



***Ritrattamento radio-  
chemioterapico con  
sovradosaggio  
stereotassico nei pazienti  
affetti da recidiva di  
adenocarcinoma  
prostatico:  
studio di fase I-II.***

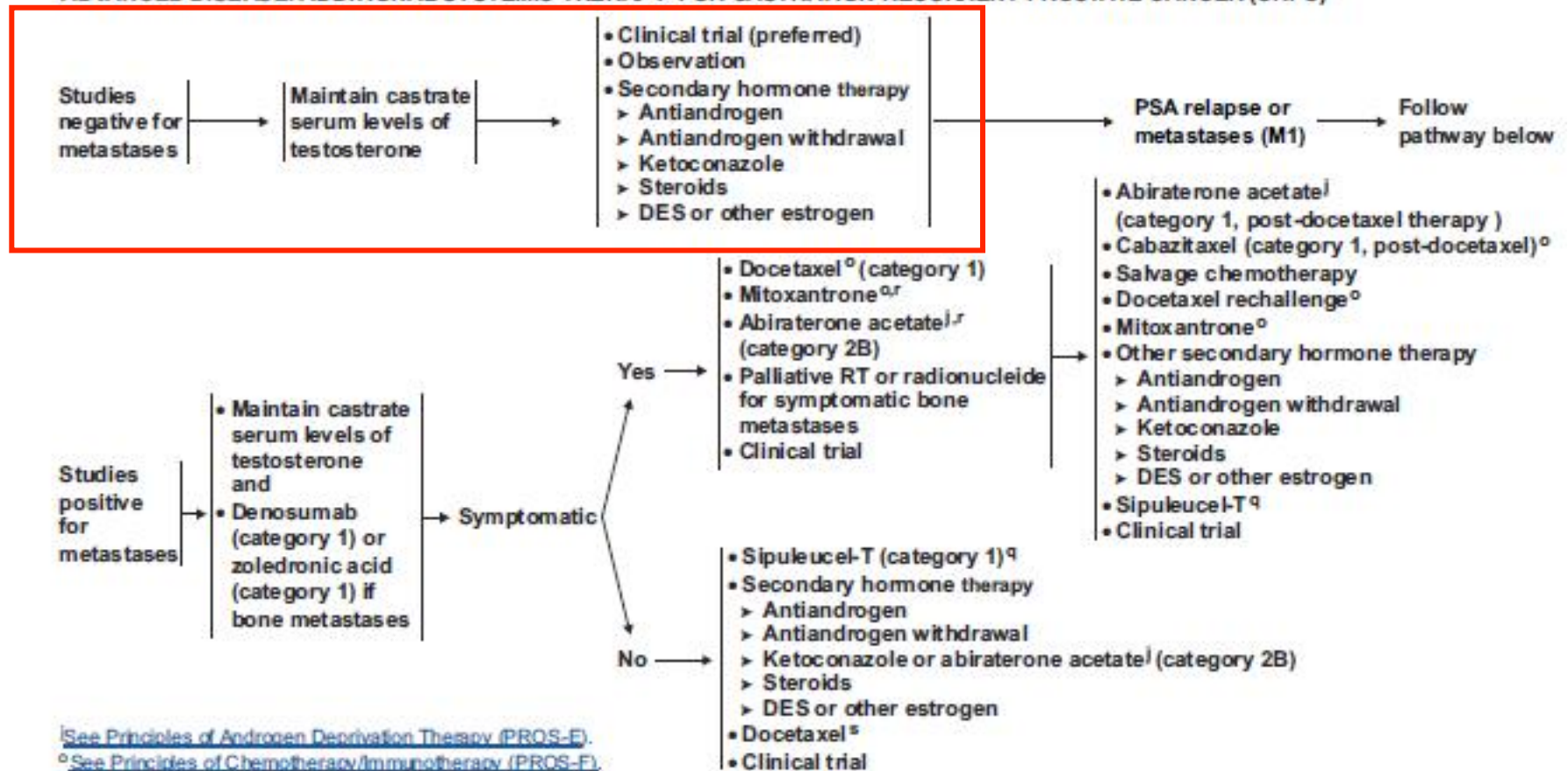
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# Background

NCCN National Comprehensive Cancer Network  
**NCCN Guidelines Version 3.2012**  
**Prostate Cancer**

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## ADVANCED DISEASE: ADDITIONAL SYSTEMIC THERAPY FOR CASTRATION-RECURRENT PROSTATE CANCER (CRPC)



<sup>l</sup>See Principles of Androgen Deprivation Therapy (PROS-F).

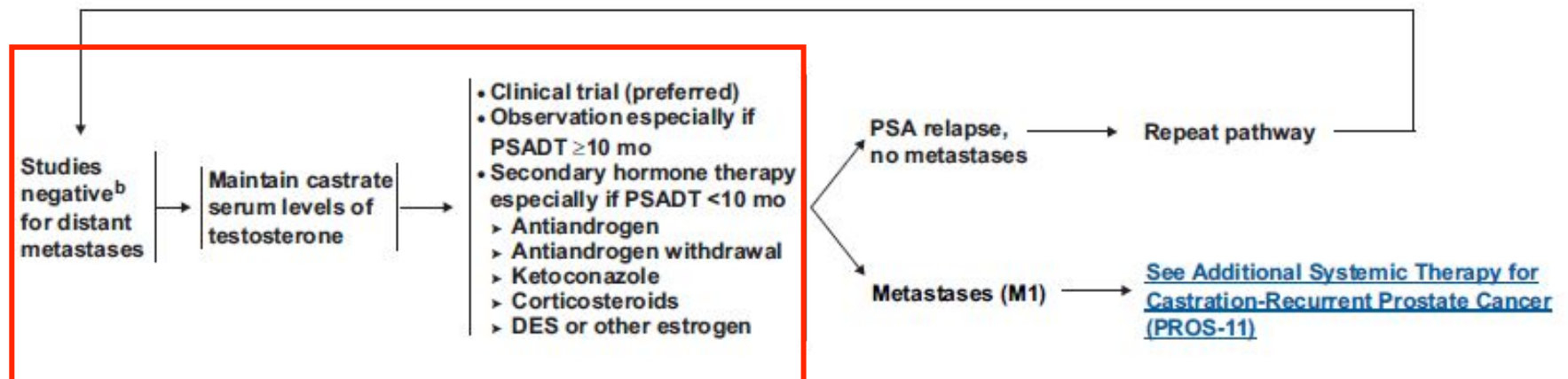
<sup>o</sup>See Principles of Chemotherapy/Immunotherapy (PROS-F).

# Background

NCCN National  
Comprehensive Cancer  
Network® **NCCN Guidelines Version 2.2014**  
**Prostate Cancer**

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ADVANCED DISEASE: ADDITIONAL SYSTEMIC THERAPY FOR CASTRATION-RECURRENT PROSTATE CANCER



# Re-irradiation of local relapse after RP and RT

- **22 pts with local relapse after radical prostatectomy and radiotherapy**
- **Dynamic 18F-Choline PET/CT and multiparametric MRI was positive only locally**



# Re-irradiation of local relapse after RP and RT

## First phase

Radiotherapy:

IMRT 45.6 @ 1.2 bid

Concurrent chemotherapy

Weekly Docetaxel (25 mg/m<sup>2</sup>)

## Second phase

Stereotactic RT: 12-15 Gy in 3 fx

# Re-irradiation of local relapse after RP and RT

## RT issues

Definition of recurrence by dynamic  $^{18}\text{F}$ -Choline PET/CT

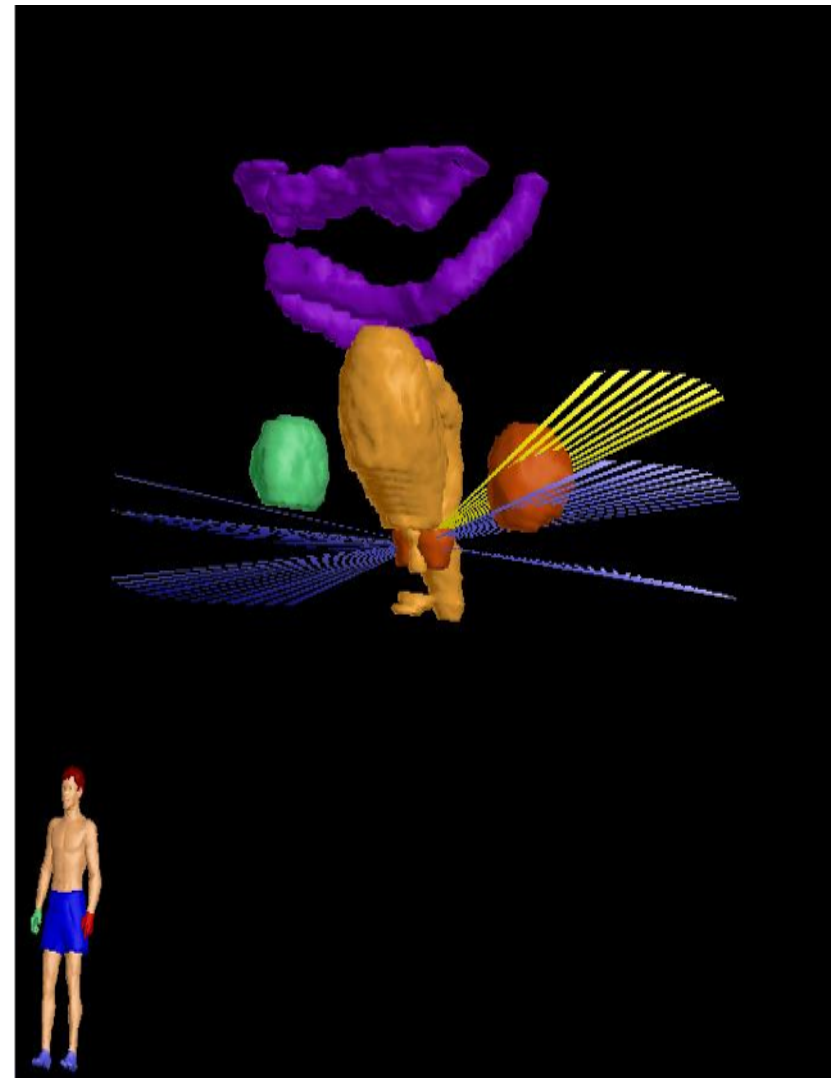
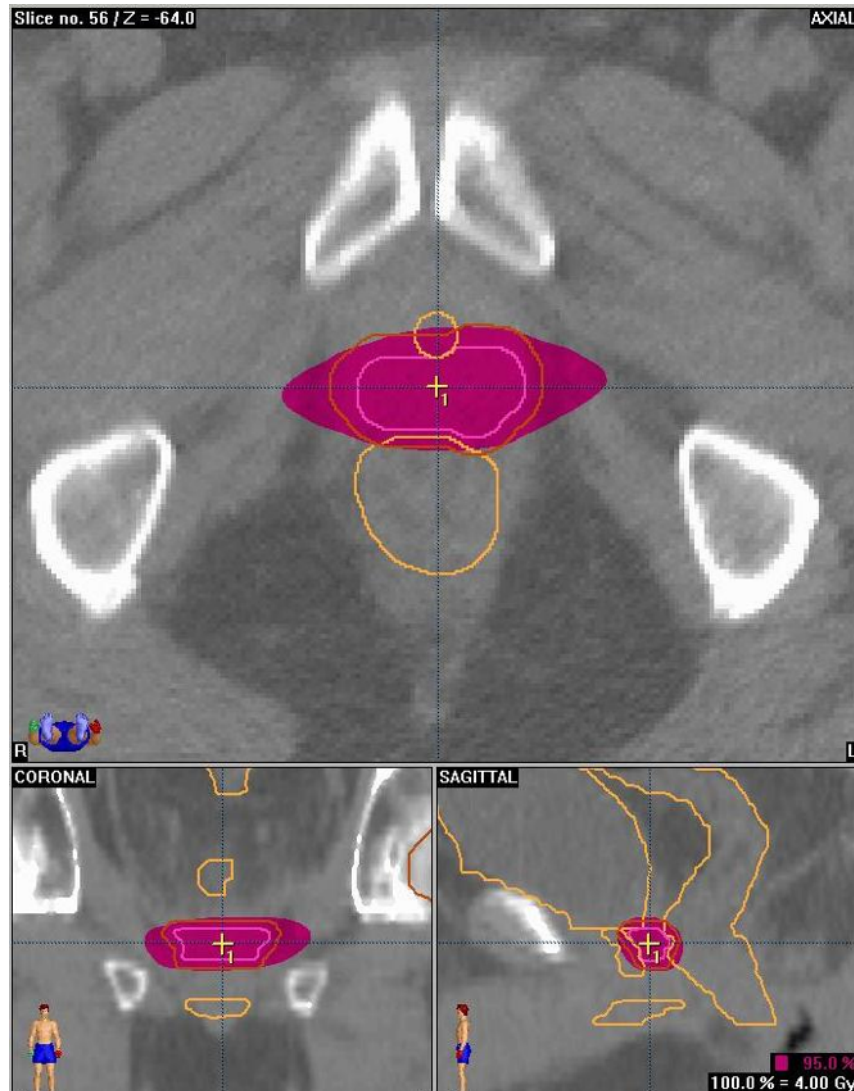
Stereotactic dose:

according to previous RT

main object: keep dose to urethra below 150 Gy

BED3 = 62.4-69.6 Gy

# Re-irradiation of local relapse after RP and RT



## Results

# Re-irradiation of local relapse after RP and RT

Type of Toxicity	Grade 0	Grade 1	Grade 2	Grade 3
<b>Toxicity (CTC vers 4.0)</b>				
<b>Acute toxicity</b>				
Gastro-Intestinal	14 (64%)	4 (18%)	2 (9%)	2* (9%)
Genito-Urinary	18 (82%)	3 (14%)	1 (4%)	0
<b>Late toxicity</b>				
Gastro-Intestinal	16 (73%)	6 (27%)	0	0
Genito-Urinary	10 (46%)	7 (32%)	4 (18%)	1 (4%)

*20/22 (90%) completed treatment without interruptions \*one drop-off due to GI toxicity*



# Results

## Re-irradiation of local relapse after RP and RT

### Results

PSA reduction: 16/22 pts (72.7%)

Local Response with PET/CT:

CR 12/22 (55%)

PR 4/22 (18%)

NC 5/22 (23%)

NA 1/22 (4%)

## Conclusions

Re-irradiation of local recurrence of PCa is feasible if a sparing technique, as stereotactic RT, is applied

Patients' selection (hormone-sensitive vs. CRPCa) for re-irradiation needs further investigation