L'Association Algérienne d'Urologie (AAU)
2éme Forum des Cancers Urologiques(FCU)

Radiothérapie postopératoire des cancers de la prostate : à quel moment la proposer ? Quelle place pour la déprivation androgénique ?

M .Chabani*,M.A.Talbi*.H.ALLAM*. M. Bouzid*, M. Azli**, C.Tayeb*.
***Service de radiothérapie-oncologie /HCA.**
****service d'urologie /HCA**

Alger le 09.06.2022

Introduction

- **1 400 000** (N.cas -2020)

- **2ème** Kc après le cancer du poumon.

- Incidence;
  - **> 95n.cas/10^5** .
  - **> 34,7n.cas /10^5** .(Alger). INSP 2019

- **5ème** cause de décès (370 000)(Globocan 2020).

Introduction

- TRT local; Chirurgie **VS** Radiothérapie

- **30 %** RB après la chirurgie à 5 ans.

- Radiothérapie post-opératoire
  - Radiothérapie adjuvante(**ART**)
  - Radiothérapie rattrapage(**SRT**)

Définition:

ASTRO American Society for Radiation Oncology

American Urological Association

2018 Guideline

ART is defined as the administration of RT to postRP patients at a higher risk of recurrence because of **adverse pathological features** prior to evidence of disease recurrence (i.e., with an undetectable PSA).

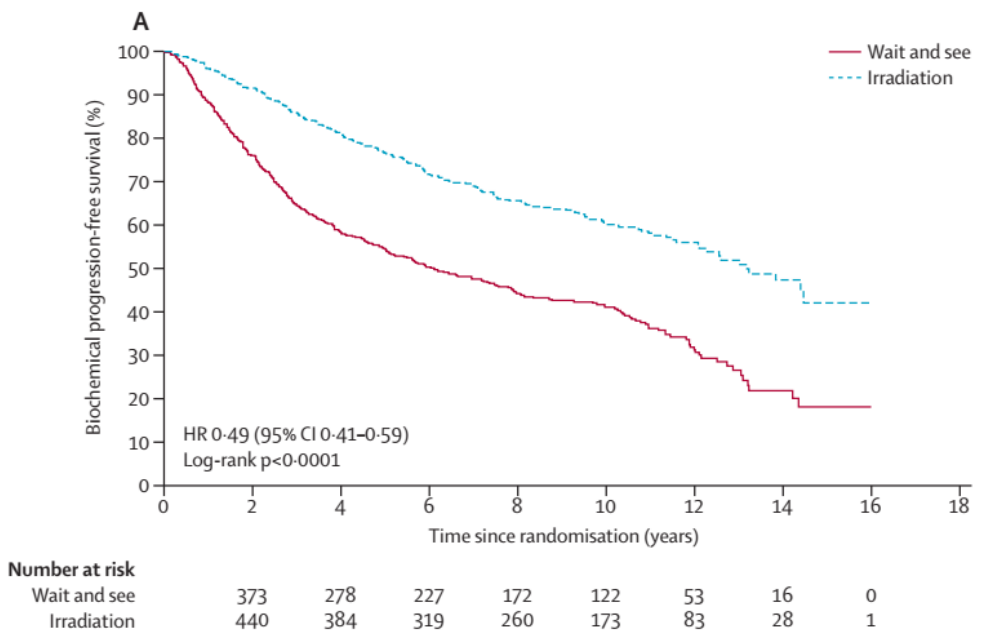
Biochemical recurrence (BCR) after surgery is defined as a detectable **PSA level > 0.2 ng/mL** with a second confirmatory level > 0.2 ng/mL.

SRT is defined as the administration of RT to the prostatic bed and possibly to the surrounding tissues, including lymph nodes, in the patient with a **PSA recurrence after surgery** but no evidence of distant metastatic disease.

RT-Adjuvante ≠Observation

Postoperative radiotherapy after radical prostatectomy for high-risk prostate cancer: long-term results of a randomised controlled trial (EORTC trial 22911)

Michel Bolla



La survie sans progression biochimique;

74% vs **53%** (p=0,0001)

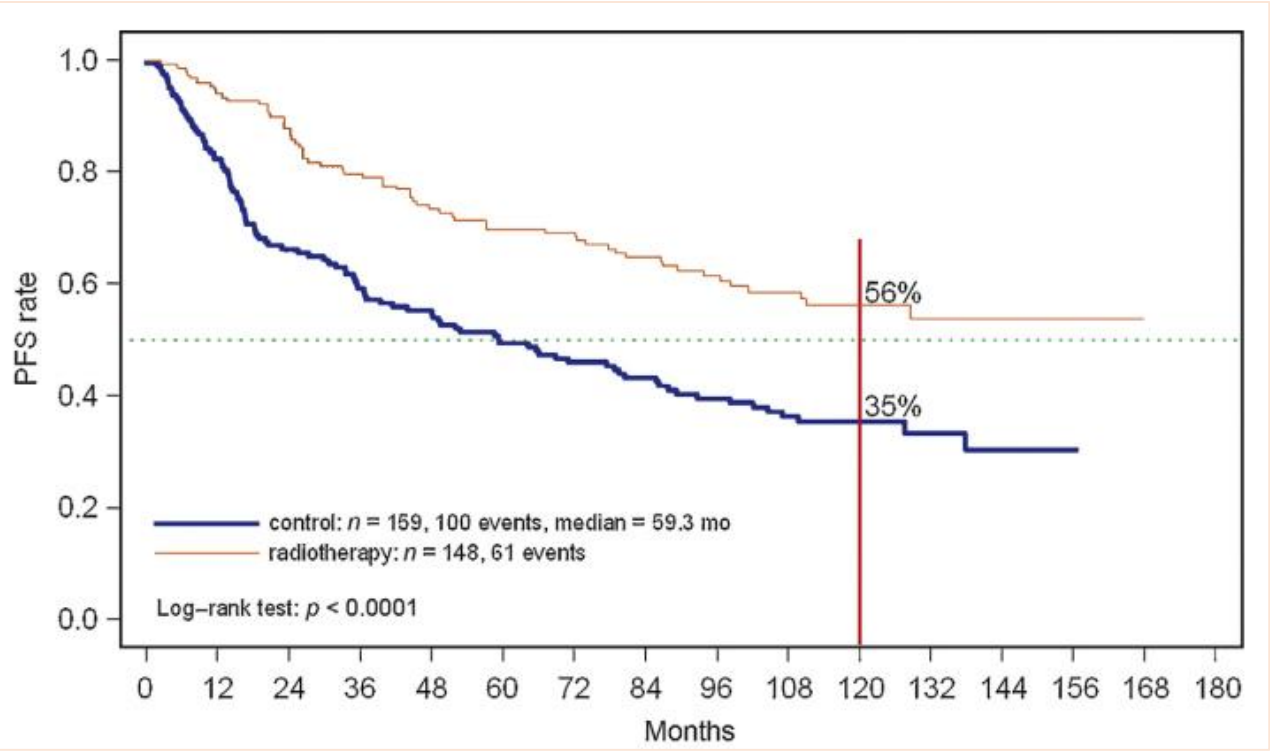
Taux de complications à 5 ans (échelle du RTOG)

Grade 3 : **4,2%** vs **2,6%** (p=0,07)

RT-Adjuvante ≠Observation

Adjuvant Radiotherapy Versus Wait-and-See After Radical Prostatectomy: 10-year Follow-up of the ARO 96–02/AUO AP 09/95 Trial

Thomas Wiegel



PFS à 10 ans

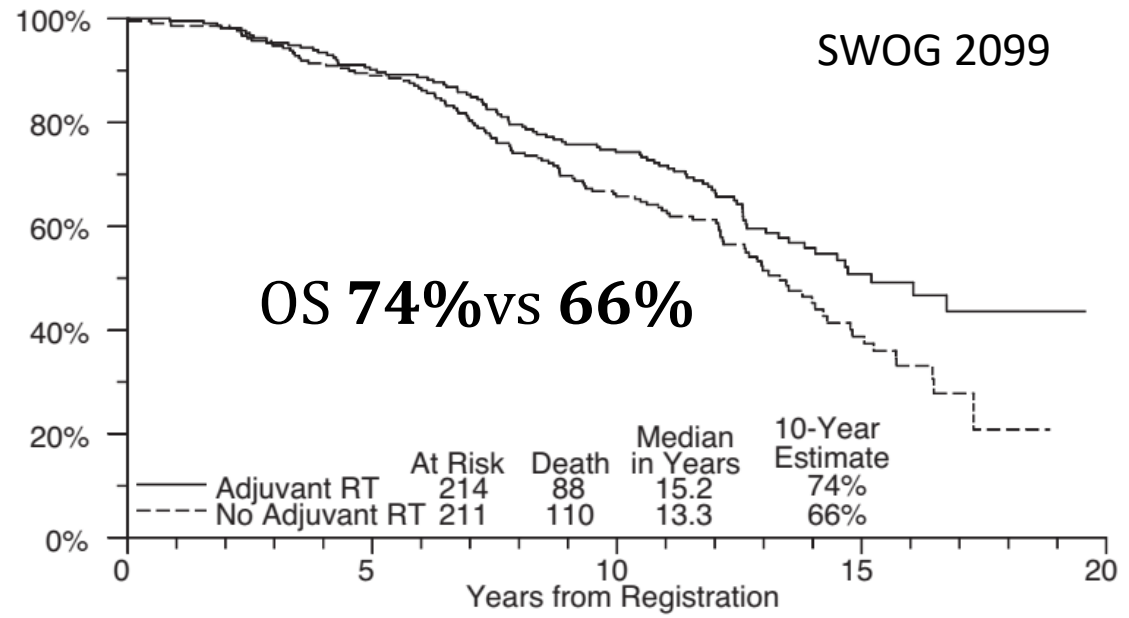
56% vs **35 %**

Taux de complications à 4 ans

Rectite G2 >2 : 3%

RT-Adjuvante ≠Observation

Adjuvant Radiotherapy for Pathological T3N0M0 Prostate Cancer Significantly Reduces Risk of Metastases and Improves Survival: Long-Term Followup of a Randomized Clinical Trial



Taux de complications à 10 ans;

- **Rectite : 3,3% vs 0% .**
- **Sténose urétrale : 17,8% vs 9,5%.**
- **Incontinence : 6,5% vs 2,8%.**

RT-Adjuvante ≠Observation

La critique des essais randomisés;

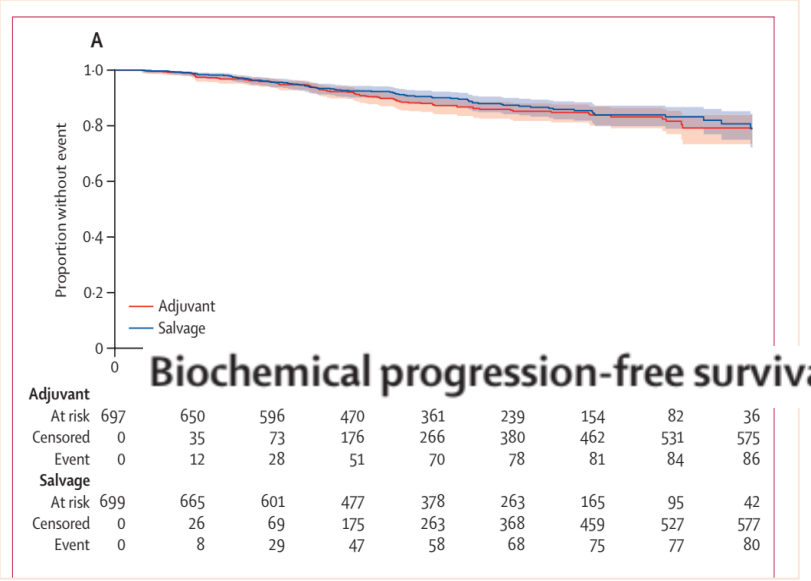
-**30%** des patients ont été traités avec un PSA dosable.

-Dose de la radiothérapie: **60 Gy**, peut être un peu faible .

-**30 à 50%** des patients dans le bras chirurgie seule restent en rémission biologique.

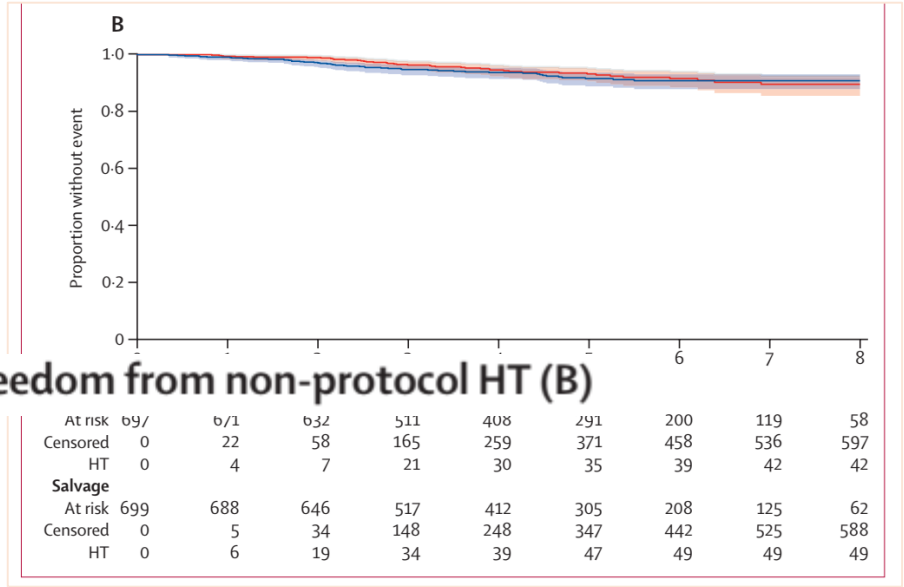
RT-Adjuvante ≠ Rattrapage.

Timing of radiotherapy after radical prostatectomy (RADICALS-RT): a randomised, controlled phase 3 trial



Adjuvant									
At risk	697	650	596	470	361	239	154	82	36
Censored	0	35	73	176	266	380	462	531	575
Event	0	12	28	51	70	78	81	84	86
Salvage									
At risk	699	665	601	477	378	263	165	95	42
Censored	0	26	69	175	263	368	459	527	577
Event	0	8	29	47	58	68	75	77	80

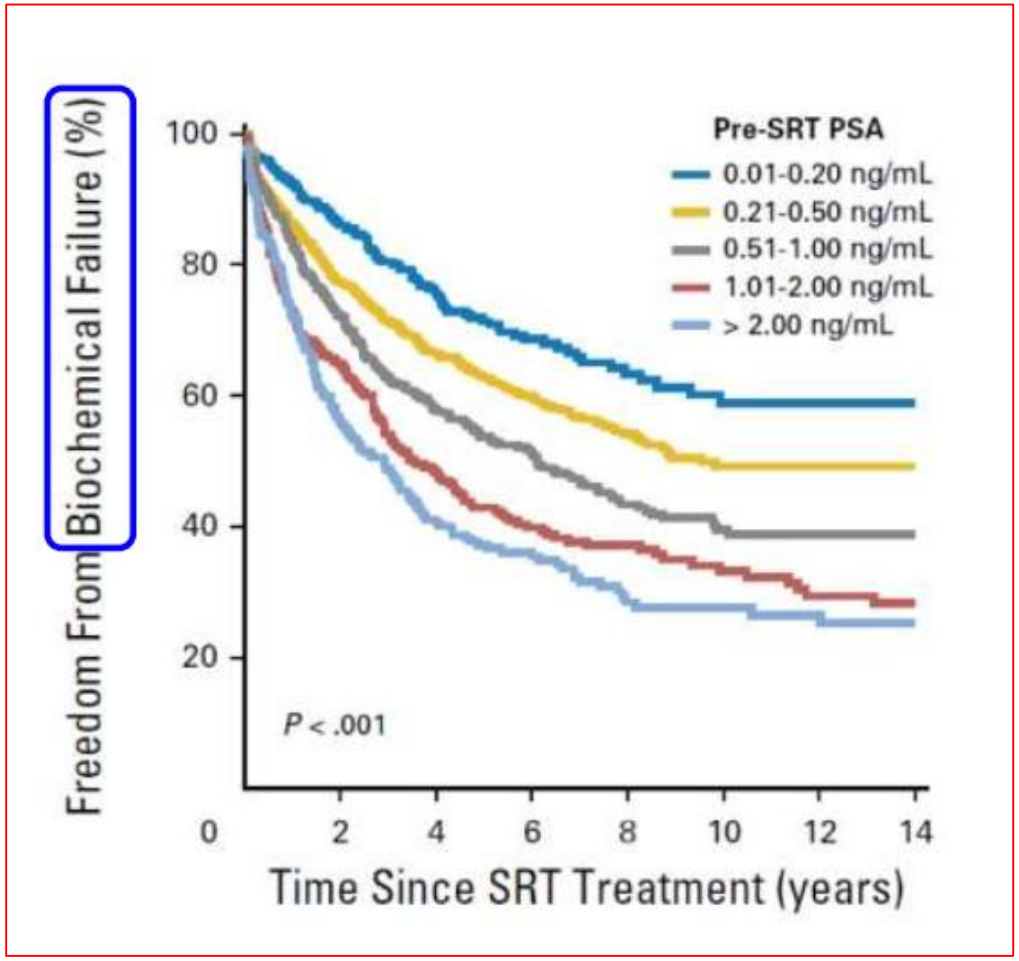
Biochemical progression-free survival (A) and freedom from non-protocol HT (B)



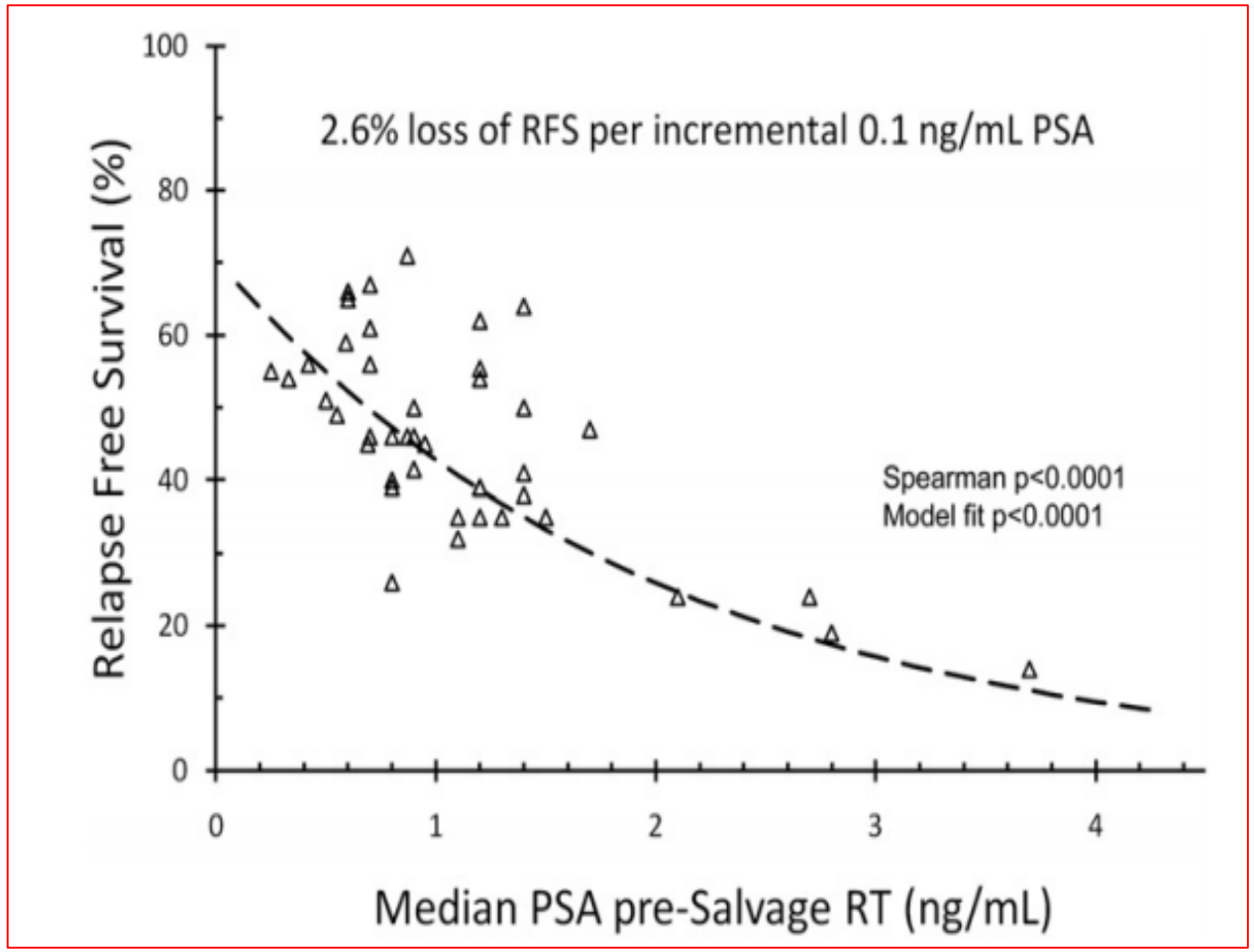
At risk	697	671	632	511	408	291	200	119	58
Censored	0	22	58	165	259	371	458	536	597
HT	0	4	7	21	30	35	39	42	42
Salvage									
At risk	699	688	646	517	412	305	208	125	62
Censored	0	5	34	148	248	347	442	525	588
HT	0	6	19	34	39	47	49	49	49

Sténose urétrale **8%** Adjuvante VS **5%** Rattrapage (p=0·03).

RT-Adjuvante ≠ Rattrapage.



Tendulkar 2016



King Biophys2012

RT-Adjuvante ≠ Rattrapage.

Actualisation 2020-2022 des recommandations françaises du Comité de cancérologie de l'AFU - Éditorial

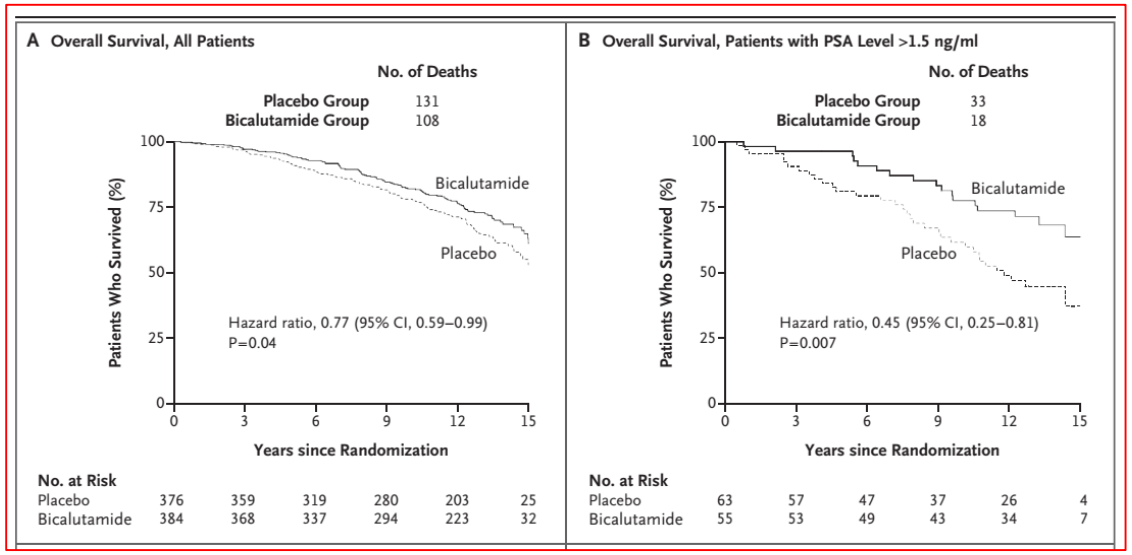
- **Il n'y a plus d'indication à réaliser une radiothérapie adjuvante.**

-les patients à **haut risque** de rechute biologique après chirurgie doivent être surveillés très régulièrement.

-Une radiothérapie différée précoce doit être proposée dès que la RB survient(**PSA >0,1ng/ml**).

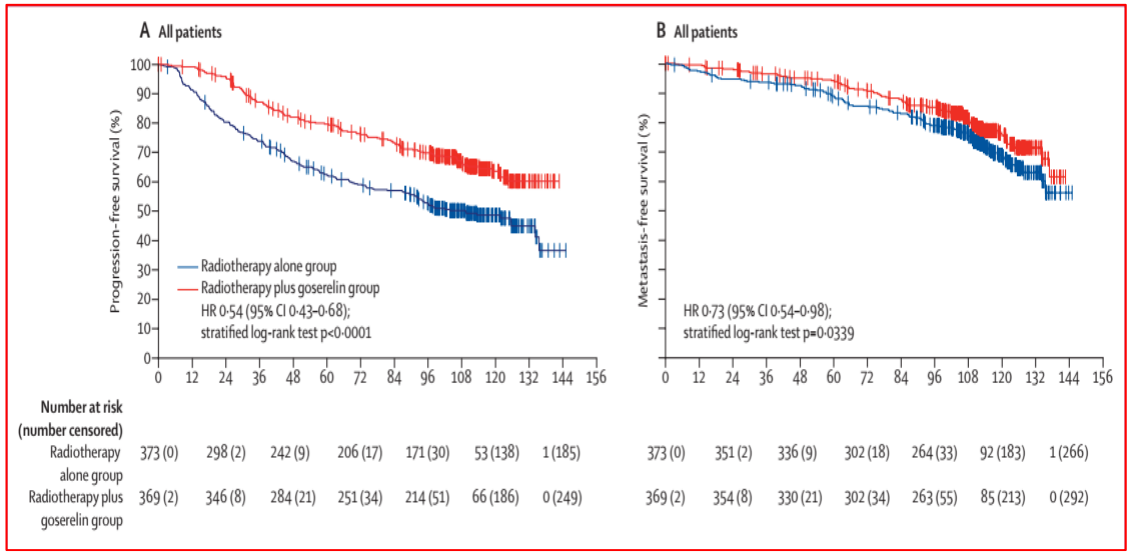
RT-Post-Op avec ou sans HT?

Essai **RTOG 96-01** :
(Bicalutamide150mg) 2 ans



Amélioration **OS** de **5%**
Mais……;;

Essai **GETUG-AFU 16** :
Goséreline 6 mois



PFS 64% vs **49%** (p=0,001)
MFS 75% vs **69%** (p=0,03)

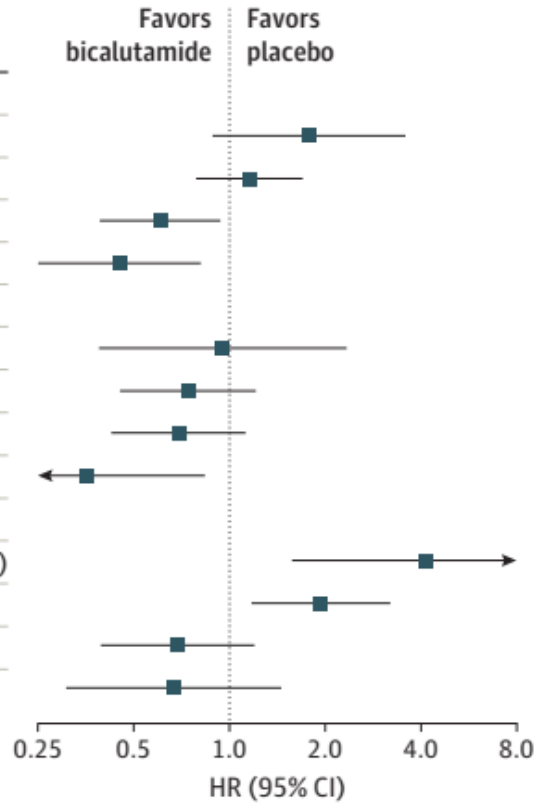
RT-Post-Op avec ou sans HT?

ASTRO 2019 Plenary session

RTOG 9601 relecture

Figure 3. Forest Plot of Overall Survival, Distant Metastasis, and Other-Cause Mortality by Presalvage Radiotherapy PSA Level

End point, PSA	Bicalutamide incidence/N	Placebo incidence/N	12-Year absolute difference bicalutamide vs placebo (CI 95%)	HR (95% CI)	P value
Overall survival					.02
0.20-0.30	20/74	13/74	-0.13 (-0.27 to 0.01)	1.78 (0.88-3.57)	
0.20-0.60	56/201	48/188	-0.04 (-0.12 to 0.05)	1.16 (0.79-1.70)	
0.61-1.50	34/128	50/125	0.09 (-0.03 to 0.20)	0.61 (0.39-0.94)	
≥1.51	18/55	33/63	0.25 (0.07 to 0.42)	0.45 (0.25-0.81)	
Distant metastasis					.03
0.20-0.30	9/74	10/74	0.01 (-0.10 to 0.13)	0.95 (0.39-2.34)	
0.20-0.60	28/201	36/188	-0.04 (-0.12 to 0.03)	0.74 (0.45-1.21)	
0.61-1.50	28/128	37/125	-0.10 (-0.21 to 0.01)	0.69 (0.43-1.12)	
≥1.51	7/55	20/63	-0.18 (-0.33 to -0.03)	0.36 (0.15-0.84)	
Other-cause mortality					.20
0.20-0.30	17/74	5/74	0.18 (0.06 to 0.31)	4.14 (1.57-10.89)	
0.20-0.60	43/201	23/188	0.09 (0.02 to 0.17)	1.94 (1.17-3.20)	
0.61-1.50	21/128	29/125	-0.03 (-0.13 to 0.08)	0.69 (0.39-1.20)	
≥1.51	10/55	15/63	-0.09 (-0.23 to 0.06)	0.67 (0.31-1.45)	



HR indicates hazard ratio; PSA, prostate-specific antigen.

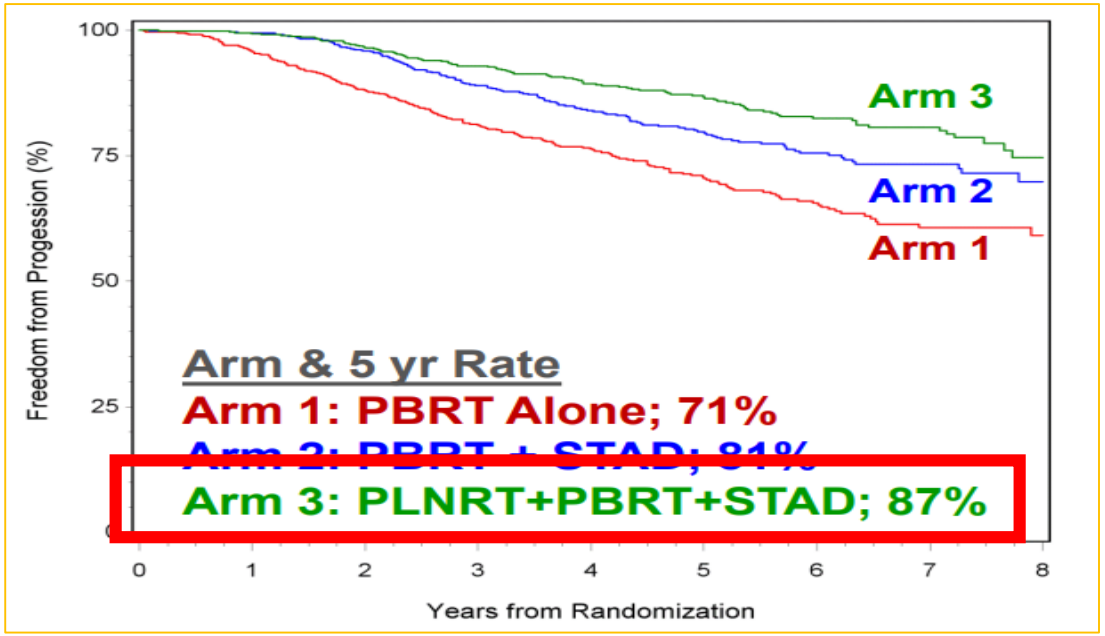
RT-Post-Op avec ou sans HT?

RT-Post-Op Quel volume?

The addition of androgen deprivation therapy and pelvic lymph node treatment to prostate bed salvage radiotherapy (NRG Oncology/RTOG 0534 SPPORT): an international. multicentre, randomised phase 3 trial

May 14, 2022

FFP: All eligible patients (1,792)



5 yr Rate Comparison
Arm 3 vs Arm 1: p<0.0001
Arm 2 vs Arm 1: p<0.0001
Arm 3 vs Arm 2: p=0.0039

The subgroup analysis of baseline PSA also indicated that the **freedom from progression** benefit of PLNRT was greatest in patients with PSAs above the median of 0·35 ng/mL.

RT-Post-Op Quel volume?

Postoperative radiotherapy in prostate cancer: Dose and volumes

Radiothérapie postopératoire des cancers de la prostate : doses et volumes

U. Schick[a,b,*], I. Latorzeff[c], P. Sargos[d]

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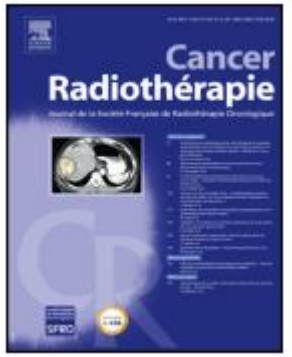
[b] *LaTIM, UMR 1101, INSERM, University Brest, Brest, France*
[c] *Department of Oncology Radiotherapy, Bât Atrium, Clinique Pasteur, Toulouse, France*
[d] *Department of Radiotherapy, Institut Bergonié, Bordeaux, France*

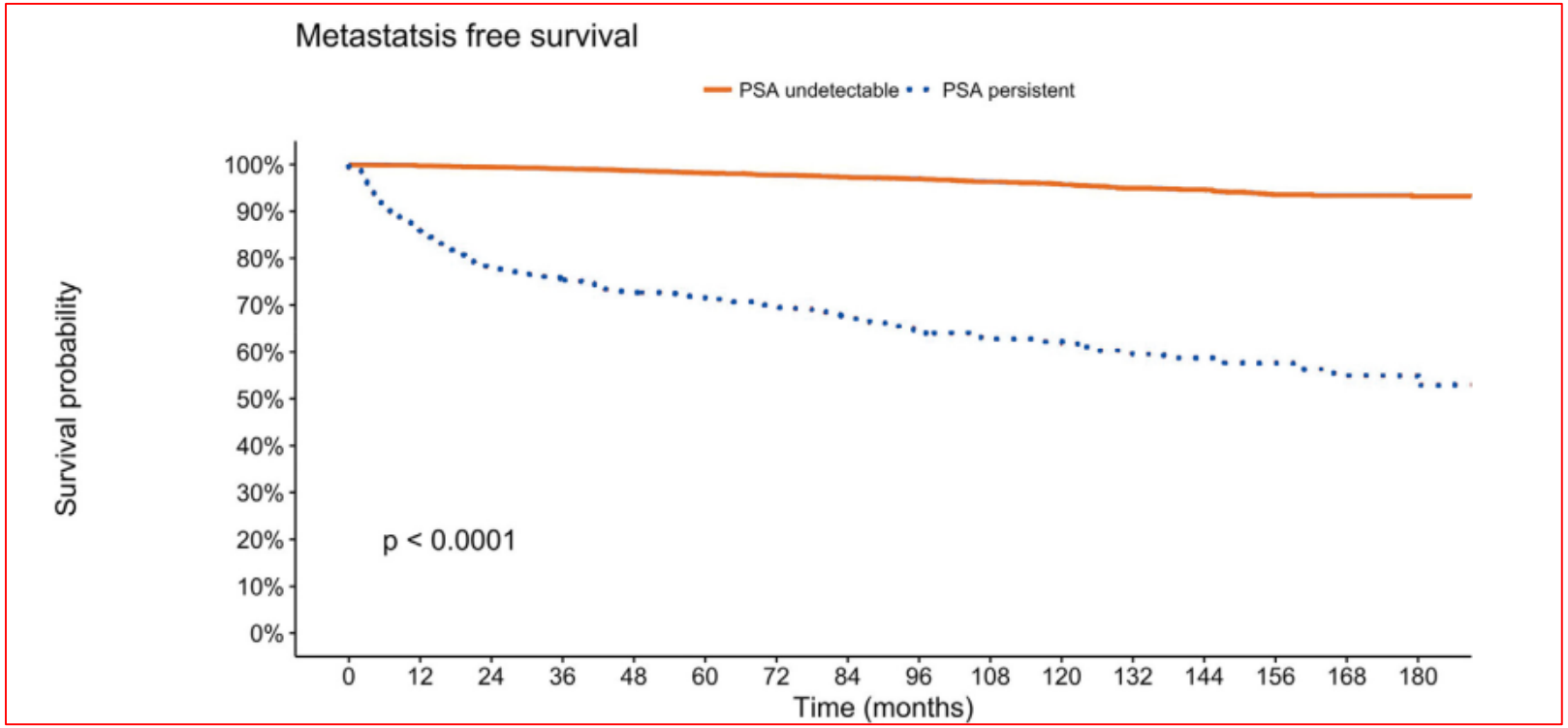


This important trial is the first randomized study to show that the addition of PLNRT resulted in early, meaningful reduction in failure. PLNRT should be strongly considered in routine clinical practice especially in men with PSA $\geq$ 0.34 as this subgroup benefit the most from addition of STAD and WPRT. Pelvic RT had less of an effect in men with PSA levels below that. Follow-up of patients will further elucidate the magnitude of the benefit of pelvic radiation.

RT-Post-Op; concentration de PSA postopératoire élevée persistante

Persistent Prostate-Specific Antigen After Radical Prostatectomy and Its Impact on Oncologic Outcomes

Felix Preisser [a,b], Felix K.H. Chun [b], Raisa S. Pompe [c], Alexander Heinze [a], Georg Salomon [a], Markus Graefen [a], Hartwig Huland [a], Derya Tilki [a,c,]*



93,2%

53%

RT-Post-Op; concentration de PSA postopératoire élevée persistante

Impact of Early Salvage Radiation Therapy in Patients with Persistently Elevated or Rising Prostate-specific Antigen After Radical Prostatectomy

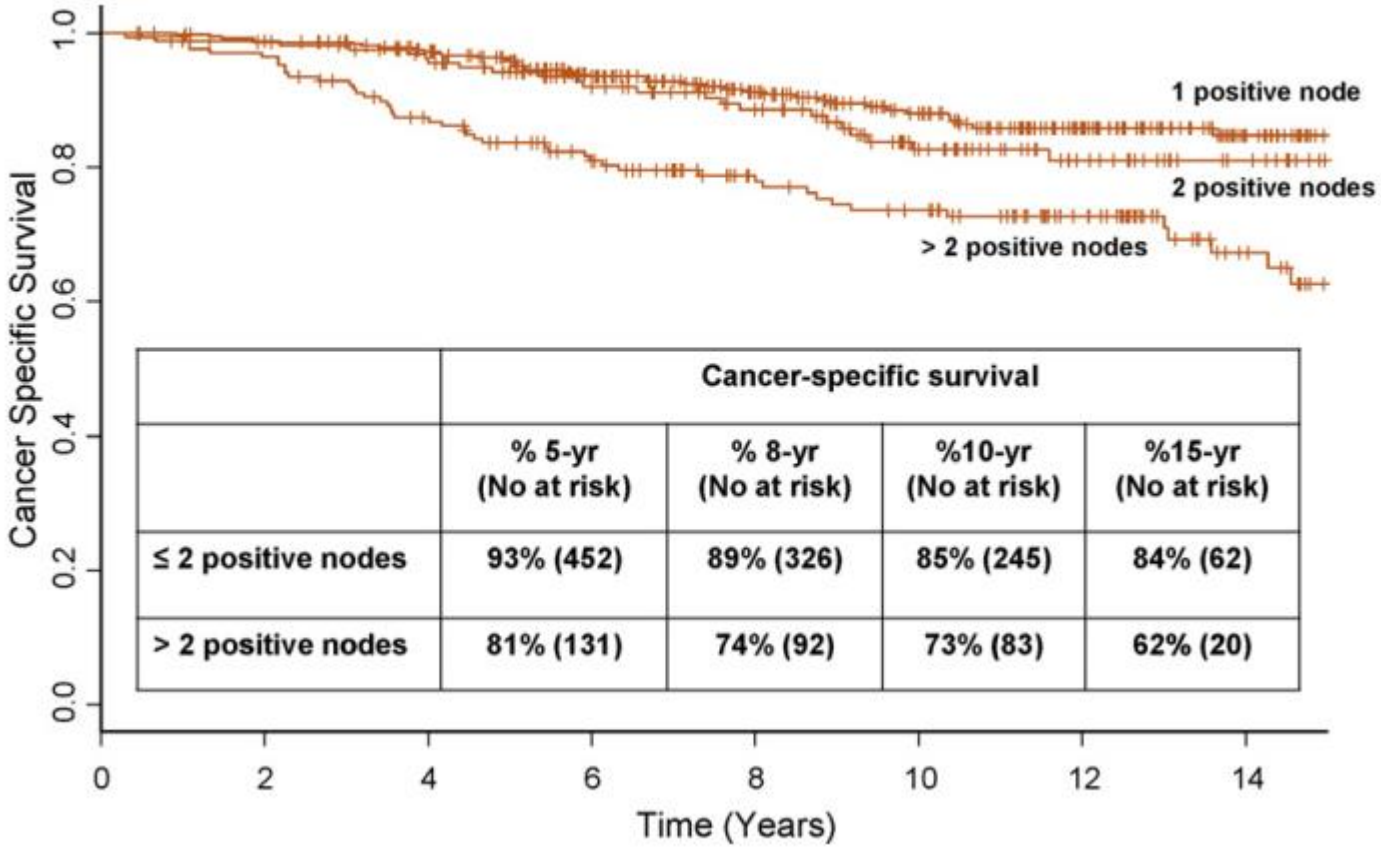
Nicola Fossati [a,], R. Jeffrey Karnes [b], Michele Colicchia [b], Stephen A. Boorjian [b], Alberto Bossi [c], Thomas Seisen [c], Nadia Di Muzio [d], Cesare Cozzarini [d], Barbara Noris Chiorda [d], Claudio Fiorino [e], Giorgio Gandaglia [a], Paolo DellOglio [a], Shahrokh F. Shariat [f], Gregor Goldner [g], Steven Joniau [h], Antonino Battaglia [h], Karin Haustermans [i], Gert De Meerleer [i], Valérie Fonteyne [j], Piet Ost [j], Hendrik Van Poppel [h], Thomas Wiegel [k], Francesco Montorsi [a], Alberto Briganti [a]*

When patients were stratified into five risk groups using regression tree analysis (area under the curve: 85%), early SRT administration provided better metastasis-free survival in three groups only:

(1) low risk: undetectable PSA after RP, Gleason score ≤ 7, and tumour stage ≥ pT3b,
(2) intermediate risk: undetectable PSA after RP with Gleason score ≥ 8,
(3) high risk: PSA persistence after RP with Gleason score ≤ 7.

Conversely, very low-risk (undetectable PSA after RP, Gleason score ≤ 7, and tumour stage ≤ pT3a and very high-risk patients (PSA persistence after RP, and Gleason score ≥ 8) did not benefit from early salvage treatment

How to treat men with pN1?



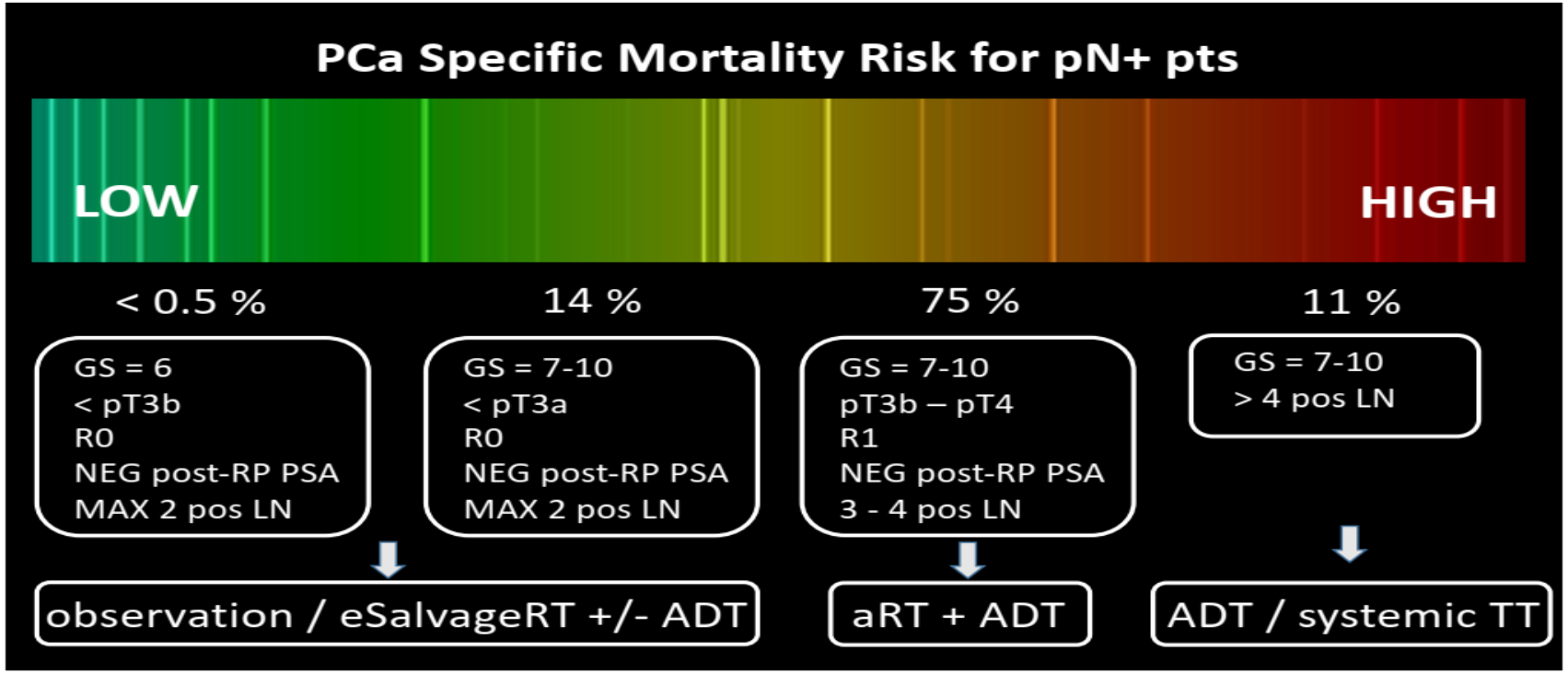
	Cancer-specific survival			
	% 5-yr (No at risk)	% 8-yr (No at risk)	%10-yr (No at risk)	%15-yr (No at risk)
≤ 2 positive nodes	93% (452)	89% (326)	85% (245)	84% (62)
> 2 positive nodes	81% (131)	74% (92)	73% (83)	62% (20)

Alberto Briganti 2009

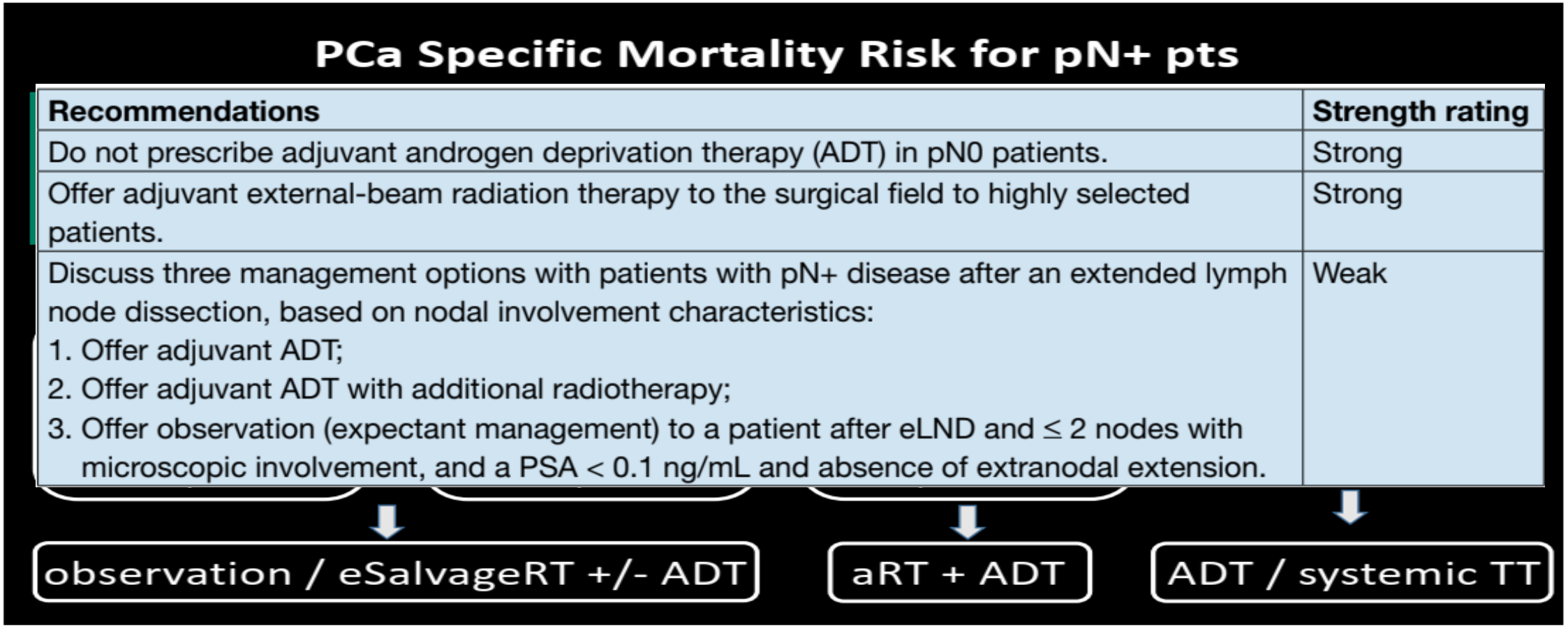
How to treat men with pN1?

Impact of Adjuvant Radiotherapy in Node-positive Prostate Cancer Patients: The Importance of Patient Selection

Firas Abdollah [a,], Deepansh Dalela [a], Akshay Sood [a], Jacob Keeley [a], Shaheen Alanee [a], Alberto Briganti [b], Francesco Montorsi [b], James O. Peabody [a], Mani Menon [a]*



How to treat men with pN1?



Conclusion:

- Il n'y a plus d'indication à réaliser une radiothérapie adjuvante. «puts the nail in the coffin of adjuvant radiotherapy. »

-PSA:

- **PSA < 0,34 :** → **RT lit op sans HT**
- **PSA entre 0,34 et 0,6** → **RT lit op + GG sans HT**
- **PSA > 0,6** → **RT lit op + GG avec HT**

-PN+:

- **2N+**
- **3-4N+**

→ **PSA indétectables**