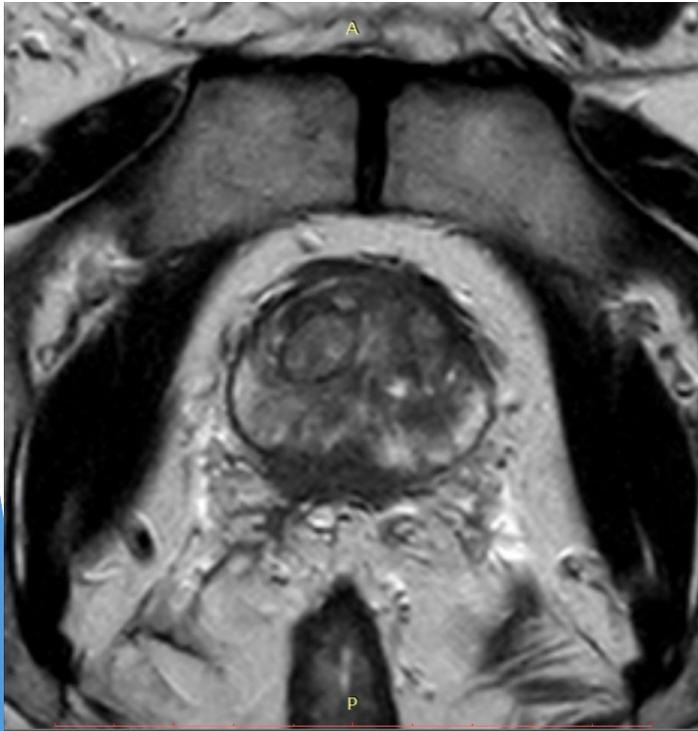


Clinical Case

- ▶ R.T. 69 years old
- ▶ Medical History: Ischemic heart disease, PCI procedure was performed 10 years ago
- ▶ PSA screening: 11 ng/ml
- ▶ mpMRI was requested by Urologist

Clinical Case

- ▶ mpMRI: Right lobe lesion with capsular bulging. Seminal vesicles involved. Pericentimetric pelvic lymph nodes. PIRADS 4



Clinical Case

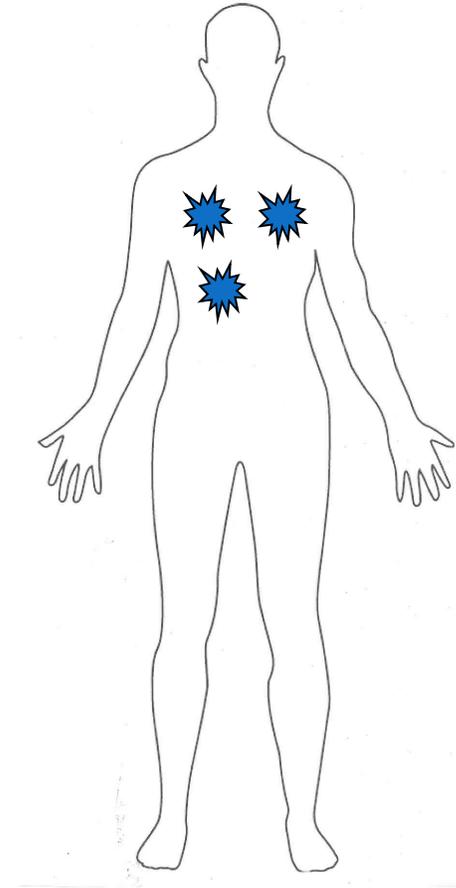
- ▶ Fusion prostate biopsy :
 - Target Lesion: Adenocarcinoma Gleason Score 9 (4+5) ISUP 5
 - 12 cores: 2 cores positive Gleason Score 8 (4+4) ISUP 4
- ▶ CT Total Body and Bone Scan was negative

Clinical Case

- ▶ Fusion prostate biopsy :
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- ▶ CT Total Body and Bone Scan was negative
- ▶ PET PSMA: increased uptake in the prostate. No lymph nodes metabolically active. Small lesion of D5
- ▶ MRI spine: confirms presence of lesion of the body of D5

Definition of Oligometastatic PCa

Hellman and Weichselbaum (1995).. *“there is a subgroup of patients with an intermediate phase of metastatic disease, that presents a potential for disease control with the ablation of the few metastases”*



Ολιγοσ: poche lesioni secondarie

What evidence on staging?

What evidence on staging?

EAU - EANM - ESTRO - ESUR - ISUP - SIOG Guidelines on Prostate Cancer

Summary of evidence	LE
PSMA PET/CT is more accurate for staging than CT and bone scan for high-risk disease but to date no outcome data exist to inform subsequent management.	1b

Recommendations	Strength rating
Any risk group staging	
Use pre-biopsy MRI for local staging information.	Weak
Low-risk localised disease	
Do not use additional imaging for staging purposes.	Strong
Intermediate-risk disease	
In ISUP grade 3, include at least cross-sectional abdominopelvic imaging and a bone-scan for metastatic screening.	Weak
High-risk localised disease/locally advanced disease	
Perform metastatic screening including at least cross-sectional abdominopelvic imaging and a bone-scan.	Strong
When using PSMA PET or whole body MRI to increase sensitivity, be aware of the lack of outcome data of subsequent treatment changes.	Strong

Certezza globale delle prove	Raccomandazione clinica	Forza della raccomandazione clinica
Moderata	La PET/TC con 68Ga-PSMA può essere presa in considerazione in alternativa all'imaging convenzionale nei pazienti con neoplasie a rischio alto o molto alto	Condizionata a Favore
COI: i Membri del Panel non dichiarano conflitti di interesse in atto per il presente quesito		



Linee guida CARCINOMA DELLA PROSTATA

Edizione 2021

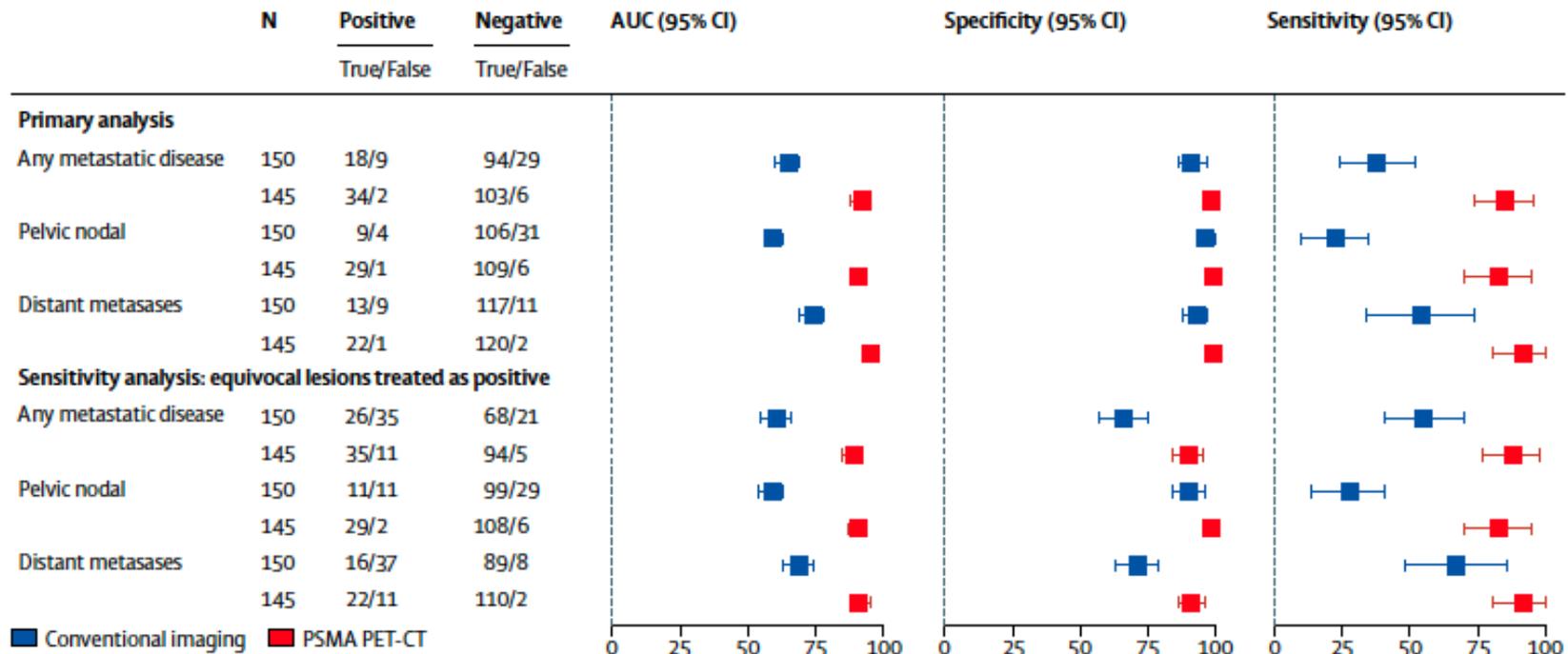


What evidence on staging?



Prostate-specific membrane antigen PET-CT in patients with high-risk prostate cancer before curative-intent surgery or radiotherapy (proPSMA): a prospective, randomised, multicentre study

302 men with biopsy proven prostate cancer and high-risk features



N+ or M+ @ conventional imaging: 12%

@ PSMA PET: 23%

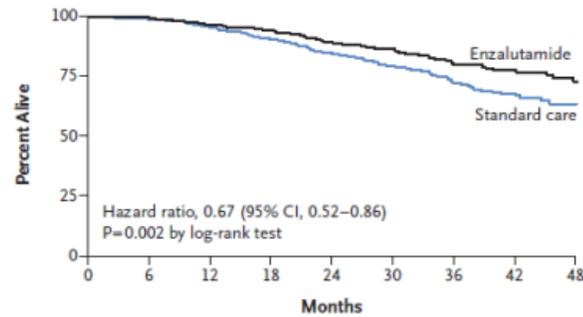
What evidence on systemic therapy?

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Enzalutamide with Standard First-Line Therapy in Metastatic Prostate Cancer

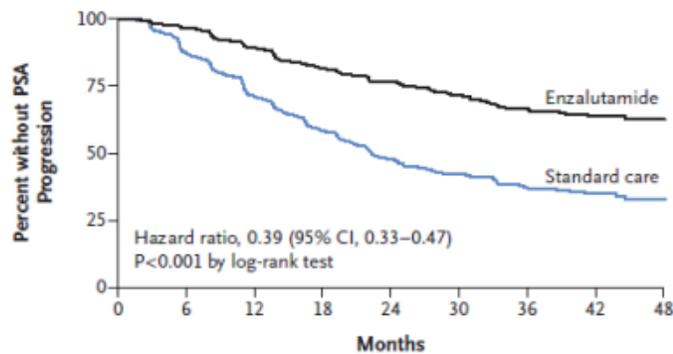
I.D. Davis, A.J. Martin, M.R. Stockler, S. Begbie, K.N. Chi, S. Chowdhury,

A Overall Survival



No. at Risk	0	6	12	18	24	30	36	42	48
Enzalutamide	563	558	541	527	480	340	189	106	45
Standard care	562	551	531	501	452	311	174	86	32

B PSA Progression-free Survival



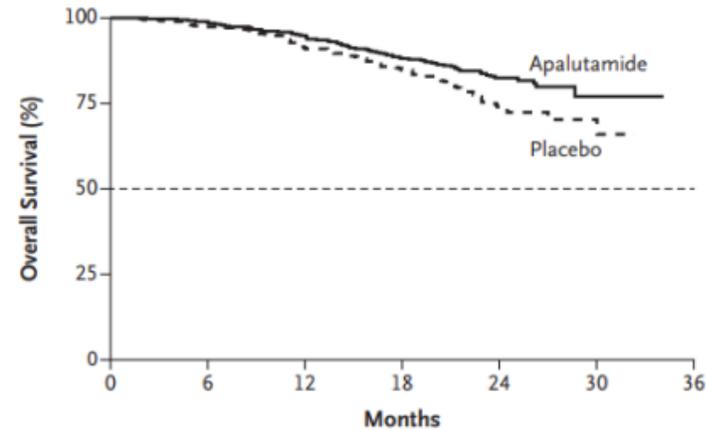
No. at Risk	0	6	12	18	24	30	36	42	48
Enzalutamide	563	543	500	455	411	269	146	77	34
Standard care	562	486	395	322	249	161	78	44	17

N Engl J Med 2019;381:121-31

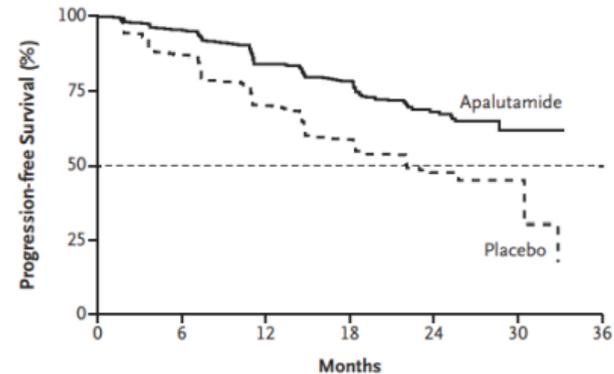
Apalutamide for Metastatic, Castration-Sensitive Prostate Cancer

Kim N. Chi, M.D., Neeraj Agarwal, M.D., Anders Bjartell, M.D.

Overall Survival



Radiographic Progression-free Survival



N Engl J Med 2019;381:13-24



What evidence on systemic therapy?

Meeting Abstract | 2022 ASCO Annual Meeting II

GENITOURINARY CANCER—PROSTATE, TESTICULAR, AND PENILE

Updated overall survival outcomes in ENZAMET (ANZUP 1304), an international, cooperative group trial of enzalutamide in metastatic hormone-sensitive prostate cancer (mHSPC).

[Ian D. Davis](#), [Andrew James Martin](#), [Robert Richard Zielinski](#), [Alastair Thomson](#), [Thean Hsiang Tan](#), [Shahneen Sandhu](#), ...

The benefits were more evident in pts with low volume disease

	Enzalutamide		NSAA		HR (95% CI)
	Deaths/Total	5y OS %	Deaths/Total	5y OS %	
All participants	208/563	67	268/562	57	0.70 (0.58 to 0.84)
Concurrent docetaxel					
No	100/310	72	145/312	58	0.60 (0.47 to 0.78)
Yes	108/253	61	123/250	56	0.82 (0.63 to 1.06)
Volume of Disease (Vol)					
Low	59/262	80	97/261	66	0.54 (0.39 to 0.74)
High	149/301	55	171/301	49	0.79 (0.63 to 0.98)

What evidence on treatment of the primary tumour?

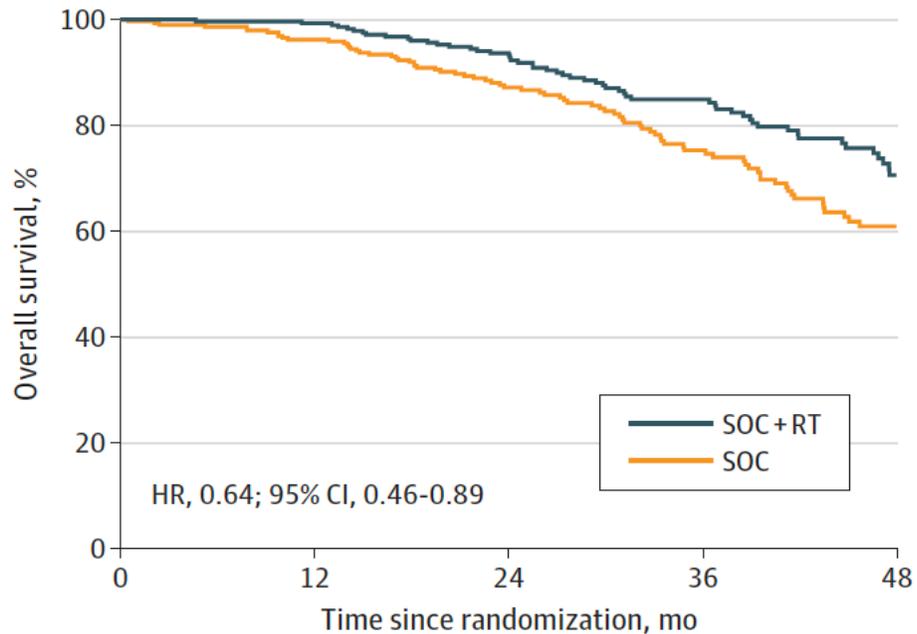
What evidence on treatment of the primary tumour?

JAMA Oncology | Original Investigation

Association of Bone Metastatic Burden With Survival Benefit From Prostate Radiotherapy in Patients With Newly Diagnosed Metastatic Prostate Cancer

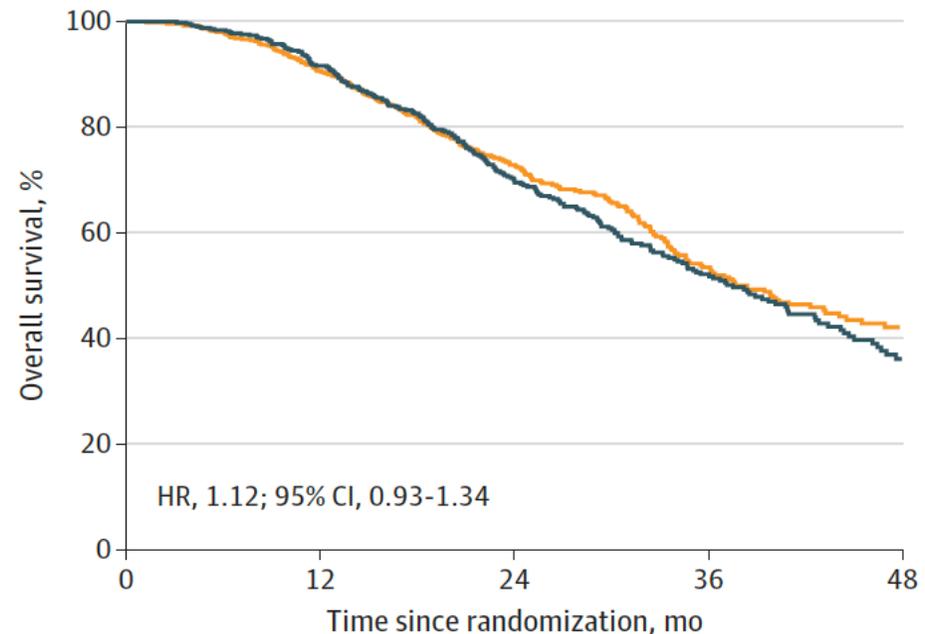
A Secondary Analysis of a Randomized Clinical Trial

A Overall survival in ≤ 3 bone metastases (\pm NRLN) subcohort



No. at risk (events)	0	12	24	36	48				
SOC	290	(11)	274	(24)	188	(22)	116	(19)	50
SOC+RT	287	(2)	281	(15)	212	(18)	145	(18)	59

C Overall survival in ≥ 4 bone metastases (\pm NRLN) subcohort



No. at risk (events)	0	12	24	36	48				
SOC	512	(47)	452	(83)	281	(64)	147	(25)	45
SOC+RT	498	(41)	441	(96)	260	(58)	136	(30)	38

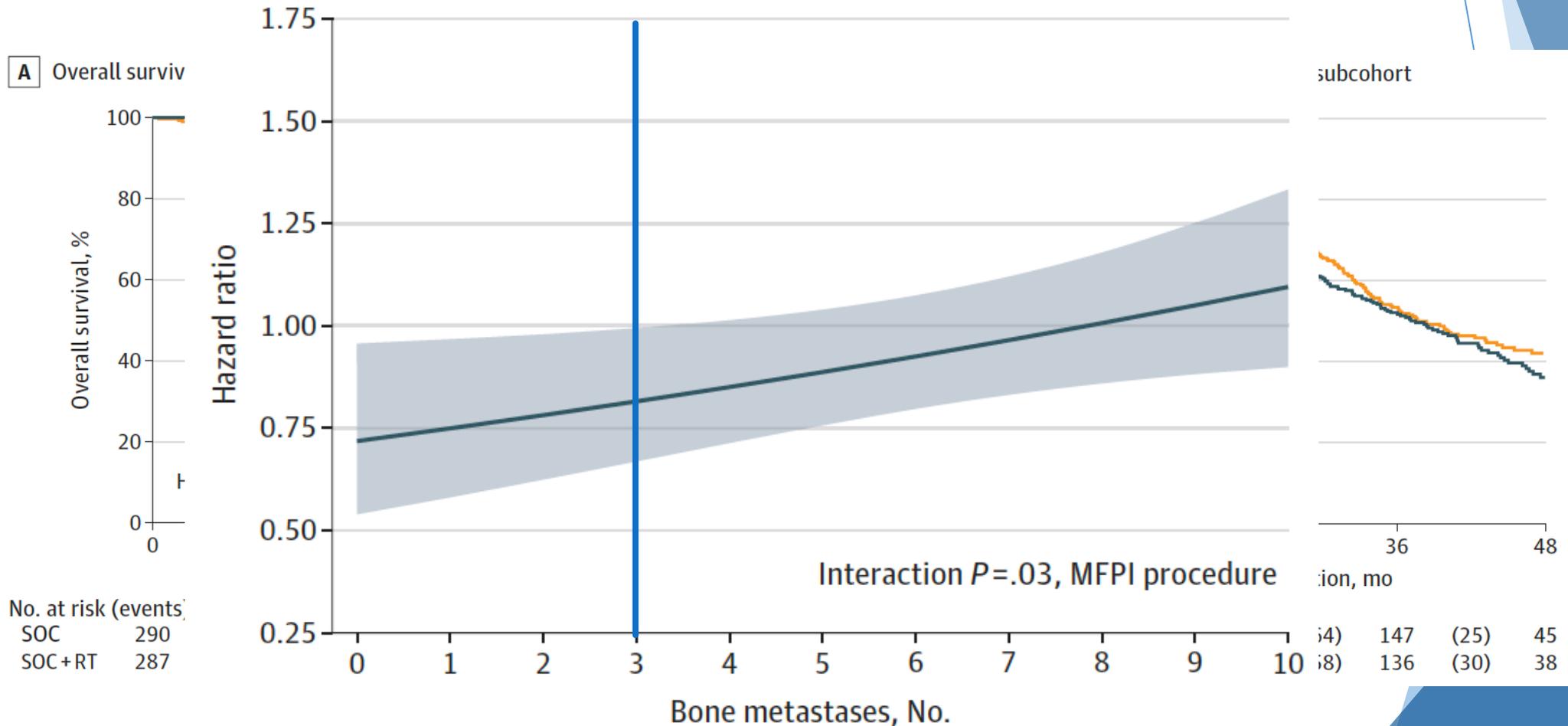


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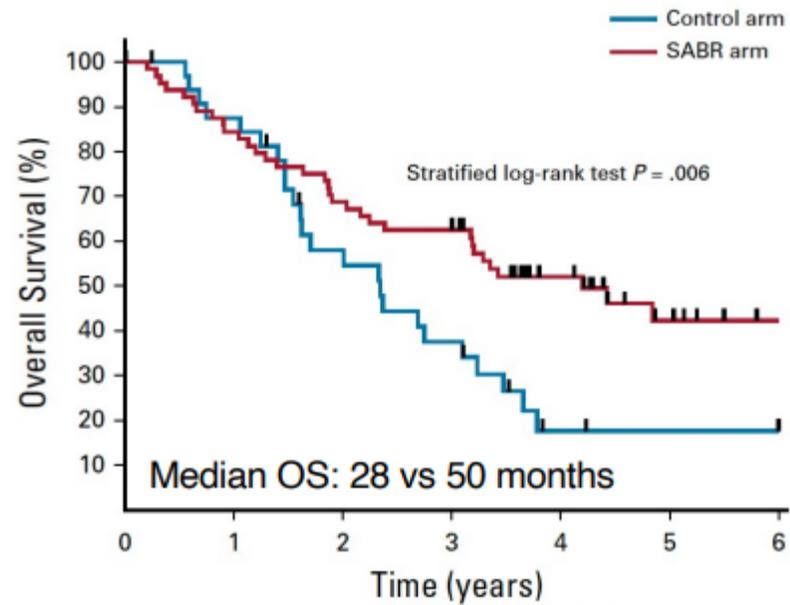
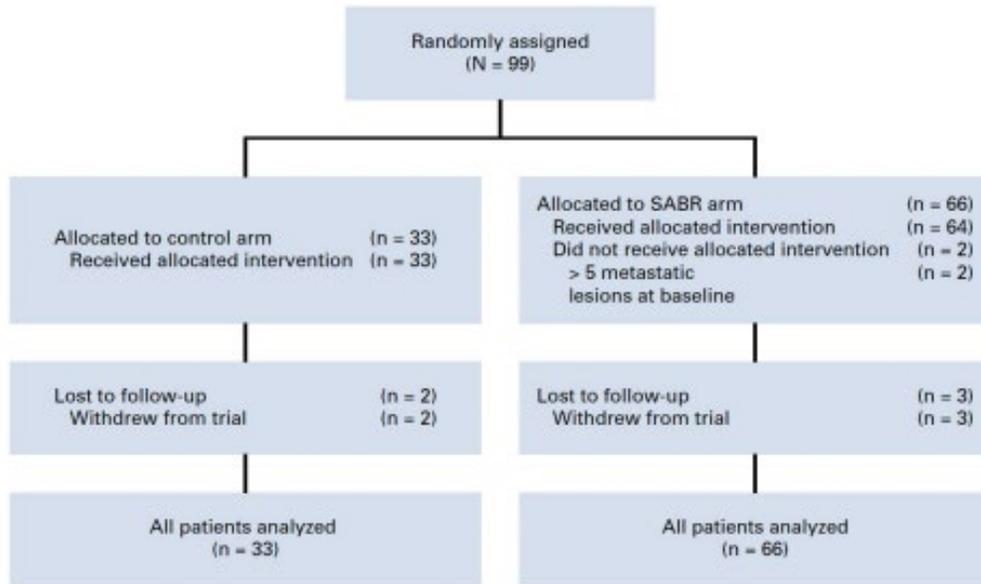
A Overall survival



What evidence on Metastasis-Directed Therapy?

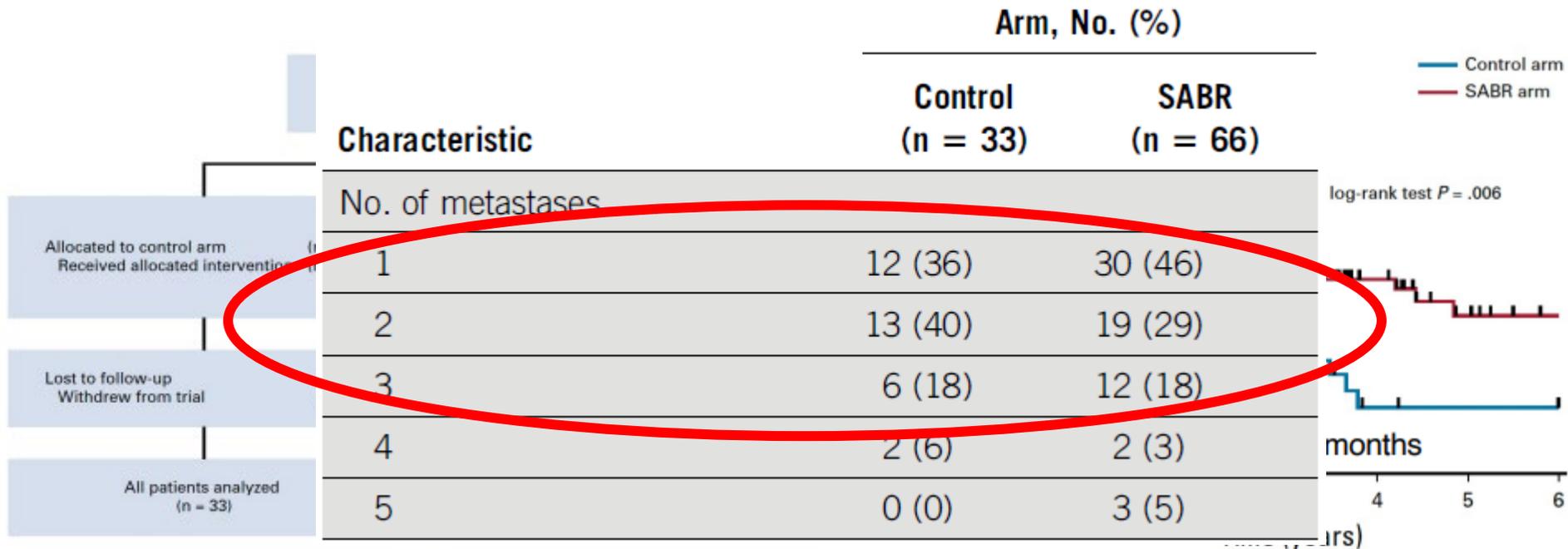
What evidence on Metastasis-Directed Therapy?

Stereotactic Ablative Radiotherapy for the Comprehensive Treatment of Oligometastatic Cancers: Long-Term Results of the SABR-COMET Phase II Randomized Trial



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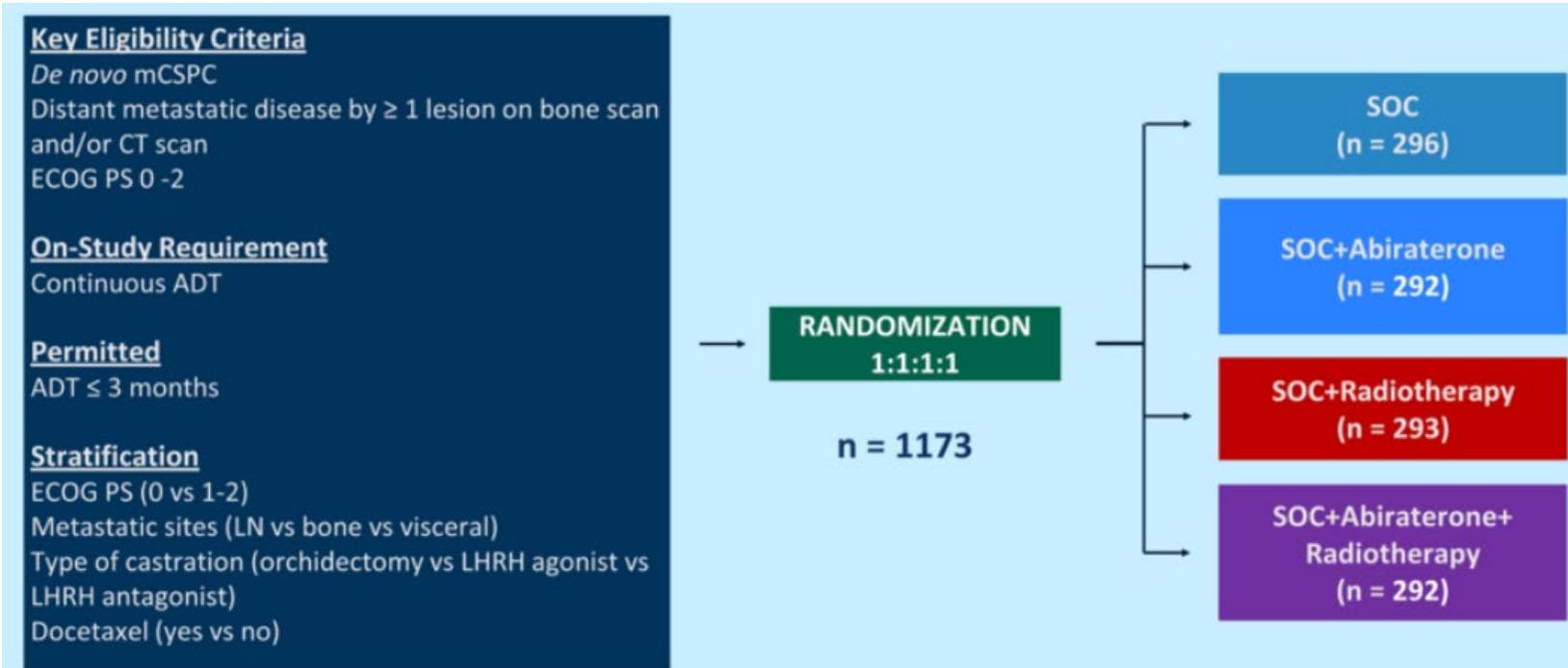


What evidence will have in the future?

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Abiraterone plus prednisone added to androgen deprivation therapy and docetaxel in de novo metastatic castration-sensitive prostate cancer (PEACE-1): a multicentre, open-label, randomised, phase 3 study with a 2 × 2 factorial design

Karim Fizazi, Stéphanie Foulon, Joan Carles, Guilhem Roubaud, Ray McDermott, Aude Fléchon, Bertrand Tombal, Stéphane Supiot,



Open questions...

- ▶ PET PSMA changes patients' prognosis?
- ▶ Are ARSI really necessary in the oligometastatic patient?
- ▶ Should radiotherapy on the prostate be offered in an oligometastatic patient receiving ADT + ARSI?
- ▶ Are the SABR-COMET data suitable for proposing MDT to the oligometastatic patient?