



Highlights ESMO 2024 urologie

10/10/2024

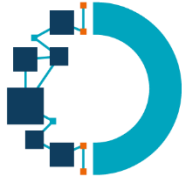
Nouvelle-Aquitaine

Diego Teyssonneau



Liens d'intérêts

Novartis, BMS, Eisai, Ipsen, Janssen, Pfizer, Astellas, AstraZeneca, Sandoz, Viatrix

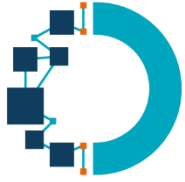


NIAGARA

ORIGINAL ARTICLE

Perioperative Durvalumab with Neoadjuvant Chemotherapy in Operable Bladder Cancer

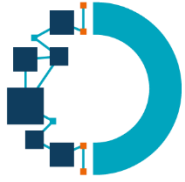
T. Powles, J.W.F. Catto, M.D. Galsky, H. Al-Ahmadie, J.J. Meeks, H. Nishiyama, T.Q. Vu, L. Antonuzzo, P. Wiechno, V. Atduev, A.G. Kann, T.-H. Kim, C. Suárez, C.-H. Chang, F. Roghmann, M. Özgüroğlu, B.J. Eigl, N. Oliveira, T. Buchler, M. Gadot, Y. Zakharia, J. Armstrong, A. Gupta, S. Hois, and M.S. van der Heijden, for the NIAGARA Investigators*



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Contexte

- Environ 50% de rechute après chimiothérapie néoadjuvante puis cystectomie
- CheckMate 274 et AMBASSADOR positives en adjuvant, sur une population sélectionnée
- Intérêt d'évaluer un traitement péri-opératoire avec tumeur en place

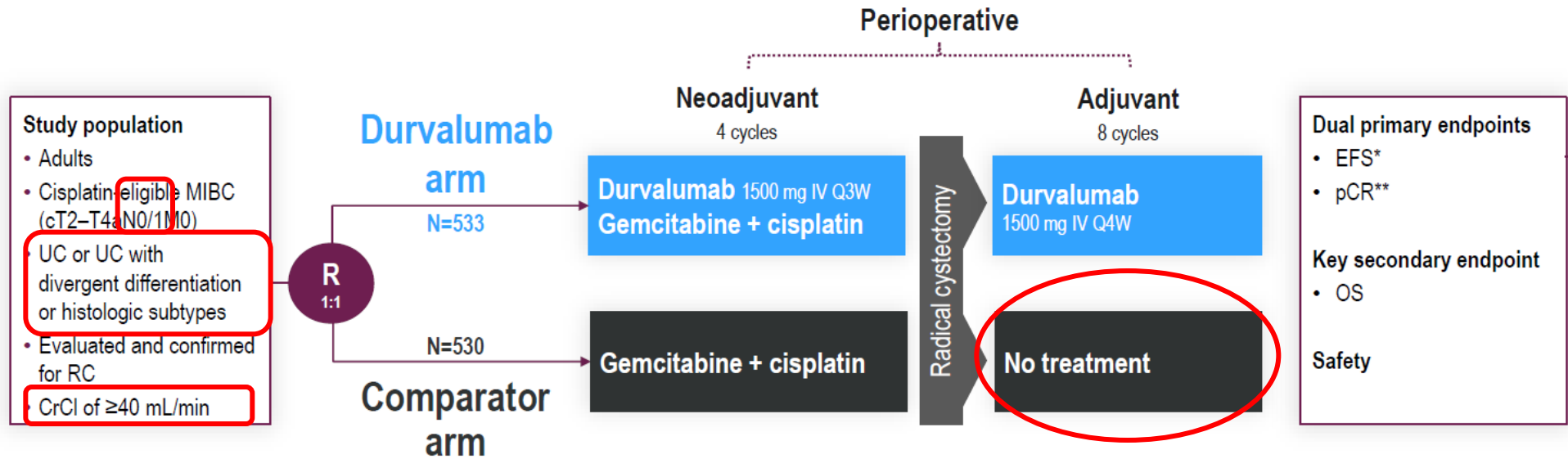


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Design

NIAGARA: Study Design

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Stratification factors

- Clinical tumour stage (T2N0 vs >T2N0)
- Renal function (CrCl ≥ 60 mL/min vs ≥ 40 – <60 mL/min)
- PD-L1 status (high vs low/negative expression)

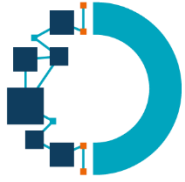
Gemcitabine/cisplatin dosing

- CrCl ≥ 60 mL/min: Cisplatin 70 mg/m² + gemcitabine 1000 mg/m² Day 1, then gemcitabine 1000 mg/m² Day 8, Q3W for 4 cycles
- CrCl ≥ 40 – <60 mL/min: Split-dose cisplatin 35 mg/m² + gemcitabine 1000 mg/m² Days 1 and 8, Q3W for 4 cycles

EFS was defined as:

- Progressive disease that precluded RC
- Recurrence after RC
- Date of expected surgery in patients who did not undergo RC
- Death from any cause

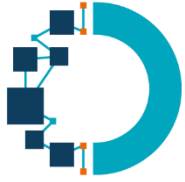
Other endpoints (not reported here): DFS, DSS, MFS, HRQoL, 5-year OS



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Population

Characteristics		Durvalumab arm N=533	Comparator arm N=530
Age	Median, years (range)	65 (34–84)	66 (32–83)
Sex, %	Male	82	82
Race, %	White	66	68
	Asian	29	27
	Black/Other	2	1
	Not reported	3	4
ECOG PS, %	0	78	78
	1	22	22
Smoker, %	Yes (current or former)	71	75
Renal function*, %	CrCl ≥60 mL/min	81	81
	CrCl ≥40–<60 mL/min	19	19
Tumour stage*, %	T2N0	40	40
	>T2N0	60	60
PD-L1 expression†, %	High	73	73
	Low/negative	27	27
Histology, %	UC	86	83
	UC with divergent differentiation or histologic subtypes	14	17
Regional lymph nodes, %	N0	95	94
	N1	5	6

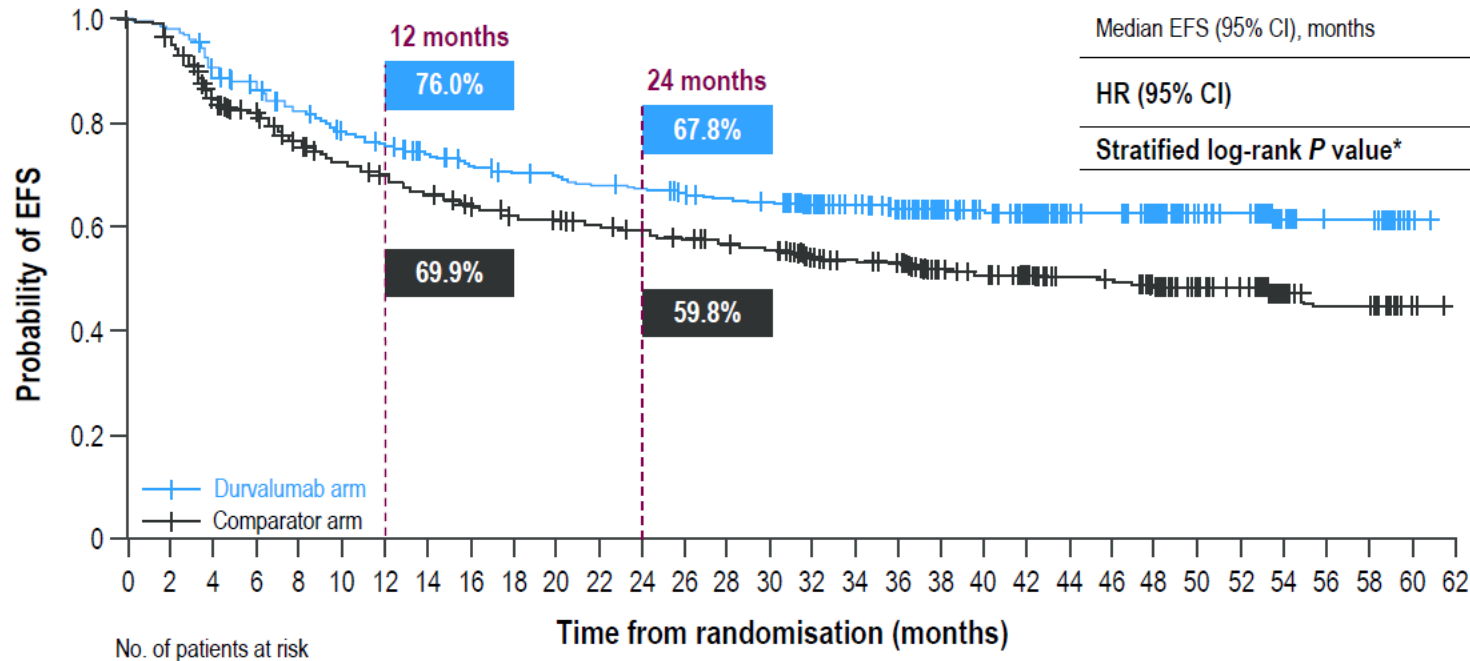


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EFS

NIAGARA: Event-free Survival by Blinded Independent Central Review (ITT)

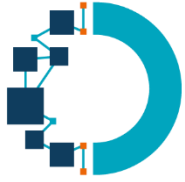
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	Durvalumab arm N=533	Comparator arm N=530
Number of events, n (%)	187 (35.1)	246 (46.4)
Median EFS (95% CI), months	NR (NR-NR)	46.1 (32.2-NR)
HR (95% CI)	0.68 (0.56-0.82)	
Stratified log-rank P value*	<0.0001	

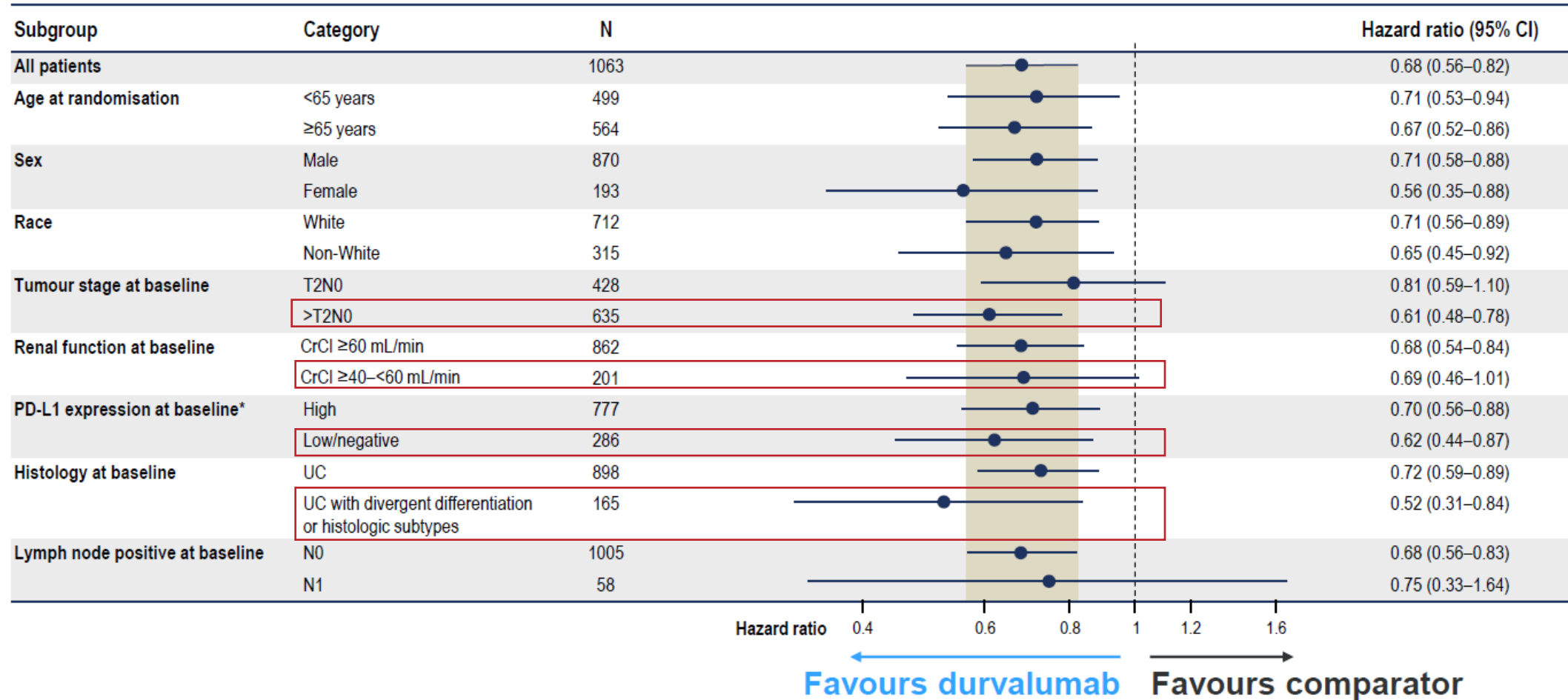
Median follow-up in censored patients:
42.3 months (range, 0.03-61.3)

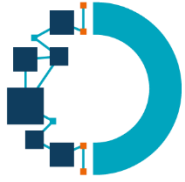
	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62
Durvalumab arm	533	519	475	454	424	401	386	370	356	348	344	335	330	321	315	312	282	269	255	214	202	180	141	140	115	86	81	32	20	20	1	0
Comparator arm	530	498	437	416	381	358	343	328	313	300	296	288	281	273	264	259	228	219	214	177	172	159	132	129	94	69	62	24	18	16	2	0



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EFS : sous-groupes

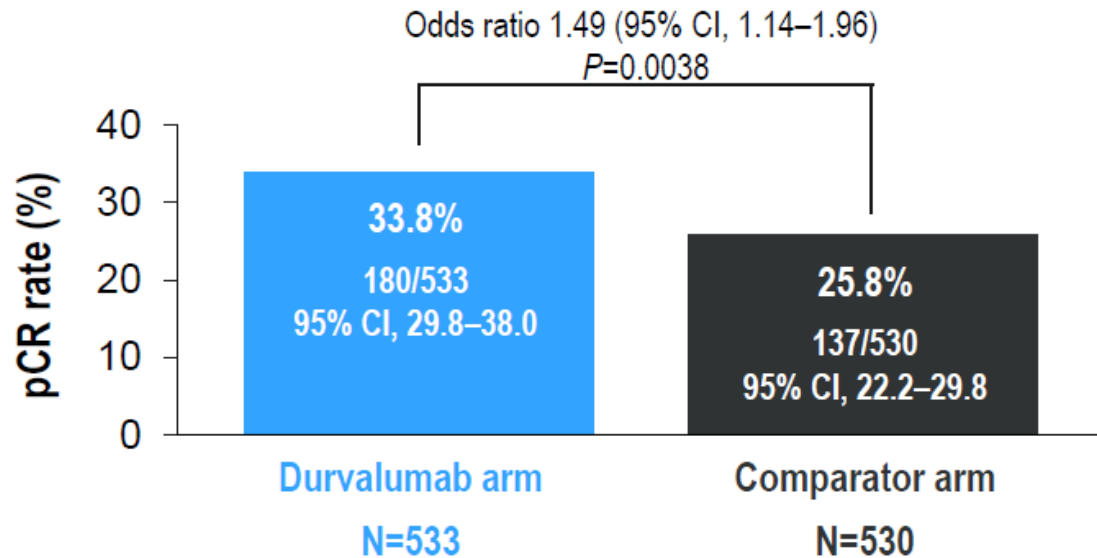




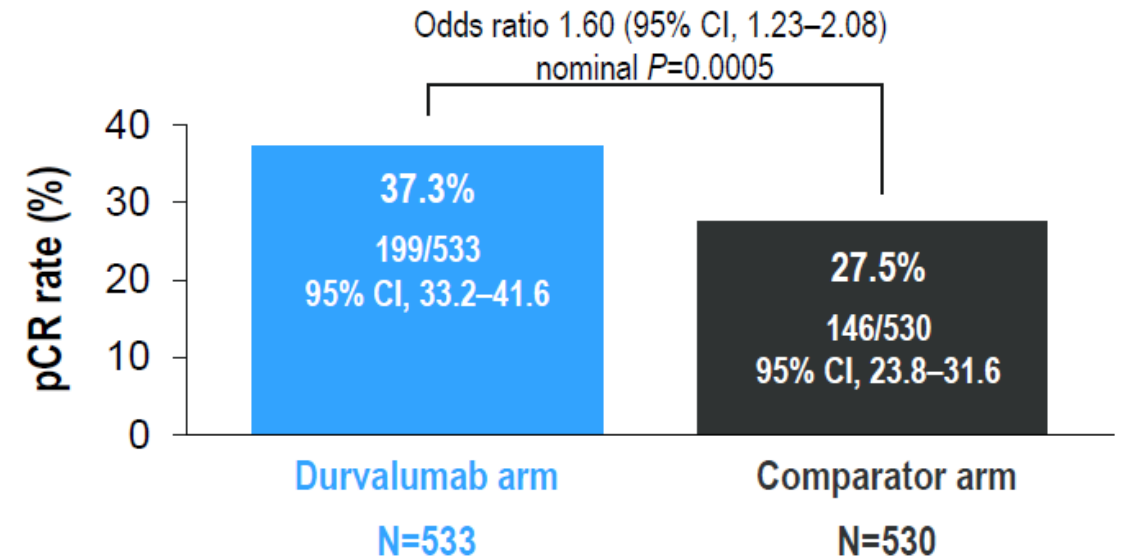
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pCR

Formal analysis (Jan 2022)

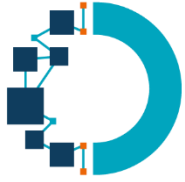


Re-analysis (Apr 2024)



- The planned formal analysis for pCR was not statistically significant (threshold for significance, p-value 0.001)
- 59 evaluable samples were incorrectly considered non-responders rather than their true result*

- The re-analysis showed nominal statistical significance in favour of the durvalumab arm
- This analysis includes the results of the 59 omitted samples (28 additional pCRs)*

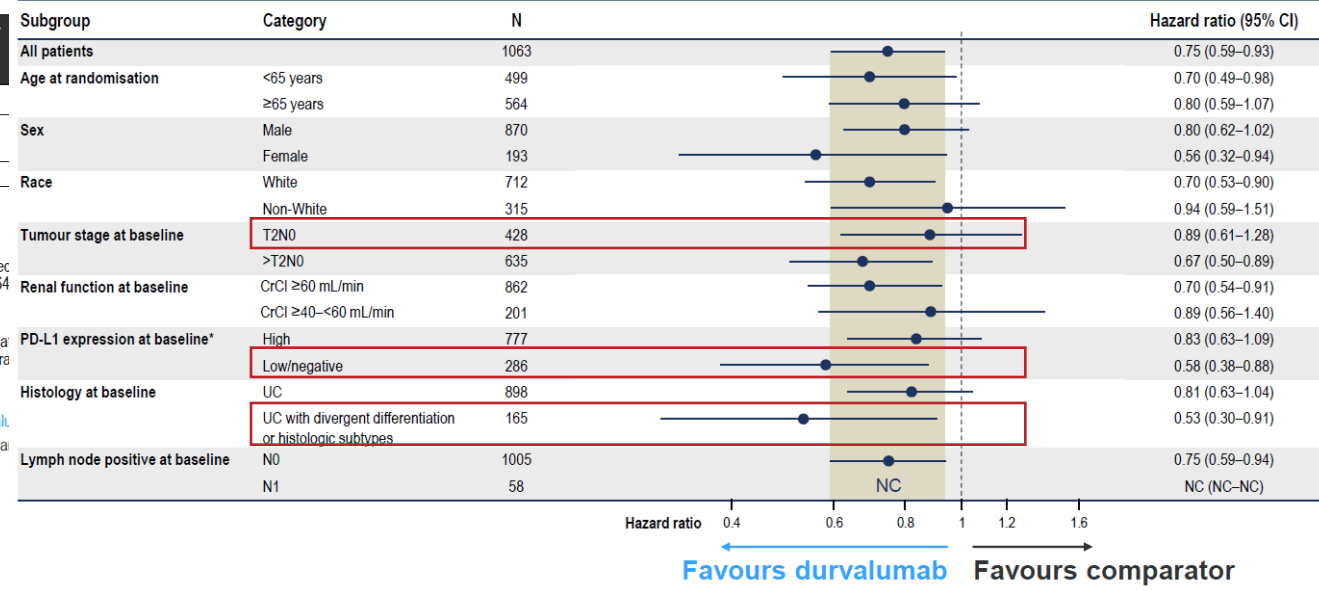
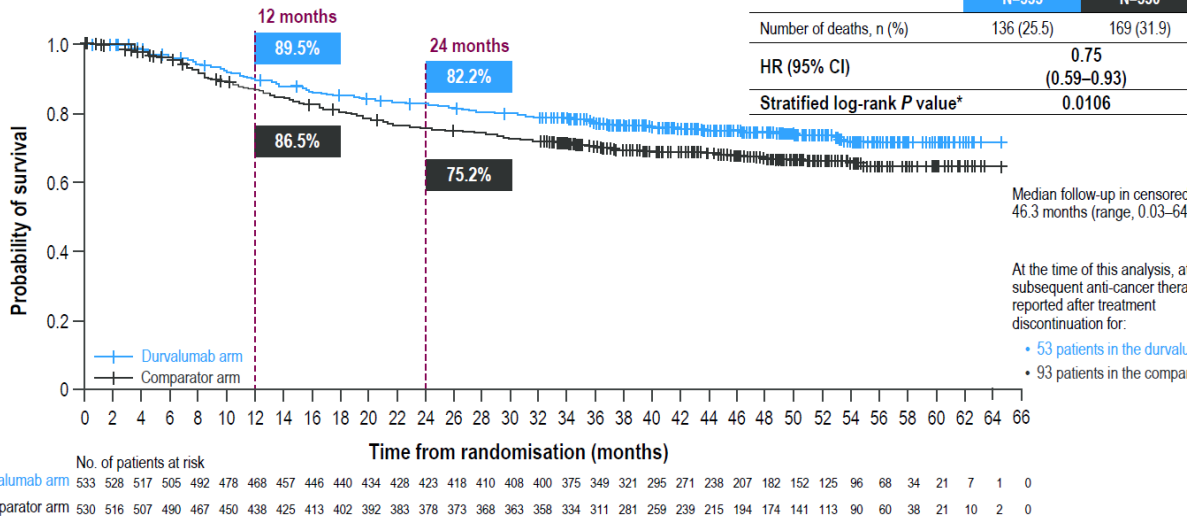


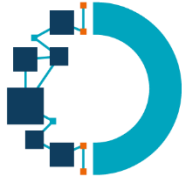
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OS

NIAGARA: Overall Survival (ITT)

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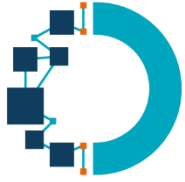




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Toxicité

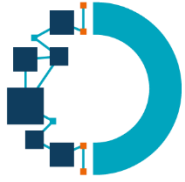
Overall study period (unless otherwise stated)	Durvalumab arm N=530	Comparator arm N=526
AEs of any cause, n (%)	527 (99)	525 (100)
Grade 3 or 4	368 (69)	355 (68)
Serious AEs	326 (62)	287 (55)
Outcome of death	27 (5)	29 (6)
Leading to discontinuation of study treatment	112 (21)	80 (15)
Leading to discontinuation of neoadjuvant durvalumab	50 (9)	---
Leading to discontinuation of NAC	72 (14)	80 (15)
Leading to patient not undergoing RC	6 (1)	7 (1)
Leading to delay in surgery*	9 (2)	6 (1)
Leading to discontinuation of adjuvant durvalumab	30/383 [†] (8)	---
AEs possibly related to any treatment, n (%)[‡]	502 (95)	487 (93)
Grade 3 or 4 (treatment related)	215 (41)	215 (41)
Outcome of death (treatment related)	3 (0.6)	3 (0.6)
Any-grade immune-mediated AEs	111 (21)	16 (3)



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Conclusion

- 1^{er} essai de phase 3 évaluant l'impact des ICI en péri-opératoire
- Positif en EFS et OS pour la plupart des sous-groupes
- Toxicité acceptable, pas de retard de chirurgie



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Discussion

Population large

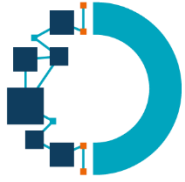
Cddp fractionné autorisé

Bonne tolérance

Résultats impactants

Pas ddMVAC (VESPER)
• pCR inférieure
• GC < ddMVAC en OS

Quelle part de du néo vs adjuvant ?



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Discussion

Population large

Cddp fractionné autorisé

Bonne tolérance

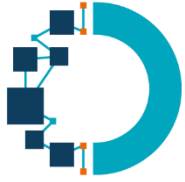
Résultats impactants

Pas ddMVAC (VESPER)
• pCR inférieure
• GC < ddMVAC en OS

Quelle part de du néo vs adjuvant ?

- Suivi de données selon le ypT
- ctDNA

Vers un nouveau standard ?



TiNivo-2

Tivozanib plus nivolumab versus tivozanib monotherapy in patients with renal cell carcinoma following an immune checkpoint inhibitor: results of the phase 3 TiNivo-2 Study



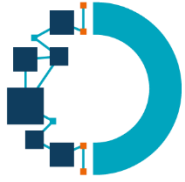
Toni K Choueiri, Laurence Albiges, Philippe Barthélémy, Roberto Iacovelli, Sheik Emambux, Javier Molina-Cerrillo, Benjamin Garmezy, Pedro Barata, Arnab Basu, Maria T Bourlon, Helen Moon, Raffaele Ratta, Rana R McKay, Alexander Chehrazhi-Raffle, Hans Hammers, Daniel Y C Heng, Edgar Braendle, Kathryn E Beckermann, Bradley A McGregor, Robert J Motzer**



TiNivo-2

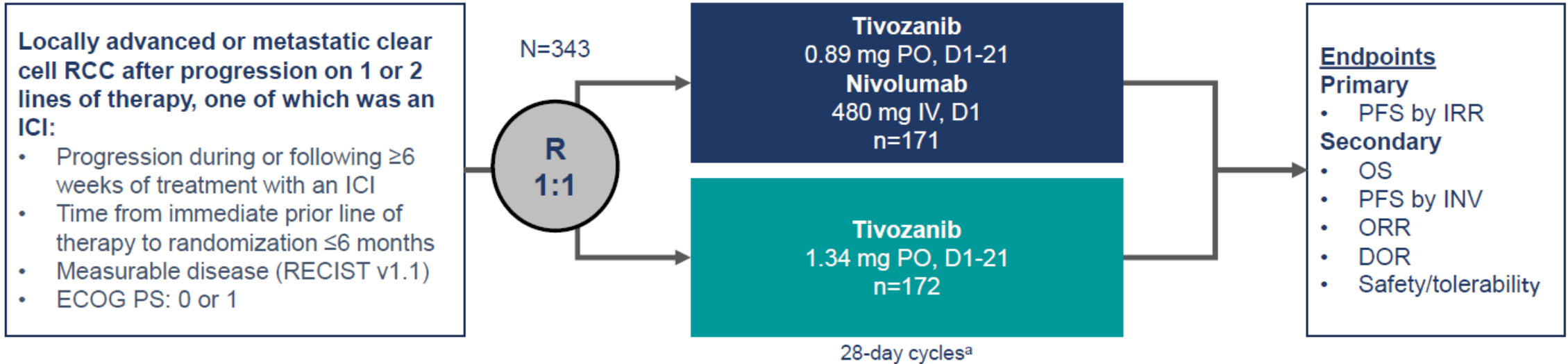
CONTEXTE

- L1 ccRCC : doublet comprenant un ICI
- Lignes suivantes ne comprenant que des anti-VEGF ou mTOR
- Intérêt du rechallenge d'ICI en suspens
 - CONTACT-03 négative



TiNivo-2

DESIGN



Stratification Factors

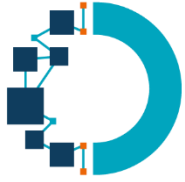
- IMDC risk category
- Prior therapy (ICI as most recent therapy or not)

Statistical Analysis

- 220 PFS events, statistically powered to detect an improvement of 4 months in PFS (HR=0.67)
- Stratified log-rank test with a two-sided 5% significance level

Key Considerations

- Reduced dose of tivozanib in combination arm was agreed with regulatory authorities due to potential risk of higher rate of grade 3/4 hypertension
- Prior therapy (ICI as most recent therapy or not)
 - Test if ICI break impacts outcome (to resensitize the immune system to ICI therapy)

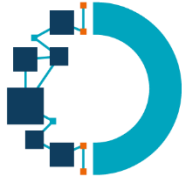


TiNivo-2

POPULATION

Characteristic	Tivozanib + Nivolumab (n=171)	Tivozanib (n=172)
Age, years Median (range)	64 (37-87)	63 (33-82)
Sex, n (%) Female Male	46 (27) 125 (73)	38 (22) 134 (78)
Race, n (%) White Asian Black or African American Not reported	112 (65) 1 (<1) 2 (1) 56 (33)	107 (62) 0 8 (5) 57 (33)
ECOG PS, n (%) 0 1 Missing	76 (44) 94 (55) 1 (<1)	85 (49) 87 (51) 0

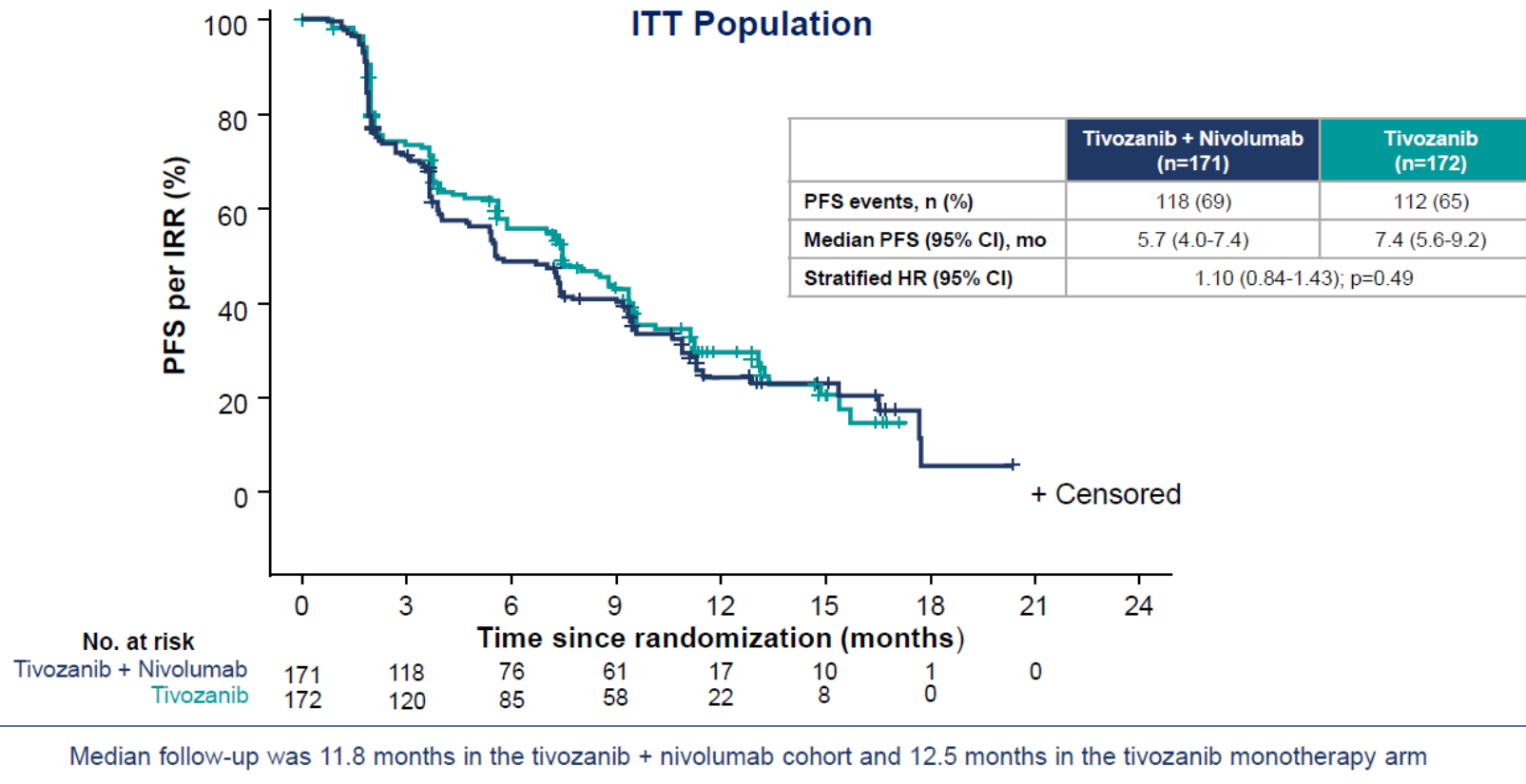
Characteristic	Tivozanib + Nivolumab (n=171)	Tivozanib (n=172)
IMDC risk category, n (%) Favorable Intermediate Poor	30 (18) 114 (67) 27 (16)	31 (18) 113 (66) 28 (16)
Prior lines of therapy, n (%) 1 2	111 (65) 60 (35)	105 (61) 67 (39)
Most recent therapy, n (%) ICI Non-ICI	122 (71) 49 (29)	122 (71) 50 (29)
Prior VEGFR-TKI use, n (%) 0 1 2	53 (31) 96 (56) 22 (13)	53 (31) 101 (58) 18 (11)

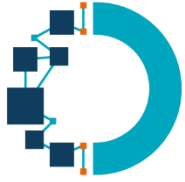


TiNivo-2

RESULTATS

Primary Analysis of Centrally Reviewed PFS (primary endpoint)



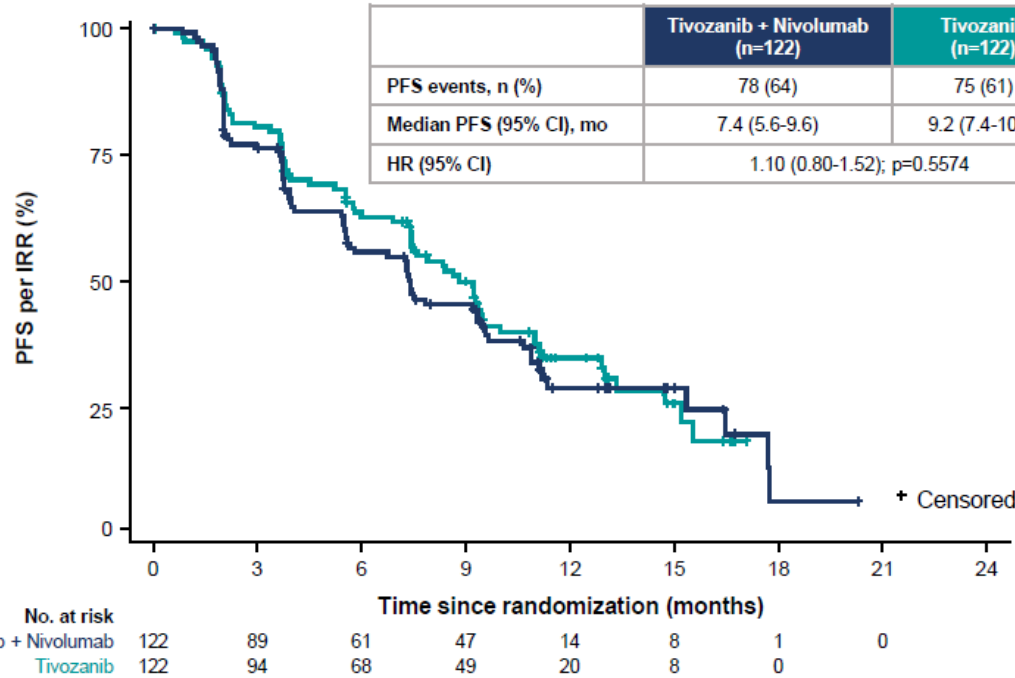


TiNivo-2

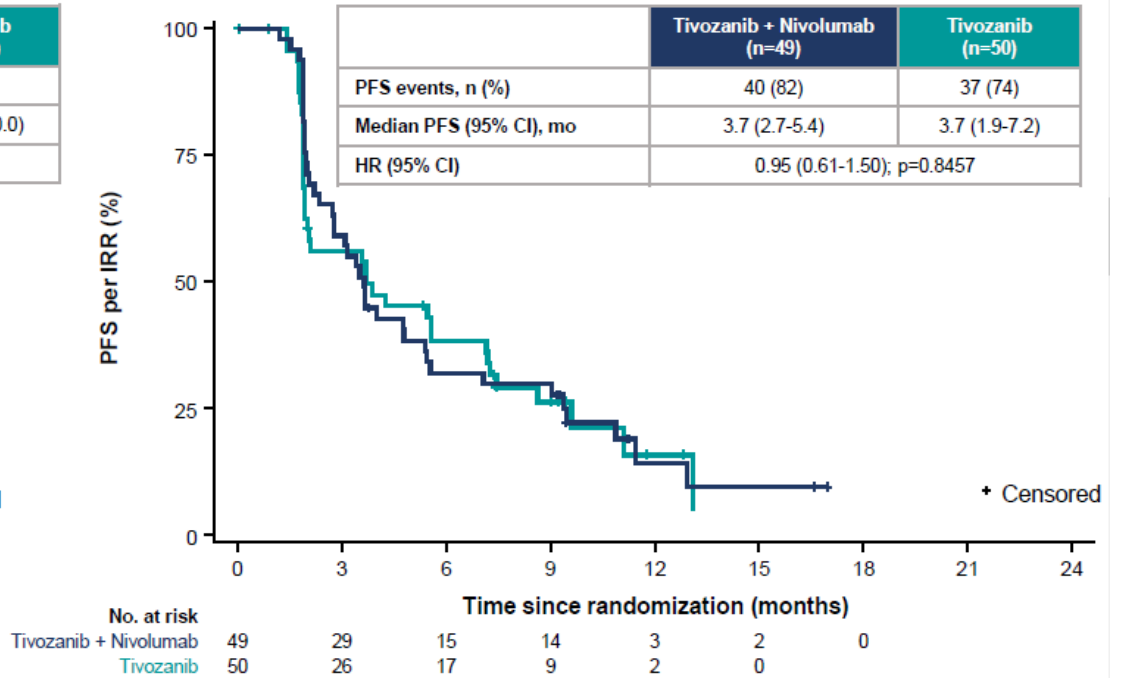
RESULTATS

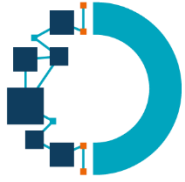
Centrally Reviewed PFS by Most Recent Line of Therapy

ICI as Most Recent Therapy



Non-ICI as Most Recent Therapy

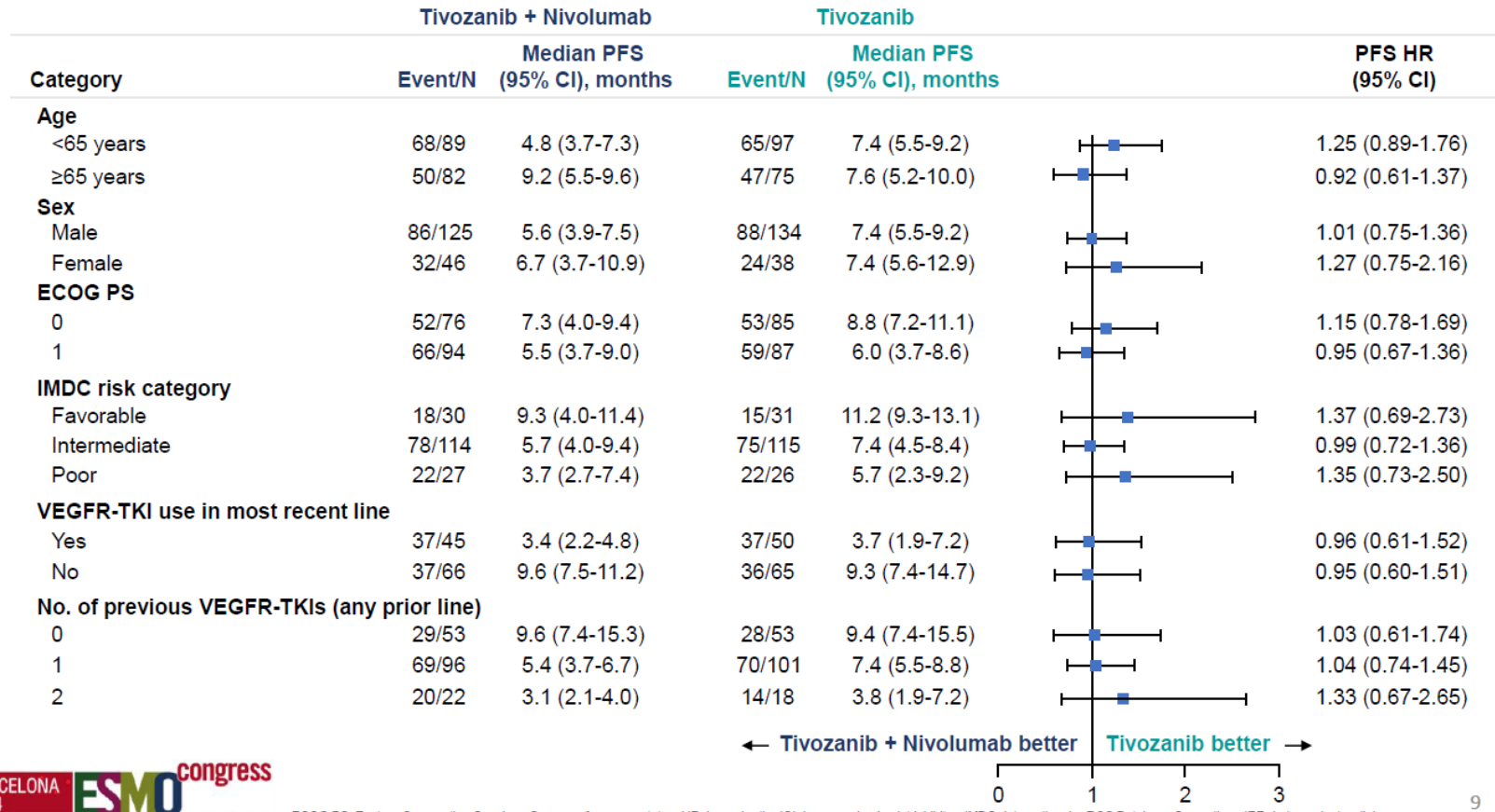




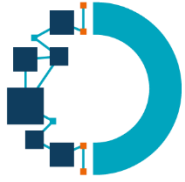
TiNivo-2

RESULTATS

Centrally Reviewed PFS by Subgroups



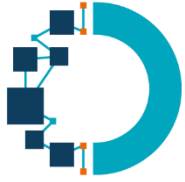
ECOG PS, Eastern Cooperative Oncology Group performance status; HR, hazard ratio; ICI, immune checkpoint inhibitor; IMDC, International mRCC Database Consortium; IRR, independent radiology review; PFS, progression-free survival; VEGFR-TKI, vascular endothelial growth factor receptor tyrosine kinase inhibitor.



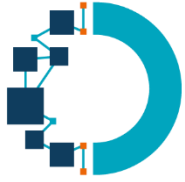
TiNivo-2

Conclusion

- 1^{er} essai à évaluer le rechallenge d'un iPD-1
- Pas de bénéfice à l'ajout de NIVOLUMAB
- Confirme les résultats de CONTACT-03



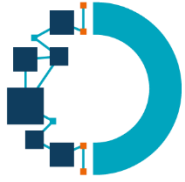
SUNNIFORECAST



SUNNIFORECAST

CONTEXTE

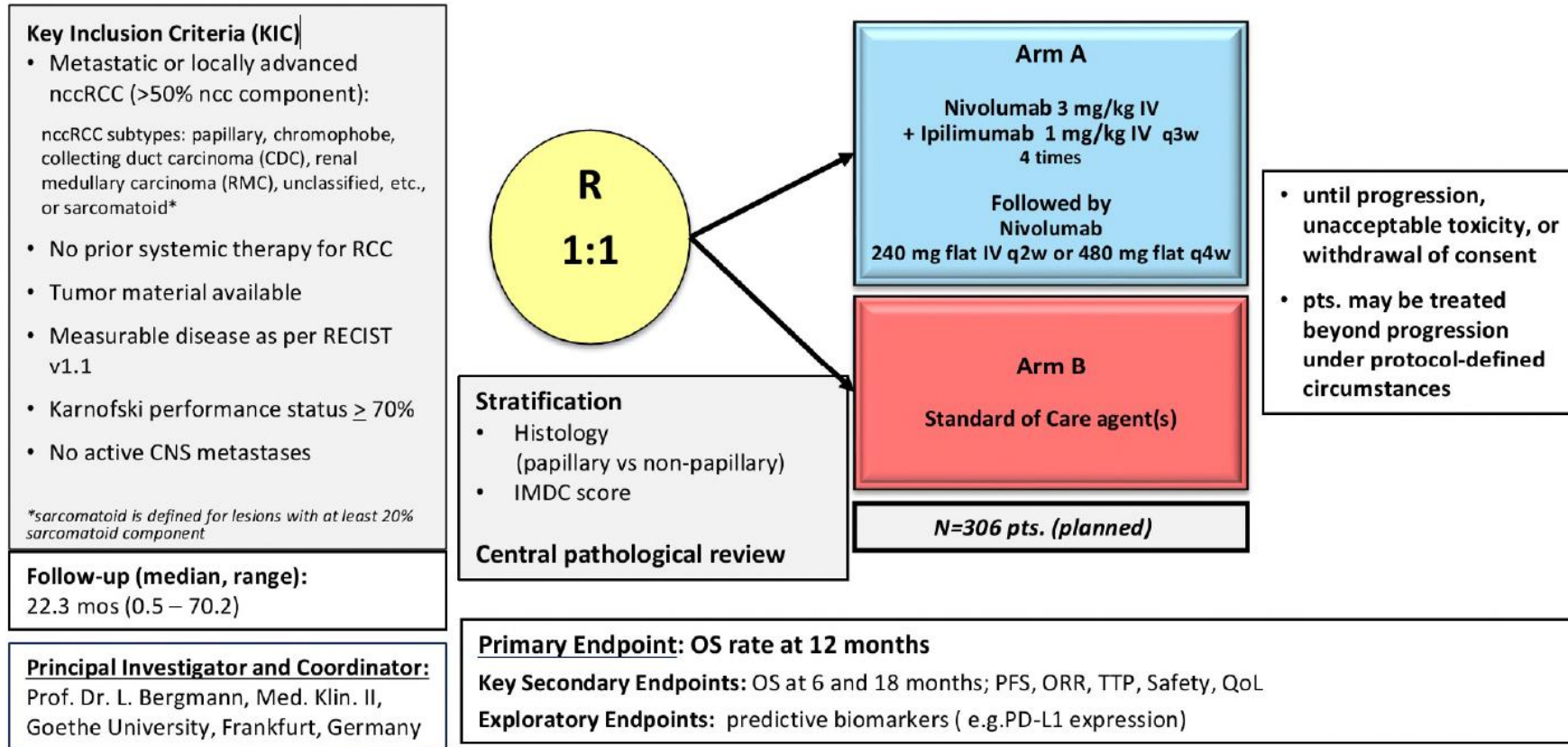
- nccRCC : population très hétérogène
- Peu de traitements efficaces
- Impact majeur du doublet comprenant un ICI dans les ccRCC



SUNNIFORECAST

DESIGN

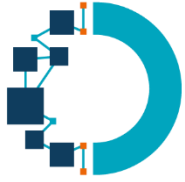
SUNNIFORECAST – Study design



CNS, central nervous system; IV, intravenous; ORR, objective response rate; TTP time to progression; OS, overall survival; PD-L1, programmed death ligand-1; PFS, progression-free survival; PO, oral; PS, performance status; R, randomized; RCC, renal cell carcinoma.

Bergmann L et al. Oral presentation at ESMO 2024; September 13-17; Barcelona, Spain. Abstract LBA75

Bergmann et al. ESMO 2024



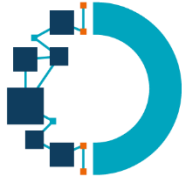
SUNNIFORECAST

POPULATION

Subtypes of nccRCC (central pathological review)	Total N=309	Ipilimumab/Nivolumab N=157	Standard of Care (SOC) N=152	p-value
Papillary RCC	178 (57.6 %)	89 (56.7%)	89 (58.6%)	<i>p=0.17</i>
Chromophobe RCC	60 (19.4 %)	28 (17.8%)	32 (21.2%)	
MiT family translocation RCC	12 (3.9 %)	9 (5.7%)	3 (2.0%)	
Renal medullary carcinoma	3 (1.0 %)	0 (0.0%)	3 (2.0%)	
Translocation RCC (TFE, TEFEB)	5 (1.6%)	3 (1.9%)	2 (1.3%)	
Tubulocystic RCC	3 (1.0 %)	3 (1.9%)	0 (0.0%)	
Mucinous tubular and spindle cell carcinoma	1 (0.3 %)	1 (0.6%)	0 (0.0%)	
Sarcomatoid	14 (4.5 %)	8 (5.1%)	6 (3.9%)	
Ductus Bellini carcinoma	3 (1.0%)	0 (0.0%)	3 (2.0%)	
Others	21 (6.7 %)	11 (7.0%)	10 (6.6%)	

***SOC**

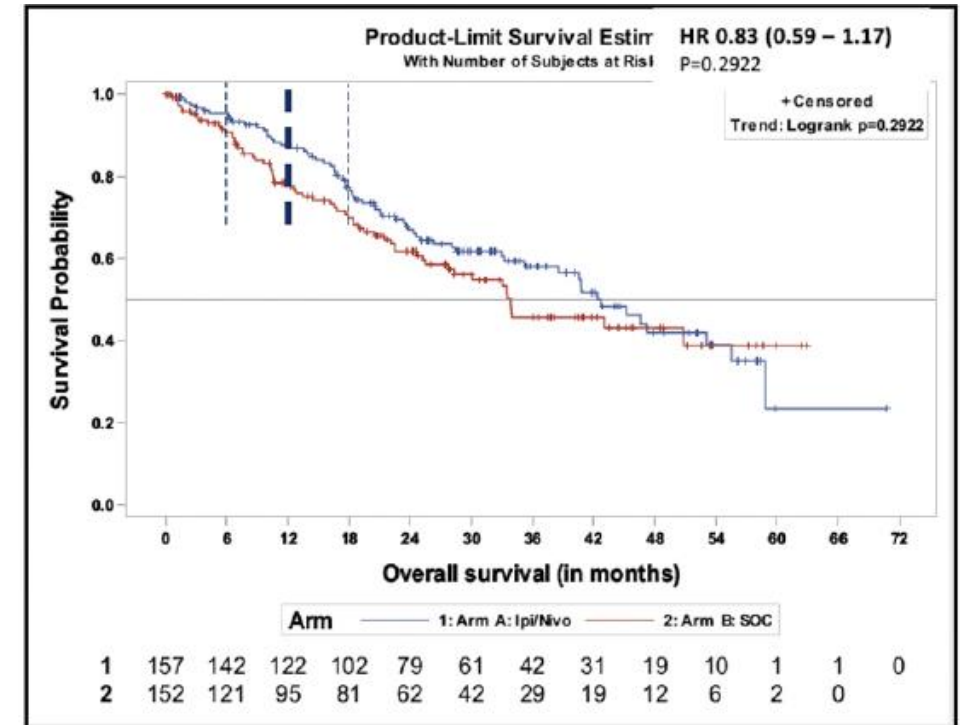
- 124 x TKI
- 17 x TKI/IO
- 2x others



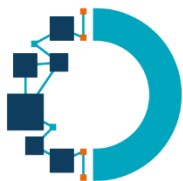
SUNNIFORECAST

RESULTATS : OS

	Total N=309	Ipilimumab/ Nivolumab N=157	Standard of Care (SOC) N=152	<i>p</i> -value
OS rate at 12 mos (95%-CI)	82.5% (77.46% - 86.46%)	86.9% (80.24% - 91.46%)	76.8% (68.62% - 83.09%)	<i>p</i>=0.0141
OS rate at 6 mos (95%-CI)	92.8% (95.27% - 2.83%)	94.7% (89.72% - 97.32%)	90.0% (83.75% - 93.98%)	<i>p</i> =0.067
OS rate at 18 mos (95%-CI)	73.4% (67.67% - 78.28%)	76.6% (68.69% - 82.79%)	69.1% (60.25% - 76.34%)	<i>p</i> =0.084
OS mos (median, 95%-CI)	40.8 (33.2 - 47.21)	42.4 (35.24 - 55.54)	33.9 (25.52 - *)	<i>p</i> =0.292



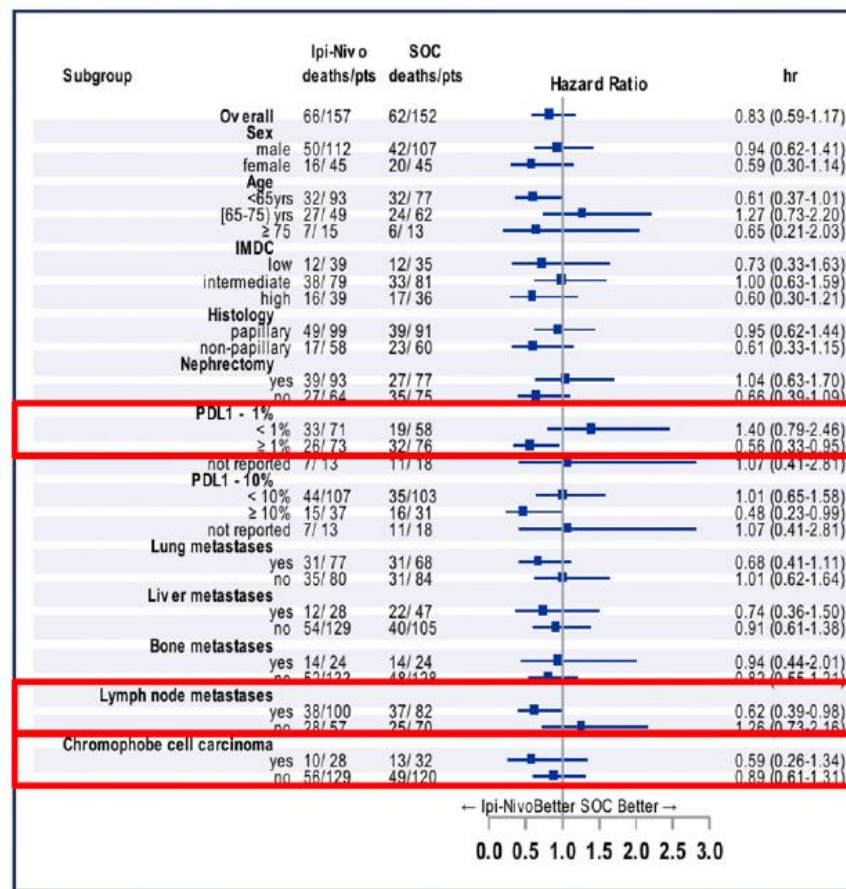
Median follow-up: 24.3 mos (0.5 -70.2)

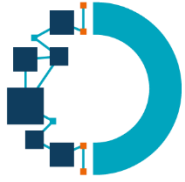


SUNNIFORECAST

RESULTATS : sous groupes

Forest Plot for OS





SUNNIFORECAST

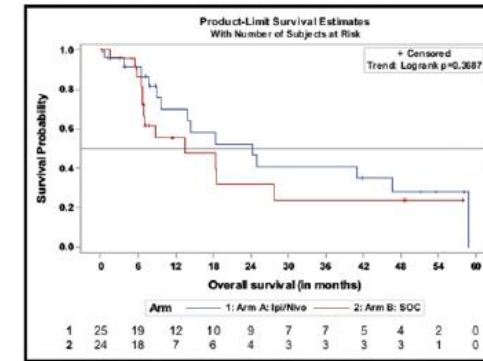
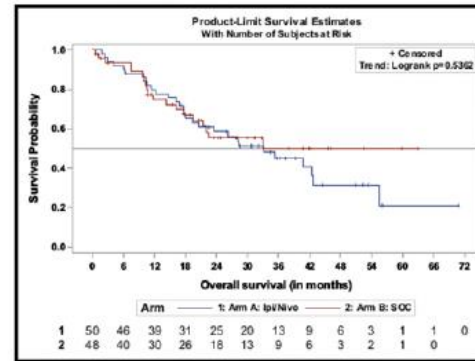
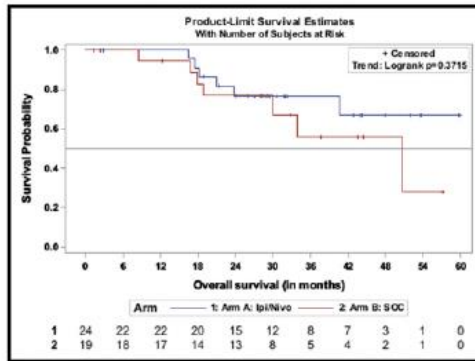
RESULTATS : papillaires

favorable

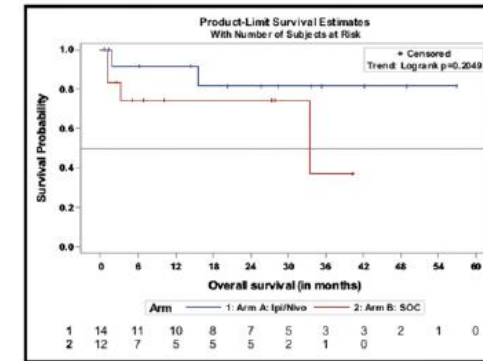
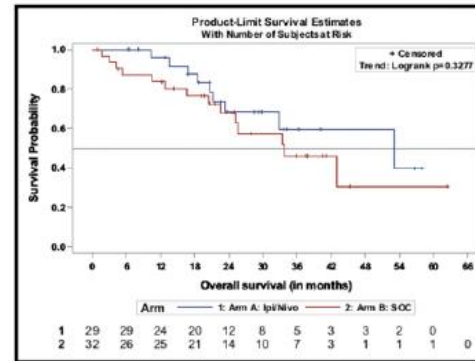
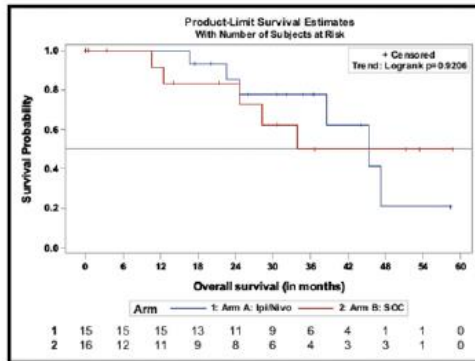
intermediate

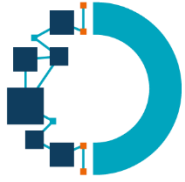
poor

Papillary RCC



Non papillary RCC

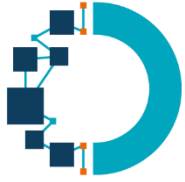




SUNNIFORECAST

Conclusion

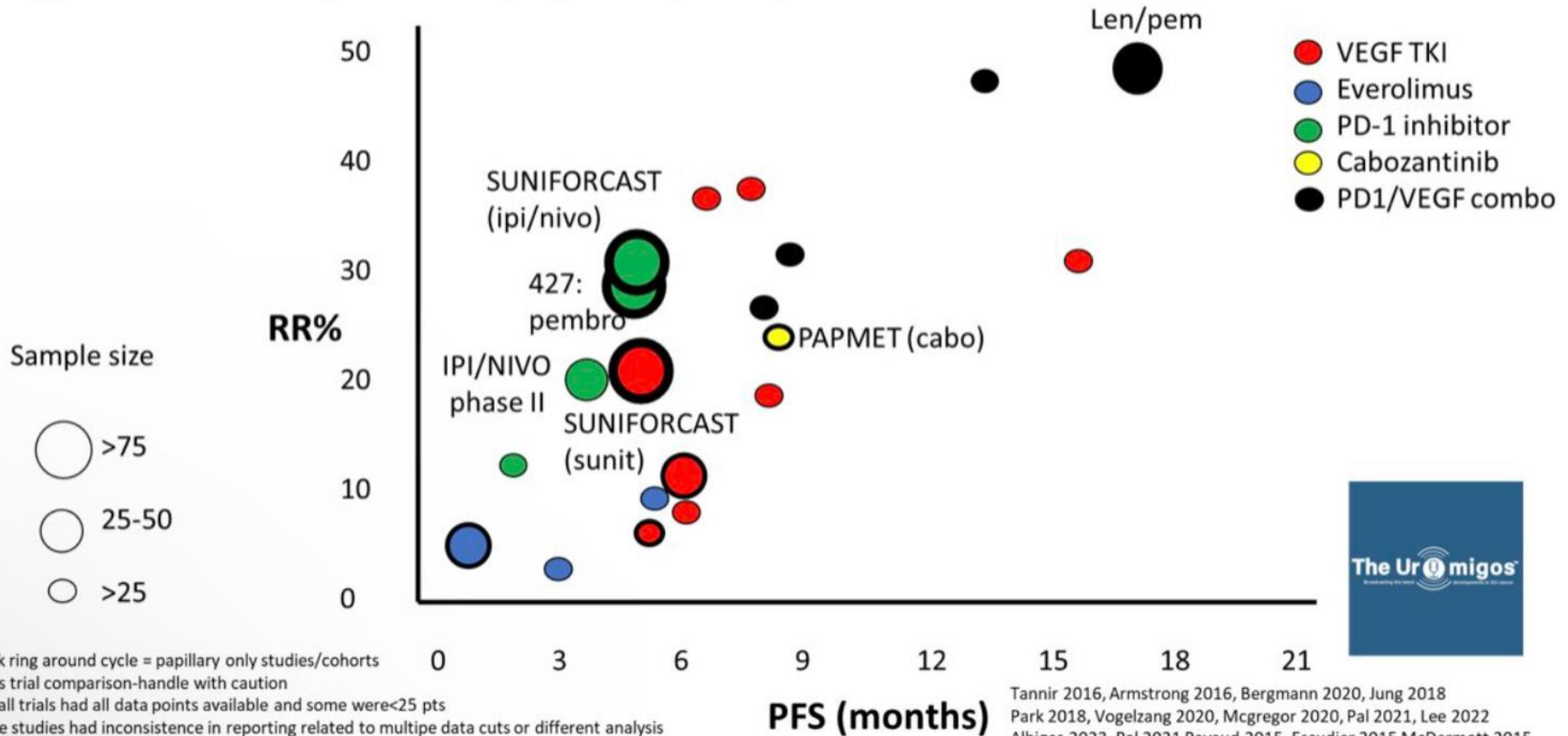
- Positive sur son objectif primaire (OS à 12 mois) sur une population pauvre en traitement
- Profil de survie similaire entre papillaire et non papillaire
- Intérêt du statut PD-L1?
- Profil de tolérance intéressant



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Perspectives

Rough summary of efficacy data in non-clear cell RCC
ringed circles represent papillary only.



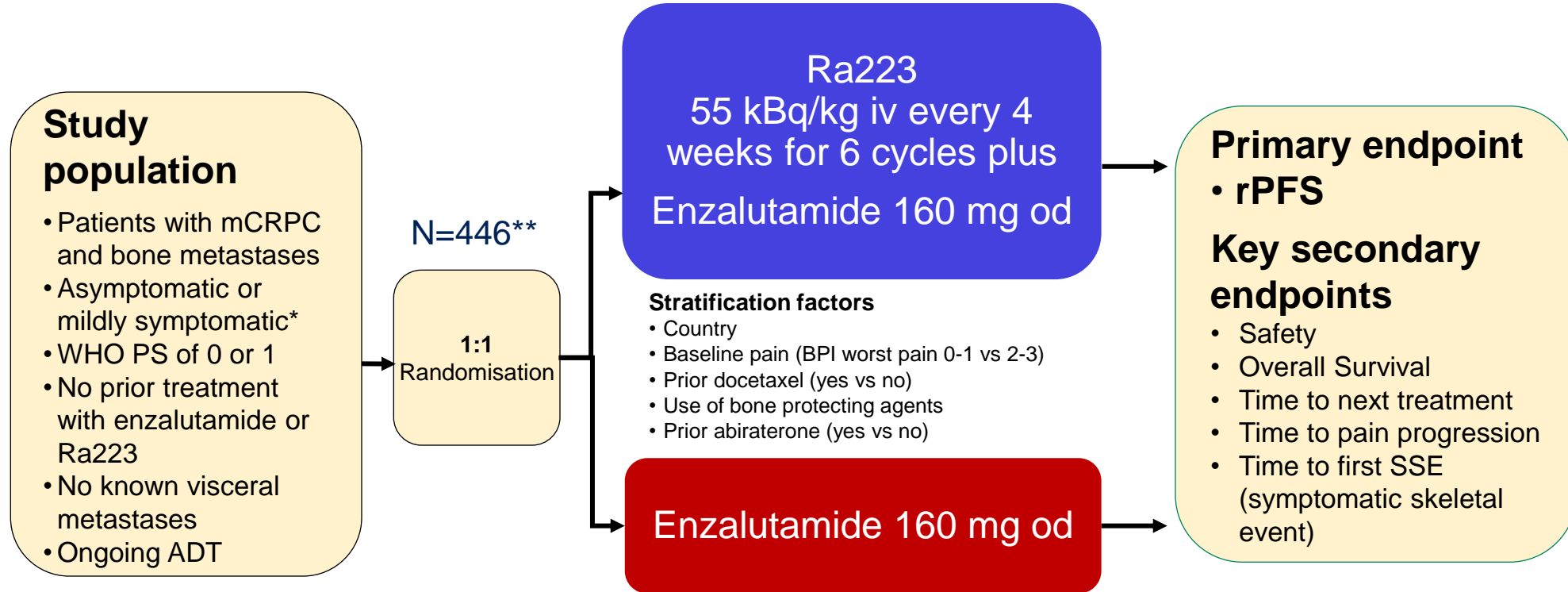


PEACE-3



PEACE-3

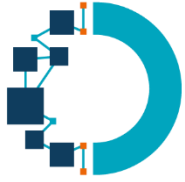
Design



*defined as brief pain inventory WP24 score < 4

** original target accrual N=560, adapted for slow accrual

Use of bone protecting agents (BPA) made mandatory (after inclusion of 119 patients)



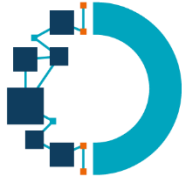
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Population

	Enza+Ra223 (N=222)	Enza (N=224)
	N (%)	N (%)
Age, Median (range) years	70.0 (43.0 - 90.0)	70.0 (47.0 - 90.0)
PSA, Median (Q25-Q75) ng/mL	25.3 (6.5 - 68.8)	23.0 (8.5 - 54.9)
WHO Performance status 0	152 (69)	154 (69)
Prior docetaxel ⁽¹⁾	67 (30.2)	66 (30)
Prior abiraterone ⁽¹⁾	4 (2)	7 (3)
Bone lesions ⁽²⁾		
<10	109 (49)	105 (47)
≥10	93 (42)	99 (44)
Missing or diffuse lesions	20 (9)	20 (9)
Alkaline phosphatase		
≤ULN	127 (57)	107 (48)
>ULN	82 (37)	110 (49)
Missing	13 (6)	7 (3)
Extra-skeletal disease at baseline	77 (35)	73 (33)

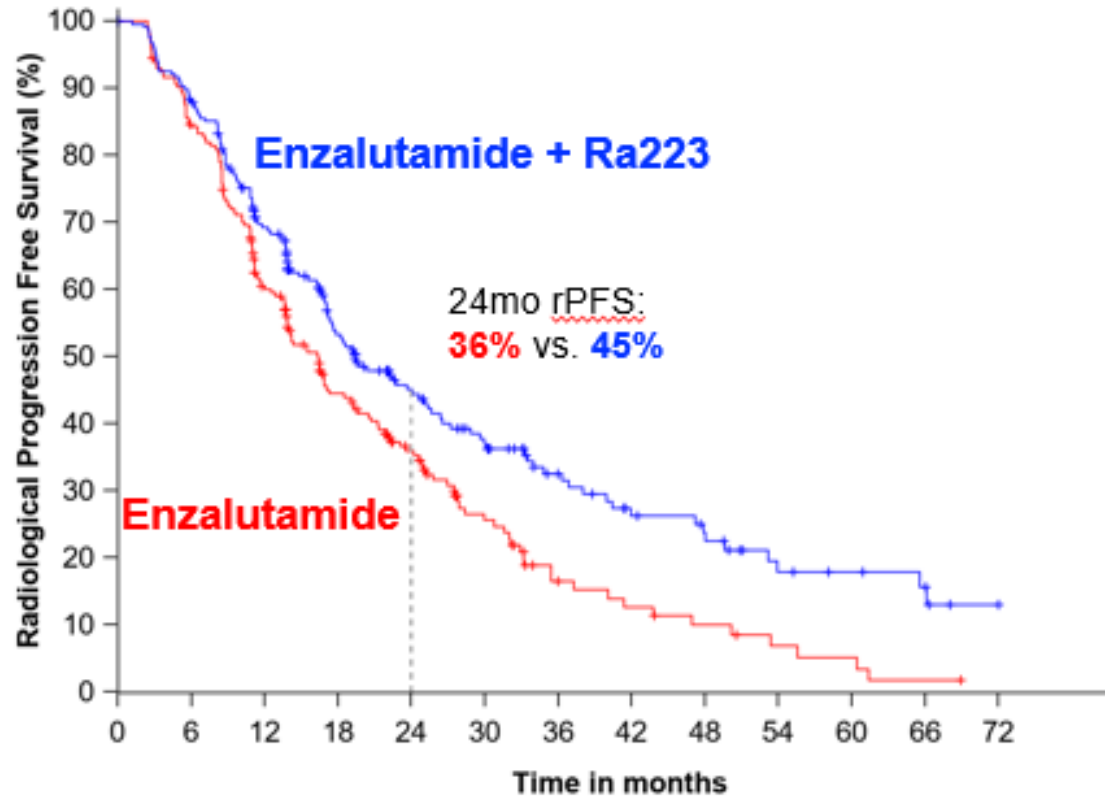
(1) Prior docetaxel or abiraterone was allowed for mHSPC

(2) Per imaging guidelines, the type of bone lesions is reported by a radiologist and classified into focal, diffuse or equivocal. Only focal bone lesions can be counted.



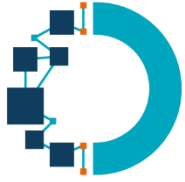
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PFS



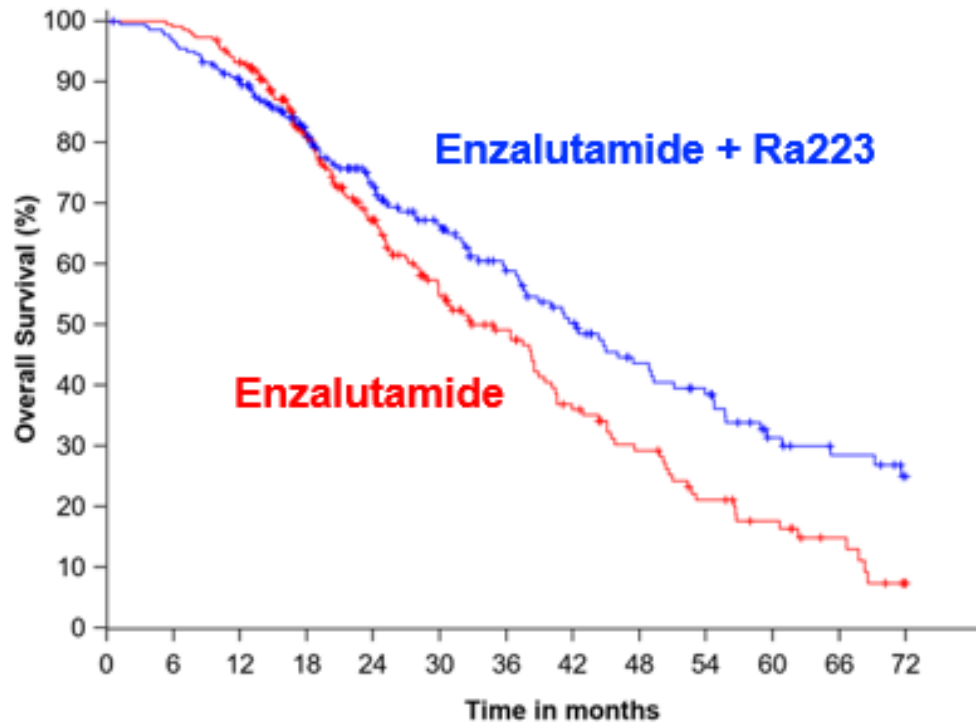
	0	6	12	18	24	30	36	42	48	54	60	66	72
Enza-	224 (0)	122 (84)	52 (128)	13 (150)	7 (155)	3 (158)	0 (160)						
Enza+Ra223-	222 (0)	138 (65)	64 (107)	32 (123)	19 (131)	9 (135)	3 (137)						

Arm	n/N	Median (95%CI)
Enzalutamide + Ra223	139/222	19.4 (17.1-25.3) mo
Enzalutamide	160/224	16.4 (13.8-19.2) mo
HR (95%CI)	0.69 (0.54-0.87)	
Log-Rank p-value	0.0009	
Assumption of proportional hazard achieved		



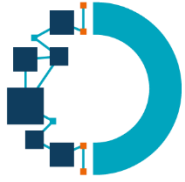
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OS



	0	6	12	18	24	30	36	42	48	54	60	66	72
Enza-	224 (0)	206 (15)	107 (64)	58 (90)	30 (112)	14 (123)	1 (129)						
Enza+Ra223-	222 (0)	194 (21)	114 (53)	71 (73)	43 (90)	23 (101)	12 (105)						

Arm	n/N	Median (95%CI)
Enzalutamide + Ra223	110/222	42.3 (36.8-49.1) mo
Enzalutamide	129/224	35.0 (28.8-38.9) mo
HR (95%CI)	0.69 (0.52-0.90)	
Log-Rank p-value	0.0031	<0.0034
<ul style="list-style-type: none"> • Pre-set level of significance for interim analysis was ≤ 0.0034 • Due to non-proportional hazards plus lack of unequivocal significance for RMST (restricted mean survival time) sensitivity analysis, study will continue to final OS analysis 		

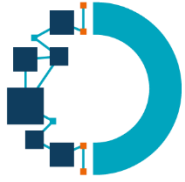


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Toxicité

Patients	Enza+Ra223 (N=218)	Enza (N=224)
	N (%)	N (%)
Adverse events (AEs)	218 (100)	216 (96)
Drug-related AEs	183 (84)	158 (71)
Serious AEs	93 (43)	66 (30)
Serious drug-related AEs	18 (8)	3 (1)
Grade 3-5 AEs	143 (66)	125 (56)
Grade 3-5 drug-related AEs	61 (28)	42 (19)
Death due to AE	7 (3)	4 (2)
Death due to a drug-related AE	0	0
Treatment discontinuation due to toxicity		
Enzalutamide	13 (8)	12 (7)
RA223	7 (3)	

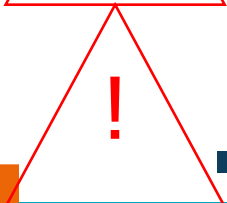
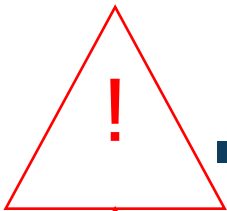
Most common grade 3-5 treatment emergent AE (TEAE)	Enza+Ra223 (N=218)	Enza (N=224)
	N (%)	N (%)
All		
Hypertension	73 (33.5)	77 (34.4)
Fatigue	12 (5.5)	4 (1.8)
Fracture	11 (5.1)	3 (1.3)
Anaemia	10 (4.6)	5 (2.2)
Neutropenia	10 (4.6)	0
Bone Pain	9 (4.1)	11 (4.9)
Weight Decreased	7 (3.2)	1 (0.4)
Spinal Cord Compression	6 (2.8)	8 (3.6)
Treatment related		
Hypertension	25 (11.5)	27 (12.1)
Fatigue	9 (4.1)	3 (1.3)
Anaemia	6 (2.8)	0
Neutropenia	7 (3.2)	0

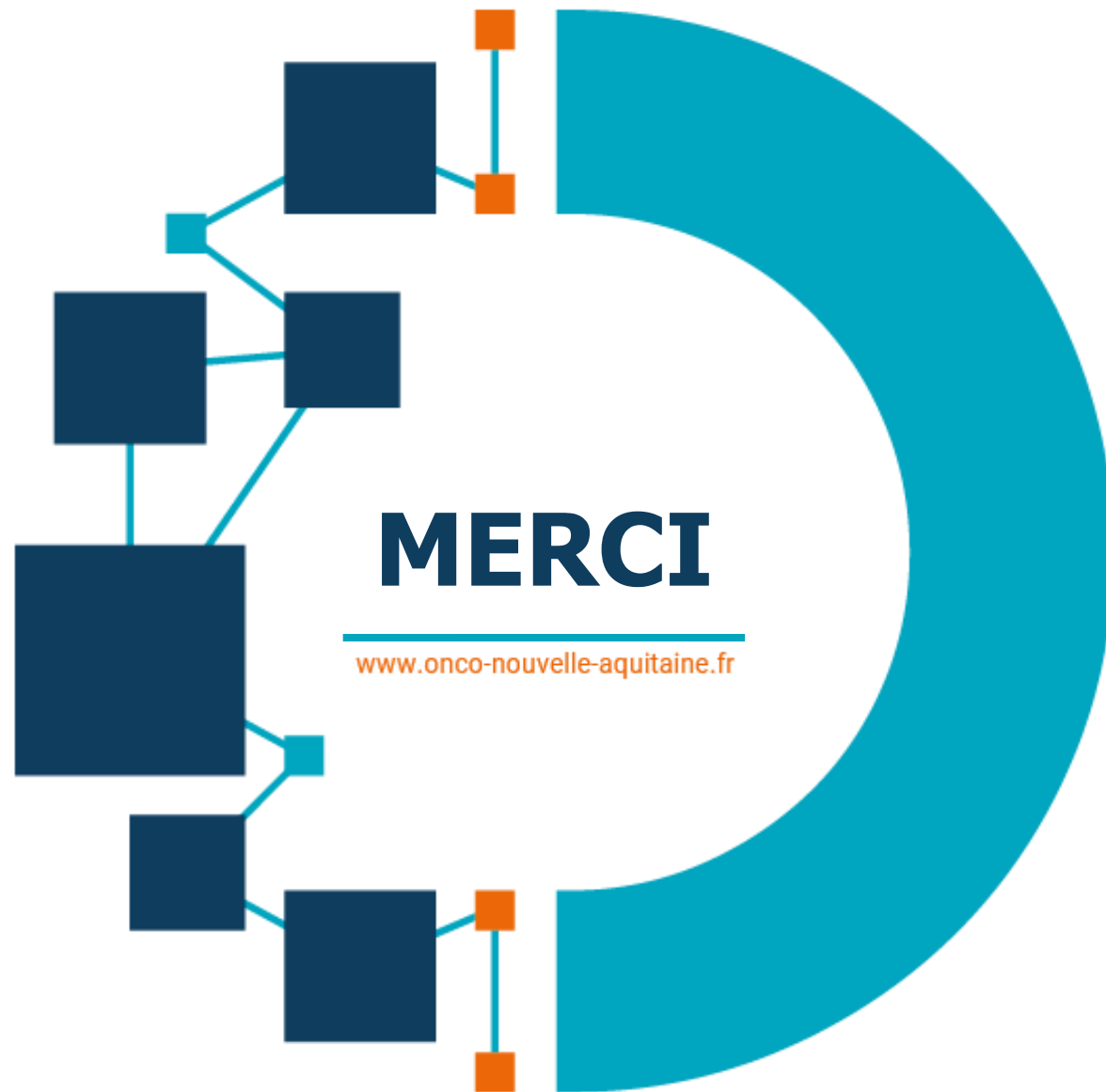


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Conclusion

- Replace à l'honneur le Ra223
- Effet synergique intéressant, peu toxique
- Quelle myélotoxicité pour la suite ?
- Agents anti-resorptif osseux
- Population non exposé aux NHT





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