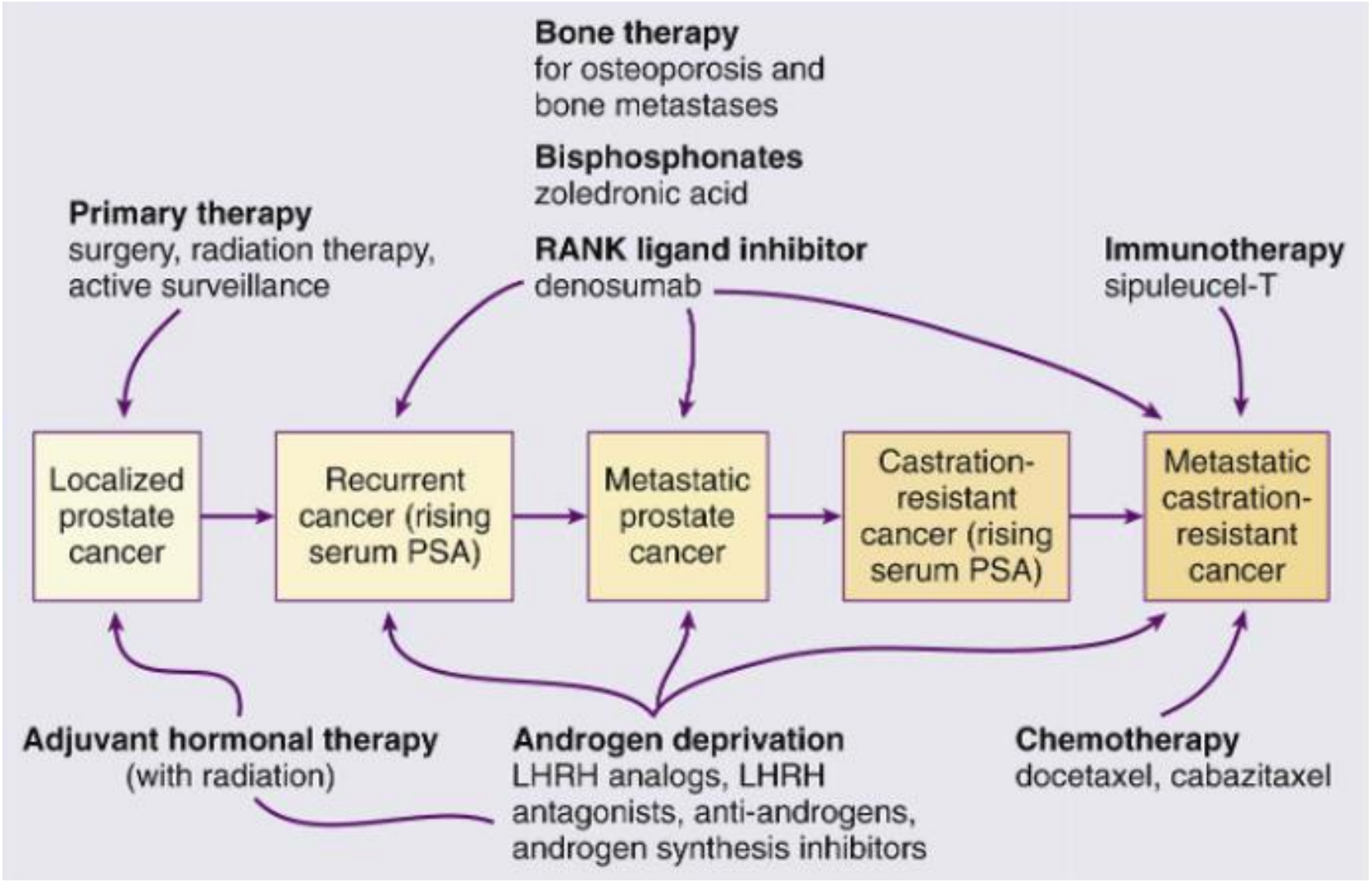
Oligometastatik Prostat Kanseri

Dr. Deniz Tural
Bakırköy Dr. Sadi Konuk Eğitim ve Araştırma Hastanesi
Tıbbi Onkoloji

Ders Planı

- ❑ Oligometastatik hastalık tanımı
- ❑ Yeni görüntüleme teknikleri ve evreleme
- ❑ Vaka sunumu
- ❑ Tedavi seçenekleri
- ❑ Sonuç

Prostat Kanseri Tedavi Yaklaşımları



Şekil; Abeloff's Clinical Oncology, 10th edition

OLİGOMETASTATİK HASTALIK

Oligometastatik Hastalık[1]

Hellman ve arkadaşları tarafında 1995 yılında tanımlanmış

- Primer tümör tedavi edilmemiş
- Senkron metastaz saptanan
- metastaz bölgesi sayısı 5≤ olan hasta grubu

Oligorekürrens Hastalık[2]

Niibe ve arkadaşları tarafından 2010 yılında tanımlanmış

- Primer tümör tedavi edilmiş
- Metakron metastaz gelişen
- Metastaz bölgesi sayısı 5≤ olan hasta grubu

1. J Clin Oncol. 1995;13:8-10 2.Jpn J Clin Oncol 2010;40:107–111

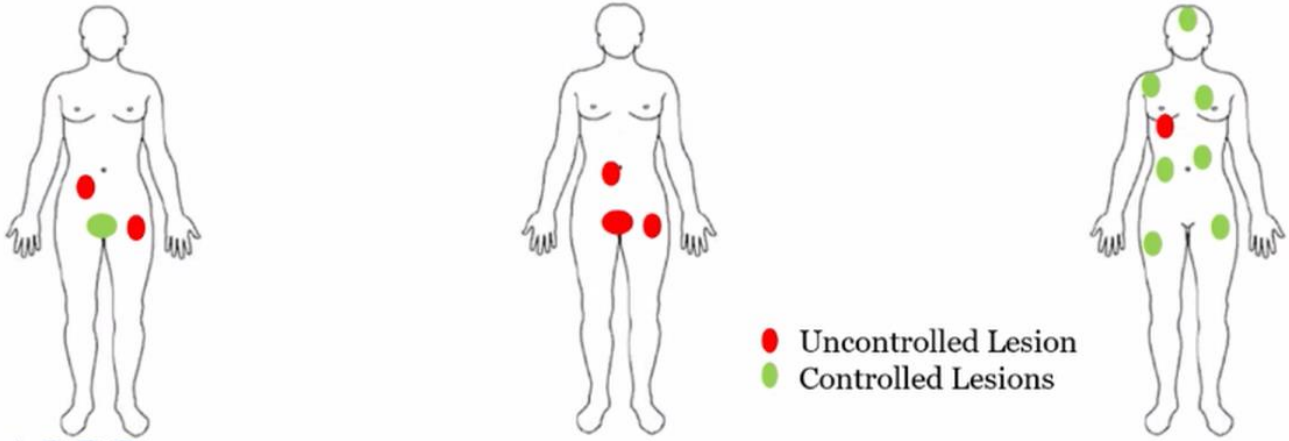
OLİGOMETASTATİK HASTALIK

Defining Oligometastatic Subtypes

Oligo-Recurrent/
Metachronous
Oligometastasis

Synchronous
Oligometastasis

Oligo-Progressive
Metastasis



2021 ASCO ANNUAL MEETING

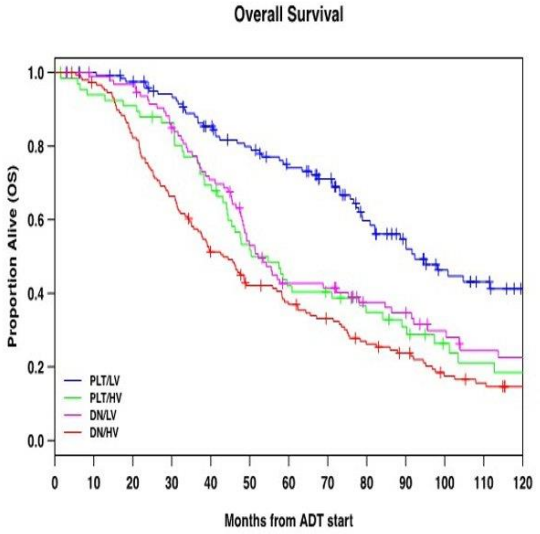
Palma Nat Rev Clin Onc 11:549, 2014

OLİGOMETASTATİK HASTALIK

Different Prognoses by:
Type of Presentation & Extent of Metastases

CHAARTED & GETUG15 (TS alone)	Median OS (years)
Metach and low volume	~8
Metach and high volume	4.5
De Novo and LV	4.5
De Novo and HV	3

High volume: *visceral mets and/or 4 or more bone mets at least one beyond vert and pelvis)*



Groups	N (% events)	Median OS yrs (95%CI)
Prior Tx+LV	125 (50)	7.7 (6.7,10.6)
Prior Tx+HV	67 (75)	4.6 (3.7,6.7)
De-novo+LV	96 (70)	4.3 (4,6.5)
De-novo+HV	148 (84)	3.6 (3.1,4.7)

56% of mHSPC low volume in hospital registry are metachronous; found by surveillance with rising PSA

OLİGOMETASTATİK HASTALIK NEDEN ?
NASIL? TEDAVİ

Amaç

- ❑ Progresyona kadar geçen süreyi uzatmak
- ❑ Tam kür elde etmek
- ❑ Tümör yükünü azaltmak
- ❑ Primer tümör odağından kaynaklanan yayılımı engellemek
- ❑ Obstrüktif üropatiyi engellemek

Primer /Metastaza yönelik Tedavi

- ❑ Cerrahi
- ❑ RT(SABRT vb)
- ❑ RFA

Sistemik Tedaviler

- ❑ ADT
- ❑ Yeni nesil androjen reseptör yolağı inhibitörleri

Oligometastatik Prostat Kanseri Tanımı

Study Group (ClinicalTrials.gov Identifier/ISRCTN Number)	Number of Metastases	Site of Metastases	Imaging Modality
University of Florida (NCT01859221)	NS	Any except brain or CNS	—
Sunnybrook Health Sciences Centre (NCT02563691)	≤ 5	Outside the prostate and pelvic LNs	—
Sidney Kimmel Comprehensive Cancer Center (NCT02489357)	≤ 4	Extrapelvic	—
Mayo Clinic (NCT01777802)	≤ 3	NS	—
Grupo de Investigación Clínica en Oncología Radioterapia (NCT02192788)	≤ 4	Bone, LN	—
University Hospital, Ghent (NCT01558427)	≤ 3	NS (N, M1a/b)	—
Technische Universität Dresden (NCT02264379)	≤ 5	NS	—
City of Hope Medical Center (NCT00544830)	≤ 5	NS (N1–3, M1)	—
Memorial Sloan Kettering Cancer Center (NCT02020070)	≤ 10	Bone, LN	—
Sidney Kimmel Comprehensive Cancer Center (ORIOLE) (NCT02680587)	≤ 3	Bone, LN	—
MD Anderson Cancer Center (NCT01751438)	NS	Any except brain or CNS	Bone scan, CT scan, and/or MRI
Martini-Klinik am UKE GmbH (NCT02454543)	≤ 5	Bone, LN	—
Oxford University Hospitals (ISRCTN15704862)	NS	Bone, LN	—
University Hospital, Ghent (NCT02138721)	NS	Any except brain or CNS	—

CNS = central nervous system; LN = lymph node; NR = not reported; NS = not specified.

Oligometastatik Prostat Kanseri Tanımı

Studies	n	Number of Metastases	Site of Metastases	Imaging Modality
Tabata et al[81]	35	≤ 5	Bone only; each site < 50% size of vertebral body	Bone scan
Ahmed et al[82]	17	≤ 5	NS	^{11}C-choline PET/CT, MRI, biopsy, CT, and ^{11}C-choline PET/CT + MRI
Berkovic et al[83]	24	≤ 3	Bone, LN	Bone scan + ^{18}F-FDG PET/CT, bone scan + ^{11}C-choline PET/CT
Schick et al[84]	50	≤ 4	NS	Bone scan + ^{18}F-choline PET/CT, bone scan + ^{11}C-acetate PET/CT
Decaestecker et al[85]	50	≤ 3	Bone, LN	^{18}F-FDG PET/CT, ^{18}F-choline PET/CT
Ost et al[66]	119	≤ 3	Any	^{18}F-FDG PET/CT, ^{18}F-choline PET/CT

FDG = fluorodeoxyglucose; LN = lymph node; NS = not specified; PET = positron emission tomography.

http://www.cancernetwork.com

Evreleme Nasıl Yapılmalı

- European Association of Urology(EUA)[1–2]
- National Comprehensive CancerNetwork(NCCN)[3]

Kemik, viseral ve lenf nodu metastazı ve doğru evreleme için

- Bilgisayarlı Tomografi(BT)/ Manyetik Rezonans(MR)
- ^{99m}Tc- metilen difosfonat kemik sintigrafisi

1. Heidenreich A. EAU guidelines on prostate cancer. Part I. Eur Urol. 2014
2. Heidenreich A. EAU guidelines on prostate cancer. Part II. Eur Urol. 2014
3. Mohler JL. Prostate cancer. Version 1.2016. J Natl Compr Canc Netw. 2016

Oligometastatik Prostat Kanseri
Yeni Görüntüleme Yöntemleri

Why the Oligometastatic Space has Increased in Prostate Cancer: The Advent of PET Imaging

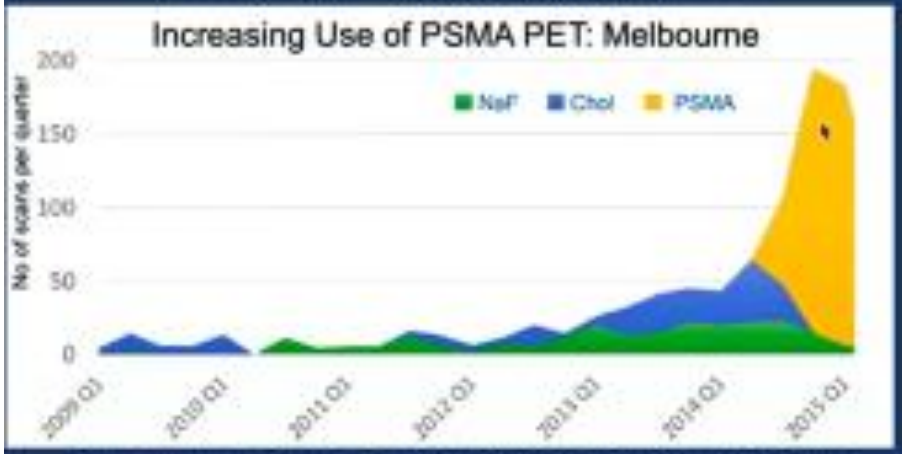


Figure courtesy of Michael Hofman, Peter MacCallum Cancer Center, Melbourne

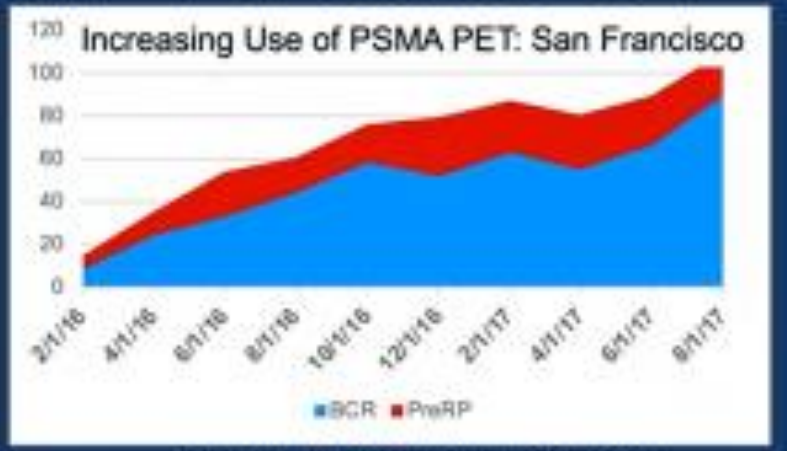


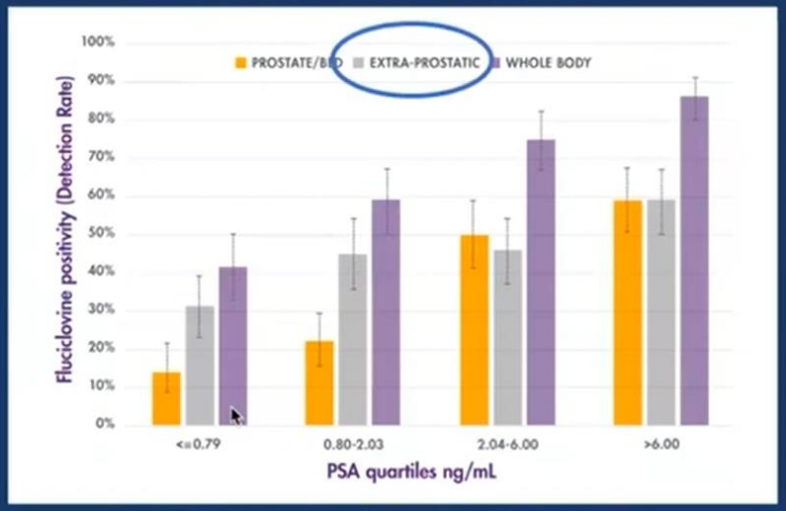
Figure courtesy of Thomas Hope, UC San Francisco

Axumin (fluciclovine F18) PET: Currently available at hundreds of imaging sites across the US
FDA–approved for use in biochemical recurrence, reimbursed by Medicare and some private payers

Oligometastatik Prostat Kanseri Yeni Görüntüleme Yöntemleri

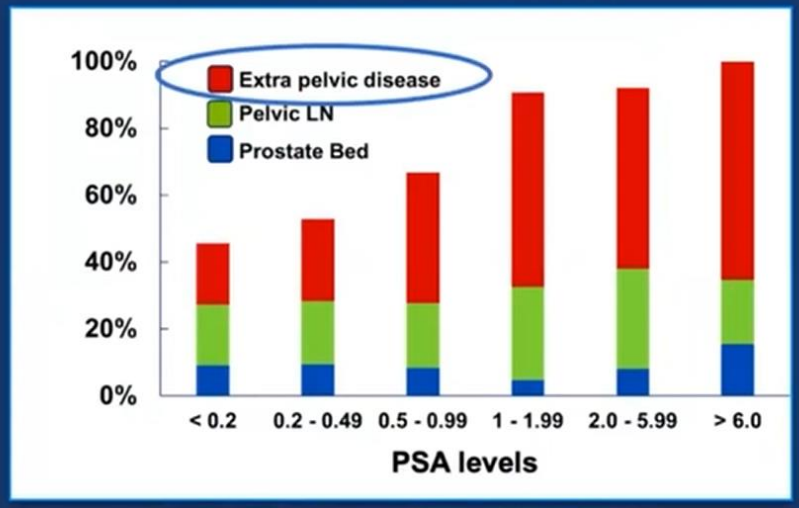
Using Advanced PET Imaging to Detect Extrapelvic Disease in Patients with PSA Recurrences

Fluciclovine F18 PET



Bach-Gansmo T, et al. J Urol 2017;197:676-83

Gallium 68 PSMA PET

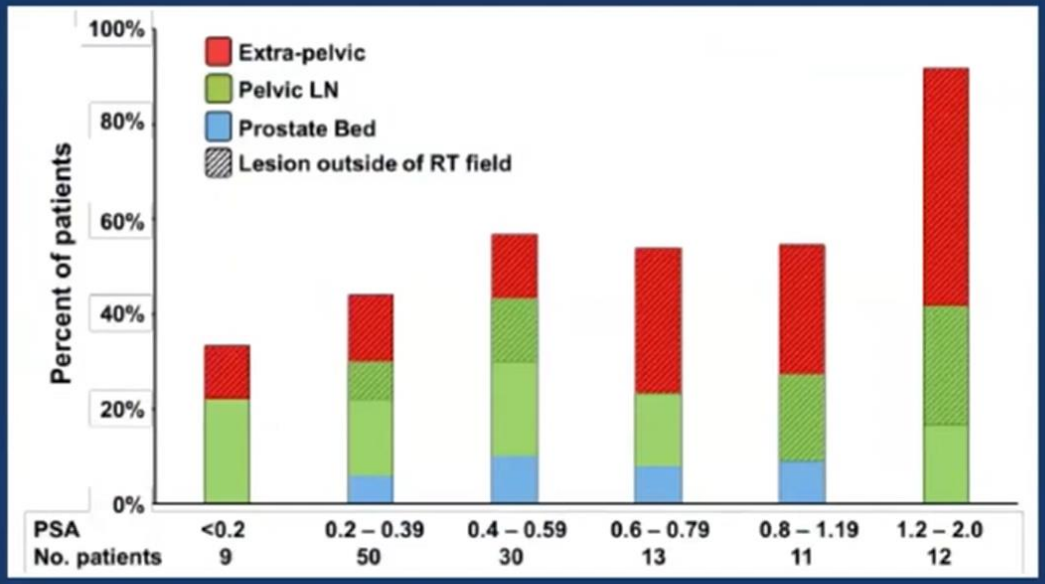


Boreta L et al, Urology 2019; 129 (165-171)

Oligometastatik Prostat Kanseri Yeni Görüntüleme Yöntemleri

PSMA PET Identifies Oligometastatic Disease at Low PSA Recurrences

- UCSF Experience using PSMA PET at time of recurrence
- 125 men with BCR after prostatectomy (PSA <2)
- 53% had a PSMA-avid lesion
- 38% had a lesion outside of the pelvis
- 30% had a lesion outside of a standard RT field



Boreta et al, *Urology* 2019

OLİGOMETASTATİK HASTALIK

Metastatik bölge kanser hücre klonları

Copy number analysis indicates monoclonal origin of lethal metastatic prostate cancer

Wennuan Liu[1,9], Sari Laitinen[2,9], Sofia Khan[3], Mauno Vihinen[3], Jeanne Kowalski[4], Guoqiang Yu[5], Li Chen[5], Charles M Ewing[6], Mario A Eisenberger[7], Michael A Carducci[7], William G Nelson[7], Srinivasan Yegnasubramanian[7], Jun Luo[6,7], Yue Wang[5], Jianfeng Xu[1], William B Isaacs[6,7], Tapio Visakorpi[2] & G Steven Bova[6–8]

NATURE MEDICINE VOLUME 15 | NUMBER 5 | MAY 2009

30 hastada otopsi sonrası yapılan genetik incelemede, metastatik bölge klonları, primer tümör ile benzer özelikler göstermektedir.

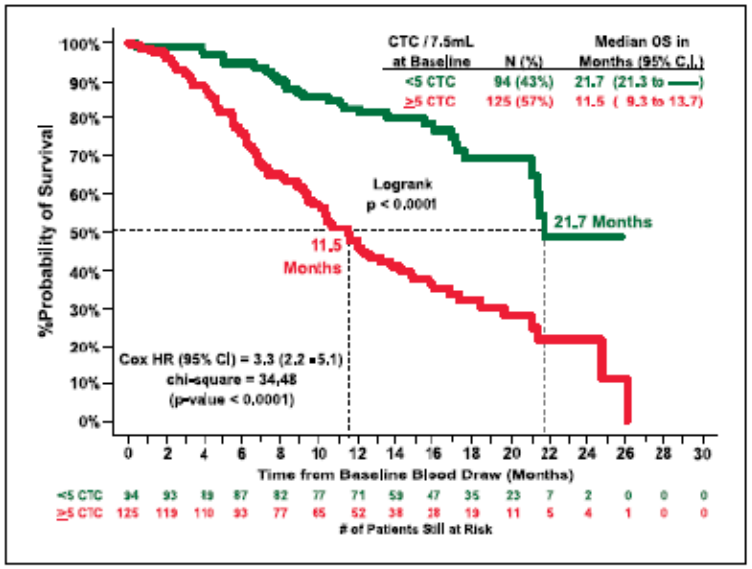
OLİGOMETASTATİK HASTALIK

Circulating Tumour Cells

Circulating Tumor Cells Predict Survival Benefit from Treatment in Metastatic Castration-Resistant Prostate Cancer

Johann S. de Bono,[1] Howard I. Scher,[2] R. Bruce Montgomery,[3] Christopher Parker,[1] M. Craig Miller,[4] Henk Tissing,[4] Gerald V. Doyle,[4] Leon WW.M. Terstappen,[4] Kenneth J. Pienta,[5] and Derek Raghavan[6]

Clin Cancer Res 2008;14(19) October 1, 2008



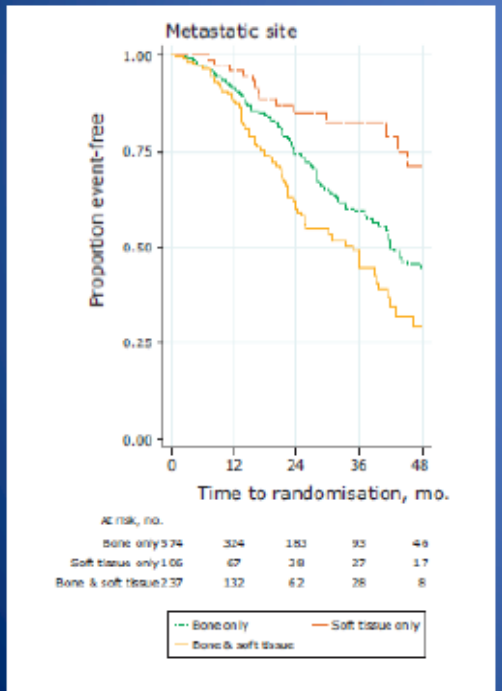
231 prosta kanserli hasta CTC düzeyi düşük olanların prognozu daha iyi

OLİGOMETASTATİK HASTALIK

Survival with Newly Diagnosed Metastatic Prostate Cancer in the "Docetaxel Era": Data from 917 Patients in the Control Arm of the STAMPEDE Trial (MRC PR08, CRUK/06/019)

Nicholas David James[a,], Melissa R. Spears[b], Noel W. Clarke[c], David P. Dearnaley[d,e], Johann S. De Bono[d,e], Joanna Gale[f], John Hetherington[g], Peter J. Hoskin[h], Robert J. Jones[i], Robert Laing[j], Jason F. Lester[k], Duncan McLaren[l], Christopher C. Parker[d,e], Mahesh K.B. Parmar[b], Alastair W.S. Ritchie[b], J. Martin Russell[m], Räto T. Strebel[n], George N. Thalmann[o], Malcolm D. Mason[k], Matthew R. Sydes[b]*

EUROPEAN UROLOGY 67 (2015) 1028–1038



STAMPEDE ÇALIŞMASI; 917 KONTROL KOLUNDE(ADT alan) BULUNAN M1 HASTALARIN SONUÇLARI

Hastaların %62 yalnız kemik ve %26 kemik+yumuşka doku met.(lenf nodu metastazı)

2 Yıllık sağkalım; yumuşak doku met.%85

Kemik met.%75

Yumuşak doku+kemik met.%60

2yılık FFS; yumuşak dokuda %54, kemik met %28 , yumuşak doku+kemik met.%18

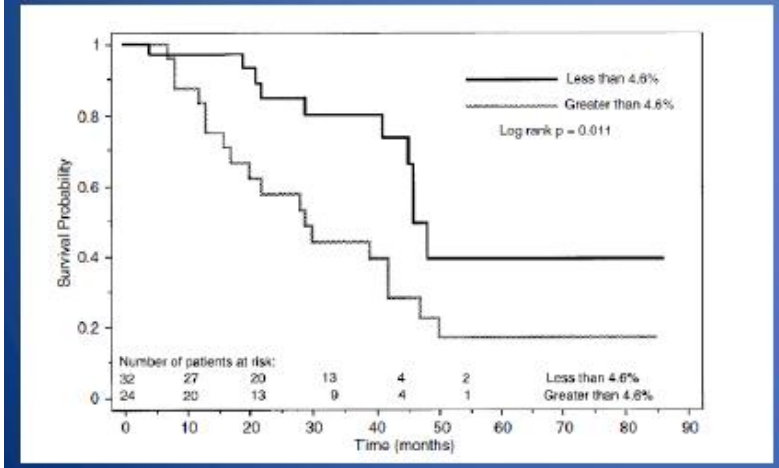
OLİGOMETASTATİK HASTALIK

Percentage of the positive area of bone metastasis is an independent predictor of disease death in advanced prostate cancer

M Noguchi*,[1], H Kikuchi[1], M Ishibashi[2] and S Noda[1]

[1]Department of Urology, 67 Asahi-machi, Kurume University School of Medicine, Kurume, Fukuoka, Japan; [2]Division of Nuclear Medicine and Department of Radiology, 67 Asahi-machi, Kurume University School of Medicine, Kurume, Fukuoka, Japan

British Journal of Cancer (2003) 88, 195–201
© 2003 Cancer Research UK All rights reserved 0007–0920/03 $25.00



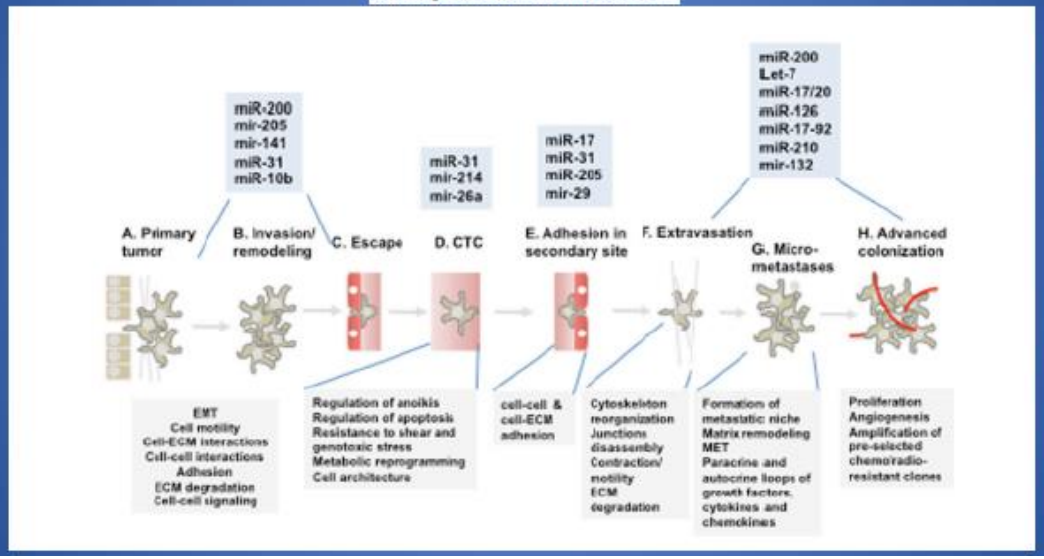
- Retrospective analysis of 56 men with bone mets
- %PABS is an independent predictor of disease-specific survival

OLİGOMETASTATİK HASTALIK

Towards a molecular basis of oligometastatic disease: potential role of micro-RNAs

Abhineet Uppal · Mark K. Ferguson · Mitchell C. Posner · Samuel Hellman · Nikolai N. Khodarev · Ralph R. Weichselbaum

Clin Exp Metastasis (2014) 31:735–748



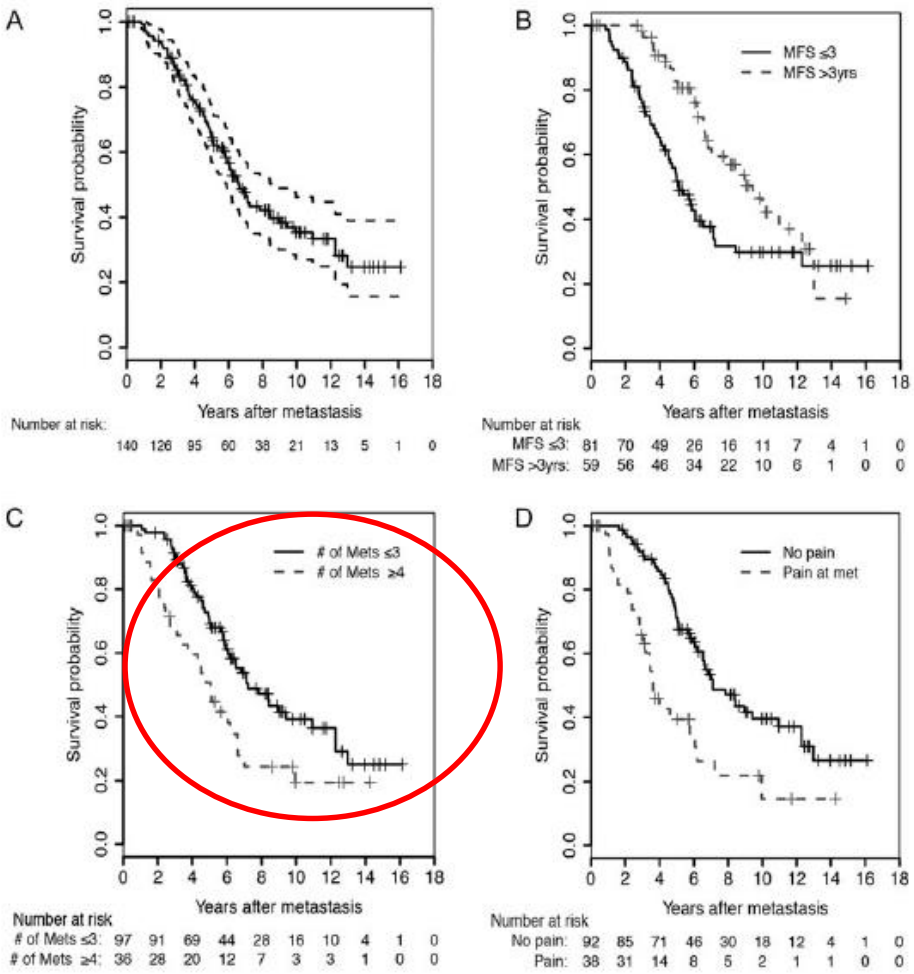
34 hastanın, 42 tümör örneğinde 39 miRNA belirteciyle yapılan çalışmada, oligometastaz ve polimetastatik hastalığın bir birinden farklı olduğu saptanmıştır.

Tanı Anında Tümör Yükü Sağkalım İle İlişkili

Annals of Oncology 24: 2881–2886, 2013
doi:10.1093/annonc/mdt335
Published online 14 August 2013

Metastasis-free survival is associated with overall survival in men with PSA-recurrent prostate cancer treated with deferred androgen deprivation therapy

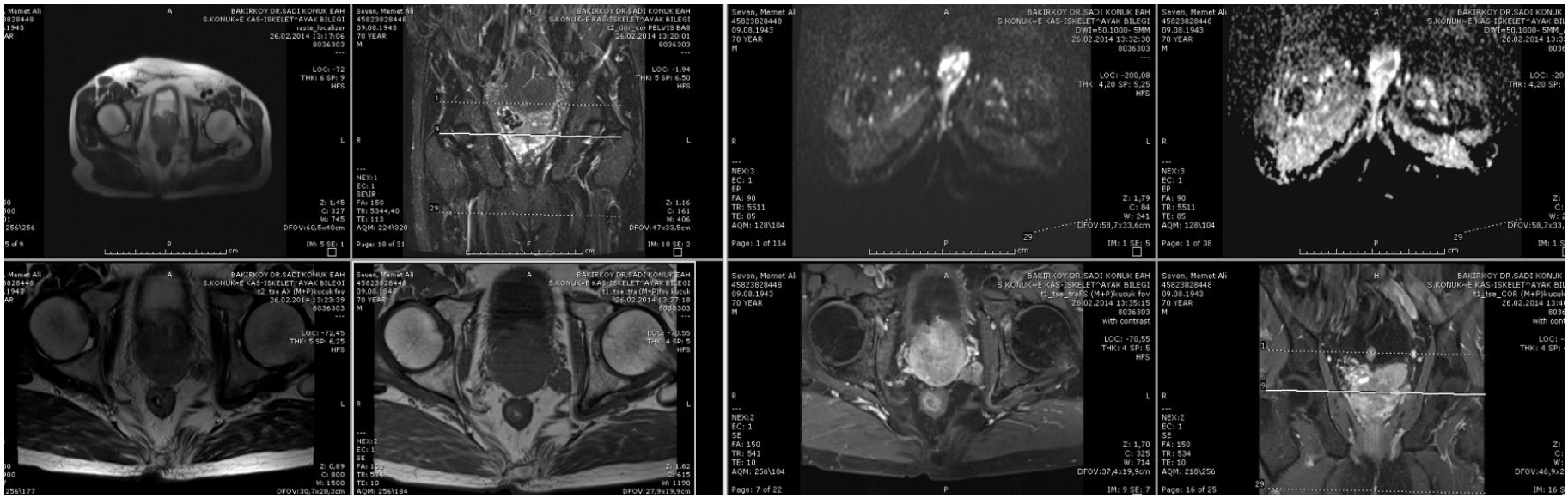
M. T. Schweizer[1], X. C. Zhou[1], H. Wang[1], T. Yang[1], F. Shaukat[1], A. W. Partin[2], M. A. Eisenberger[1] & E. S. Antonarakis[1]*
[1]Sidney Kimmel Comprehensive Cancer Center; [2]Brady Urological Institute, Johns Hopkins University, Baltimore, USA



Vaka Sunumu

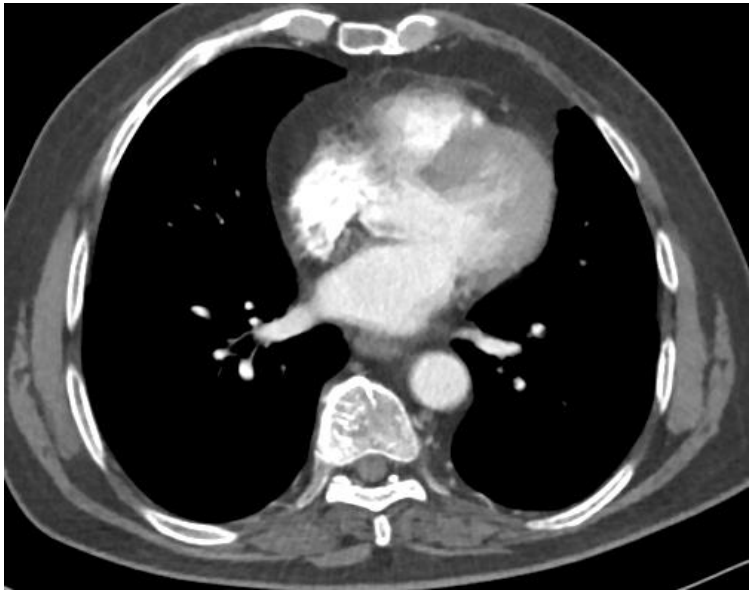
- 73 yaşında erkek hasta
- Bilinen hastalık öyküsü; KAH
- Aile öyküsü yok
- Sürekli kullandığı ilaç; Ecoprine 100 mg/gün
- Operasyon öyküsü yok
- 35 yıl paket sigara içmiş
- İdrar yaparken zorlanma ve sırt bölgesinde ağrı şikayeti ile başvurdu
- PSA : 37 ng/ml

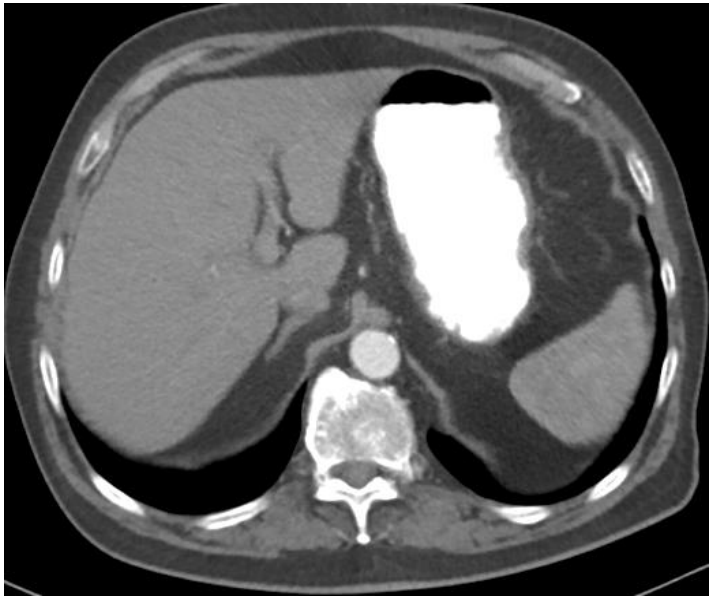
Alt Batın-Pelvik MR

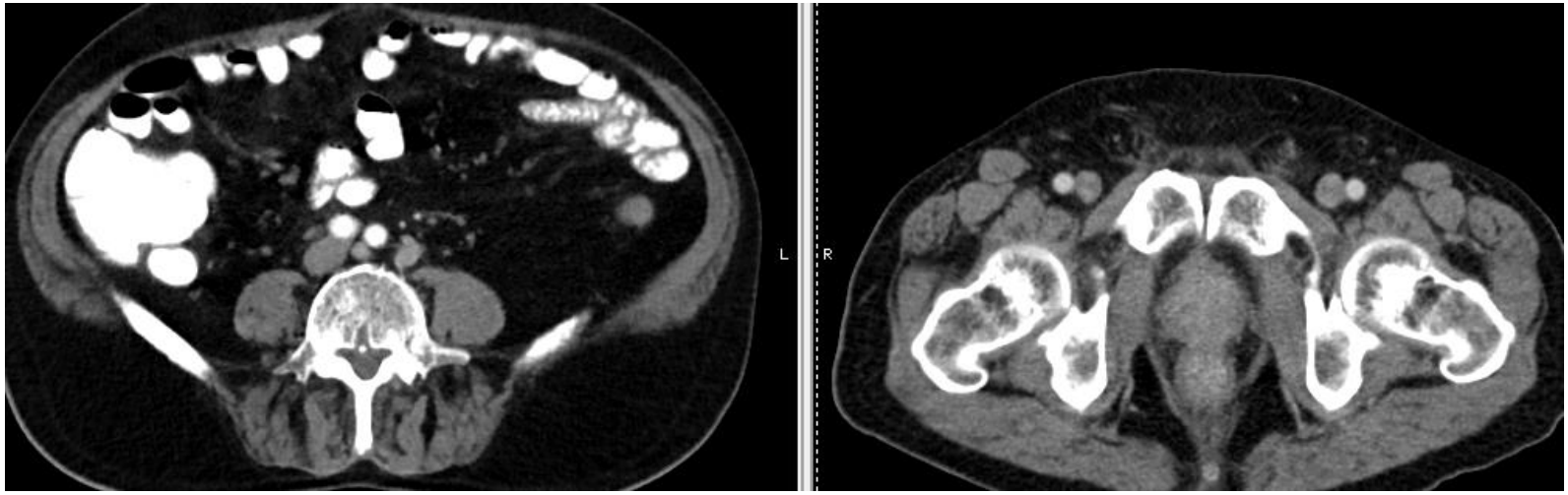


Prostat periferik zonda seminal vezikül invazyonu gösteren primer tümör
Sol yanda konglomere multiple LAP

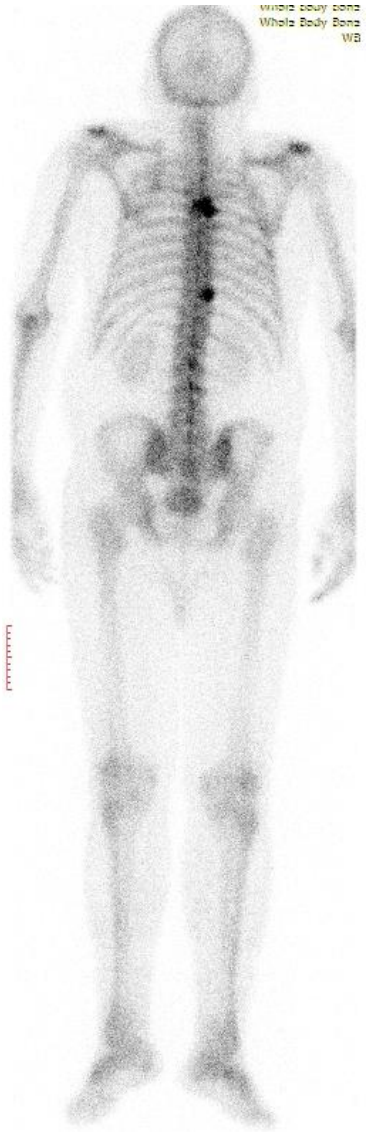
Toraks-Batın BT

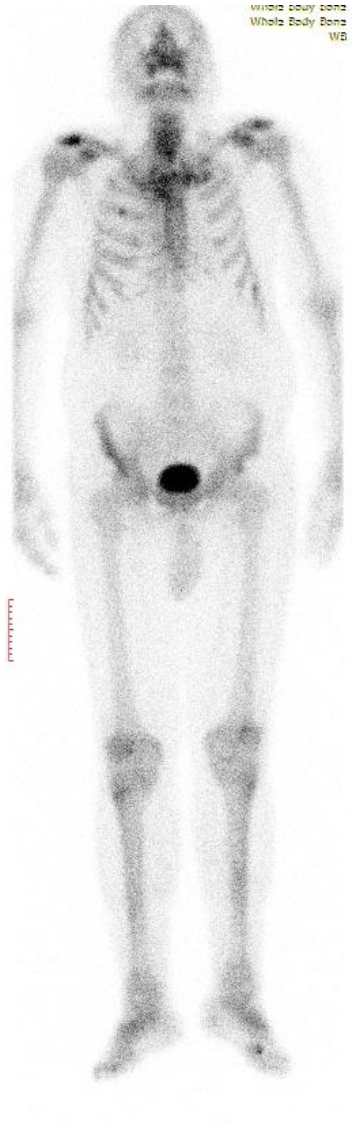






Tüm vücut kemik sintigrafisi





Prostat Biyopsisi

Klinik Bulguları :
Klinik Tanı : PSA : 34
Materyal Alım Şekli : TRU - CUT
Materyal Cinsi : PROSTAT

RAPOR BİLGİLERİ
– Patoloji Sonucu –
Makroskopik Bulgular : 1 - SOL FARLATERAL KAYITLI ; 1.3X0.1 CM ÖLÇÜLERİNDE DOKU ÖRNEĞİNİN TAMAMI 1K.
2 - SOL DORSOLATERAL KAYITLI : 1.3X0.1 CM ÖLÇÜLERİNDE DOKU ÖRNEĞİNİN TAMAMI 1K.
3 - SOL MEDİAL KAYITLI : 1.5X0.1 CM ÖLÇÜLERİNDE DOKU ÖRNEĞİNİN TAMAMI 1K.
4 - SOL BAZİS KAYITLI : 1.2X0.1 CM ÖLÇÜLERİNDE DOKU ÖRNEĞİNİN TAMAMI 1K.
5 - SOL APEKS KAYITLI : 0.5X0.1 CM ÖLÇÜLERİNDE DOKU ÖRNEĞİNİN TAMAMI 1K.
6 - SAĞ FARLATERAL KAYITLI : DOKU İZLENMEDİ
7 - SAĞ DORSOLATERAL KAYITLI : 1X0.1 CM ÖLÇÜLERİNDE DOKU ÖRNEĞİNİN TAMAMI 1K.
8 - SAĞ MEDİAL KAYITLI : 0.3X0.1 CM ÖLÇÜLERİNDE DOKU ÖRNEĞİNİN TAMAMI 1K.
9 - SAĞ BAZİS KAYITLI : 1X0.1 CM ÖLÇÜLERİNDE DOKU ÖRNEĞİNİN TAMAMI 1K.
10 - SAĞ APEKS KAYITLI : 1X0.1 CM ÖLÇÜLERİNDE DOKU ÖRNEĞİNİN TAMAMI 1K.

Mikroskopik Bulgular :

Tanı : 1-3-4-5-7-8-9-10) PROSTAT İĞNE BİYOPSİLERİ;
PROSTATİK ASİNER ADENOKARSİNOM

- TÜMÖRÜN HİSTOLOJİK GRADE: PRİMER PATERN: 4
SEKONDER PATERN: 5
GLEASON SKOR: 9

- OLGUDAN ALINAN 9 ADET PROSTAT İĞNE BİYOPSİ ÖRNEKLERİNİN YAKLAŞIK %60-70' İ TÜMÖR İLE İNFİLTREDİR.
- TÜMÖRDE PERİNÖRAL İNVAZYON: MEVCUT
- TÜMÖRDE LENFOVASKÜLER İNVAZYON: SAPTANMADI

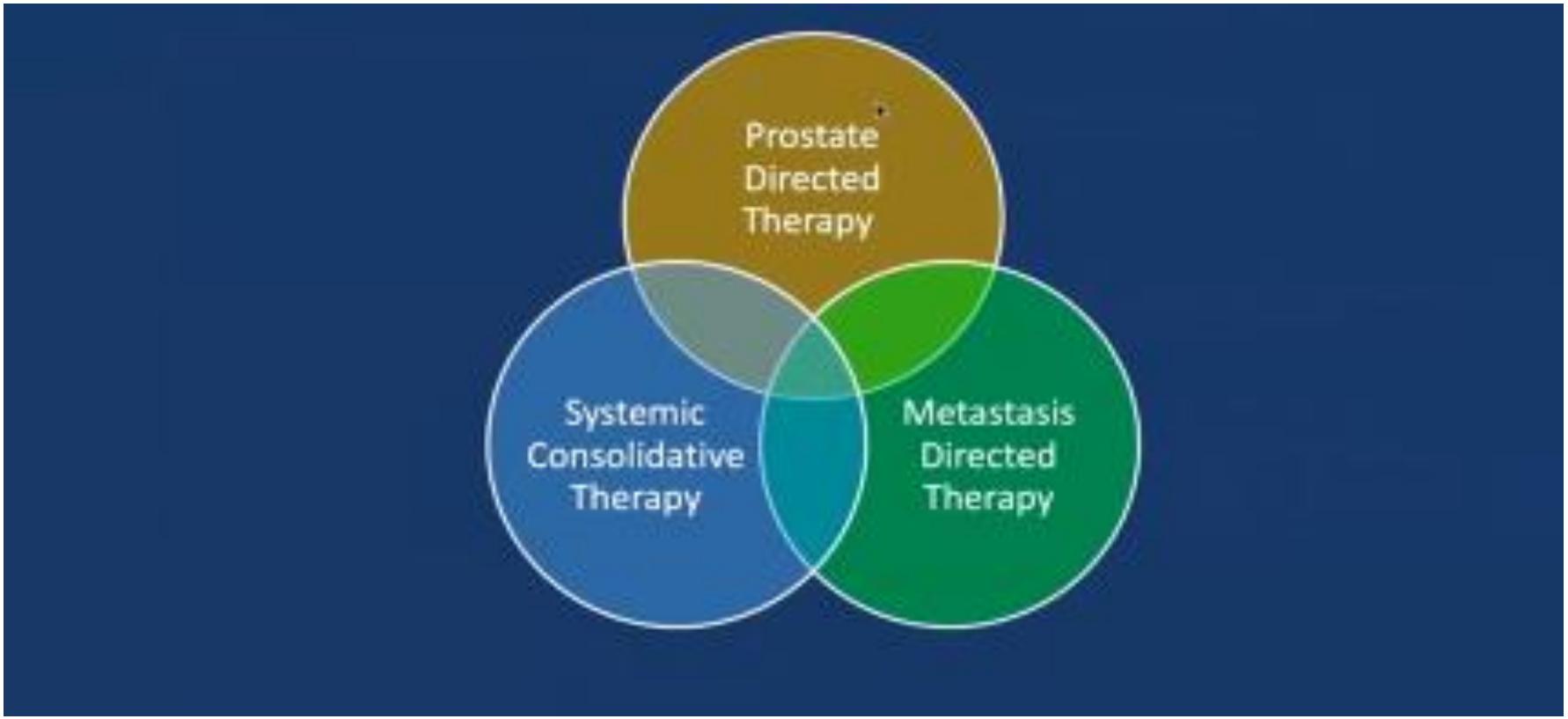
5-7-9) PROSTAT : İĞNE BİYOPSİ ÖRNEKLERİ : BENİGN PROSTAT DOKULARI

Uygulanan Tedavi

De Novo Düşük Volümlü Kastrasyona duyarlı Metastatik Prostat ca

- Bikalutamid 50mg/gün(14 gün)
- Leuprolid asetat 22.5

Oligometastatik Prostat Kanserinde Tedavi Yaklaşımları



Oligometastatik Prostat Kanseri Retrospektif Veri Sonuçları

Radical Prostatectomy or External Beam Radiation Therapy vs No Local Therapy for Survival Benefit in Metastatic Prostate Cancer: A SEER-Medicare Analysis

Raj Satkunasivam,* Andre E. Kim, Mihir Desai, Mike M. Nguyen, David I. Quinn, Leslie Ballas, Juan Pablo Lewinger, Mariana C. Stern, Ann S. Hamilton, Monish Aron and Inderbir S. Gill

0022-5347/15/1942-0378/0
THE JOURNAL OF UROLOGY®
http://dx.doi.org/10.1016/j.juro.2015.02.084
Vol. 194, 378-385, August 2015
Printed in U.S.A.
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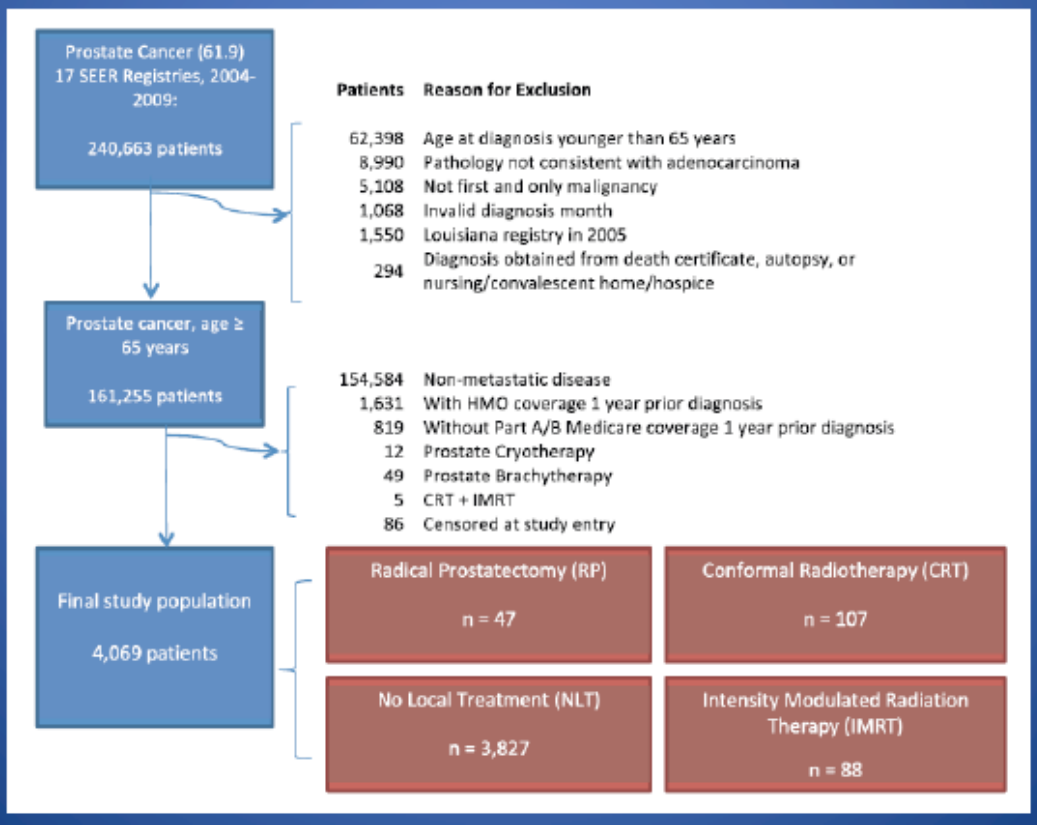
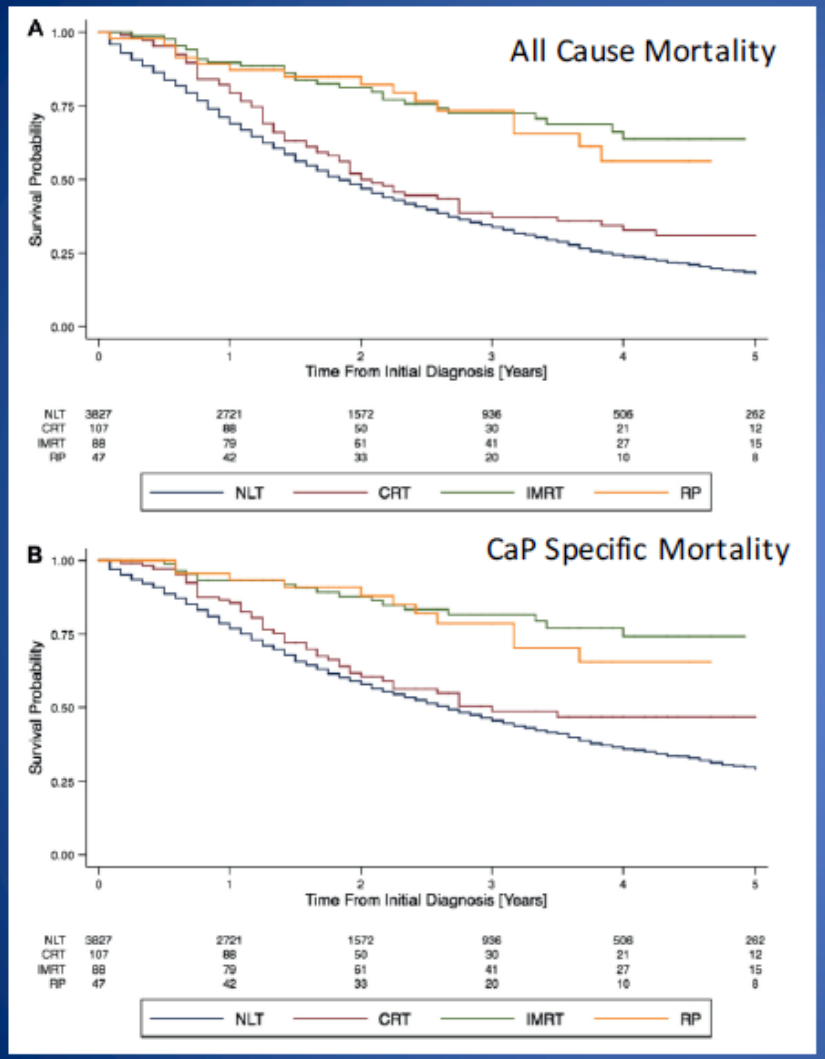


Oligometastatik Prostat Kanseri Retrospektif Veri Sonuçları



Tüm nedenlere bağlı ölüm oranı; RP %52 ve IMRT %62 daha düşük bulunmuş. CRT ve Tedavi edilmeyen grup benzer bulunmuş. PCa bağlı mortalite; RP %57 ve IMRT %55 daha düşük saptanmış

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Oligometastatik Prostat Kanseri Retrospektif SEER Veri Sonuçları

	RP	IMRT	CRT	NLT	*p-value*
	47	88	107	3827	
Year of Diagnosis – N (%)					
2004	6 (13)	12 (14)	21 (20)	709 (19)	0.2
2005	5 (11)	9 (10)	26 (24)	692 (18)	
2006	7 (15)	14 (16)	21 (20)	667 (17)	
2007	11 (23)	21 (24)	16 (15)	619 (16)	
2008	10 (21)	18 (20)	14 (13)	580 (15)	
2009	8 (17)	14 (16)	9 (8)	560 (15)	
Age at Diagnosis					
Mean (SD)	73.0 (6.0)	74.2 (6.1)	76.4 (6.3)	78.2 (7.2)	< 0.001
Race – N (%)					
NHW	38 (81)	75 (85)	81 (76)	2925 (76)	0.5
AA	7 (15)	9 (10)	13 (12)	608 (16)	
Hisp	0 (0)	2 (2)	3 (3)	95 (2)	
Asian	2 (4)	1 (1)	6 (6)	103 (3)	
Other/Unknown	0 (0)	1 (1)	4 (4)	96 (3)	
Marital Status – N (%)					
Single	2 (4)	10 (11)	6 (6)	408 (11)	0.1
Married	35 (74)	60 (68)	68 (64)	2248 (59)	
Separated/divorced/widowed/domestic partners	9 (19)	12 (14)	27 (25)	933 (24)	
Unknown	1 (2)	6 (7)	6 (6)	238 (6)	
PSA – N (%)					
< 10 ng/ml	25 (53)	35 (40)	9 (8)	401 (10)	< 0.001
10-19 ng/ml	6 (13)	16 (18)	20 (19)	449 (12)	
20-29 ng/ml	3 (6)	10 (11)	9 (8)	286 (7)	
> 30 ng/ml	6 (13)	17 (19)	55 (51)	2127 (56)	
Unknown	7 (15)	10 (11)	14 (13)	564 (15)	
PSA (Continuous)					
Mean (SD)	181 (263)	282 (338)	531 (369)	590 (380)	< 0.001
Gleason Score – N (%)					
≤6	5 (11)	10 (11)	8 (7)	167 (4)	< 0.001
7	22 (47)	24 (27)	22 (21)	569 (15)	
≥8	19 (40)	43 (49)	59 (55)	2042 (53)	
Unknown	1 (2)	11 (13)	18 (17)	1049 (27)	

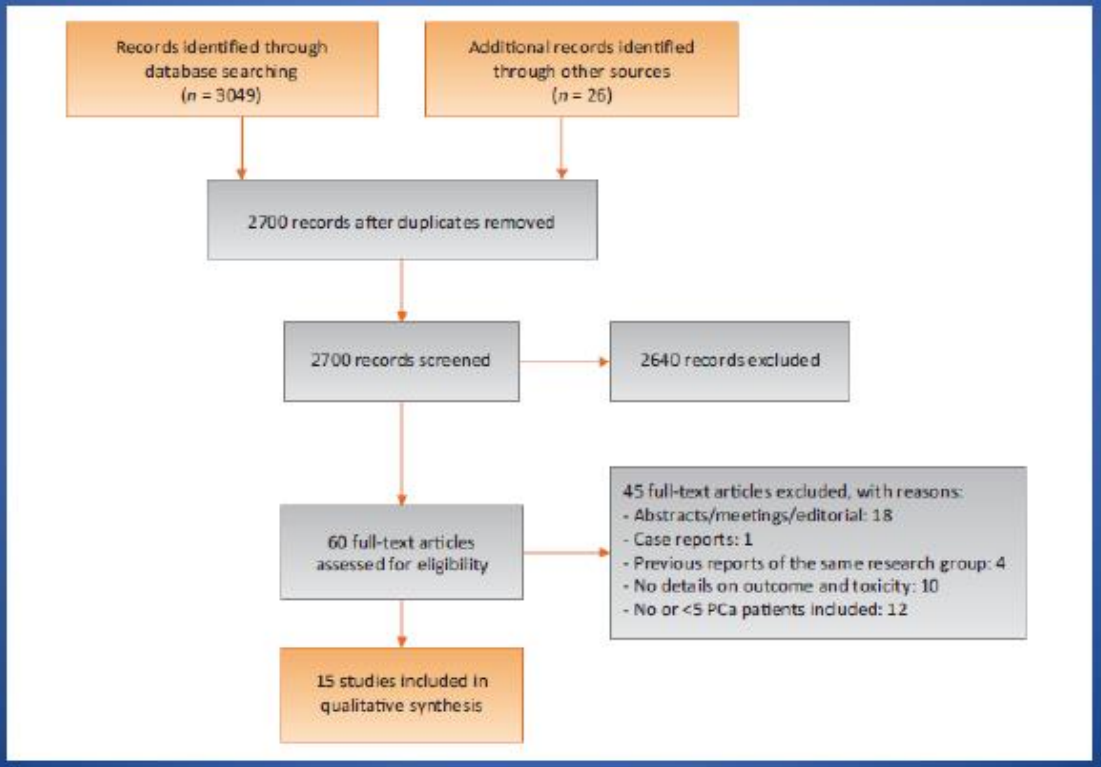
ACCEPTED MANUSCRIPT

Oligometastatik Prostat Kanseri Retrospektif Veri Sonuçları(Review)

Metastasis-directed Therapy of Regional and Distant Recurrences After Curative Treatment of Prostate Cancer: A Systematic Review of the Literature

Piet Ost [a,], Alberto Bossi [b], Karel Decaestecker [c], Gert De Meerleer [a], Gianluca Giannarini [d], R. Jeffrey Karnes [e], Mack Roach III [f], Alberto Briganti [g]*

EUROPEAN UROLOGY 67 (2015) 852–863



Oligometastatik Prostat Kanseri Retrospektif Veri Sonuçları

Table 1 – Full-text publications of metastasis-directed therapy for oligometastatic prostate cancer recurrence included in the systematic review

Study	No. of patients	Site of metastasis: node/bone/visceral	Median time to metastatic recurrence, mo	Median PSA at time of metastasis	Staging method	Type of MDT	Median follow-up, mo	Median PFS	Adjuvant ADT (%)	Median duration ADT	Prophylactic nodal radiotherapy (%)
Casamassima et al. [23]	25	25/0/0	11.8–36.7	5.65	Choline PET/CT	SBRT	29	24 mo	None	NA	7 (28)
Muacevic et al. [24]	40	0/40/0	NR	5.4	Choline PET/CT	SBRT	14*	NR	27 (68)	NR	NA
Würschmidt et al. [25]	15	15/0/0	NR	1.79	Choline PET/CT	NRT	28	Median not reached: 3-yr PFS: 75%	NR	NR	15 (100)
Ahmed et al. [26]	17	1/15/1	50.4	2.1	Choline PET/CT (n = 9), MRI (n = 6), CT (n = 1), and biopsy (n = 1)	SBRT	6	12 mo	15 (88)	NR	NA
Jereczek-Fossa et al. [27]	19	18/1/0	66	1.77 (pelvic nodes); 10.7 (M1)	Choline PET/CT	SBRT	17	Median not reached; 30-mo PFS: 63.5%	19 (100)	12–17 mo	None
Schick et al. [28]	50	33/15/2	15.6	6.7	Choline PET/CT and bone scintigraphy	SBRT (n = 14) NRT (n = 36)	31	Median not reached; 3-yr PFS: 58.6%	49 (98)	12 mo	25 (50)
Decaestecker et al. [29]	50	27/22/1	57.6	3.8	Choline (n = 18) or FDG (n = 32) PET/CT	SBRT	25	19 mo	35 (70)	1 mo	None
Picchio et al. [30]	83	83/0/0	NR	2.6	Choline PET/CT	HRT	22	NR	58 (70)	NR	77 (93)
Rinnab et al. [31]	15	15/0/0	NR	1.98	Choline PET/CT	LND	13.7*	NR	11 (73)	NR	1 (7)
Schilling et al. [32]	10	10/0/0	NR	8.75	Choline PET/CT	LND	11*	NR	6 (60)	NR	None
Winter et al. [33]	6	6/0/0	NR	2.04	Choline PET/CT	LND	24 mo	NR	None	NA	None
Busch et al. [37]	6	6/0/0	Mean: 79.9	37.6*	Choline (n = 3), MRI (n = 1), CT (n = 2)	LND	NR	15.5 mo	6 (100)	Lifelong ADT	None
Jilg et al. [34]	47	47/0/0	62	11.1*	Choline PET/CT	LND	35.5	27 mo**	34 (65)	NR	27 (52)
Martini et al. [35]	8	8/0/0	NR	1.62	Choline PET/CT	LND	NR	NR	None	NA	None
Suardi et al. [36]	59	59/0/0	NR	2.0	Choline PET/CT	LND	76.6	60 mo**	24 (41)	24 mo	21 (36)

ADT = androgen-deprivation therapy; CT = computed tomography; FDG = fluorodeoxyglucose; HRT = hypofractionated radiotherapy; LND = lymph node dissection; MDT = metastasis-directed therapy; MRI = magnetic resonance imaging; NA = not applicable; NR = not reported; NRT = normofractionated radiotherapy; PET/CT = positron emission tomography with coregistered computed tomography; PFS = progression-free survival; PSA = prostate-specific antigen; SBRT = stereotactic body radiotherapy.

* Mean numbers reported instead of median.

** Median estimated from curves.

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Oligometastatik Prostat Kanseri Retrospektif Veri Sonuçları

Table 4 – Complications associated with metastasis-directed therapy for oligometastatic prostate cancer recurrence: (a) complications associated with radiotherapy according to Common Terminology Criteria for Adverse Events; (b) complications associated with salvage lymph node dissection according to the Clavien-Dindo classification

a.

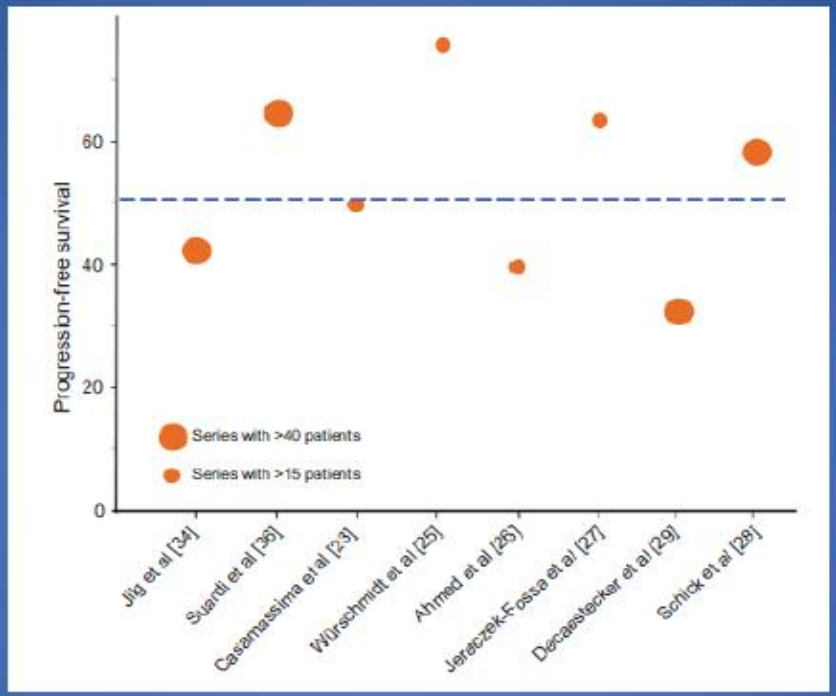
Complication type	Muacevic et al. [24] (*n* = 40), no. (%)	Würschmidt et al.* [25] (*n* = 15), no. (%)	Ahmed et al. [26] (*n* = 17), no. (%)	Jereczek-Fossa et al. [27] (*n* = 19), no. (%)	Decaestecker et al. [29] (*n* = 50), no. (%)	Total (*n* = 141), no. (%)
Grade 1						
Bone pain	0 (0)	0 (0)	0 (0)	0 (0)	3 (6)	3 (2)
Asymptomatic fracture	1 (2.5)	0 (0)	0 (0)	0 (0)	1 (2)	2 (1.4)
Fatigue	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (0.7)
Rectal toxicity	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	2 (1.4)
Urinary toxicity	0 (0)	0 (0)	0 (0)	2 (11)	0 (0)	2 (1.4)
Grade 2						
Nausea requiring antiemetics	5 (12.5)	0 (0)	0 (0)	0 (0)	0 (0)	5 (3.5)
Rectal toxicity	0 (0)	2 (13.3)	0 (0)	1 (5)	2 (4)	5 (3.5)
Urinary toxicity	0 (0)	0 (0)	0 (0)	1 (5)	1 (2)	2 (1.4)
Grade 3						
Urinary toxicity	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	1 (0.7)

b.

Complication type	Rinnab et al. [31] (*n* = 15), no. (%)	Busch et al. [37] (*n* = 6), no. (%)	Jilg et al. [34] (*n* = 47), no. (%)	Suardi et al. [36] (*n* = 59), no. (%)	Total (*n* = 127), no. (%)
Grade 1					
Lymphorrhea	0 (0)	0 (0)	4 (7.7)	12 (20.3)	16 (12.5)
Fever	0 (0)	0 (0)	3 (5.8)	18 (30.5)	21 (16.5)
Temporary weakness of the hip flexor	0 (0)	0 (0)	1 (1.9)	0 (0)	1 (0.8)
Wound dehiscence	0 (0)	0 (0)	3 (5.8)	0 (0)	3 (2.3)
Grade 2					
Deep vein thrombosis	0 (0)	0 (0)	0 (0)	1 (1.7)	1 (0.8)
Ileus	1 (7)	0 (0)	0 (0)	12 (20.3)	13 (10.2)
Grade 3a					
Lymphocele requiring drainage	1 (7)	0 (0)	2 (3.9)	7 (11.2)	10 (7.8)
Wound dehiscence	0 (0)	0 (0)	0 (0)	3 (5.1)	3 (2.3)
Hydronephrosis requiring stenting	1 (7)	0 (0)	0 (0)	0 (0)	1 (0.8)
Grade 3b					
Lymphocele requiring surgical drainage	0 (0)	0 (0)	0 (0)	1 (1.7)	1 (0.8)

* One patient experienced a grade 4 toxicity: bladder shrinkage requiring cystectomy with urinary derivation. This patient received radiotherapy to the prostate gland and metastatic nodes for a recurrence in the seminal vesicle and iliac nodes after previous brachytherapy to the prostate.

Oligometastatik Prostat Kanseri Retrospektif Veri Sonuçları



- Studies with >15 pts included in analysis
- Mean PFS of 50% from all studies at 3yrs

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Oligometastatik Prostat Kanserinde Tedavi Yaklaşımları

Results of Studies on Salvage LND with 5 yr FU

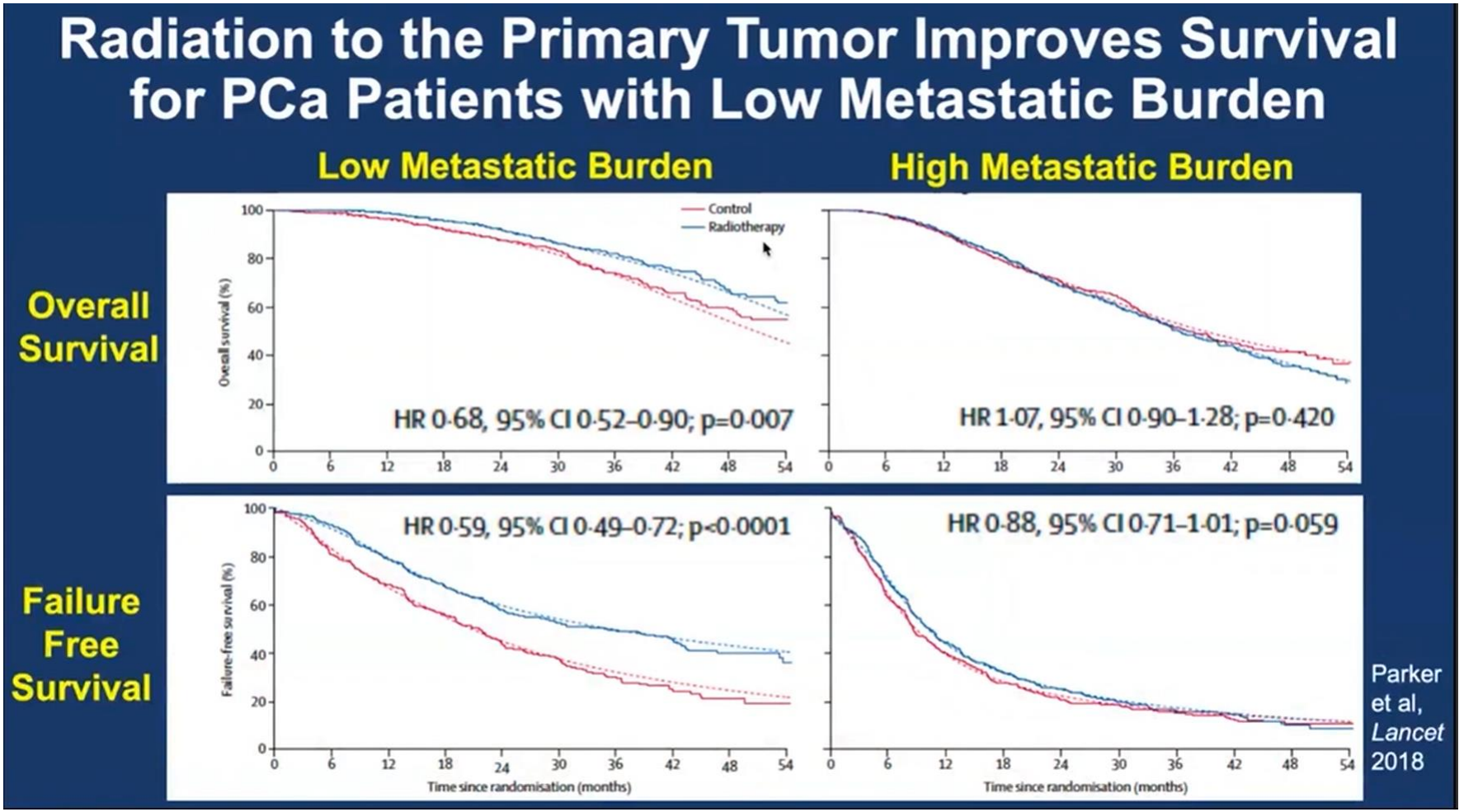
Table 1 Main results of studies that have reported on sLND in patients with nodal recurrent PCa for which 5-year follow-up data are available

Author	No. of patients	PSA at sLND (ng/ml)	No. of nodes removed	No. of positive nodes	BR (%)	5-year BCRFS (%)	5-year PFS (%)	5-year CSS (%)
Rigatti et al. [12]	72	1.2 (0.8–5.1)	29 (16–40)	2 (1–12)	56.9	19	34	75
Jilg et al. [27]	52	52. (0.9–72)	17 (1–57)	4 (0–54)	46	8.7	25.6	75.7
Clayes et al. [33]	13	2 (0.2–26)	11 (1–219	1 (0–6)	23	NA	38.4	NA
Tilki et al. [34]	58	9.8	18.6	6.3	22.4	0	35.9	71
Karnes et al. [32]	52	2.2 (1.4–3.7)	21 (16–30)	3 (1.2–6)	73	45.5	47	92.5
Suardi et al. [10]	59	2 (0.8–5.3)	26 (15–40)	2 (1–11)	59.3	29.4	52	89
Zattoni et al. [35]	117	2.3 (1.2–4.1)	22 (15–30)	3 (1–6)	79.5	31	51	97
Herlemann et al. [36]	104	4.1 (2–7.4)	13 (7–25)	3 (1–7)	29.8	6.2[a]	26[a]	82.8[a]

2021 ASCO ANNUAL MEETING

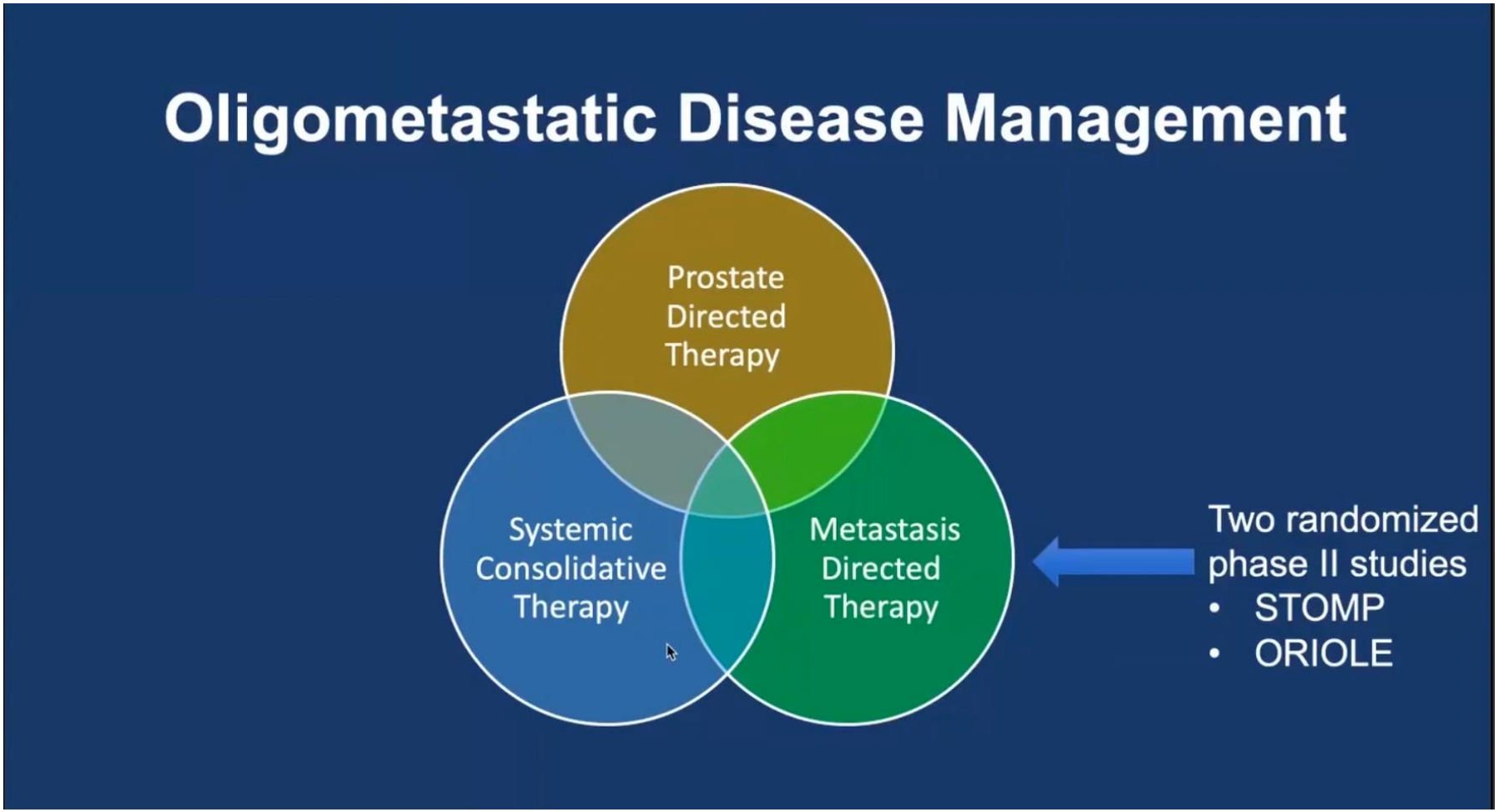
Pisano World Journal of Urology 37:1551, 2019

Radiotherapy to the primary tumour for newly diagnosed, metastatic prostate cancer (STAMPEDE)



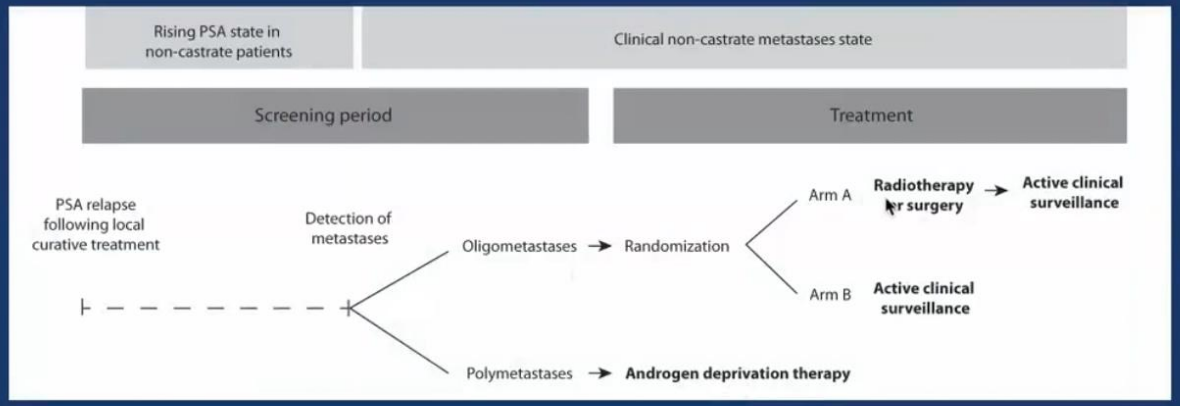
Yüksek volümlü hastalığı olanlar; viseral organ metastazı olan yada ≥4 kemik lezyonu olan ve en az ≥1 vertebra, pelvis dışı kemiklerde metastaz olmalı

Oligometastatik Prostat Kanserinde Tedavi Yaklaşımları



Oligo Rekürrens Prostat Kanserinde Tedavi Yaklaşımları

The STOMP trial: Surveillance vs Metastasis-Directed Therapy for Oligometastatic Prostate Cancer



Primary endpoint:
- ADT-free survival

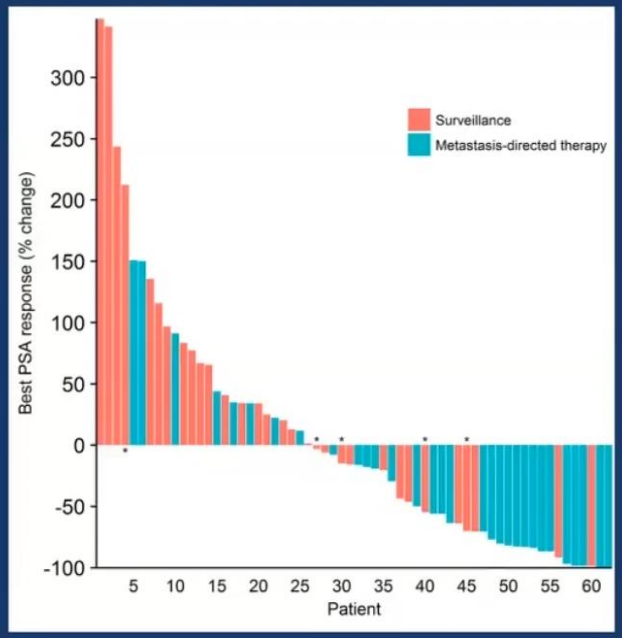
Stratification
- PSA doubling time
- Location of mets

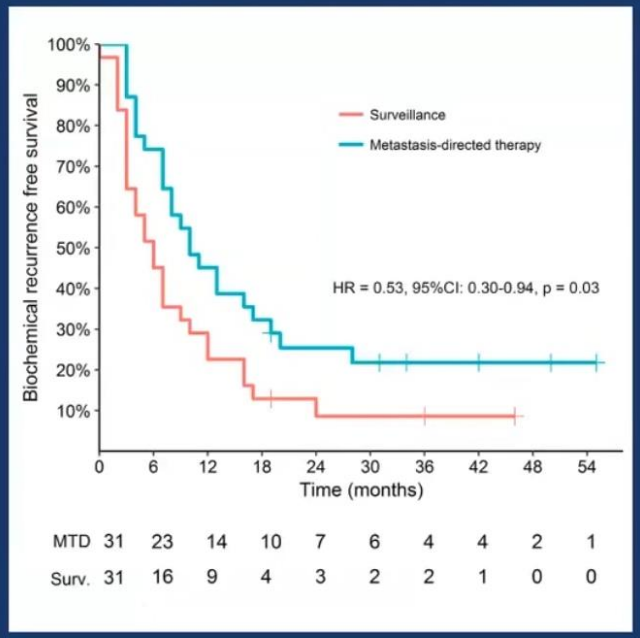
Reason to start ADT
- Symptoms
- Local progression
- Polymetastatic progression

Ost et al, JCO 2017

Oligo Rekürrens Prostat Kanserinde Tedavi Yaklaşımları

STOMP: Metastasis-Directed Therapy Improves Biochemical Recurrence-Free Survival





Surveillance:
35% of pts had a PSA decline

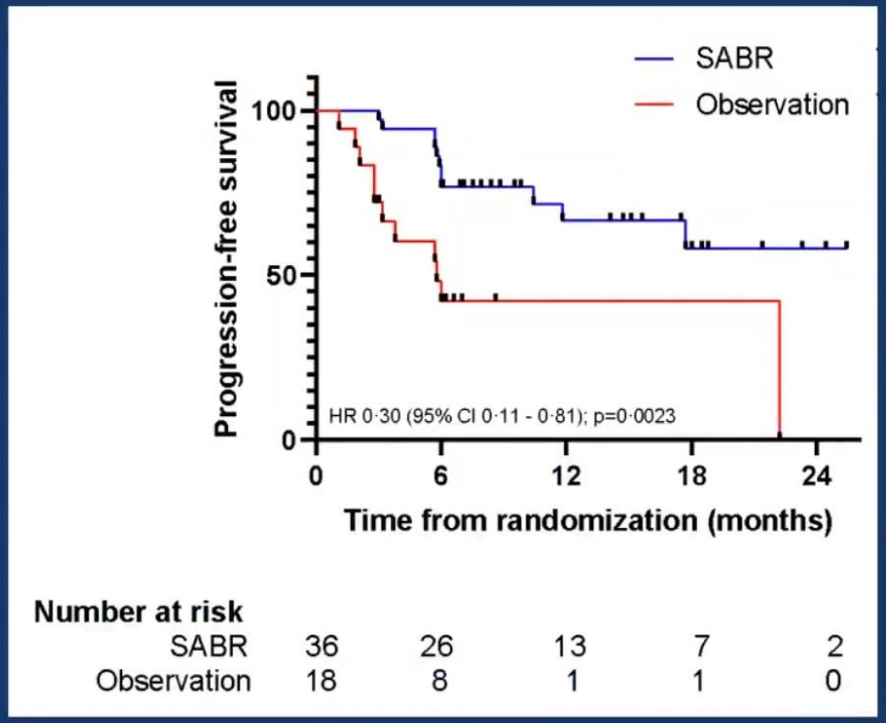
Metastasis-Directed Therapy (MDT):
75% of pts had a PSA decline

Median ADT-free survival:
13 months in the surveillance arm vs 21 months in the MDT arm

Ost et al, JCO 2017

Oligo Rekürrens Prostat Kanserinde Tedavi Yaklaşımları

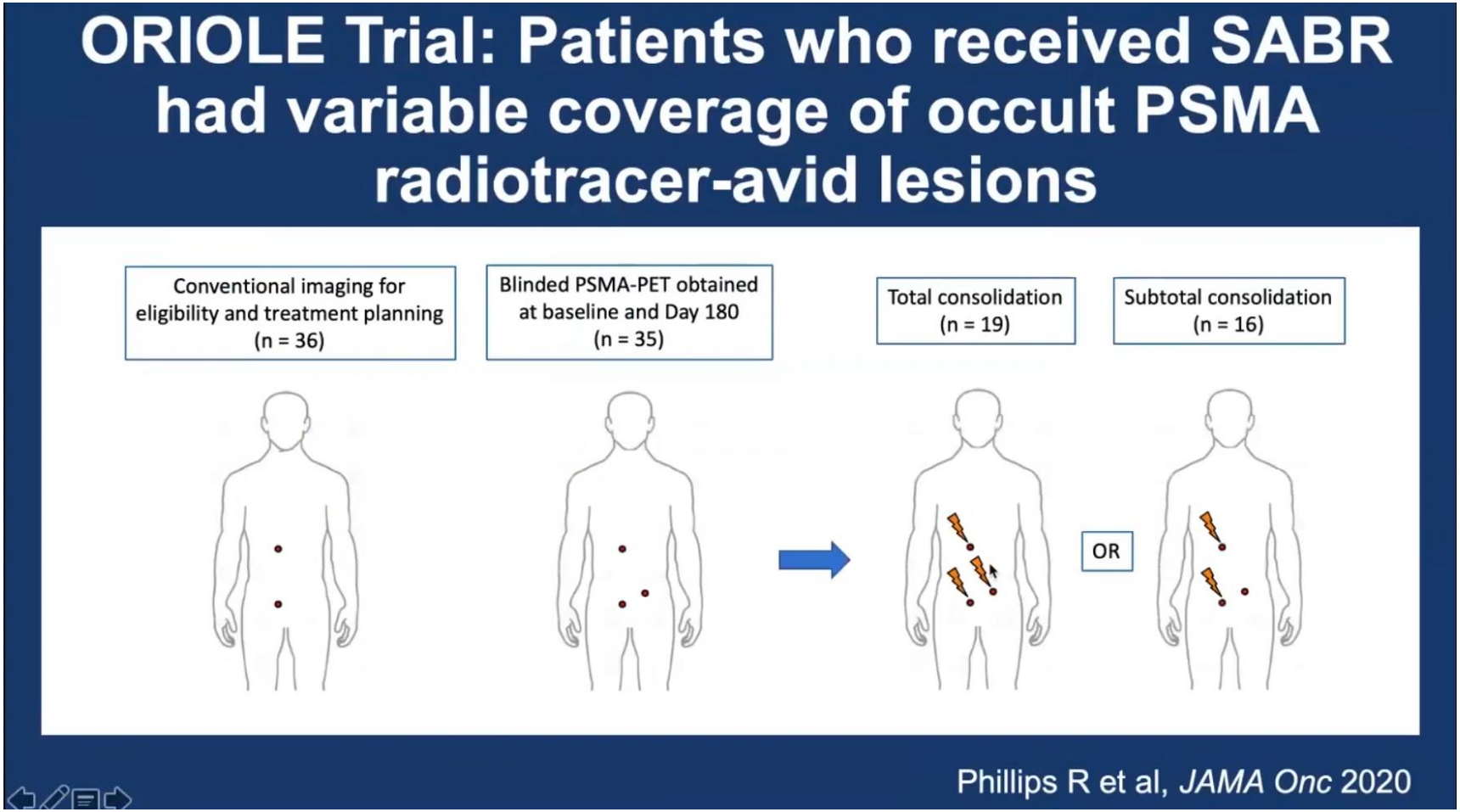
ORIOLE Trial: Observation vs Stereotactic Ablative Radiation for Oligometastatic PCa



Hazard Ratio: 0.30
95% CI: 0.11 - 0.81
p-value: 0.0023

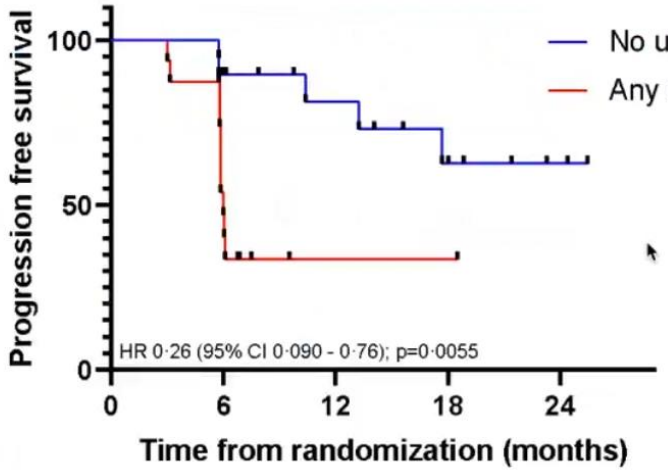
Phillips R et al, *JAMA Onc* 2020

Oligo Rekürrens Prostat Kanserinde Tedavi Yaklaşımları



Oligo Rekürrens Prostat Kanserinde Tedavi Yaklaşımları

ORIOLE Trial: Patients who received SABR had variable coverage of occult PSMA radiotracer-avid lesions



Hazard Ratio: 0.26
95% CI: 0.090 - 0.76
p-value: 0.0055

Number at risk

No untreated	19	14	10	6	2
Any untreated	16	7	1	1	0

Phillips R et al, *JAMA Onc* 2020

Oligometastatik Prostat Kanserinde Tedavi Yaklaşımları

clinical trial updates

Long-Term Outcomes and Genetic Predictors of Response to Metastasis-Directed Therapy Versus Observation in Oligometastatic Prostate Cancer: Analysis of STOMP and ORIOLE Trials

Matthew P. Deek, MD[1,2]; Kim Van der Eecken, MD, PhD[3]; Philip Sutera, MD[2]; Rebecca A. Deek, MS[4]; Valérie Fonteyne, MD, PhD[5]; Adrianna A. Mendes, MD[6]; Karel Decaestecker, MD, PhD[7]; Ana Ponce Kiess, MD, PhD[2]; Nicolaas Lumen, MD, PhD[5]; Ryan Phillips, MD, PhD[8]; Aurélie De Bruycker, MD[7]; Mark Mishra, MD[9]; Zaker Rana, MD[9]; Jason Molitoris, MD, PhD[9]; Bieke Lambert, MD[10]; Louke Delrue, MD[11]; Hailun Wang, PhD[2]; Kathryn Lowe, BS[2]; Sofie Verbeke, MD, PhD[12]; Jo Van Dorpe, MD, PhD[12]; Renée Bultijnck, PhD[7]; Geert Villeirs, MD[10]; Kathia De Man, MD[13]; Filip Ameye, MD[14]; Daniel Y. Song, MD[2]; Theodore DeWeese, MD[2]; Channing J. Paller, MD[15]; Felix Y. Feng, MD[16]; Alexander Wyatt, PhD[17]; Kenneth J. Pienta, MD[15,18]; Maximillian Diehn, MD, PhD[19]; Soren M. Bentzen, PhD, DMsc[9,20]; Steven Joniau, MD, PhD[21]; Friedl Vanhaverbeke, MD[22]; Gert De Meerleer, MD[23]; Emmanuel S. Antonarakis, MD[24]; Tamara L. Lotan, MD[6]; Alejandro Berlin, MD[25]; Shankar Siva, MD, PhD[26]; Piet Ost, MD, PhD[27,28]; and Phuoc T. Tran, MD, PhD[2,9,15,18]

Oligometastatik Prostat Kanserinde Tedavi Yaklaşımları

Outcome	MDT Median Time to Event, months (95% CI)	Observation Median Time to Event, months (95% CI)	HR (95% CI)	*P*
PFS	11.9 (8 to 18.3)	5.9 (3.2 to 7.1)	0.44 (0.29 to 0.66)	< .001
rPFS	18.3 (12 to 36)	17 (13 to 22.8)	0.81 (0.50 to 1.29)	.37
CRPC	NR (62 to NR)	63 (53.9 to NR)	0.67 (0.34 to 1.31)	.24
OS	NR (84 to NR)	NR (73 to NR)	0.53 (0.13 to 2.11)	.36

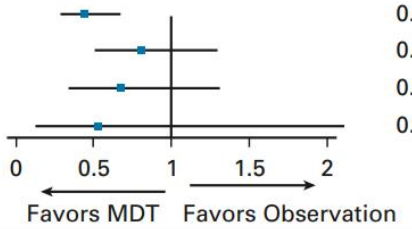


FIG 2. Time-to-event outcomes of MDT versus observation. Time-to-event outcomes demonstrate improvements in PFS with MDT over observation, but no differences in rPFS, time to CRPC, or OS. CRPC, castration-resistant prostate cancer; HR, hazard ratio; MDT, metastasis-directed therapy; NR, not reached; OS, overall survival; PFS, progression-free survival; rPFS, radiographic progression-free survival.

Oligometastatik Prostat Kanserinde Tedavi Yaklaşımları

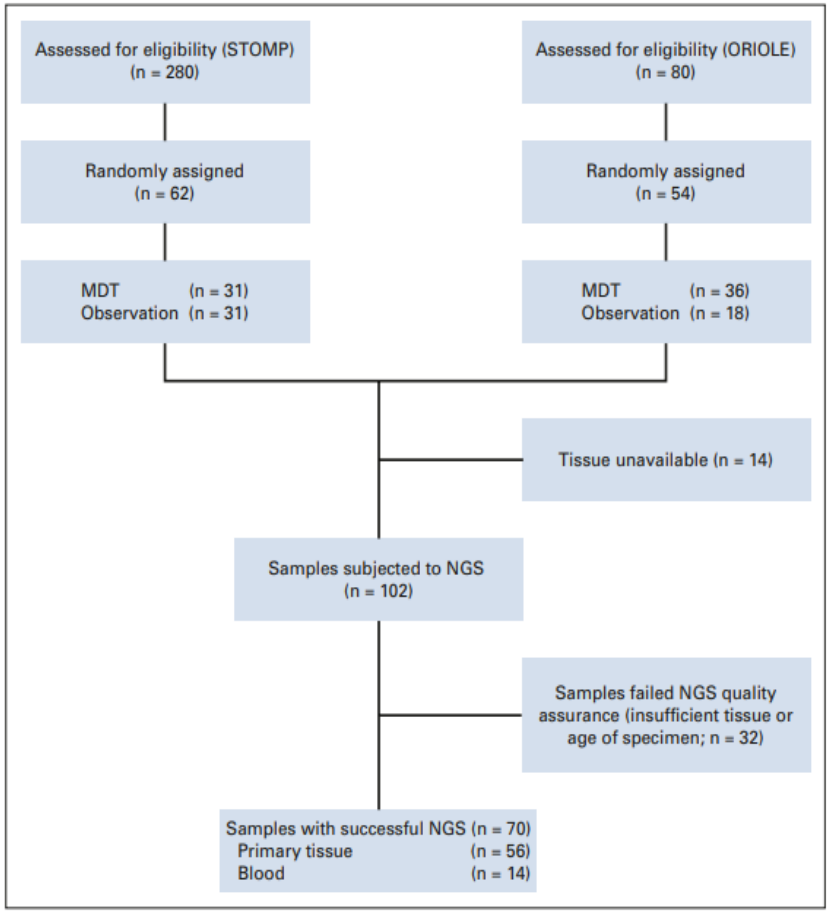


FIG 1. CONSORT diagram demonstrating screening, inclusion, and sequenced sample breakdown. MDT, metastasis-directed therapy; NGS, next-generation sequencing.

A high-risk mutational signature was defined as pathogenic somatic mutations within ATM, BRCA1/2, Rb1, and TP53 on the basis of their strong association with prostate cancer outcomes

Oligometastatik Prostat Kanserinde Tedavi Yaklaşımları

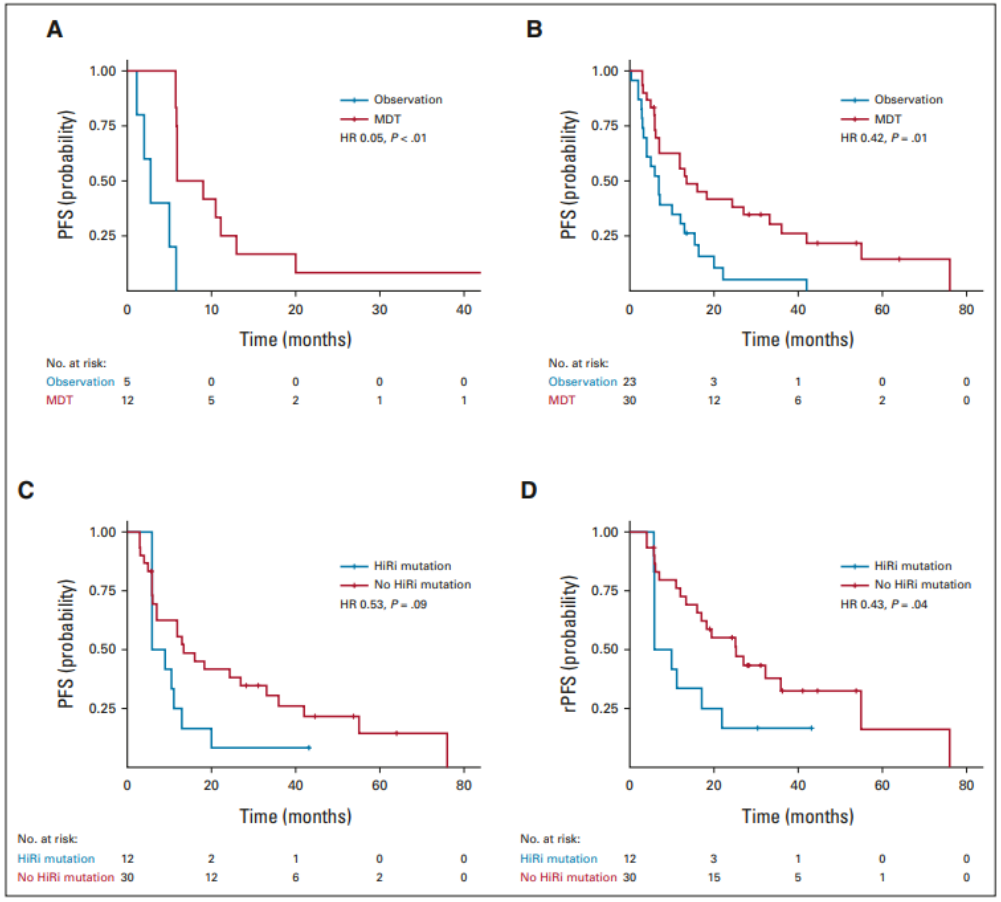


FIG 3. PFS stratified by treatment arm for those (A) with and (B) without a high-risk mutation stratified by treatment arm. MDT resulted in improvements in PFS in those both with and without a high-risk mutation, however, with a potential differential benefit resulting in relatively larger improvements in PFS in those with a high-risk mutation treated with MDT. (C) PFS and (D) rPFS in those treated with MDT stratified by high-risk mutation status. High-risk mutational status was prognostic for both PFS and rPFS in those treated with MDT, with longer times to events in those without a high-risk mutation. HiRi, high-risk; MDT, metastasis-directed therapy; OS, overall survival; PFS, progression-free survival; rPFS, radiographic progression-free survival.

A-Tumors harboring a high-risk mutation treated with MDT experienced a median PFS of 7.5 months compared with a PFS of 2.8 months.

B- In tumors without a high-risk mutation, the median PFS with MDT was 13.4 months compared with 7.0 months

C- the PFS was 13.4 months without a high-risk mutation, compared with 7.5 months with a high-risk mutation.

D-The median rPFS after MDT was 25.3 months without a high-risk mutation, compared with 8.0 months with a high-risk mutation

Oligometastatik Prostat Kanserinde Tedavi Yaklaşımları

ClinicalTrials.gov

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Stereotactic Body Radiotherapy With or Without Darolutamide for OligoRecurrent Prostate Cancer (DART)

The safety and scientific validity of this study is the responsibility of the study sponsor and investigators. Listing a study does not mean it has been evaluated by the U.S. Federal Government. Know the risks and potential benefits of clinical studies and talk to your health care provider before participating. Read our disclaimer for details.

ClinicalTrials.gov Identifier: NCT04641078

Recruitment Status : Recruiting
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Sponsor:
University Hospital, Ghent

Information provided by (Responsible Party):
University Hospital, Ghent

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Study Description

Go to

Brief Summary:

The current trial will test the combination of darolutamide with SBRT, in oligometastatic recurrent hormone sensitive prostate cancer. We hypothesize that the addition of short-term darolutamide improves metastasis-free survival when added to SBRT without a detrimental impact on the QoL. Considering the large reluctance of both patients and physicians to be randomized to observation, we propose to use the historical data from previous reported randomized trials (STOMP and ORIOLE) as a comparator to explore as a secondary endpoint.

Oligometastatik Prostat Kanserinde Tedavi Yaklaşımları

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RAdium-223 and SABR Versus SABR for Oligometastatic Prostate Cancers (RAVENS)

The safety and scientific validity of this study is the responsibility of the study sponsor and investigators. Listing a study does not mean it has been evaluated by the U.S. Federal Government. Know the risks and potential benefits of clinical studies and talk to your health care provider before participating. Read our disclaimer for details.

ClinicalTrials.gov Identifier: NCT04037358

Recruitment Status : Recruiting
First Posted : July 30, 2019
Last Update Posted : May 27, 2022

See **Contacts and Locations**

Sponsor:
Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins

Information provided by (Responsible Party):
Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins

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Study Description Go to

Brief Summary:
This is a Phase II non-blinded randomized study evaluating men with oligometastatic prostate cancer lesions randomized (1:1) to stereotactic ablative radiation therapy (SABR) versus SBAR + Radium-223. We are looking to determine the progression-free survival of men who have oligometastatic prostate cancer with at least one bone metastasis with stereotactic ablative radiation therapy (SABR) versus SABR + Radium-223.

Oligometastatik Prostat Kanserinde Tedavi Yaklaşımları

Clinical Data for MDT in OligoCRPC

Author/Year	Institution	N	PFS/DMFS	TTNI**
Triggiani et al. 2019	Multi-Italian	86	12.3-mos	21.8-mos
Deek et al., 2021	Mayo/JHU	68	9.7-mos	15.6-mos
Onal et al. 2021*	Baskent/ Hacettepe	67	16.6-mos	16.4-mos

* - All lesions were targeted with Ga68-PSMA MDT
** - Or similar

2021 ASCO ANNUAL MEETING

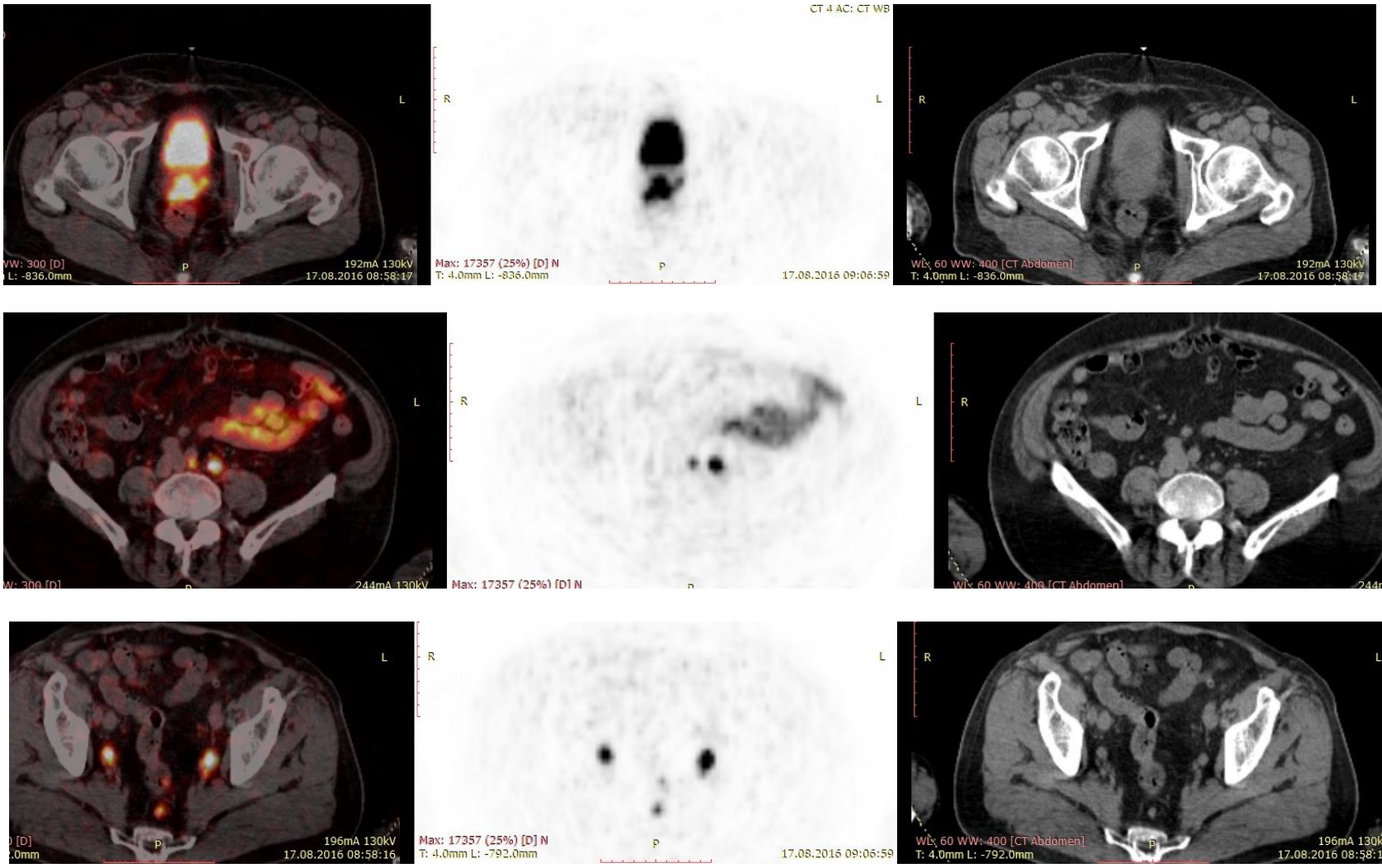
Oligometastatik Prostat Kanserinde Tedavi Yaklaşımları

Clinical Trials for MDT in OligoCRPC

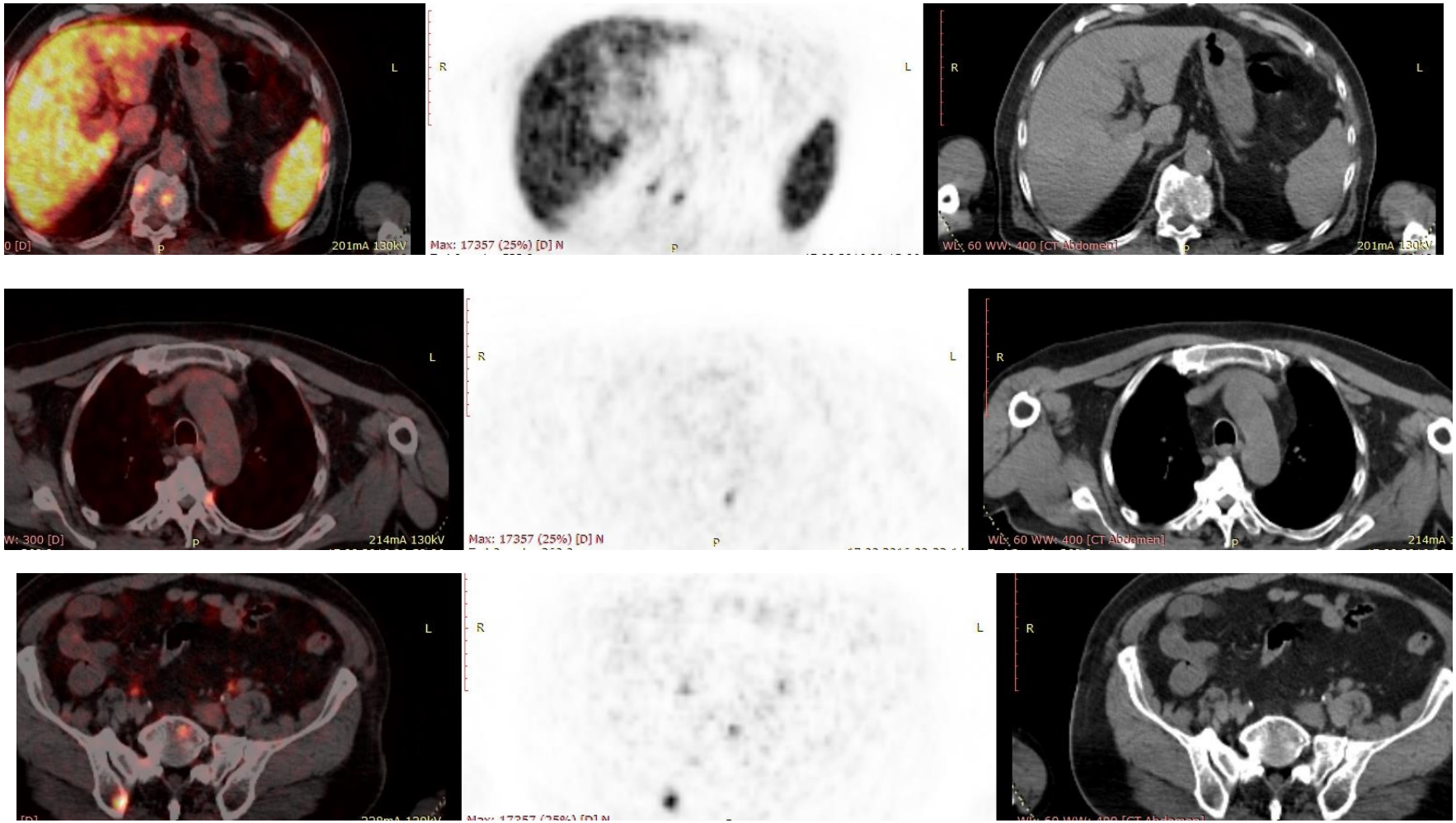
TRIAL #/NAME	Phase/Arms	N	Systemic	Endpoint
NCT03644303/TRAP	II single arm	84	Enza/Abi	median PFS
NCT03556904/ FORCE	IIR	72	Enza/Abi/Doc	PFS
NCT03503344/PILLAR	IIR	60	Apa	PSA <0.2
NCT03449719 /ARTO	IIR	174	Abi	6-mos PSA >50%
NCT02685397/PCS IX	II/IIIR	130	Enza	rPFS

2021 ASCO ANNUAL MEETING

Tedavin 18. Ayı Ga-68 PSMA PET/BT



Tedavin 18. Ayı Ga-68 PSMA PET/BT



PSA ve Biyokimya

	Parametre Adı	Sonuc	Birim	Normal Değerler		Önceki Sonuc
↑	Glukoz	205	mg/dL	74	106	Grafik.
	Üre	45	mg/dL	16.6	48.5	Grafik.
	Ürik Asit	4.2	mg/dL	3,4	7	Grafik.
↑	Kreatinin	1.36	mg/dL	0.7	1.2	Grafik.
	eGFR	51.26	mL/min/1.7			Grafik.
CKD-EPI formülü kullanilarak hesaplanmistir.						
	AST	17	U/L	0	40	Grafik.
	ALT	10	IU/L	0	41	Grafik.
	GGT	20	U/L	5	36	Grafik.
↑	LDH	221	U/L	135	214	Grafik.
	ALP	57	U/L	40	120	Grafik.
	Total Protein	7	g/dL	6.4	8.3	Grafik.
	Albumin	4.18	g/dL	3.5	5.2	Grafik.
↑	Direkt Bilirubin	0.25	mg/dL	0	0,2	Grafik.
	Total Bilirubin	0.7	mg/dL	0	1,2	Grafik.
	İndirekt Bilirubin	0.45	mg/dL	0	1,2	Grafik.
	Kalsiyum	8.9	mg/dL	8.6	10.2	Grafik.
	Sodyum	142.4	mmol/L	136	145	Grafik.
	Potasyum	4.48	mmol/L	3.5	5.1	Grafik.
↓	Total Testosteron	0.38	ng/mL	1.32	8.92	Grafik.
↑	PSA	45.76	ng/mL	0	4	Grafik.

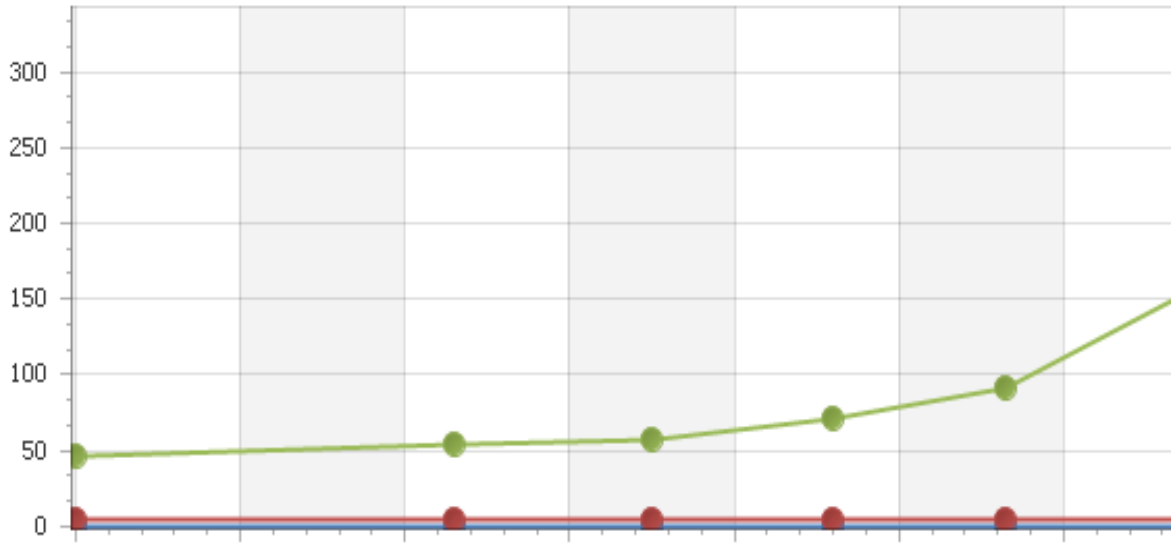
Tedavi Değişikliği Yapılıyor

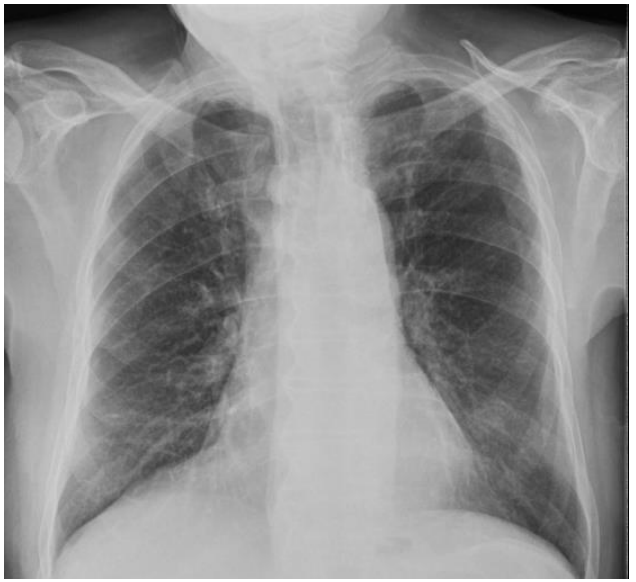
- Dosetaksel
- Deltakortile 2x5 mg
- Zolendronik asid 4 mg
- Leuprolide acetate 22.5
- Palyatif RT

Tedaviye Yanıt Değerlendirmesi

- 6 kür KT sonrası nefes darlığı şikayeti başlıyor
- Günlük aktivitelerini yaparken zorlanma
- Sık kan transfüzyon ihtiyacı
- ECOG P2
- PSA düzeyinde artma
- Dış merkez BT akciğerde yeni nodüller lezyonlar

Tedaviye Yanıt Değerlendirmesi

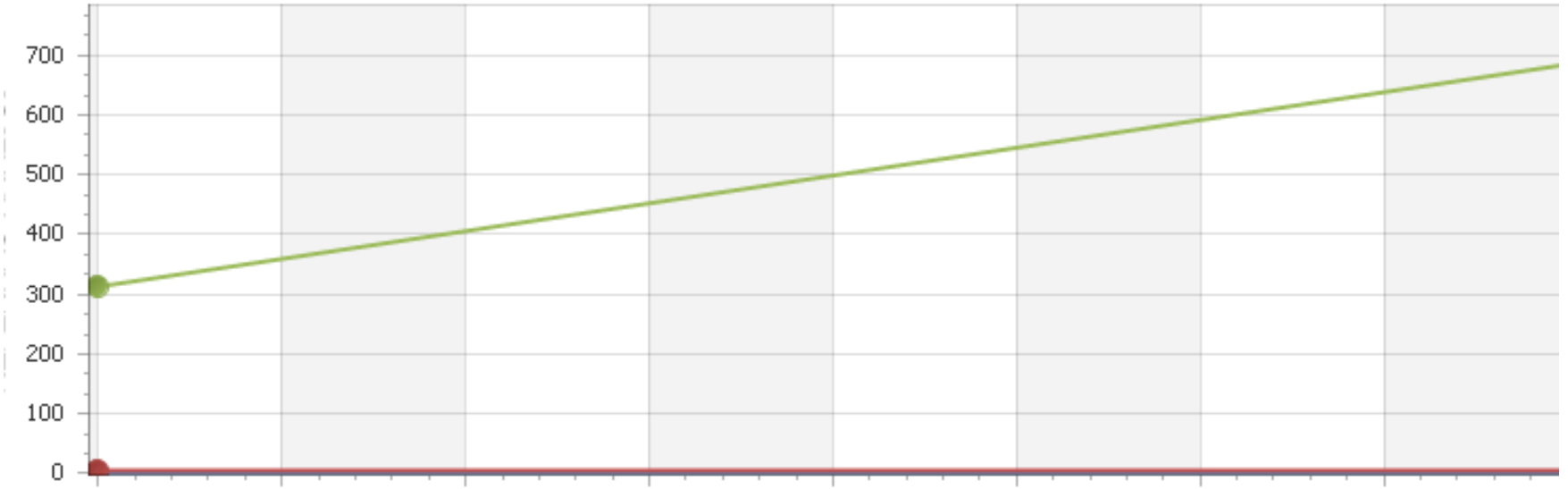




5.Ayda Tedavi Değişikliği

- Enzalutamide 160 mg/gün
- Zoledronik asit 4 mg
- Leuprolide acetate 22.5

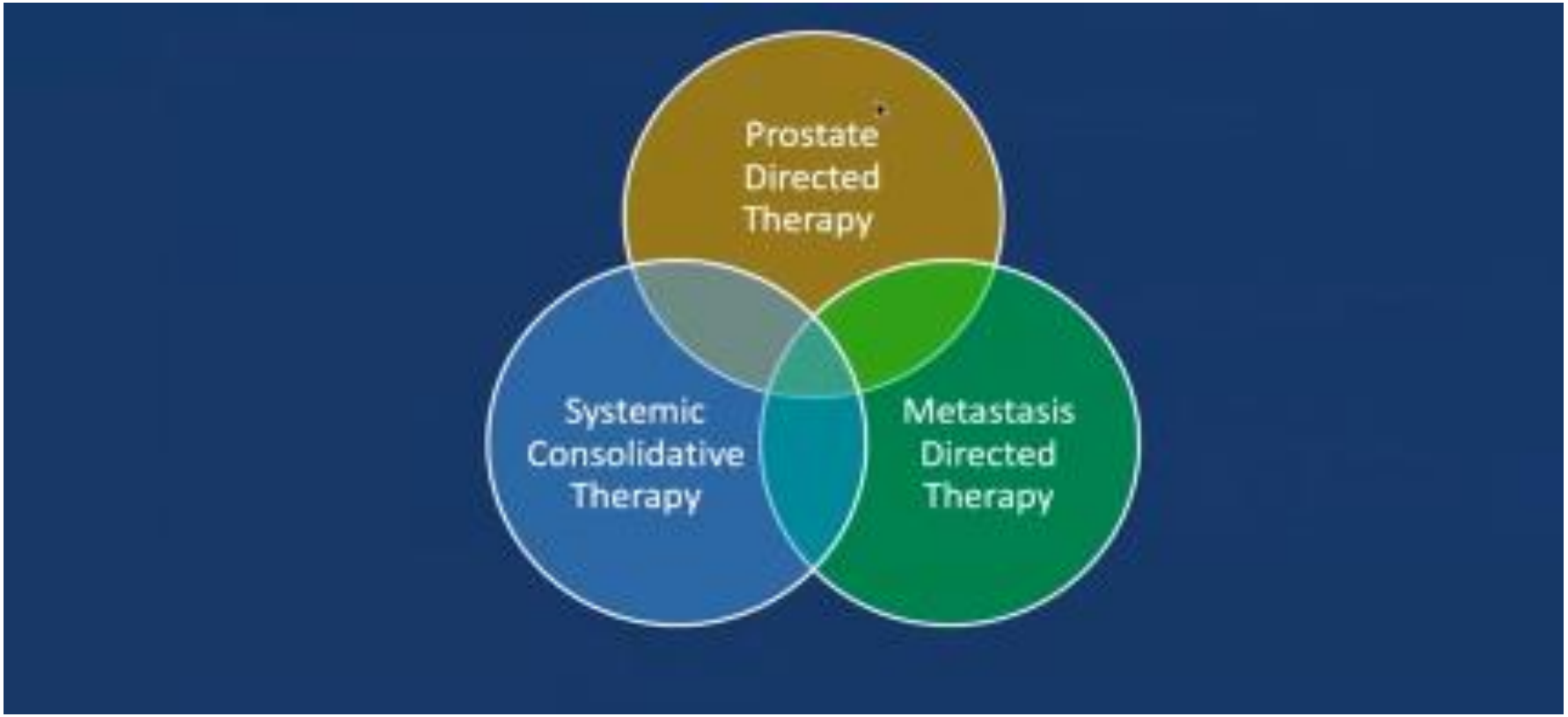
Tedaviye Yanıt



3 AYDA BELİRGİN PSA PROGRESYONU, PALYATİF DESTEK

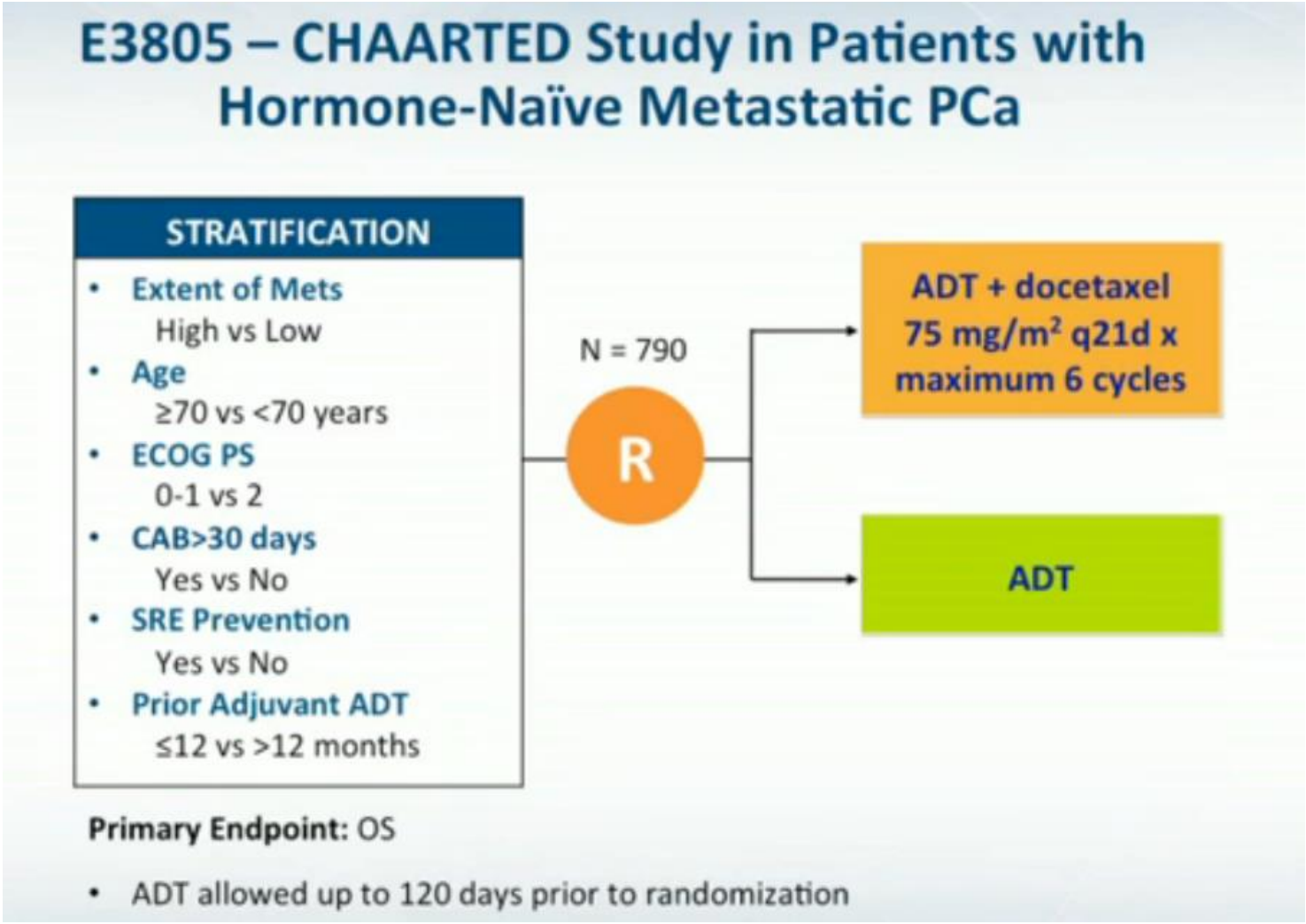
OLİGOMESTASTATİK HASTALIKTA SEYİR

Oligometastatik Prostat Kanserinde Sistemik Tedavi Yaklaşımları

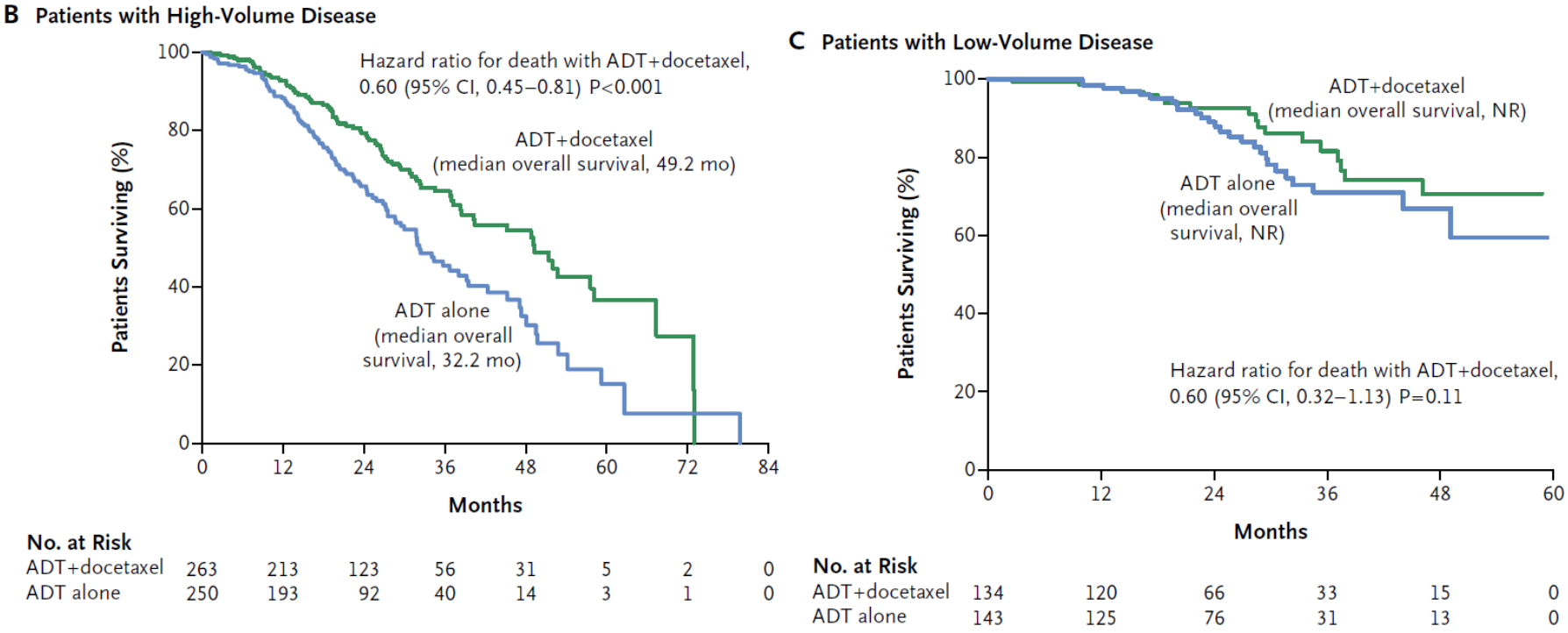


Hormon Duyarlı Metastatik Prostat Kanseri

ADT + Erken Dönem Kemoterapi

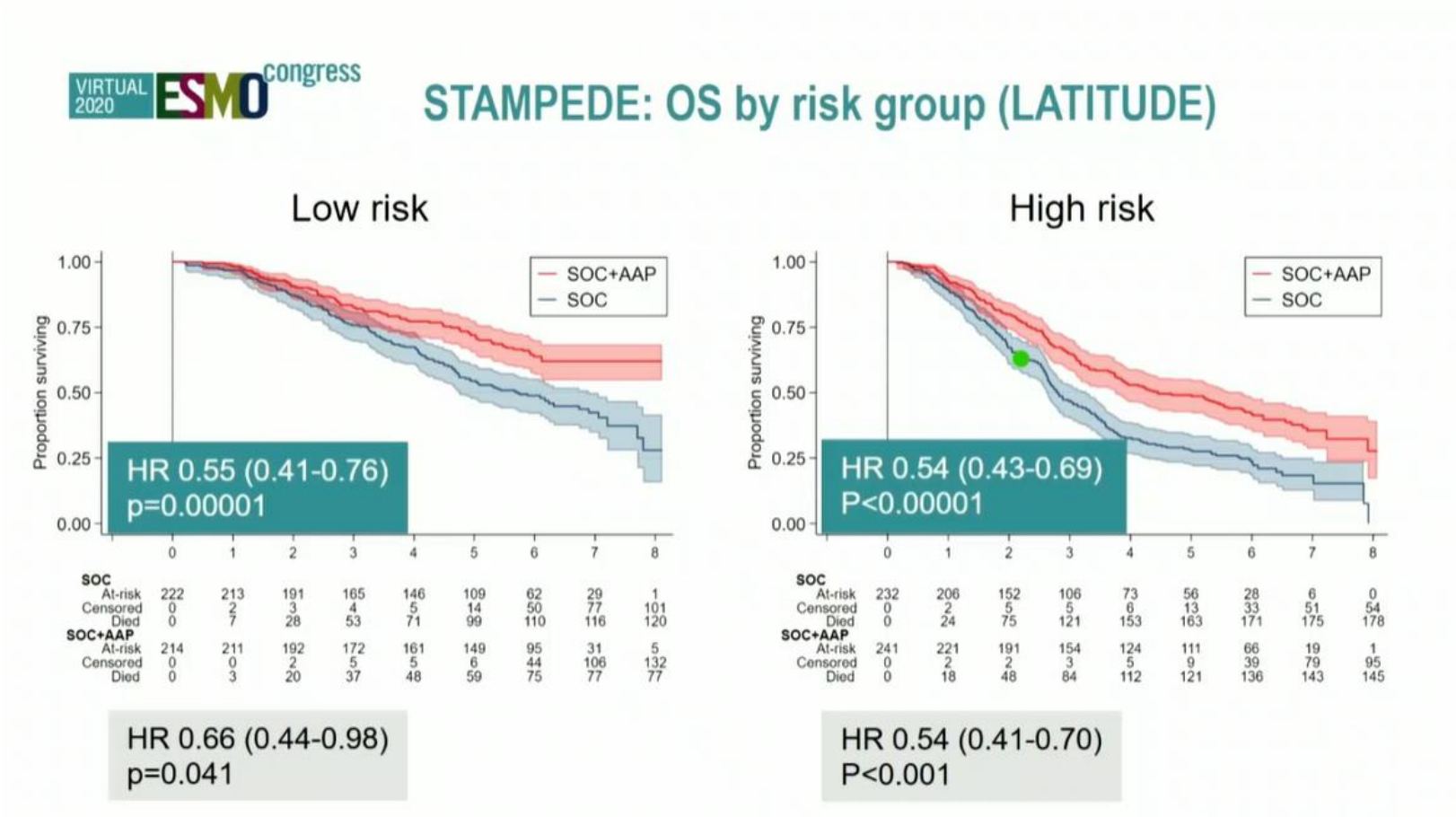


ADT + Erken Dönem Kemoterapi

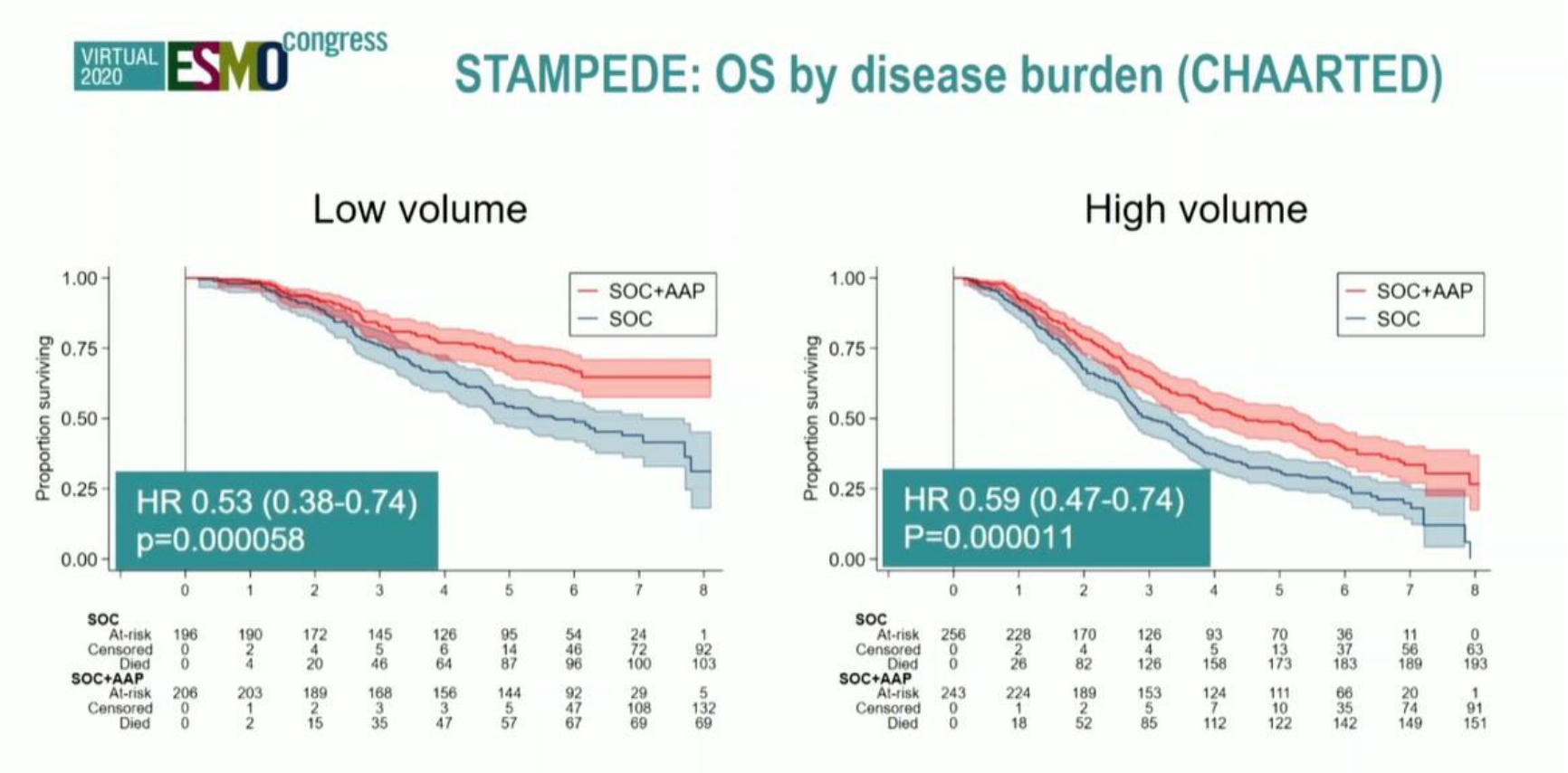


Yüksek volümlü hastalığı olanlar; viseral organ metastazı olan yada ≥4 kemik lezyonu olan ve en az ≥1 vertebra, pelvis dışı kemiklerde metastaz olmalı

Kastrasyona Duyarlı Metastatik Prostat Kanseri Tedavisi



Kastrasyona Duyarlı Metastatik Prostat Kanseri Tedavisi



Oligometastatik Prostat Kanserinde Sistemik Tedavi Yaklaşımları

Improved Survival With Enzalutamide in Patients With mHSPC

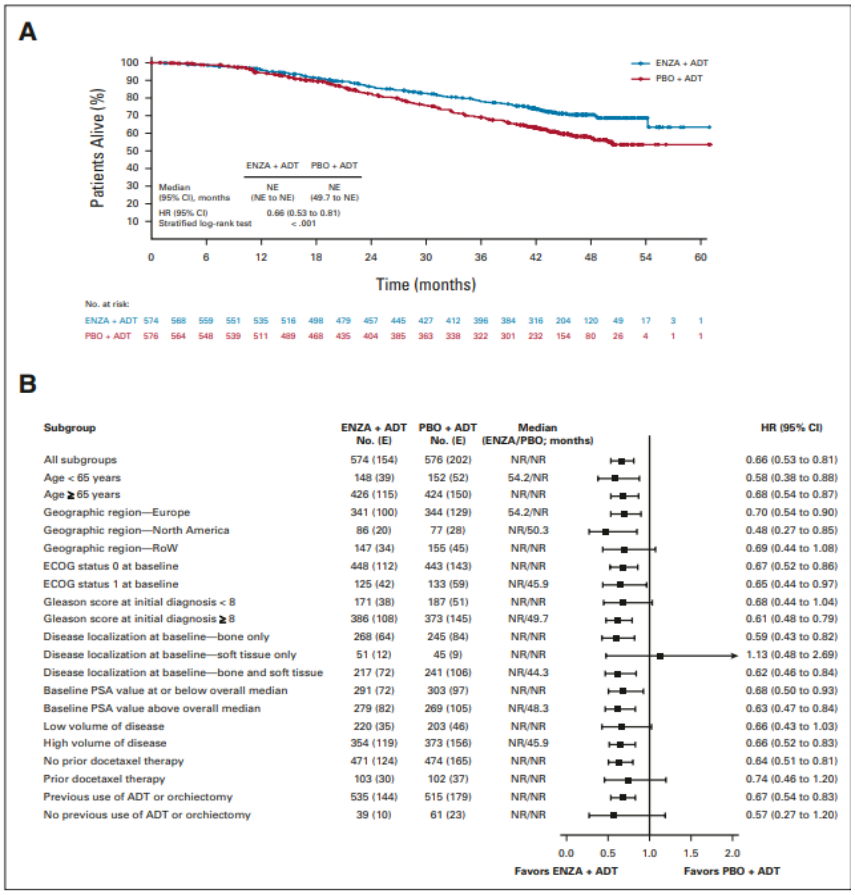


TABLE 1. Patient Demographics and Disease Characteristics (intent-to-treat population)

Characteristic	ENZA + ADT (n = 574)	PBO + ADT (n = 576)	PBO Crossover (n = 184)
Median age, years (range)	70.0 (46-92)	70.0 (42-92)	69.0 (51-89)
Age, years, No. (%)			
< 65	148 (25.8)	152 (26.4)	39 (21.2)
Europe	341 (59.4)	344 (59.7)	102 (55.4)
Asia-Pacific	104 (18.1)	113 (19.6)	49 (26.6)
North America	86 (15.0)	77 (13.4)	18 (9.8)
South America	32 (5.6)	30 (5.2)	11 (6.0)
Other	11 (1.9)	12 (2.1)	4 (2.2)
ECOG status, No. (%)			
0	448 (78.0)	443 (76.9)	155 (84.2)
1	125 (21.8)	133 (23.1)	29 (15.8)
Disease volume, No. (%)			
High[b]	354 (61.7)	373 (64.8)	92 (50.0)
Low	220 (38.3)	203 (35.2)	92 (50.0)
Total Gleason score at initial diagnosis, No. (%)			
< 8	171 (29.8)	187 (32.5)	70 (38.0)
≥ 8	386 (67.2)	373 (64.8)	108 (58.7)

TABLE 1. Patient Demographics and Disease Characteristics (intent-to-treat population) (continued)

Characteristic	ENZA + ADT (n = 574)	PBO + ADT (n = 576)	PBO Crossover (n = 184)
Visceral disease, with or without bone or lymph node	64 (11.1)	64 (11.1)	17 (9.4)
No. (%)			
0	471 (82.1)	474 (82.3)	155 (84.2)
1-5	14 (2.4)	11 (1.9)	6 (3.3)
6	89 (15.5)	91 (15.8)	23 (12.5)
Previous use of ADT, No. (%)			
None	39 (6.8)	61 (10.6)	21 (11.4)
≤ 3 months	414 (72.1)	394 (68.4)	125 (67.9)
> 3 months	121 (21.1)	120 (20.8)	37 (20.1)
Unknown[a]	0	1 (0.2)	1 (0.5)
Median PSA, ng/mL (range)	5.4 (0-4,823.5)	5.1 (0-19,000.0)	4.05 (0-3,192.0)

Abbreviations: ADT, androgen deprivation therapy; ECOG, Eastern Cooperative Oncology Group; ENZA, enzalutamide; M0, no distant metastasis; M1, distant metastasis; MX, distant metastasis cannot be assessed (not evaluated by any modality); PBO, placebo; PSA, prostate-specific antigen.

[a]By country regulations, race is not collected in France.

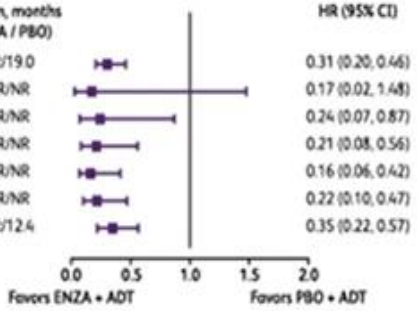
Hastaların en az %70 oranında
De novo Metastatik

ARCHES Enzulutamid oligometastatik hastalıkta etkinliği

Oligometastatik Prostat Kanserinde Sistemik Tedavi Yaklaşımları

Figure 1. Forest Plot of rPFS[a] for Oligometastatic and Polymetastatic Disease

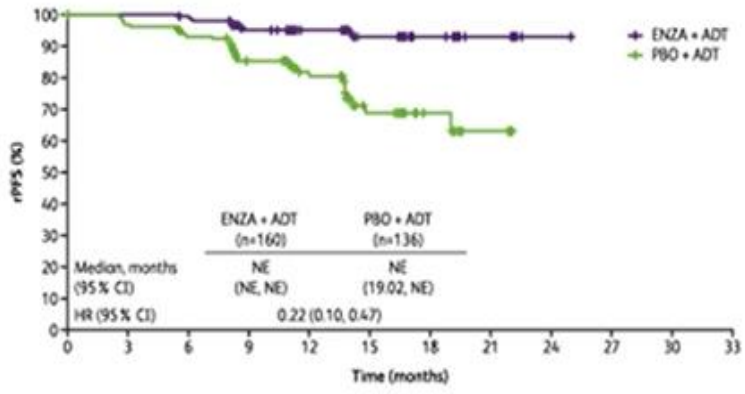
Subgroup	ENZA + ADT N (E)	PBO + ADT N (E)	Median, months (ENZA / PBO)	HR (95% CI)
Overall – bone only	267 (32)	245 (81)	NR/19.0	0.31 (0.20, 0.46)
1 metastasis	53 (1)	44 (5)	NR/NR	0.17 (0.02, 1.48)
≤2 metastases	87 (3)	76 (11)	NR/NR	0.24 (0.07, 0.87)
≤3 metastases	120 (5)	103 (20)	NR/NR	0.21 (0.08, 0.56)
≤4 metastases	142 (5)	117 (24)	NR/NR	0.16 (0.06, 0.42)
≤5 metastases	160 (8)	136 (29)	NR/NR	0.22 (0.10, 0.47)
≥6 metastases	107 (24)	109 (52)	NR/12.4	0.35 (0.22, 0.57)



[a]rPFS was defined as the time from randomization to first objective evidence of radiographic progression per RECIST version 1.1, as assessed by independent central review, or death from any cause within 24 weeks of treatment discontinuation, whichever occurred first.

ADT=androgen deprivation therapy; CI=confidence interval; ENZA=enzalutamide; E=number of events; HR=hazard ratio; N=number of patients; NR=not reached; PBO=placebo; RECIST=Response Evaluation Criteria in Solid Tumors; rPFS=radiographic progression-free survival.

Figure 2. Kaplan-Meier Curve of rPFS in Oligometastatic Patients With ≤5 Metastases

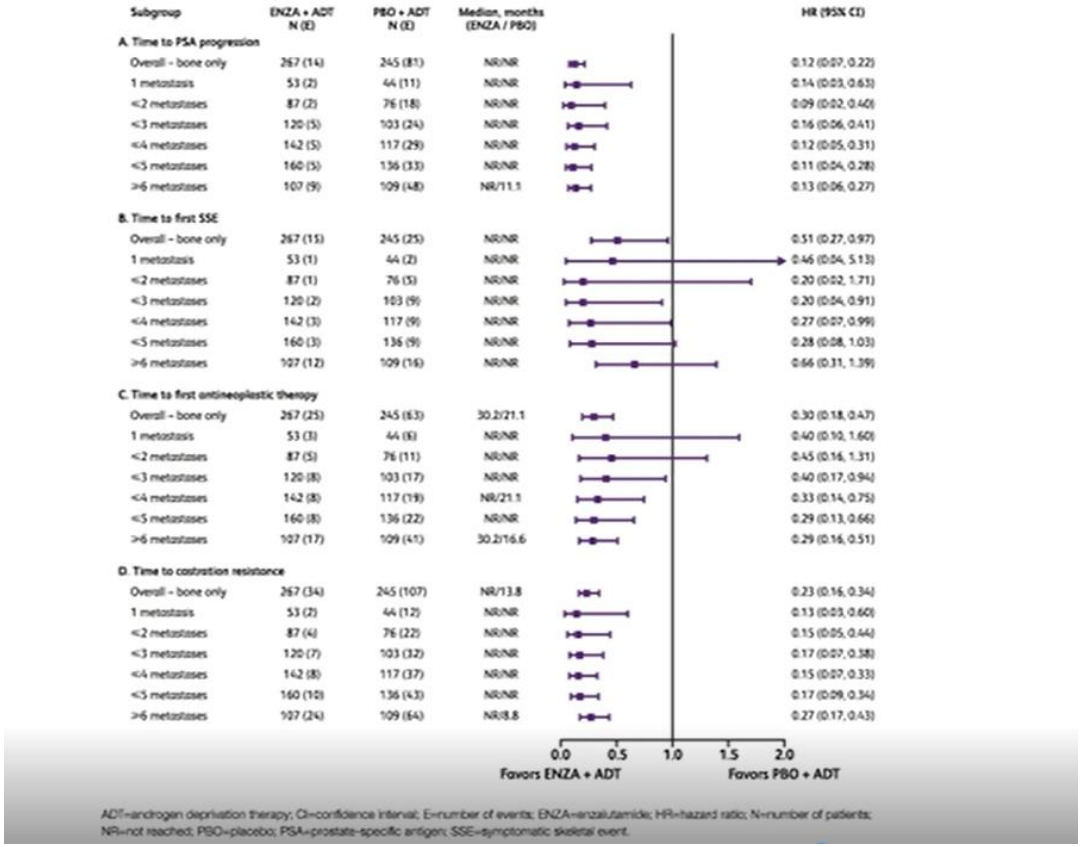


ADT=androgen deprivation therapy; CI=confidence interval; ENZA=enzalutamide; HR=hazard ratio; NE=not evaluable; NR=not reached; PBO=placebo; rPFS, radiographic progression free survival.

ARCHES Enzulutamid oligometastik hastalıkta etkinliği

Oligometastatik Prostat Kanserinde Sistemik Tedavi Yaklaşımları

Figure 5. Secondary Endpoints in ARCHES Based on the Presence of Bone Metastases for Time to A) PSA Progression, B) First SSE, C) First Antineoplastic Therapy, and D) Castration Resistance



ADT=androgen deprivation therapy; CI=confidence interval; E=number of events; ENZA=enzalutamide; HR=hazard ratio; N=number of patients; NR=not reached; PBO=placebo; PSA=prostate-specific antigen; SSE=symptomatic skeletal event.

ARCHES Enzulutamid oligometastik hastalıkta etkinliği

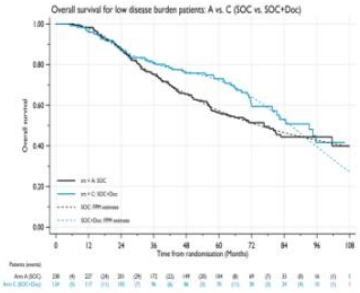
Kastrasyona Duyarlı Metastatik Prostat Kanseri Tedavisi

VIRTUAL 2020 ESMO congress

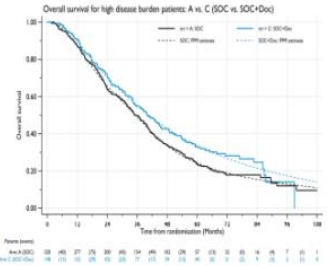
Should we count the metastases for decision making about systemic treatment? No !!!

Docetaxel | **Hormonal agents**

Low burden



High burden



Clarke N, Ann Oncol 2019

STAMPEDE (Abi)

Low risk	59/220	41/208	0.657 (0.438-0.983)	0.041
High risk	136/232	94/241	0.536 (0.411-0.699)	<0.001

TITAN (Apa)

Disease volume					
High	109/325	173/335	NE	14.9	0.53 (0.41–0.67)
Low	25/200	58/192	NE	30.5	0.36 (0.22–0.57)

ENZAMET (Enza)

Volume of disease			
Low	22/272	46/265	0.43 (0.26–0.72)
High	80/291	97/297	0.80 (0.59–1.07)

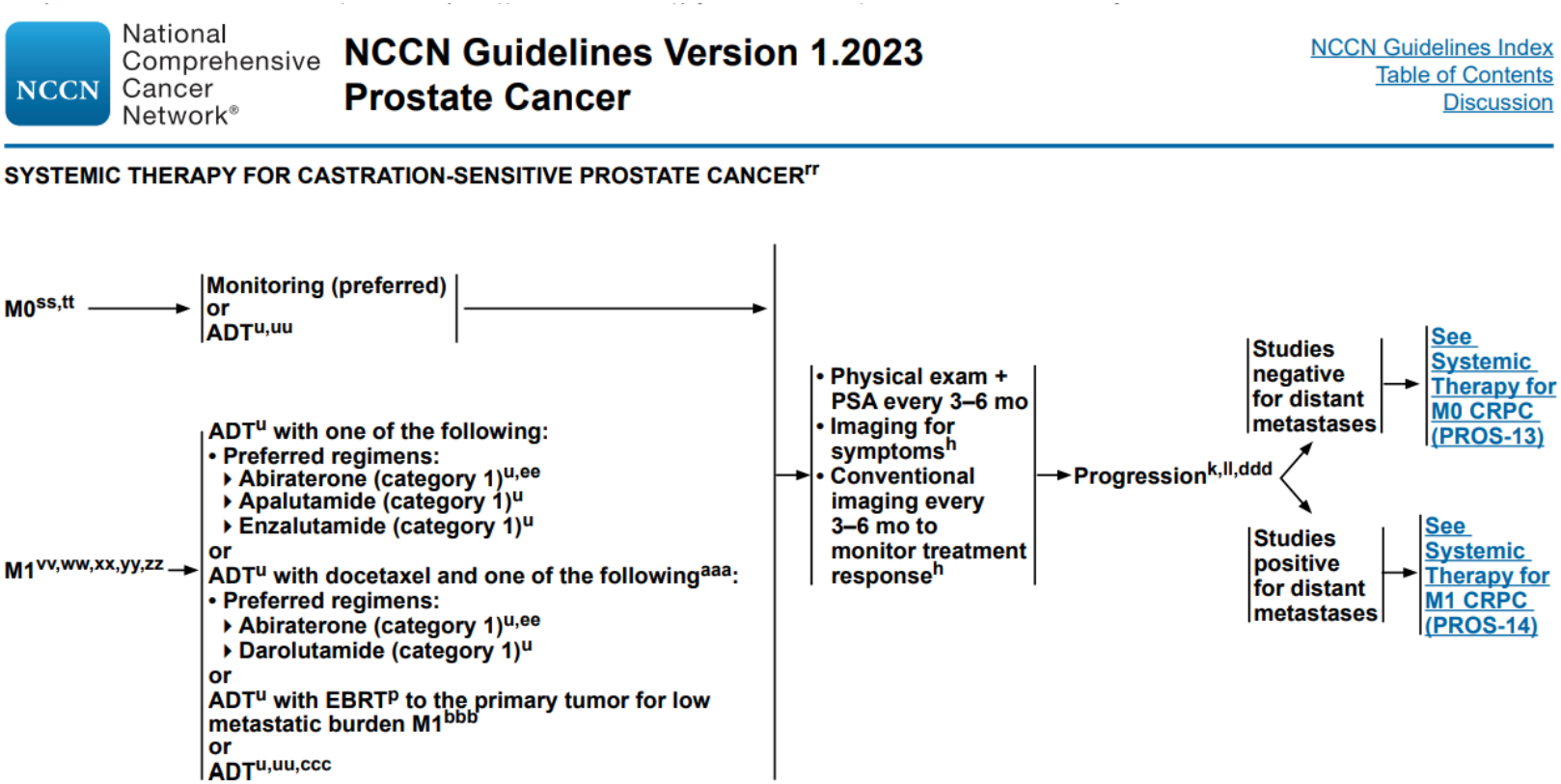
Hoyle A, ESMO 2018; Chi K, NEJM 2019, Davis I, NEJM 2019

Kastrasyona Duyarlı Metastatik Prostat Kanseri Tedavisi

High level summary of *all HR(OS) and 95% CI* TS + / - potent ARi mHSPC data: Consistent!

M1 HSPC	All M1	High Volume/risk	Low Volume/risk	*Metachronous (mostly low volume)*
LATITUDE-Abi (All *de novo*)	0.66 0.58-0.178	0.62 (0.52-0.74)	0.72 (0.47-1.10)	N/A
STAMPEDE-Abi (All *de novo*)	0.60 (0.49-0.71)	0.54 (0.43-0.69)	0.55 (0.41-0.76)	N/A
ENZAMET-Enza (45% conc doc)	0.67 (0.52-0.86)	0.53 (0.42-1.09)	0.39 (0.21-0.71)	0.72 (0.47-1.09)
TITAN-Apa (10% prior doc)	0.68 0.51-0.90	0.68 (0.50-0.92)	0.67 (0.34-1.32)	0.4 (0.15-1.03)

Kastrasyona Duyarlı Metastatik Prostat Kanseri Tedavisi



Sonuç

- Yeni görüntüleme yöntemleri ile oligometastatik hastalık tanısında artma görülmektedir
- Oligometastatik hastalıkta primer tümöre yönelik RT
- Oligorecurrence hastalıkta metastatik bölgeye SBRT, lenf nodu diseksiyonu
- Oligometastatik hastalıkta sistemik tedavi; ADT +daha etkili yeni kuşak AR yolağı inhibitörleri(Abirateron, enzalutamid, apalutamide vb.)
- Randomize çalışma sonuçları daha aydınlatıcı olacak(overtreatment/undertreatment)
- Oligometastik hastalığın agresif /indolent seyrini belirleyecek genomik bilgilere ihtiyaç mevcuttur