



Physicians' and patients' choices in evidence based practice

Evidence does not make decisions, people do

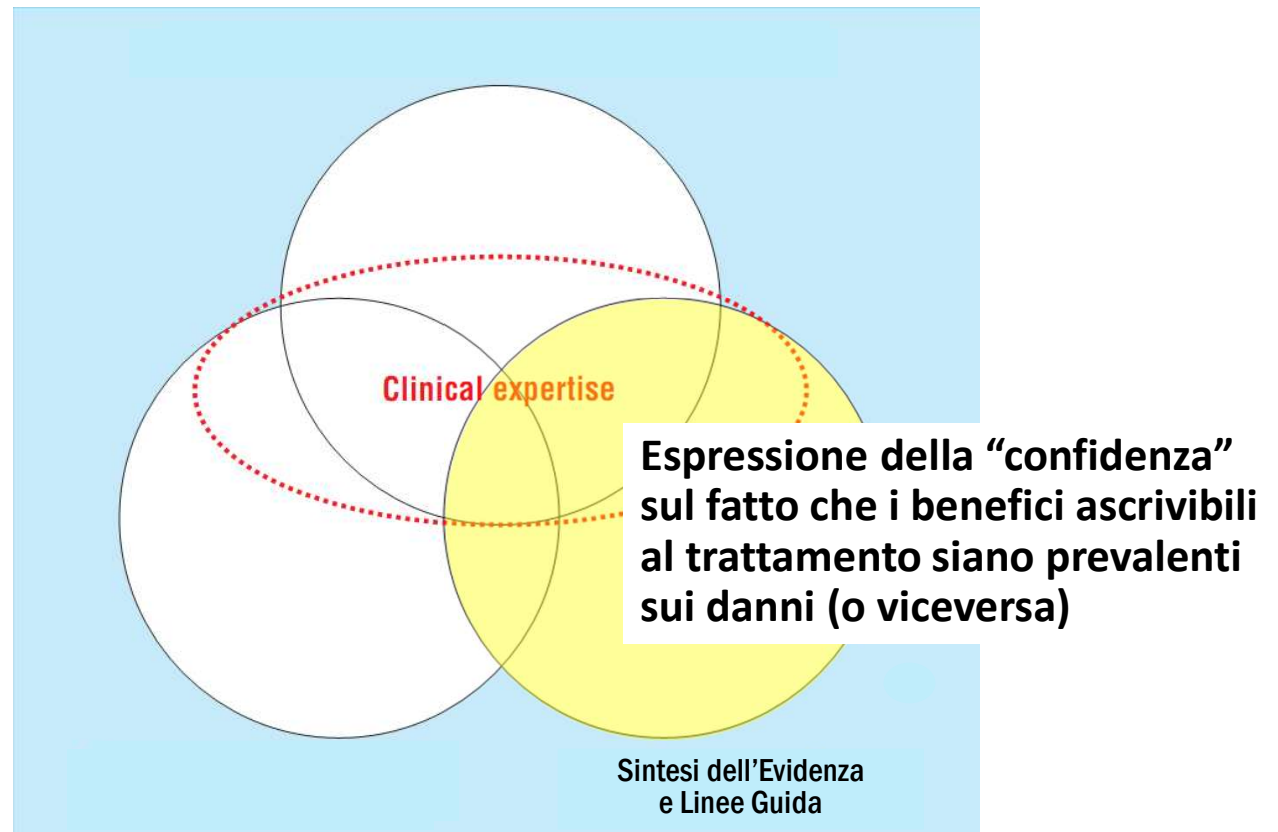
R Brian Haynes P J Devereaux Gordon H Guyatt

BMJ 2002;324:1350

Il Primo Cerchio

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The GRADE approach

- Considers
 - the evidence for each outcome in the review separately
 - magnitude of the effect
 - all factors to determine how confident we are in the results – quality of evidence
- Ensures
 - systematic process
 - transparency



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Strutturazione del Quesito Clinico sec. modello P.I.C.O.

P	Nei P azienti con...	(più o meno) specifiche caratteristiche di malattia	Pazienti con evidenza di mCSPC
I	l' I ntervento...	terapeutico oggetto del quesito clinico	“New ARTA” (Apalutamide, Darolutamide, Enzalutamide)
C	(è suscettibile di impiego) in C onfronto con...	il trattamento altrimenti considerabile in alternativa all'intervento in esame	SOC (LHRH-a ± NSAA ± docetaxel)
O	riguardo agli O utcome di beneficio/danno...	ritenuti essenziali per la proposta terapeutica	OS, TEAE G3-G4, SAE, TEAE → interruzione della terapia, TEAE → decesso del paziente

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Author(s): glp (09-Mar-2022)

Question: New ARTA compared to SOC for mCSPC patients

Bibliography: Apalutamide: Chi KN, et al. N Engl J Med 2019;381:13-24. Chi KN, et al. J Clin Oncol 2021;39:2294-2303. Enzalutamide: Armstrong AJ, et al. J Clin Oncol 2019;37:2974-2986. Armstrong AJ, et al. Annals of Oncology (2021) 32 (suppl_5): S1283-S1346. J Clin Oncol 40, no. 6_suppl (February 20, 2022) 115-115. Davis ID, et al. N Engl J Med 2019;381:121-31. Sweeney CJ, et al Eur Urol 2021;80:275-279. Darolutamide: Smith MR, et al. published on February 17, 2022, at NEJM.org.

№ of studies	Certainty assessment						№ of patients		Effect		Certainty	Importance
	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias	new ARTA	SOC	Relative (95% CI)	Absolute (95% CI)		

Overall Survival, all-comers (assessed with: Kaplan-Meier product limit estimate)

4	RCT	not serious _{a,b}	not serious _c	not serious _d	not serious _e	none	2313	2319	HR 0.67 (0.60 to 0.74)	risk difference 13 fewer per 100 (from 16 fewer to 10 fewer)	⊕⊕⊕⊕ High	CRITICAL
							-	baseline risk 50.0%				

Overall Survival, de novo mCSPC (assessed with: Kaplan-Meier product limit estimate)

4	RCT	not serious _{a,b}	not serious _f	not serious _d	not serious _e	none	1825	1854	HR 0.68 (0.61 to 0.76)	risk difference 12 fewer per 100 (from 14 fewer to 8 fewer)	⊕⊕⊕⊕ High	CRITICAL
							-	baseline risk 45.0%				

Overall Survival, recurrent mCSPC (assessed with: Kaplan-Meier product limit estimate)

4	RCT	not serious _{a,b}	not serious _g	not serious _d	not serious _e	none	443	427	HR 0.56 (0.42 to 0.75)	risk difference 18 fewer per 100 (from 25 fewer to 10 fewer)	⊕⊕⊕⊕ High	CRITICAL
							-	baseline risk 51.0%				

a. Arasens, Arches and Titan studies double blinded. Enzamet open-label design.

b. low risk of detection bias related to the type of outcome

c. $\text{Chi}^2 = 0.22$, $\text{df} = 3$ ($P = 0.97$); $I^2 = 0\%$

d. SOC as adequate comparator

e. 95%CI of absolute effect consistent with a unique clinical interpretation

f. $\text{Chi}^2 = 0.65$, $\text{df} = 3$ ($P = 0.88$); $I^2 = 0\%$

g. $\text{Chi}^2 = 2.37$, $\text{df} = 3$ ($P = 0.50$); $I^2 = 0\%$



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Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias	new ARTA	SOC	Relative (95% CI)	Absolute (95% CI)		

Overall Survival, high volume ° disease (assessed with: Kaplan-Meier product limit estimate)

3	RCT	not serious a,b	not serious f	not serious c	not serious d	none	934	956	HR 0.66 (0.57 to 0.76)	risk difference 15 fewer per 100 (from 19 fewer to 10 fewer)	⊕⊕⊕⊕ High	CRITICAL
							-	baseline risk 60.0%				

Overall Survival, low volume ° disease (assessed with: Kaplan-Meier product limit estimate)

3	RCT	not serious a,b	not serious g	not serious c	not serious d	none	728	709	HR 0.64 (0.51 to 0.82)	risk difference 12 fewer per 100 (from 17 fewer to 6 fewer)	⊕⊕⊕⊕ High	CRITICAL
							-	baseline risk 40.0%				

- a. Arasens, Arches and Titan studies double-blinded. Enzamet open-label design.
- b. low risk of detection bias related to the type of outcome
- c. SOC as adequate comparator
- d. 95%CI of absolute effect consistent with a unique clinical interpretation
- e. CHAARTED criteria
- f. $\text{Chi}^2 = 3.00$, $\text{df} = 2$ ($P = 0.22$); $I^2 = 33\%$
- g. $\text{Chi}^2 = 3.33$, $\text{df} = 2$ ($P = 0.19$); $I^2 = 40\%$



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Certainty assessment							No of patients		Effect		Certainty	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias	new ARTA	SOC	Relative (95% CI)	Absolute (95% CI)		

Overall Survival, no previous/early docetaxel (assessed with: Kaplan-Meier product limit estimate)

3	RCT	not serious _{a,b}	not serious _e	not serious _c	not serious _d	none	1247	1259	HR 0.61 (0.53 to 0.70)	risk difference 14 fewer per 100 (from 18 fewer to 11 fewer)	⊕⊕⊕⊕ High	IMPORTANT
							-	baseline risk 44.0%				

Overall Survival, early docetaxel (assessed with: Kaplan-Meier product limit estimate)

2	RCT	not serious _{a,b}	not serious _f	not serious _c	not serious _d	none	754	756	HR 0.70 (0.59 to 0.82)	risk difference 13 fewer per 100 (from 18 fewer to 7 fewer)	⊕⊕⊕⊕ High	IMPORTANT
							-	baseline risk 59.0%				

Overall Survival, previous docetaxel (assessed with: Kaplan-Meier product limit estimate)

2	RCT	not serious _{a,b}	not serious _g	not serious _c	serious _h	none	312	304	HR 0.95 (0.69 to 1.31)	risk difference 2 fewer per 100 (from 13 fewer to 10 more)	⊕⊕⊕○ Moderate	IMPORTANT
							-	baseline risk 57.0%				

a. Arasens, Arches and Titan studies double blinded. Enzamet open-label design.

b. low risk of detection bias related to the type of outcome

c. SOC as adequate comparator

d. 95%CI of absolute effect consistent with a unique clinical interpretation

e. $\text{Chi}^2 = 0.77$, $\text{df} = 2$ ($P = 0.68$); $I^2 = 0\%$

f. $\text{Chi}^2 = 0.07$, $\text{df} = 1$ ($P = 0.79$); $I^2 = 0\%$

g. $\text{Chi}^2 = 0.33$, $\text{df} = 1$ ($P = 0.56$); $I^2 = 0\%$

h. 95%CLs of absolute effect consistent with opposite clinical interpretations



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Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias	new ARTA	SOC	Relative (95% CI)	Absolute (95% CI)		

TEAE G3-G4 (assessed with: cumulative incidence)

4	RCT	not serious a,d	serious e	not serious b	serious f	none	1106/2311 (47.9%)	1009/2309 (43.7%)	RR 1.09 (0.95 to 1.25)	4 more per 100 (from 2 fewer to 11 more)	⊕⊕○○ Low	CRITICAL
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SAE (assessed with: cumulative incidence)

4	RCT	not serious a,d	not serious g	not serious b	not serious h	none	735/2311 (31.8%)	683/2309 (29.6%)	RR 1.07 (0.99 to 1.17)	2 more per 100 (from 0 fewer to 5 more)	⊕⊕⊕⊕ High	IMPORTANT
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TEAE causing permanent discontinuation of ARTA/SOC (assessed with: cumulative incidence)

4	RCT	not serious a,d	not serious i	not serious b	not serious h	none	204/2311 (8.8%)	141/2309 (6.1%)	RR 1.45 (1.18 to 1.78)	3 more per 100 (from 1 more to 5 more)	⊕⊕⊕⊕ High	CRITICAL
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TEAE causing death (assessed with: cumulative incidence)

4	RCT	not serious a,d	not serious j	not serious b	not serious c	none	57/2311 (2.5%)	59/2309 (2.6%)	RR 0.97 (0.67 to 1.38)	0 fewer per 100 (from 1 fewer to 1 more)	⊕⊕⊕⊕ High	IMPORTANT
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a. Arasens, Arches and Titan studies double blinded. Enzamet open-label design.

b. SOC as adequate comparator

c. 95%CI of absolute effect consistent with a unique clinical interpretation

d. high risk of performance bias for Enzamet study

e. Tau² = 0.02; Chi² = 14.19, df = 3 (P = 0.003); I² = 79%

f. 95%CLs of absolute effect consistent with both greater and comparable toxicity

g. Chi² = 5.14, df = 3 (P = 0.16); I² = 42%

h. wide 95%CI of absolute effect, but consistent with a unique clinical interpretation; may not be downgraded

i. Chi² = 3.15, df = 3 (P = 0.37); I² = 5%

j. Chi² = 2.12, df = 3 (P = 0.55); I² = 0%



Riepilogando...

- ↓ 13 decessi* (*all-comers*)
- ↓ 12 decessi* (*de novo*)
- ↓ 18 decessi* (*recurrent*)
- ↓ 15 decessi* (*high-volume*)
- ↓ 12 decessi* (*low-volume*)
- ↓ 14 decessi* (*docetaxel-free*)
- ↓ 13 decessi* (*early docetaxel*)
- ↓ 2 decessi* (*previous docetaxel*)

- ↑ 4 TEAE G3-G4*
- ↑ 3 TEAE → interruzione*
- ↑ 2 SAE*
- ↑ 0 TEAE causa di decesso*

* ogni 100 pazienti trattati



Isn't Androgen Deprivation Enough? Optimal Treatment for Newly Diagnosed Metastatic Prostate Cancer

Alicia K. Morgans, MD, MPH¹; and Himisha Beltran, MD¹

J Clin Oncol. 2022 Mar 10;40(8):818-824.

