

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

Davis ID, Martin AJ, Zielinski RR, Thomson A, Tan TH, Sandhu SK, Reaume MN, Pook DW, Parnis F, North SA, Marx GM, McCaffrey J, McDermott R, Lawrence NJ, Horvath L, Frydenberg M, Chowdhury S, Chi KN, Stockler MR, Sweeney CJ, on behalf of the **ENZAMET Investigators**



Current mHSPC clinical knowledge

Prognostic variables associated with better outcomes with TS alone

- Low volume better than high volume
- Metachronous metastatic presentation better than synchronous

OS benefit of combination treatment by prognostic groups

- Docetaxel + TS > TS alone: synchronous and metachronous high volume*
- "Strong" ADT (TS + abi / enza / apa) > TS alone: all prognostic groups
- Radiation to primary + TS > TS alone: synchronous low volume disease
- Abiraterone or darolutamide + docetaxel + TS > docetaxel + TS: when docetaxel is thought to be appropriate



ENZAMET Treatment



- Prior to randomization testosterone suppression up to 12 weeks and 2 cycles of docetaxel was allowed.
- Intermittent ADT and cyproterone were not allowed
- NSAA: bicalutamide; nilutamide; flutamide
- *High volume: visceral metastases and/or 4 or more bone metastases (at least 1 beyond pelvis and vertebral column)
- **Adult Co-morbidity Evaluation-27



Interim analysis (235 deaths; data cutoff 28 Feb 2019)¹

- Primary endpoint met: Improved OS for the combined overall cohort (HR 0.67)
- No evidence of additional benefit for enzalutamide in patients planned to receive early docetaxel
- Strong signal in favor of triplet (enzalutamide + TS + docetaxel) for secondary endpoints of PSA PFS and clinical PFS
- Some additional toxicity, particularly early; outweighed by clinical benefit ²



¹ Davis ID et al. NEJM 381: 121-131, 2019; Sweeney CJ et al, ASCO Plenary 2019. ² Stockler MR et al. J Clin Oncol 40: 837-846, 2022.



Planned 470 event analysis (data cutoff 19 Jan 2022)

- Longer term data median followup 68 months
- Adjusted prespecified Statistical Analysis Plan:
 - 470 deaths (no additional interim analyses)
 - Identify synchronous vs metachronous M1: "M0 at primary diagnosis (Y/N)"

Exploratory subgroup analysis:

Is the effect of enzalutamide modified by prognostic grouping and docetaxel use?

- Two binary factors for prognosis:
 - M1 at initial diagnosis (synchronous, de novo), or not (ie not M0 or Mx)
 - High volume mHSPC at study entry, or not



Overall survival – combined cohort



NR: not reached



Therapy after progression

- Participants continued on enzalutamide for longer
 - Median 22.6mo NSAA
 - Median 57.8mo enza
- Substantial crossover in control arm to enzalutamide or abiraterone for CRPC
- 76% of those on NSAA arm received <u>enzalutamide OR</u> <u>abiraterone</u> after progression; 26% on enzalutamide arm
- 39% of those with cancer progression on enzalutamide had no further treatment recorded

Treatment	NSAA (N=413)		Enzalutamide (N=268)		
	N	%	Ν	%	
Enzalutamide	205	49.6	0	0	
Abiraterone	148	35.8	70	26.1	
Other NHA	2	0.5	1	0.4	
Docetaxel	105	25.4	69	25.7	
Cabazitaxel	104	25.2	57	21.3	
Other chemo	38	9.2	37	13.8	
ICI	11	2.7	11	4.1	
PARP inhibitor	21	5.1	7	2.6	
¹⁷⁷ Lu-PSMA	12	2.9	9	3.4	
Radium-223	28	6.8	26	9.7	
Sipuleucel-T	3	0.7	1	0.4	
None	60	14.5	104	38.8	

NHA, novel hormonal agent; ICI, immune checkpoint inhibitor



Other key considerations

- ENZAMET was representative, including all combinations of patient subgroups:
 - Synchronous / metachronous; high volume / low volume; use of docetaxel
 - Treated contemporaneously in same trial
- <u>Docetaxel use</u>:
 - At investigator discretion
 - Based on assessment of "chemofitness" or predicted benefit
 - 45% planned for concurrent docetaxel up to 6 cycles (median 6)
 - Before randomization: 108 received 1 cycle, 62 received 2 cycles
- Design allows exploratory description of subgroup outcomes
 - Not formal comparisons due to confounding

ANZUP Overall survival: prespecified subgroup analysis

Cancer Tr	ials Grou	in Lim	ited
-----------	-----------	--------	------

Characteristic	Level	CTRL	ENZA		HR (CI)	P-Value	Adj P-Value
	All Patients	n/N	n/N		0 70 (0 58 to 0 84)	Interaction	Interactior
Overall	All Fallents	200/302	200/303		0.70 (0.56 to 0.64)		
Early Docetaxel Planned	Yes	123/250	108/253	+- +	0.82 (0.63 to 1.06)		
	No	145/312	100/310		0.60 (0.47 to 0.78)	0.09	0.47
Volume of disease	Low	97/261	59/262	_	0.54 (0.39 to 0.74)		
	High	171/301	149/301		0.79 (0.63 to 0.98)	0.06	0.47
Synchronous M1	Yes	183/348	140/335	_	0.70 (0.56 to 0.87)		
	No	85/214	68/228		0.71 (0.52 to 0.98)	0.91	0.91
Visceral metastases	Yes	34/70	33/69		0.94 (0.58 to 1.51)		
	No	234/492	175/494	-	0.66 (0.55 to 0.81)	0.2	0.65
Age (Years)	>=70	137/257	100/257		0.64 (0.50 to 0.83)		
0 ()	<70	131/305	108/306	—	0.75 (0.58 to 0.97)	0.4	0.74
ECOG Performance Status	1-2	92/158	77/158		0.72 (0.53 to 0.97)		
	0	176/404	131/405	-	0.68 (0.54 to 0.85)	0.81	0.91
Gleason score	<=7	57/164	34/152		0.60 (0.39 to 0.91)		
	8-10	161/320	136/335	_	0.72 (0.57 to 0.91)	0.44	0.74
Region	Ireland/UK	42/93	42/102		0.96 (0.63 to 1.47)		
	N America	65/129	44/117		0.67 (0.46 to 0.98)		
	ANZ	161/340	122/344		0.65 (0.51 to 0.82)	0.3	0.74
			Г				
			0.25	0.50 1.0	2.0 4.0		

Total	N =	1125
-------	-----	------

Docetaxel:	503
High volume:	602
Synchronous M1:	683



Overall survival: volume, M1 timing, docetaxel



ANZUP Overall survival: volume, M1 timing, docetaxel



Cancer Trials Group Limited



PSA progression-free survival





Discussion

Strengths Limitations Active control arm; outcomes Docetaxel use comparable to contemporary not randomized trials Concurrent use of docetaxel allowed as a standard of care Study not powered for exploratory subset analyses Mix of synchronous / metachronous; and HV / LV Do not confuse treatment "Hard" primary endpoint effects with different of overall survival prognostic groups

Clinical Impressions

No major differences found in enzalutamide efficacy across subgroups

Confirms benefit of enzalutamide in mHSPC, especially in low volume

Exploratory analyses suggest additional benefit when added to TS + docetaxel





- Enzalutamide added to testosterone suppression for mHSPC, and compared to an active comparator (NSAA \pm docetaxel)
 - Provided clinically meaningful improvements in OS for the combined study cohort
- Study is ongoing
- Benefits were :
 - Most apparent for low volume mHSPC in those for whom docetaxel was not deemed necessary
 - Still apparent with synchronous high volume mHSPC where docetaxel was deemed necessary (*despite median overall survival >60 months with TS + docetaxel + NSAA*)

Hypotheses from exploratory subgroup analyses:

Greatest benefit of triplet may be in those with poorest prognosis disease (synchronous, high-volume), and able to receive docetaxel

Other subgroups: TS + enzalutamide provides substantial increases in OS that are not augmented by concurrent docetaxel



Acknowledgements

- We acknowledge and thank the 1125 patients and their support network for their participation in the ENZAMET study; the principal investigators, co-investigators, study coordinators, clinical research associates, nurses and data managers at the 83 centres in Australia, New Zealand, Canada, Ireland, United Kingdom and USA for their dedication and enthusiasm
- We thank Astellas for their financial support and study drug
- ANZUP receives valuable infrastructure support from the Australian Government through Cancer Australia

ENZAMET was designed and conducted by the Australian and New Zealand Urogenital and Prostate Cancer Trials Group - ANZUP



In collaboration with:

