

ONCOLOGIE UROLOGIQUE DE LA VESSIE : TVIM

06/12/2023

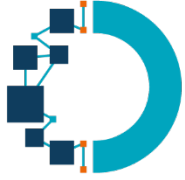
Niort

Mathilde Small

Rétrospectives et Perspectives en Onco-urologie 2023

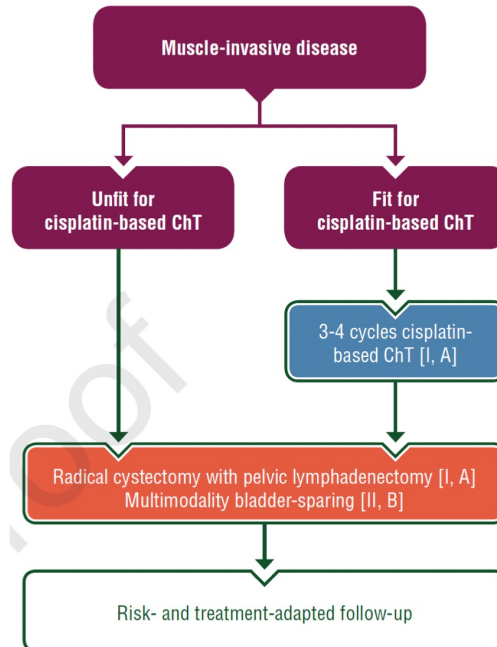


Cancer de vessie : péri-opératoire

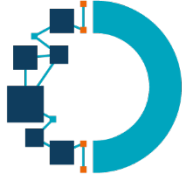


Péri-opératoire

Chimiothérapie recommandation ESMO

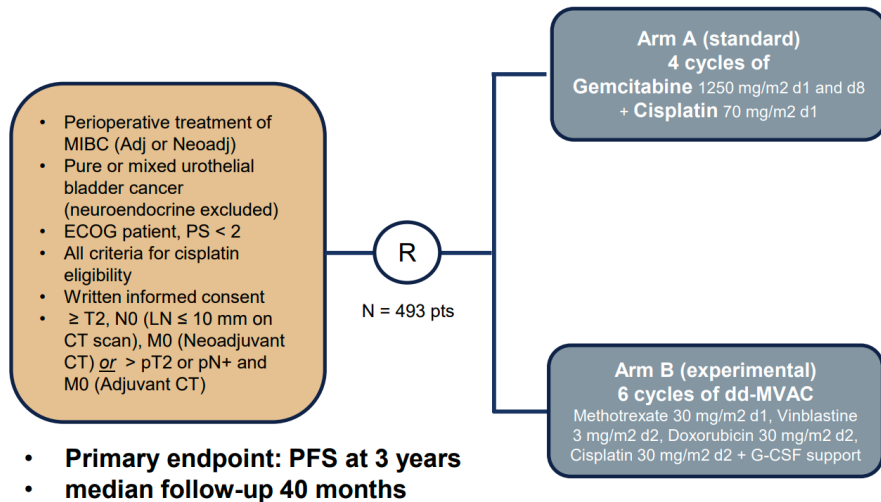


- **40-67%** of patients with pT3-T4a or lymph node-positive disease relapse after RC alone, with a poor 5-year OS (25-30%)
- **Only 12-13%** of MIUC patients undergoing radical cystectomy receive neoadjuvant chemotherapy, despite current guidelines
- **50%** of patients who receive neoadjuvant chemotherapy have residual high-risk disease (\geq pT2) with an associated median survival of 3.4 years
- **50%** of patients are ineligible for cisplatin-based adjuvant chemotherapy and there is no standard of care for these patients



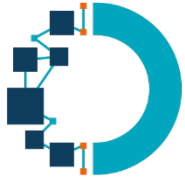
Péri-opératoire

Quel régime de chimiothérapie : mise à jour étude VESPER ASCO 2023



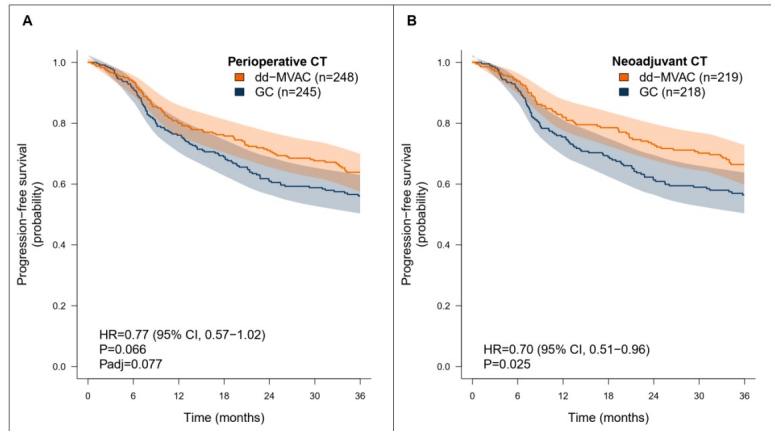
Neoadjuvant Subgroup	GC	DD-MVAC
Treatment Delivery of pre-planned cycles (%)	84	60
Radical Cystectomy performed (%)	90	91
Delay of Surgery (days)	48	51

	GC (N=245)	dd-MVAC (N=248)	P value
Nausea/vomiting	7 (2.9%)	24 (9.7%)	0.003
Diarrhea	2 (0.81%)	3 (1.2%)	-
Asthenia	10 (4.1%)	35 (14%)	<0.001
Cardiovascular	17 (6.9%)	16 (6.5%)	>0.9
Kidney	13 (5.3%)	15 (6.0%)	0.9
Liver	13 (5.3%)	7 (2.8%)	0.2
Neuropathy	0	2 (0.81%)	-
Anemia	19 (7.8%)	54 (22%)	<0.0001
Neutropenia	113 (46%)	97 (39%)	0.14
Febrile neutropenia	6 (2.4%)	16 (6.5%)	0.053
Thrombopenia	41 (17%)	49 (20%)	0.5
Chemotherapy-related deaths	1	3	-



Péri-opératoire

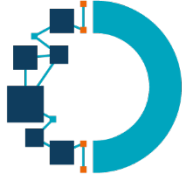
Quel régime de chimiothérapie : étude VESPER



- MVAC dd > GC en PFS
- OS ?

	GC	DD-MVAC
Patients enrolled	N=245	N=248
Peri-operative Chemotherapy		
Adjuvant (%)	11	12
Neoadjuvant (%)	89	88
NAC Subgroup		
Pathological Resonse (%)		
ypT0N0	36	42
ypT1S, Ta or T1 and ypN0	14	21
ypT2N0	13	14
≥ ypT3 or ypN+	37	22
Uncertain staging	1	2
3yr PFS (%)	56	64

Pfister Ch, et al. ESMO 2021; P6520; 2021 Feb;79(2):214-221; ContempClinTrials Commun. 2020; Grande E; invitedDiscussantP6520 ESMO2021



Péri-opératoire

Quel régime de chimiothérapie : étude VESPER

SG 5 ans : 64% MVAC dd vs 56% GC, HR, 0.77; 95% CI, 0.58-1.03; $p=0.078$),

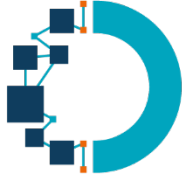
Survie spécifique 72% vs 59%, HR, 0.63; 95% CI, 0.46-0.86; $p=0.004$)

En néoadjuvant : SG 66% vs 57%, HR, 0.71; 95% CI, 0.52-0.97; $p=0.032$)

Survie spécifique (75% vs 60%, HR, 0.56; 95% CI, 0.39-0.80; $P=0.001$)

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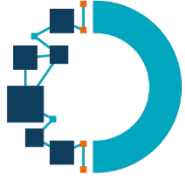
MVAC dd > Cisplatine gemcitabine



Péri-opératoire

Stratégie périopératoire

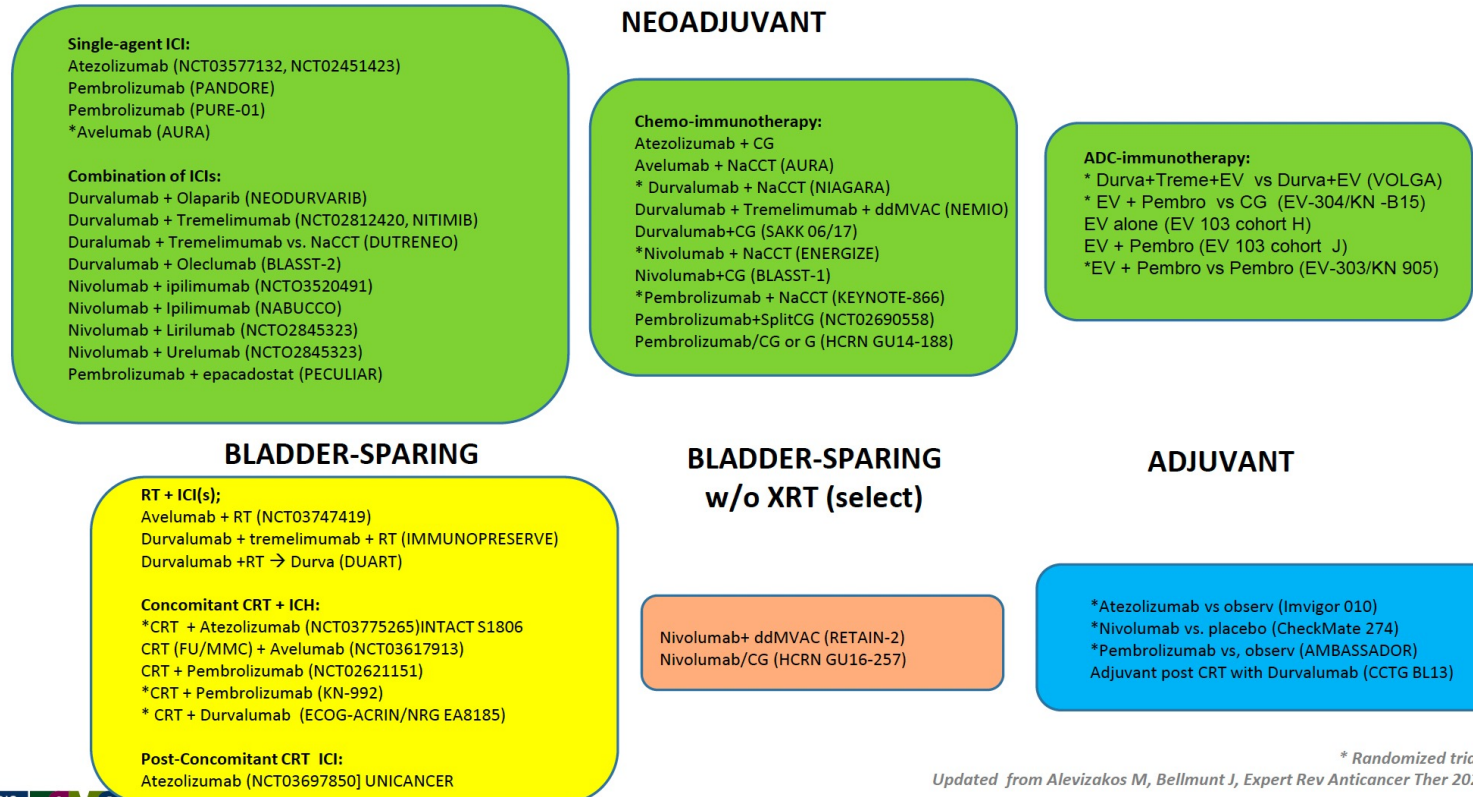
- **MVAC dd > Cisplatine Gemcitabine**
- **Comment améliorer la pCR ?**
- **Et pour les non fit au Cisplatine ?**



Péri-opératoire

Place de l'immunothérapie

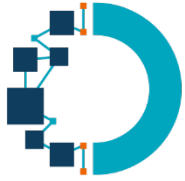
Immunotherapy Clinical Trials for Muscle-Invasive Bladder Cancer



Joaquim Bellmunt

* Randomized trials
Updated from Alevizakos M, Bellmunt J, Expert Rev Anticancer Ther 2022

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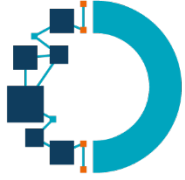
Péri-opératoire

Place de l'immunothérapie : immunothérapie seule en néoadjuvant

	PURE-01	ABACUS	MDACC	NABUCCO	DUTRENEO	BLASST-2
	Pembrolizumab	Atezolizumab	Durvalumab + Tremelimumab	Nivolumab + Ipilimumab	Durvalumab + Tremelimumab	Durvalumab
Sample size (N)	50	95	34	24	61	10
Population by cisplatin eligibility (Galsky criteria)	Eligible and ineligible	Ineligible or reject chemo	Cisplatin Ineligible	Ineligible or reject chemo	Eligible	Ineligible or reject chemo
PDL1+ (N,%)	35/30 (70)	39/95 (41)	NR	15/24 (63)	36/61 (59)	NR
Pathological Complete Responses (pCR) (%)	42	31	41	46	35	10
pCRs in PDL1+ (%)	54	37	NR	60	57	NR
pCRs in PDL1- (%)	13	24	NR	22	14	NR

- Pour rappel VESPER : PCR (ypT0N0)
 - MVAC dd :42 %
 - GC : 36 %

Necchi A, et al. JClinOncol2018, PowlesT, et al. NatMed2019, Gao J, et al. ASCO 2019, van derHeijdenMS, et al. ESMO 2019, WeiXX, et al. ASCO GU 2020, GuptaS, et al. ASCO GU 2020, Grande E, et al. ASCO 2020, HoimesCJ, et al. ASCO 2020, KaimakliotisHZ, et al. ASCO 2020

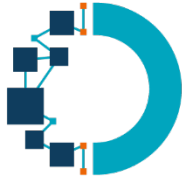


Péri-opératoire

Chimio-immunothérapie

Chemo-immunotherapy in patients with MIBCStudy	UNC LCCC1520	HCRN 14-188	BLASST-1	MSKCC	AURA	SAKK 06/17
# Patients	39	43	41	39	58	53
Immunotherapy	Pembrolizumab	Pembrolizumab	Nivolumab	Atezolizumab	Avelumab	Durvalumab
Chemotherapy	Gem/cis	Gem/cis	Gem/cis	Gem/cis	Gem/Cis LIMMA C*	Gem/cis
pCR(pT0)	36%	44%	34%	38%	38%	34%
pRR(<pT2)	56%	61%	66%	69%	61%	60%

Rose et al, JCO 2021.
 Hoimes et al, ESMO 2018, abstr5681.
 Gupta et al, JCO 38,6_supp (Feb 2020).
 Cathomas et al, ASCO 2022, abstr4515.
 Funtet al, JCO, 2022.

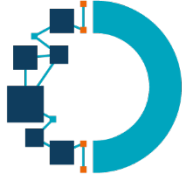


Péri-opératoire

Chimio-immunothérapie : étude phase 3 en cours

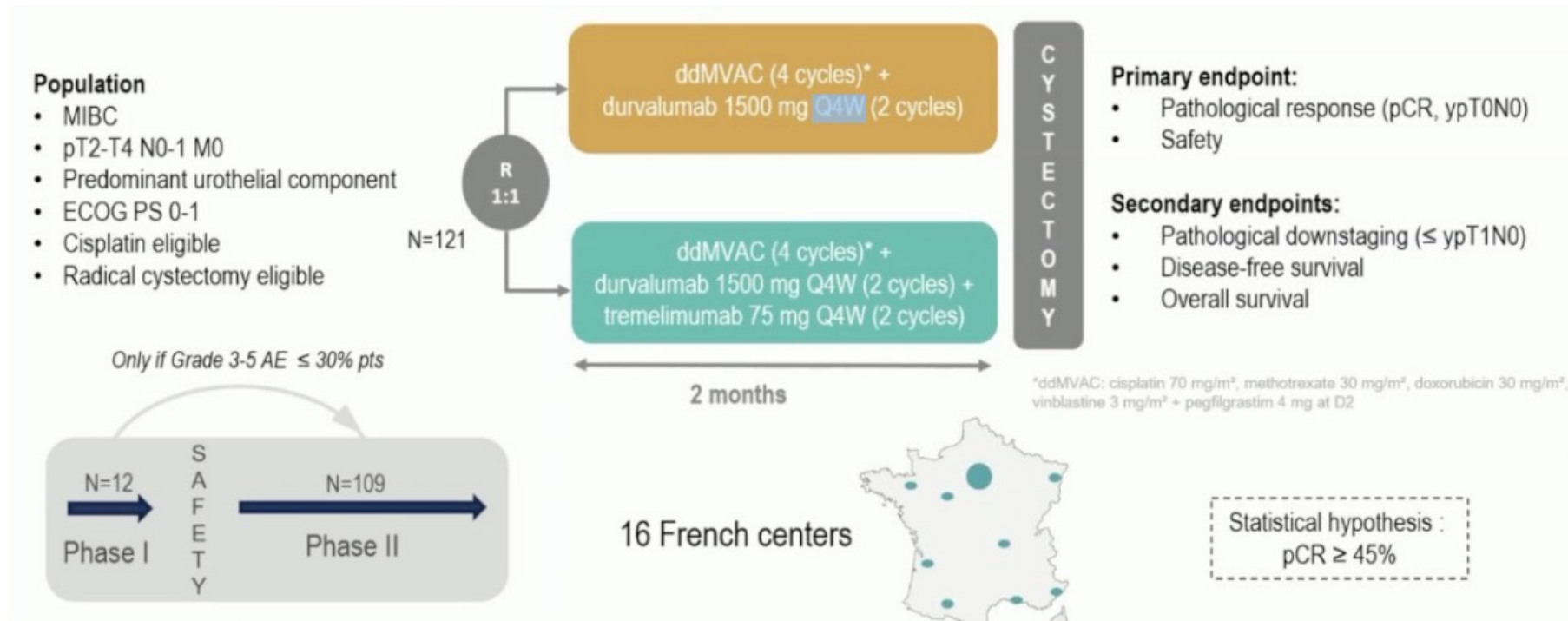
Trial	n	Immunotherapy	Chemotherapy	Primary Outcome	Adjuvant?
NIAGARA	1050	Durvalumab	Gemcitabine + Cisplatin	Co: pCR + EFS	Yes – durva arm only
Keynote-866	790	Pembrolizumab	Gemcitabine + Cisplatin	Co: pCR + EFS	Yes – pembro arm only
ENERGIZE	976	Nivolumab or Nivolumab + IDO1-inhibitor linrodostat	Gemcitabine + Cisplatin	Co: pCR + EFS	Yes – nivo arms only

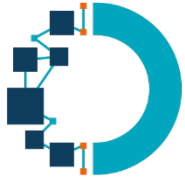
Matthew Milowsky, MD



Péri-opératoire

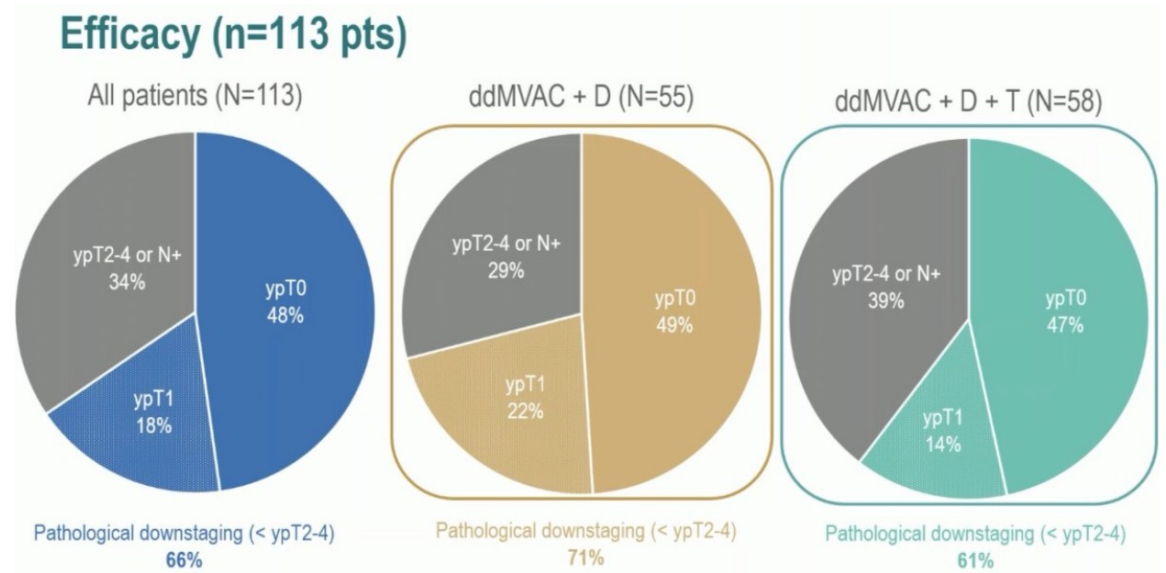
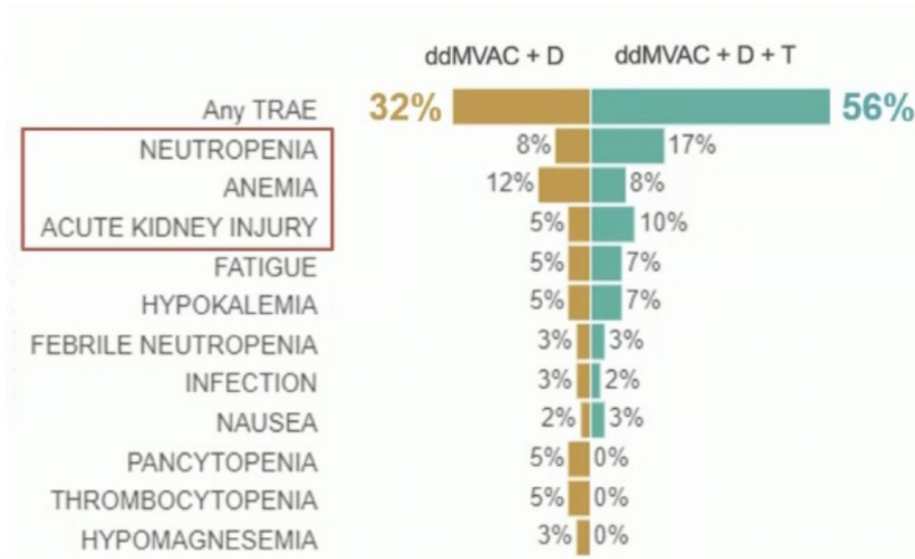
Chimio-immunothérapie : étude phase I/II NEMIO ESMO 2023

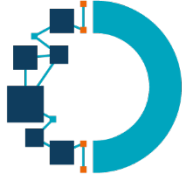




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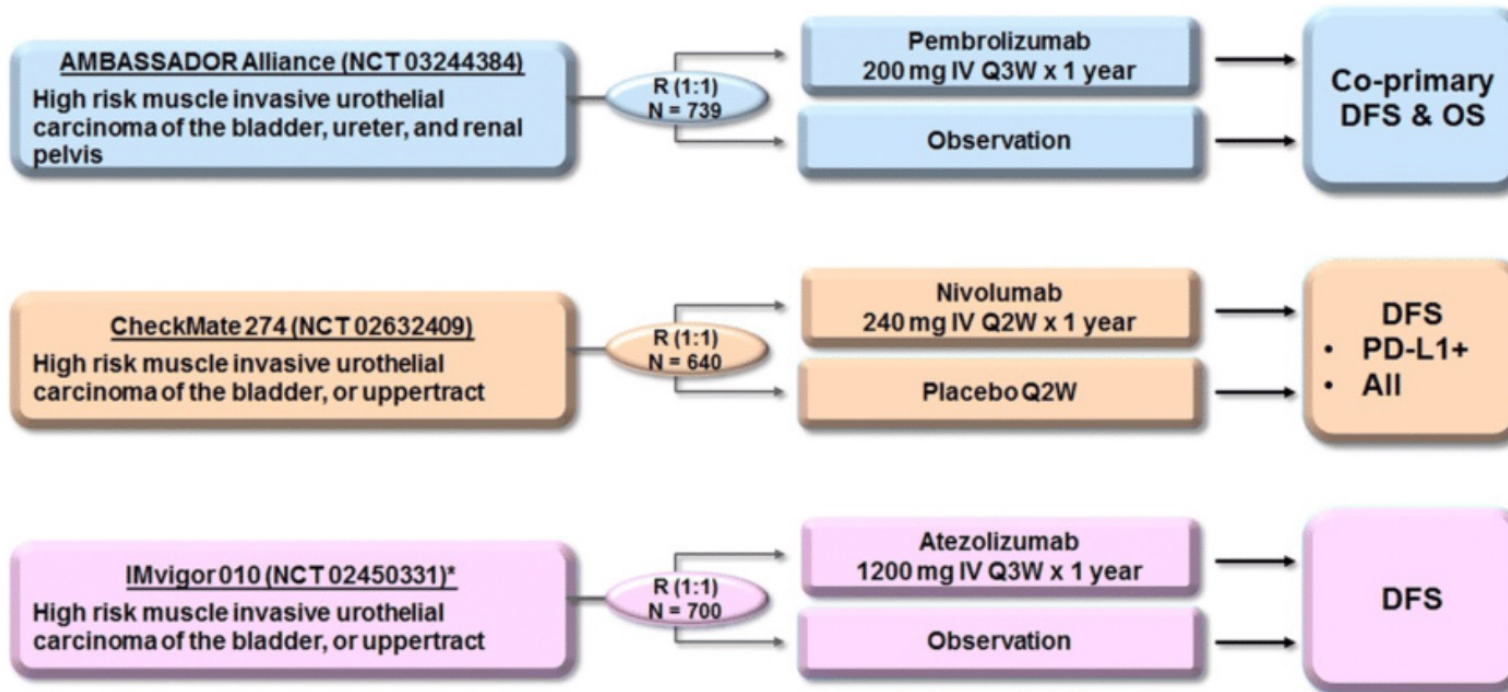
Chimio-immunothérapie : étude phase I/II NEMIO

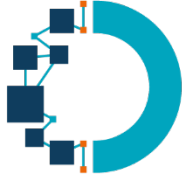




Péri-opératoire

Immunothérapie adjuvante :



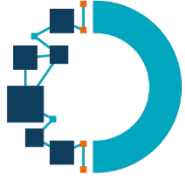


Péri-opératoire

Immunothérapie adjuvante :



En cours...



Péri-opératoire

Immunothérapie adjuvante : mise à jour Checkmate 274 ASCO 2023

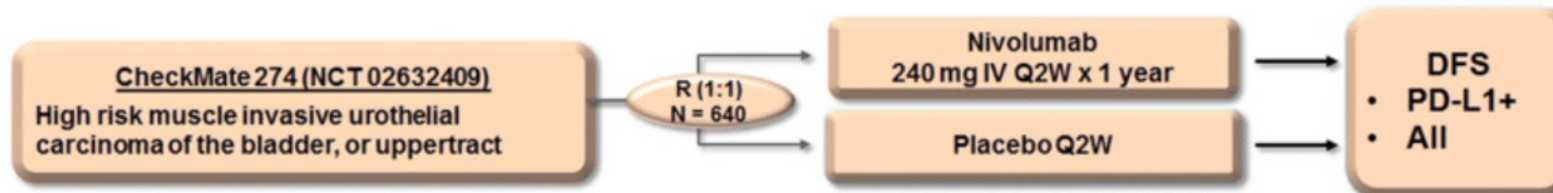
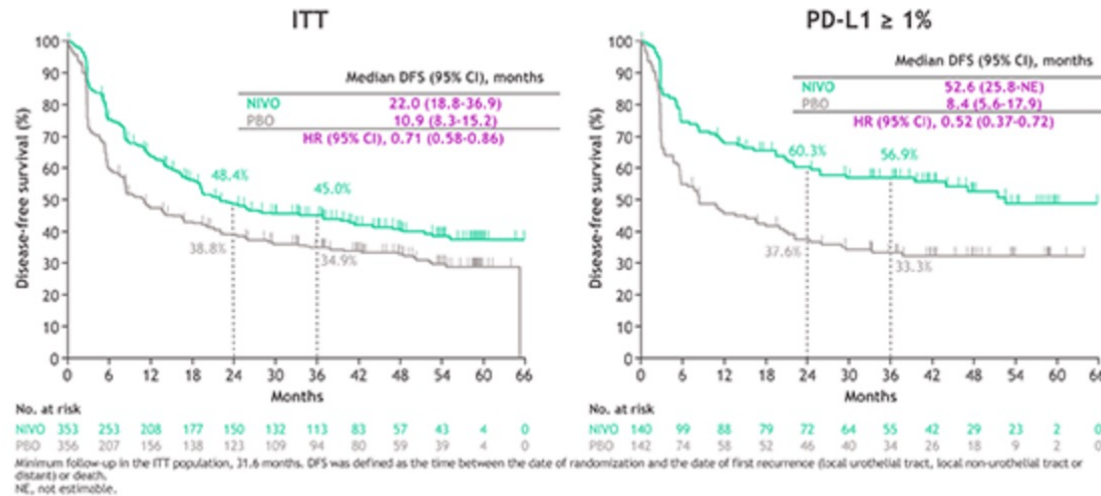
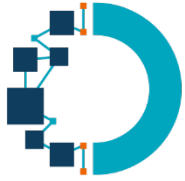


Figure 1. Disease-Free Survival (Primary Endpoint)



Abbreviations: DFS, disease-free survival; ITT, intention to treat; NE, not estimable; NIVO, nivolumab; PBO, placebo. [View larger](#)

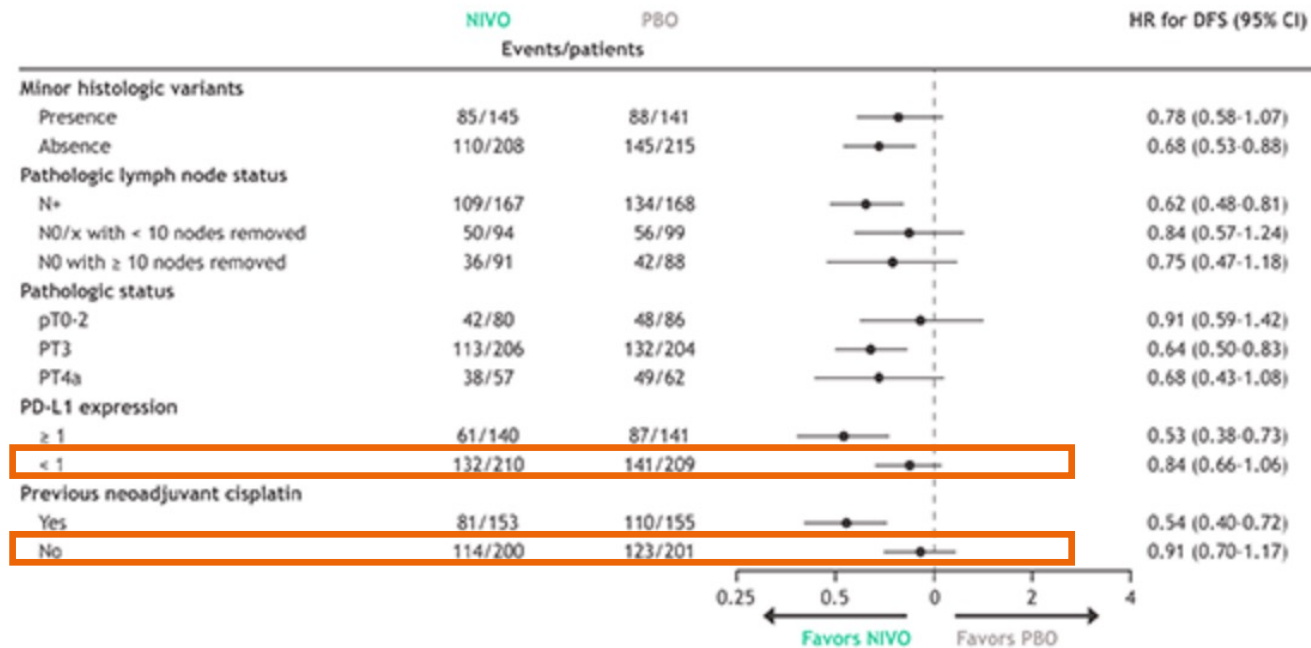
- Confirmation bénéfique DFS : 20.8 mois vs 10.8 en ITT group (HR 0.70, 98.22% CI [0.55, 0.90]; $P < .001$)
- DFS non atteinte dans le groupe PDL1 + mais DFS à 6 mois à 74.5% vs 55.7% (HR 0.55, 98.72% CI [0.35, 0.85]; $P < .001$).



Péri-opératoire

Immunothérapie adjuvante : mise à jour Checkmate 274

Figure 3. DFS by Subgroup in the ITT Population: Histologic and Pathologic Data, PD-L1 Expression, and Cisplatin Status

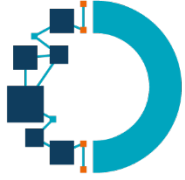


Données OS en attente ++ surtout pour PDL1 – et naïf de chimiothérapie néoadjuvante

ACCES PRECOCE :

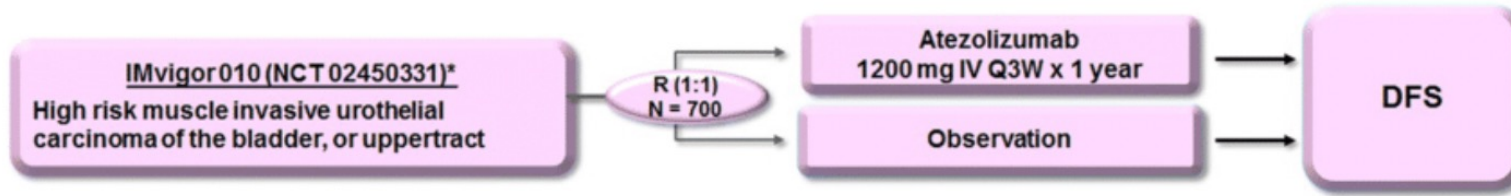
« En monothérapie dans le traitement adjuvant des patients adultes atteints de carcinome urothélial infiltrant le muscle (CUIM) à haut risque de récurrence après exérèse complète, dont les cellules tumorales expriment PD-L1 au seuil $\geq 1\%$:

- Patient(e) ayant reçu une chimiothérapie néoadjuvante : ypT2-ypT4a ou ypN+
- - Patient(e) n'ayant pas reçu de chimiothérapie néoadjuvante : pT3-pT4a ou pN+ et non éligible/ou ayant refusé une chimiothérapie adjuvante à base de cisplatine



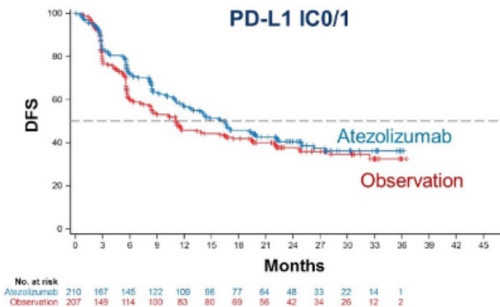
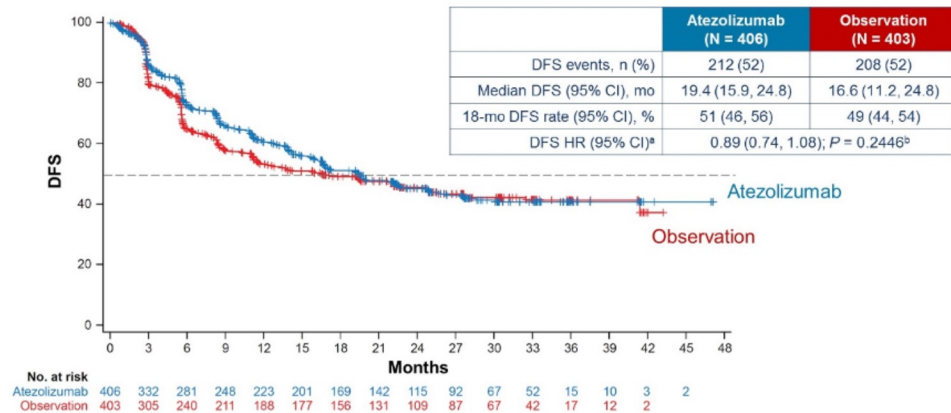
Péri-opératoire

Immunothérapie adjuvante :

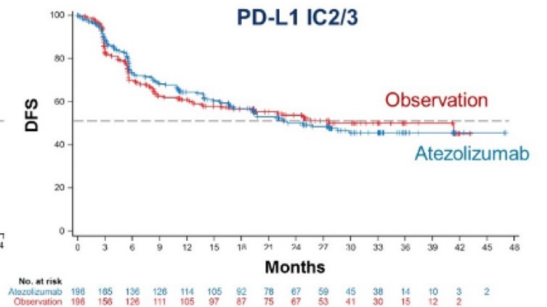


Median DFS : 19.4 months vs 16.6 months with observation, HR 0.89, P=0.2446.

DFS in ITT Population

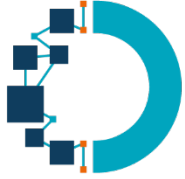


	Atezolizumab (n = 210)	Observation (n = 207)
DFS events, n (%)	118 (56)	120 (58)



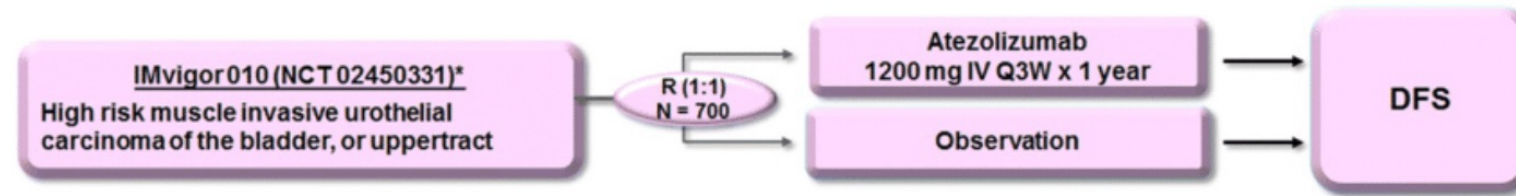
	Atezolizumab (n = 196)	Observation (n = 196)
DFS events, n (%)	94 (48)	88 (45)

ASCO 2021

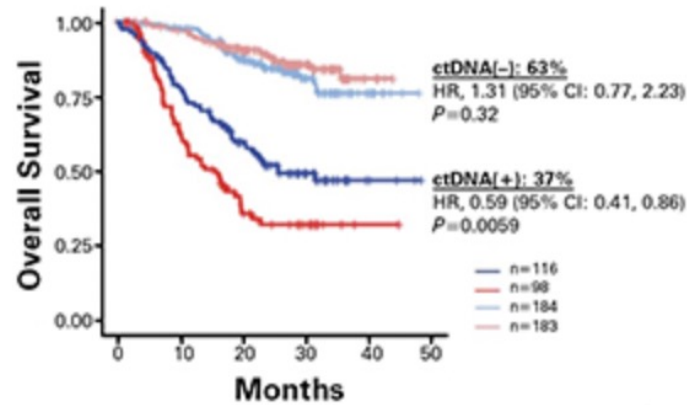
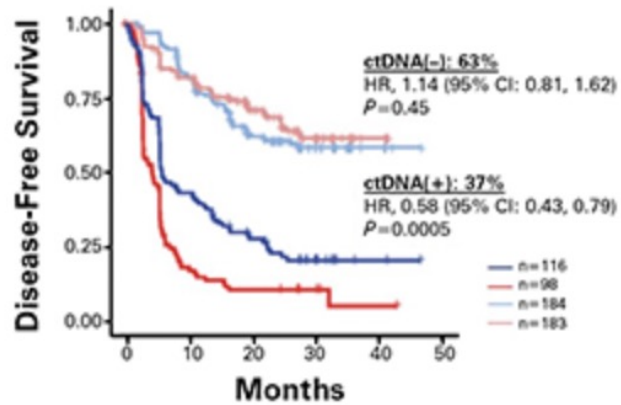


Péri-opératoire

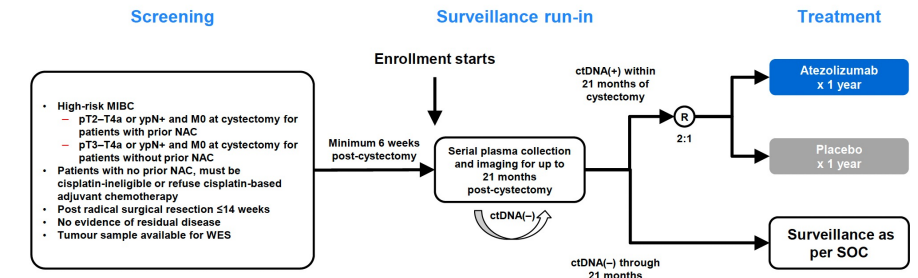
Immunothérapie adjuvante :



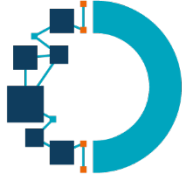
Intérêt de l'ADN circulant ?
En cours...



IMvigor011 study design

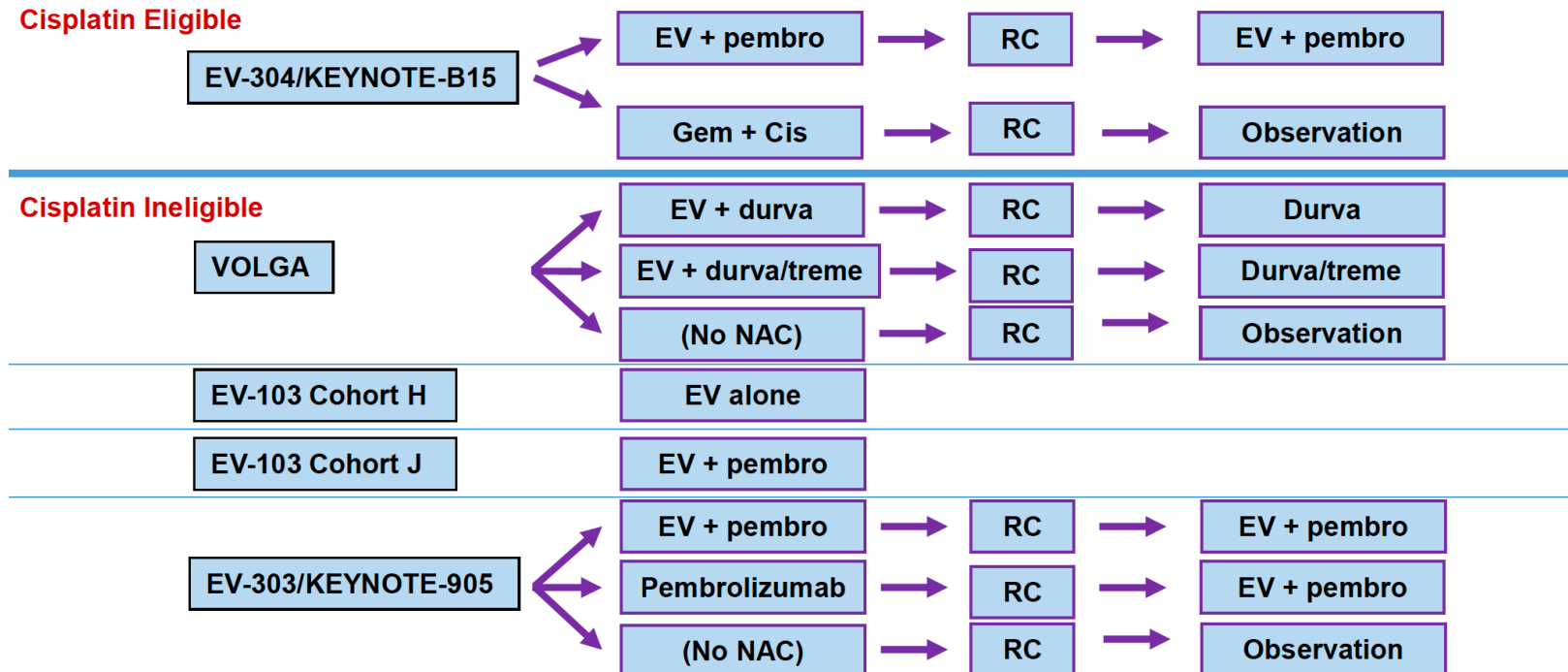


ASCO 2021

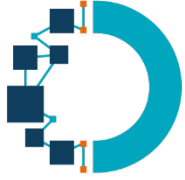


Péri-opératoire

ADC +/- IO : enfortumab vedotin ++



Adapté de M. Milowsky, ASCO 2022



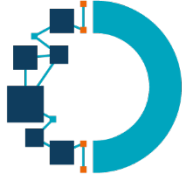
Préservation de vessie

Recommandations AFU 2022-2024

Tableau de recommandation 3

Recommandations : Traitement des TVIM localisées	Grade
Faire une cystectomie, précédée d'une chimiothérapie néoadjuvante à base de cisplatine (traitement curatif de référence)	Fort
Faire la cystectomie par voie ouverte ou par voie coelioscopique simple ou robot-assistée	Fort
Faire un curage ganglionnaire pelvien étendu quelle que soit la voie d'abord au cours de la cystectomie	Fort
Favoriser la mise en place de protocoles de Récupération Améliorée Après Chirurgie	Fort
Demander une évaluation oncogériatrique en cas de TVIM chez un sujet de plus de 75 ans et/ou si score G8 \leq 14.	Fort
Faire une évaluation de la fonction sexuelle chez l'homme et la femme et proposer une technique de préservation sexuelle et génitale chez les patients bien sélectionnés	Faible
Proposer un traitement conservateur trimodal associant RTUV complète, radiothérapie et chimiothérapie radio-sensibilisante en cas de tumeur de stade T2-T3, sans Cis, ni hydronéphrose.	Moyen

- Traitement conservateur trimodal en option
- Comment améliorer les stratégies de conservation d'organe ?



Préservation de vessie

RT +/- IO +/- CT

RT + ICI(s);

Avelumab + RT (NCT03747419)

Durvalumab + tremelimumab + RT (IMMUNOPRESERVE)

Durvalumab + RT → Durva (DUART)

Concomitant CRT + ICI:

*CRT + Atezolizumab (NCT03775265) INTACT S1806

CRT (FU/MMC) + Avelumab (NCT03617913)

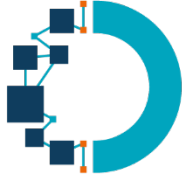
CRT + Pembrolizumab (NCT02621151)

*CRT + Pembrolizumab (KN-992)

* CRT + Durvalumab (ECOG-ACRIN/NRG EA8185)

Post-Concomitant CRT ICI:

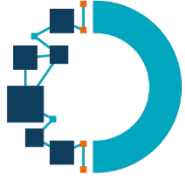
Atezolizumab (NCT03697850) UNICANCER



Préservation de vessie

Traitement systémique seul

Nivolumab+ ddMVAC (RETAIN-2)
Nivolumab/CG (HCRN GU16-257)

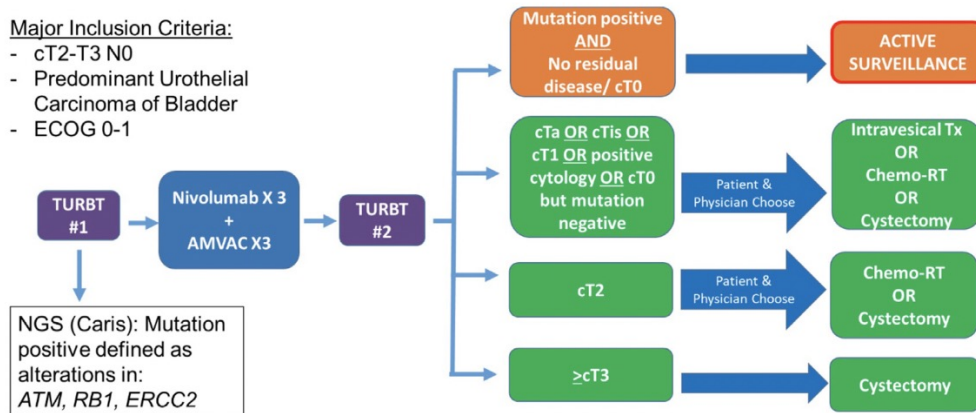


Préservation de vessie

Traitement systémique seul

RETAIN-2

- Major Inclusion Criteria:**
- cT2-T3 N0
 - Predominant Urothelial Carcinoma of Bladder
 - ECOG 0-1



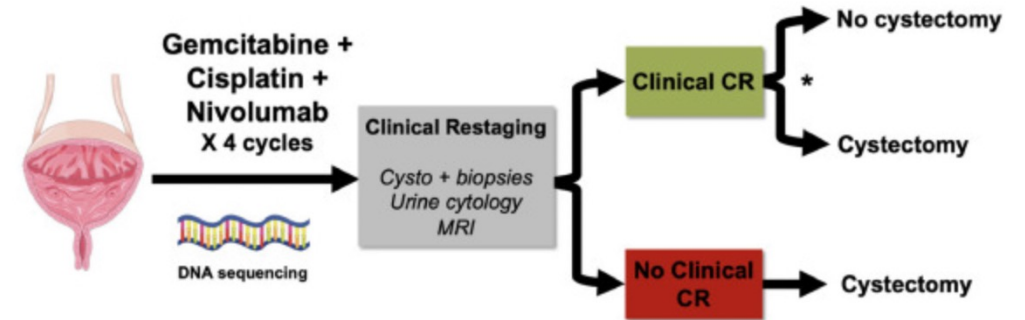
NGS (Caris): Mutation positive defined as alterations in: *ATM, RB1, ERCC2*

Metastasis-free survival (MFS) is defined as the absence of a recurrence of urothelial carcinoma that is >cN1 (more than one clinically suspicious pelvic lymph node) or surgically unresectable local recurrence (e.g., >cT4a) or M1 disease).

Primary endpt:
2-yr Metastasis-free survival
Follow-up: 5 years

Abbreviation: TURBT= transurethral resection of a bladder tumor, AMVAC=accelerated MVAC, NGS= next generation sequencing, chemo-RT= chemoradiation

HCRN GU16-257



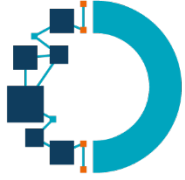
- Determine association between DDR panel and "benefit" in cCR patients

* Treatment based on patient choice

Abbreviation: DDR= DNA damage repair, CR= complete response, cCR= clinical complete response, MRI= magnetic resonance imaging




Cancer de vessie avancé



Cancer de vessie avancé

Standard of Care Management of Advanced/Metastatic Urothelial Carcinoma (pre-ESMO 2023)



First-Line

Cisplatin-eligible

- Cisplatin + gemcitabine²
- Dose-dense methotrexate + vinblastine + doxorubicin + cisplatin (ddMVAC)³

Cisplatin-ineligible¹

- Carboplatin + gemcitabine⁴
- **Enfortumab vedotin + Pembrolizumab¹¹ (accelerated approval)**

Platinum-ineligible

Pembrolizumab

Maintenance

For patients who achieve a response (CR/PR/SD) to platinum-based chemotherapy


- Avelumab⁵
- Pembrolizumab⁶

Beyond-Second-Line

- Enfortumab Vedotin⁸
- Erdafitinib⁹ (if tumor +FGFR 2/3 genetic alterations)
- Sacituzumab govitecan¹⁰
- Clinical trial
- Paclitaxel, docetaxel, or vinflunine

or Second-Line

- Pembrolizumab⁷
- Nivolumab
- Avelumab



1st-Line
Platinum-chemo

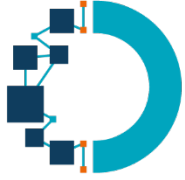
2nd-Line
Chemotherapy

3rd-Line
Enfortumab Vedotin

MADRID 2023 **ESMO** congress

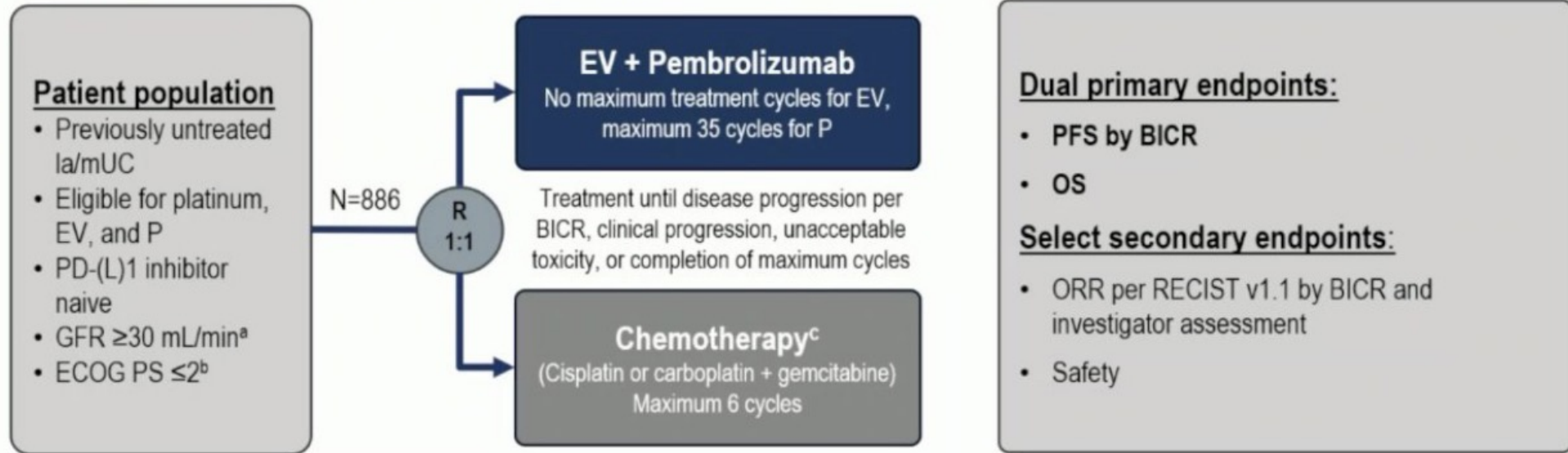
Presented by Andrea B. Apolo, MD
@apolo_andrea

1. Galsky, et al. JCO 2011 Jun 10;29(17):2432-8
2. von der Maase, et al. JCO 2000 Sep 18;(17):3068-77
3. Sternberg, et al. JCO 2001 May 15;19(10):268-46
4. De Santis, et al. JCO 2012 Jan 10;30(2):191-9
5. Powles, et al. N Engl J Med 2020 Sep 24;383(13):1218-1230
6. Galsky et al., JCO. 2020 Jun 1;38(16):1797-1806
7. Bellmunt et al., N Engl J Med 2017, 378:1015-1026
8. Powles T et al., N Engl J Med 2021;384:1125-35
9. Loriot Y, et al. N Engl J Med. 2019;381:338-348;
10. Tagawa CT et al., JCO 2021 Aug 1;39(22):2474-2485
11. O'Donnell PH et al., JCO. 2023 Sep 1;41(25):4107-4117

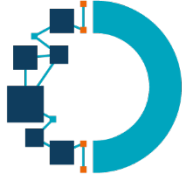


Première ligne métastatique

EV-302/KEYNOTE-A39 : EV + pembrolizumab vs chimiothérapie par platine ESMO 2023

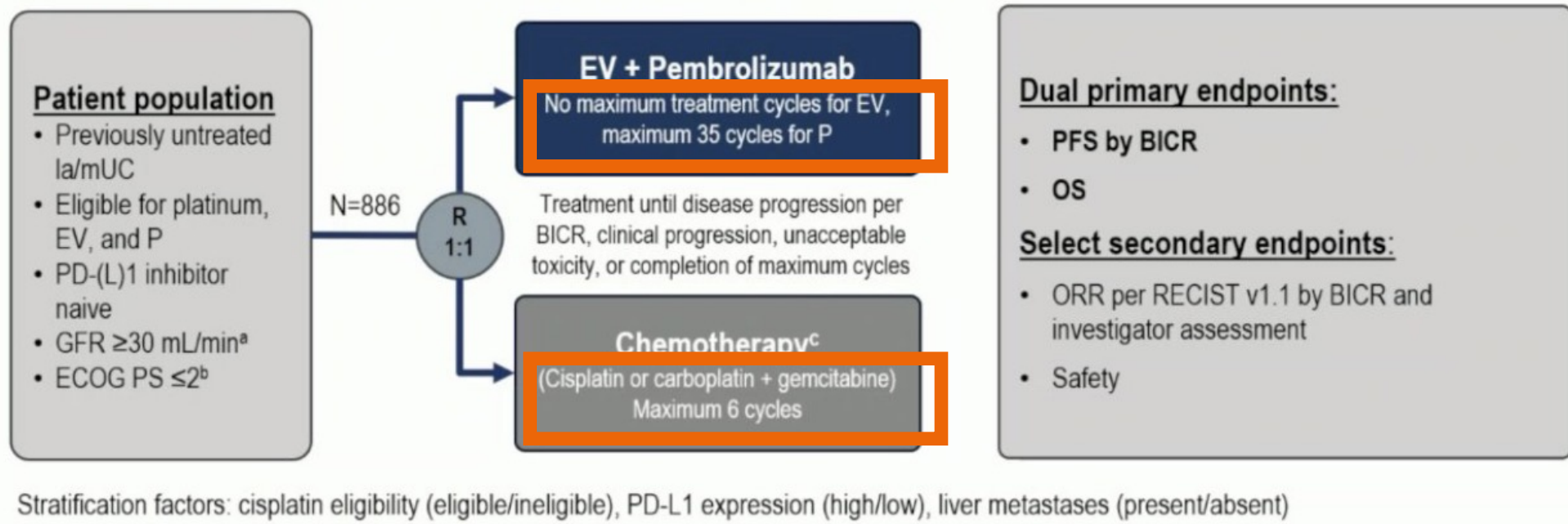


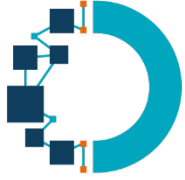
Stratification factors: cisplatin eligibility (eligible/ineligible), PD-L1 expression (high/low), liver metastases (present/absent)



Première ligne métastatique

EV-302/KEYNOTE-A39 : EV + pembrolizumab vs chimiothérapie par platine ESMO 2023



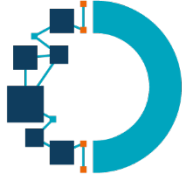


Première ligne métastatique

EV-302/KEYNOTE-A39 : EV + pembrolizumab vs chimiothérapie par platine ESMO 2023

	EV+P (N=442)	Chemotherapy (N=444)		EV+P (N=442)	Chemotherapy (N=444)
Male sex, n (%)	344 (77.8)	336 (75.7)	Cisplatin eligible^a, n (%)	240 (54.3)	242 (54.5)
Age (yrs), median (range)	69.0 (37,87)	69.0 (22,91)	Metastatic category, n (%)		
Race, n (%)			Visceral metastases	318 (71.9)	318 (71.6)
White	308 (69.7)	290 (65.3)	Bone	81 (18.3)	102 (23.0)
Asian	99 (22.4)	92 (20.7)	Liver	100 (22.6)	99 (22.3)
Geographic location, n (%)			Lung	170 (38.5)	157 (35.4)
North America	103 (23.3)	85 (19.1)	Lymph node only disease	103 (23.3)	104 (23.4)
Europe	172 (38.9)	197 (44.4)	PD-L1 expression^b, n/N (%)		
Rest of World	167 (37.8)	162 (36.5)	High (CPS ≥ 10)	254/438 (58.0)	254/439 (57.9)
ECOG PS, n (%)			Low (CPS < 10)	184/438 (42.0)	185/439 (42.1)
0	223 (50.5)	215 (48.4)			
1	204 (46.2)	216 (48.6)			
2	15 (3.4)	11 (2.5)			
Primary tumor location, n (%)					
Upper tract	135 (30.5)	104 (23.4)			
Lower tract	305 (69.0)	339 (76.4)			

^aCPS, combined positive score

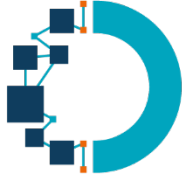


Première ligne métastatique

EV-302/KEYNOTE-A39 : EV + pembrolizumab vs chimiothérapie par platine ESMO 2023

	EV+P (N=442)	Chemotherapy (N=444)		EV+P (N=438)	Chemotherapy (N=439)
Male sex, n (%)	344 (77.8)	336 (75.7)	Cisplatin eligible^a, n (%)	240 (54.3)	242 (54.5)
Age (yrs), median (range)	69.0 (37,87)	69.0 (22,91)	Metastatic category, n (%)		
Race, n (%)			Visceral metastases	318 (71.9)	318 (71.6)
White	308 (69.7)	290 (65.3)	Bone	81 (18.3)	102 (23.0)
Asian	99 (22.4)	92 (20.7)	Liver	100 (22.6)	99 (22.3)
Geographic location, n (%)			Lung	170 (38.5)	157 (35.4)
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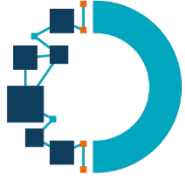
CPS, combined positive score



Première ligne métastatique

EV-302/KEYNOTE-A39 : EV + pembrolizumab vs chimiothérapie par platine ESMO 2023

	EV+P (N=442)	Chemotherapy (N=444)
Patients randomized, n (%)	442 (100)	444 (100)
Patients who received any amount of study drug, n (%)	440 (99.5)	433 (97.5)
Patients on treatment	144 (32.6)	0
Patients on study, n (%)	296 (67.0)	203 (45.7)
Primary reason for study treatment discontinuation ^a , n (%)		
Completed treatment	8 (1.8) ^b	244 (55.0)
Progressive disease	153 (34.6)	73 (16.4)
Adverse event	97 (21.9)	62 (14.0)
Physician/Patient decision	31 (7.0)	52 (11.7)
Other ^c	7 (1.6)	2 (0.5)



Première ligne métastatique

EV-302/KEYNOTE-A39 : EV + pembrolizumab vs chimiothérapie par platine ESMO 2023

	EV+P (N=442)	Chemotherapy (N=444)
Patients randomized, n (%)	442 (100)	444 (100)
Patients who received any amount of study drug, n (%)	440 (99.5)	433 (97.5)
Patients on treatment	144 (32.6)	0
Patients on study, n (%)	296 (67.0)	203 (45.7)
Primary reason for study treatment discontinuation ^a , n (%)		
Completed treatment	8 (1.8) ^b	244 (55.0)
Progressive disease	153 (34.6)	73 (16.4)
Adverse event	97 (21.9)	62 (14.0)
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Other ^c	7 (1.6)	2 (0.5)

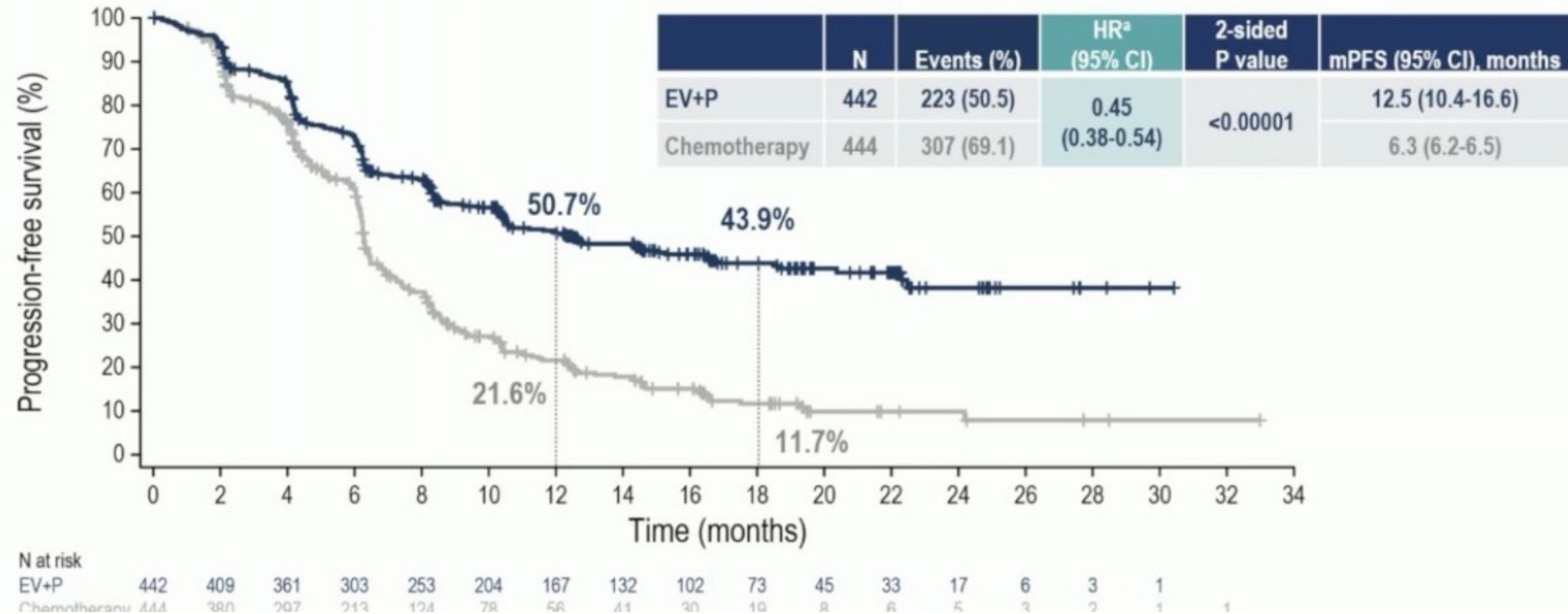


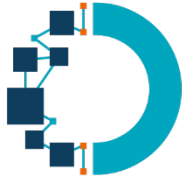
Première ligne métastatique

EV-302/KEYNOTE-A39 : EV + pembrolizumab vs chimiothérapie par platine ESMO 2023

Progression-Free Survival per BICR

Risk of progression or death was reduced by 55% in patients who received EV+P



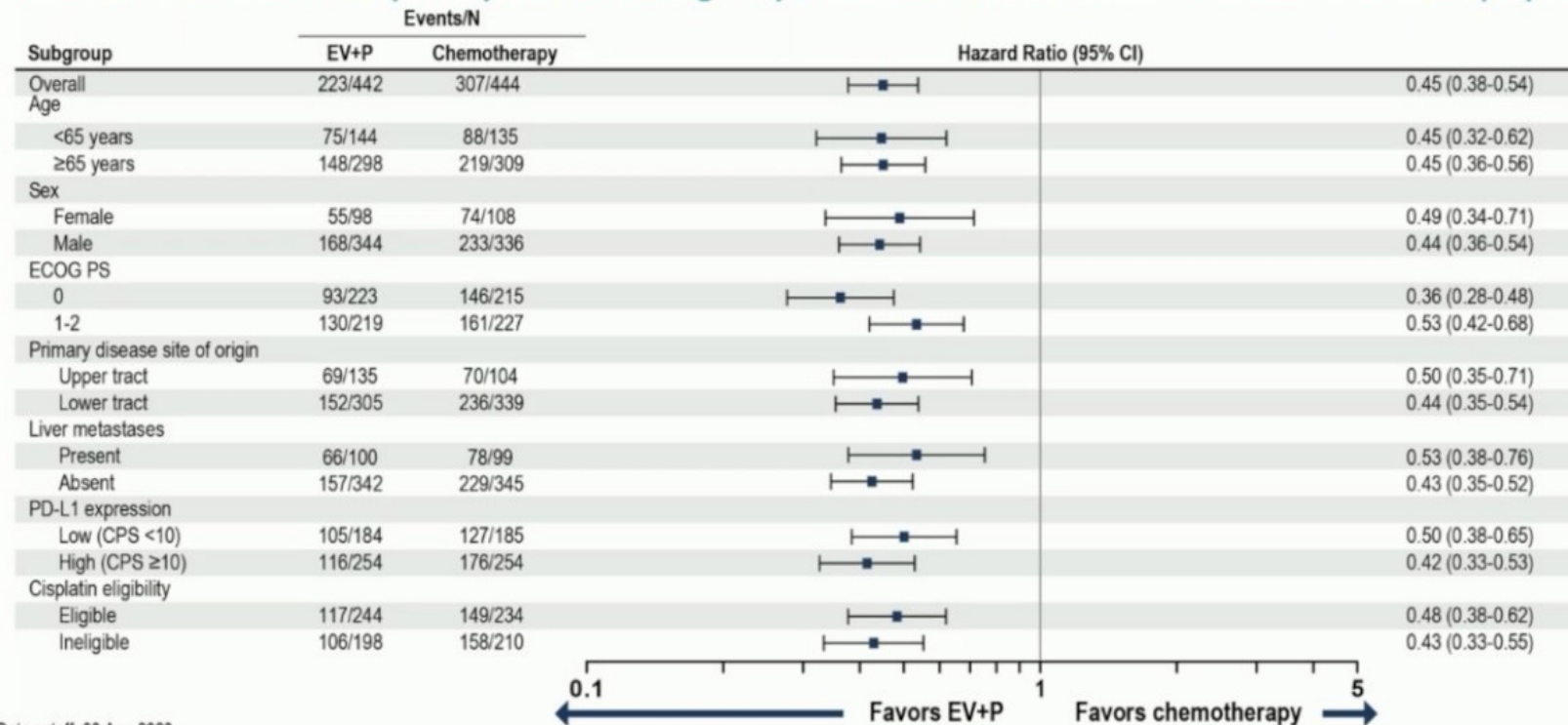


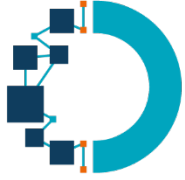
Première ligne métastatique

EV-302/KEYNOTE-A39 : EV + pembrolizumab vs chimiothérapie par platine ESMO 2023

Subgroup Analysis of PFS per BICR

PFS benefit in select pre-specified subgroups was consistent with results in overall population



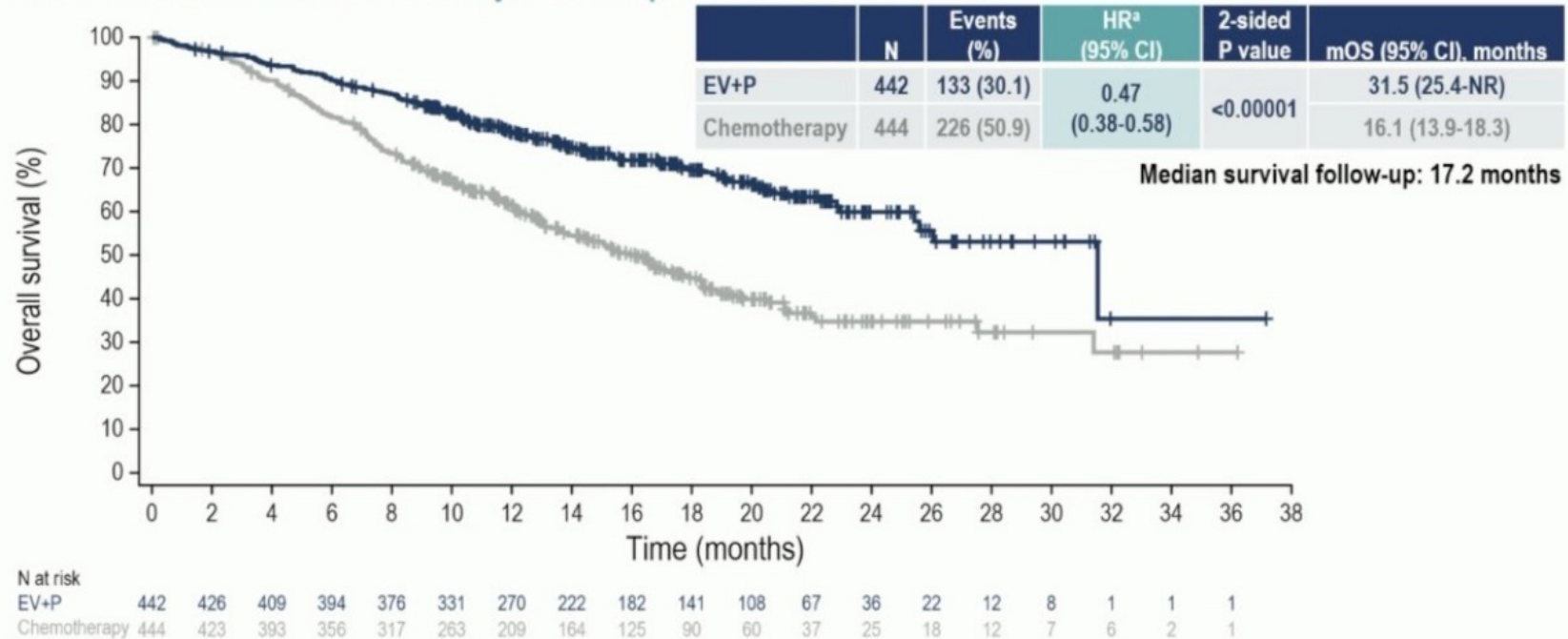


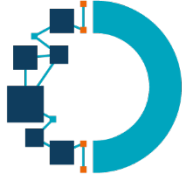
Première ligne métastatique

EV-302/KEYNOTE-A39 : EV + pembrolizumab vs chimiothérapie par platine ESMO 2023

Overall Survival

Risk of death was reduced by 53% in patients who received EV+P



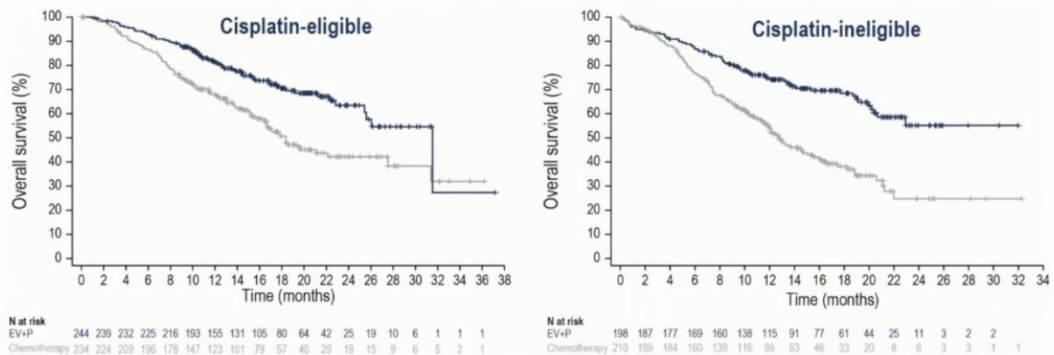


Première ligne métastatique

EV-302/KEYNOTE-A39 : EV + pembrolizumab vs chimiothérapie par platine ESMO 2023

OS Subgroup Analysis: Cisplatin Eligibility

OS benefit was consistent with overall population regardless of cisplatin eligibility

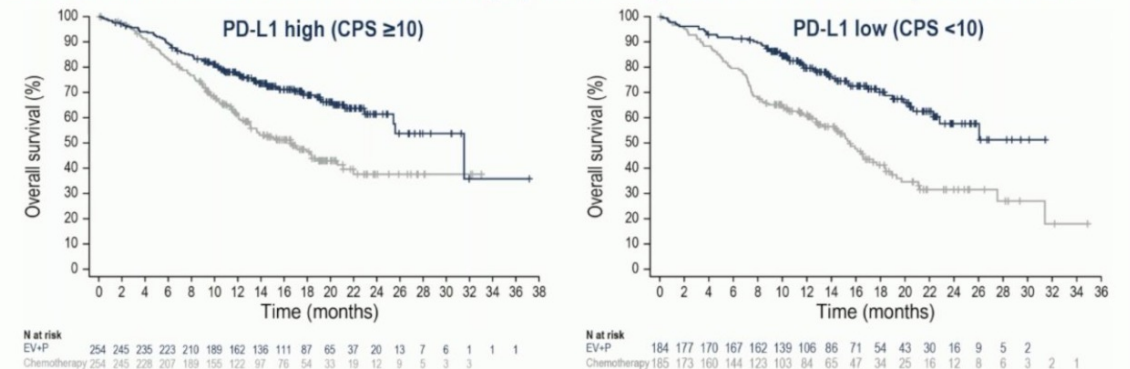


	Events, n	HR (95% CI)	mOS (95% CI), months
EV+P	69	0.53 (0.39-0.72)	31.5 (25.4-NR)
Chemotherapy	106		18.4 (16.4-27.5)

	Events, n	HR (95% CI)	mOS (95% CI), months
EV+P	64	0.43 (0.31-0.59)	NR (20.7-NR)
Chemotherapy	120		12.7 (11.4-15.5)

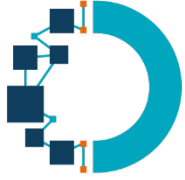
OS Subgroup Analysis: PD-L1 Expression

OS benefit was consistent with overall population regardless of PD-L1 expression status



	Events, n	HR (95% CI)	mOS (95% CI), months
EV+P	79	0.49 (0.37-0.66)	31.5 (25.4-NR)
Chemotherapy	125		16.6 (13.1-20.6)

	Events, n	HR (95% CI)	mOS (95% CI), months
EV+P	53	0.44 (0.31-0.61)	NR (22.3-NR)
Chemotherapy	99		15.5 (12.9-17.7)

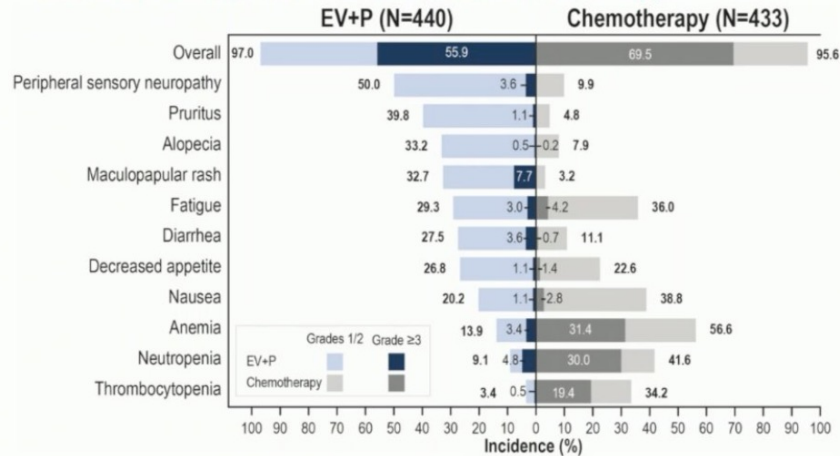


Première ligne métastatique

EV-302/KEYNOTE-A39 : EV + pembrolizumab vs chimiothérapie par platine ESMO 2023

Treatment-Related Adverse Events

Grade ≥3 events were 56% in EV+P and 70% in chemotherapy

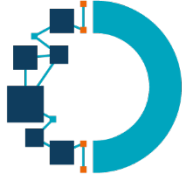


- Serious TRAEs:
- 122 (27.7%) EV+P
 - 85 (19.6%) chemotherapy
- TRAEs leading to death (per investigator):
- EV+P: 4 (0.9%)
- Asthenia
 - Diarrhea
 - Immune-mediated lung disease
 - Multiple organ dysfunction syndrome
- Chemotherapy: 4 (0.9%)
- Febrile neutropenia
 - Myocardial infarction
 - Neutropenic sepsis
 - Sepsis

EV Treatment-Related Adverse Events of Special Interest*

Majority of treatment-related AESIs were low grade

	EV+P (N=440) n (%)		Chemotherapy (N=433) n (%)	
	Any grade	Grade ≥3	Any grade	Grade ≥3
Skin reactions	294 (66.8)	68 (15.5)	60 (13.9)	1 (0.2)
Peripheral neuropathy	278 (63.2)	30 (6.8)	53 (12.2)	0 (0.0)
Sensory events	260 (59.1)	19 (4.3)	51 (11.8)	0 (0.0)
Motor events	44 (10.0)	12 (2.7)	5 (1.2)	0 (0.0)
Ocular disorders	94 (21.4)	0 (0.0)	12 (2.8)	0 (0.0)
Dry eye	82 (18.6)	0 (0.0)	8 (1.8)	0 (0.0)
Hyperglycemia	57 (13.0)	27 (6.1)	3 (0.7)	0 (0.0)
Infusion-related reactions	9 (2.0)	0 (0.0)	9 (2.1)	0 (0.0)

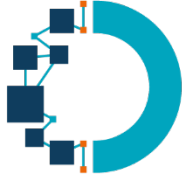


Première ligne métastatique

EV-302/KEYNOTE-A39 : EV + pembrolizumab vs chimiothérapie par platine ESMO 2023

	EV+P (N=442) n (%)	Chemotherapy (N=444) n (%)
First subsequent systemic therapy ^a	128 (28.9)	294 (66.2)
Platinum-based therapy	110 (24.9)	17 (3.8)
PD-1/L1 inhibitor-containing therapy	7 (1.6)	260 (58.6)
Maintenance therapy	0	143 (32.2)
Avelumab maintenance	0	135 (30.4)
PD-1/L1 inhibitor-containing therapy following progression	7 (1.6)	117 (26.4)
Other	11 (2.5)	17 (3.8)

^a144 (32.6%) patients in the EV+P arm remain on treatment at time of analysis



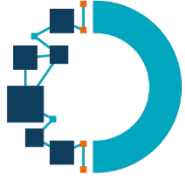
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^a144 (32.6%) patients in the EV+P arm remain on treatment at time of analysis

- Seulement 30% d'avelumab en entretien dans le bras chimiothérapie
- Place de l'EV en 3^{ème} L dans le bras chimiothérapie

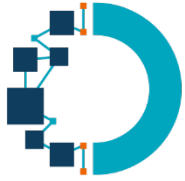


Première ligne métastatique

EV-302/KEYNOTE-A39 : EV + pembrolizumab vs chimiothérapie par platine ESMO 2023

- Première fois que la chimiothérapie par platine est dépassée en 1^{ère} ligne du cancer urothélial M+
- Doublement de la PFS et de l'OS
- Fit ou unfit cisplatine, PDL1 + ou -

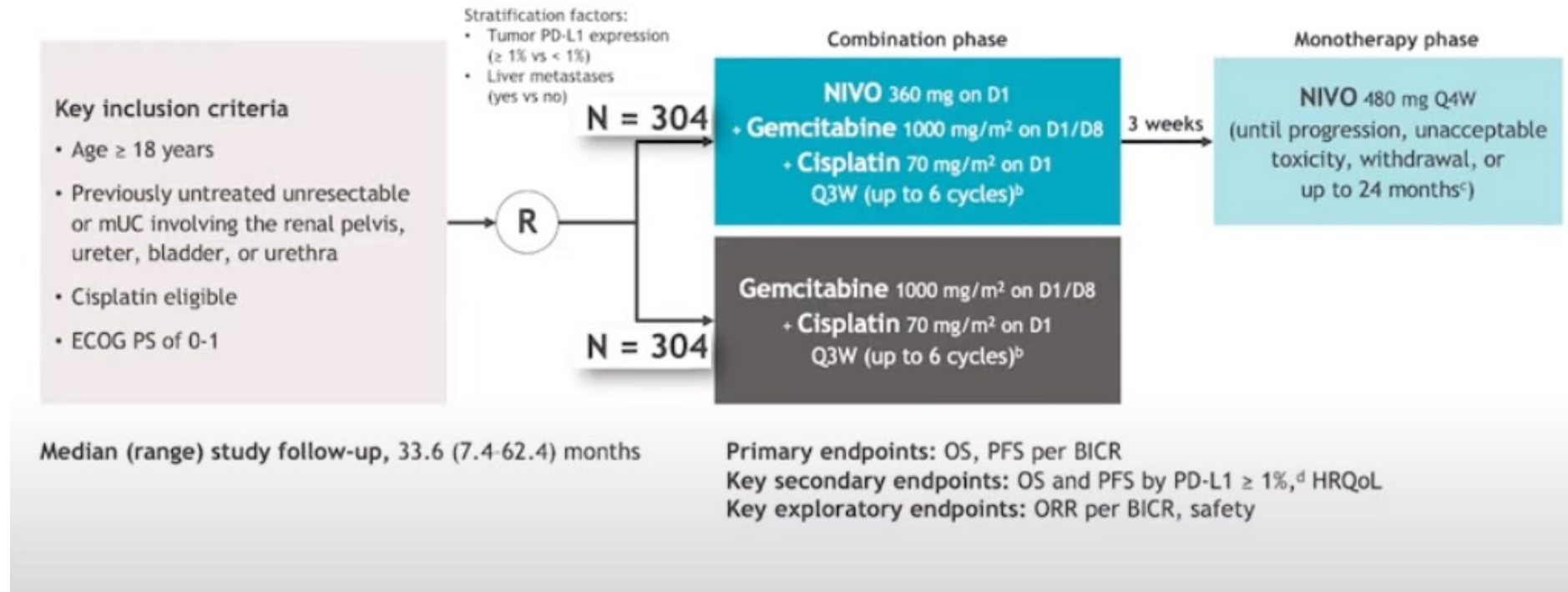
- A confirmer : quid de la tolérance des patients hors essai, traitement poursuivi tant que efficace, seulement 32 % avelumab en entretien ?

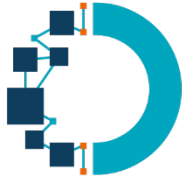


Première ligne métastatique

Checkmate 901: chimiothérapie par cisplatine +/- nivolumab phase 3 ESMO 2023

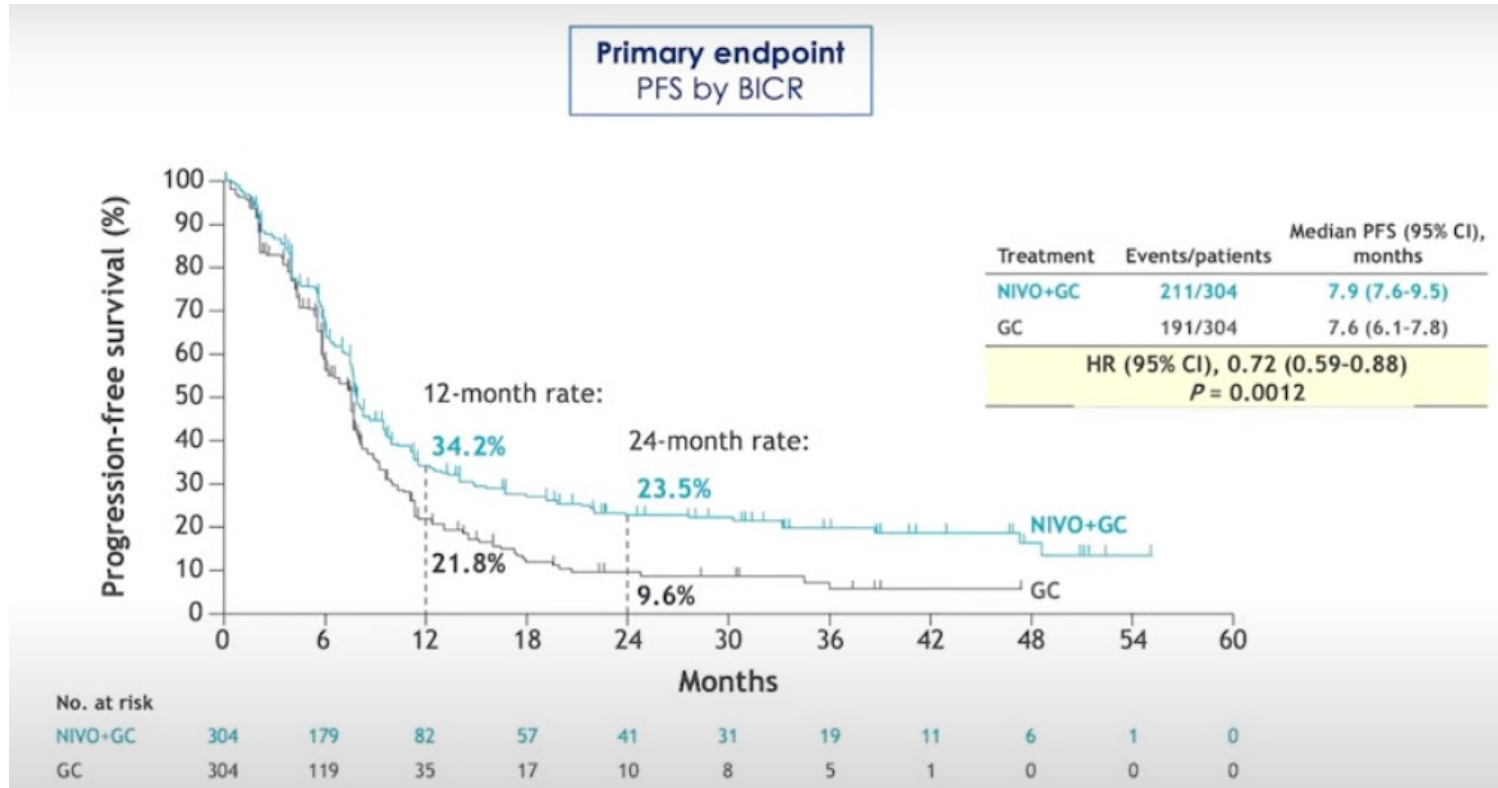
- NIVO + gemcitabine-cisplatine vs gemcitabine-cisplatine in cisplatin-eligible patients^a

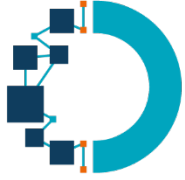




Première ligne métastatique

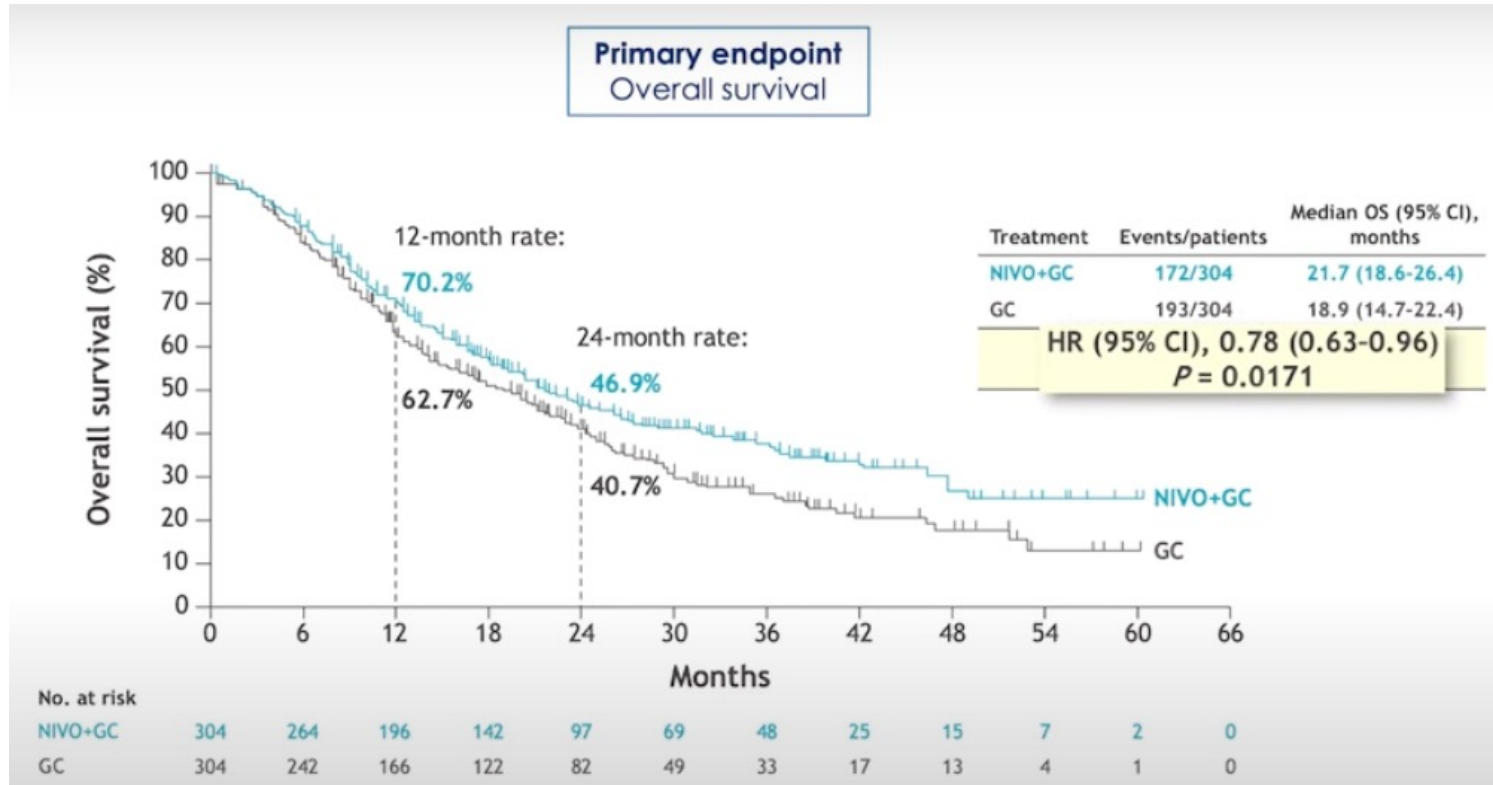
Checkmate 901: chimiothérapie par platine +/- nivolumab phase 3 ESMO 2023

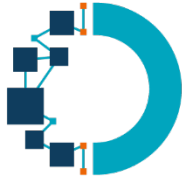




Première ligne métastatique

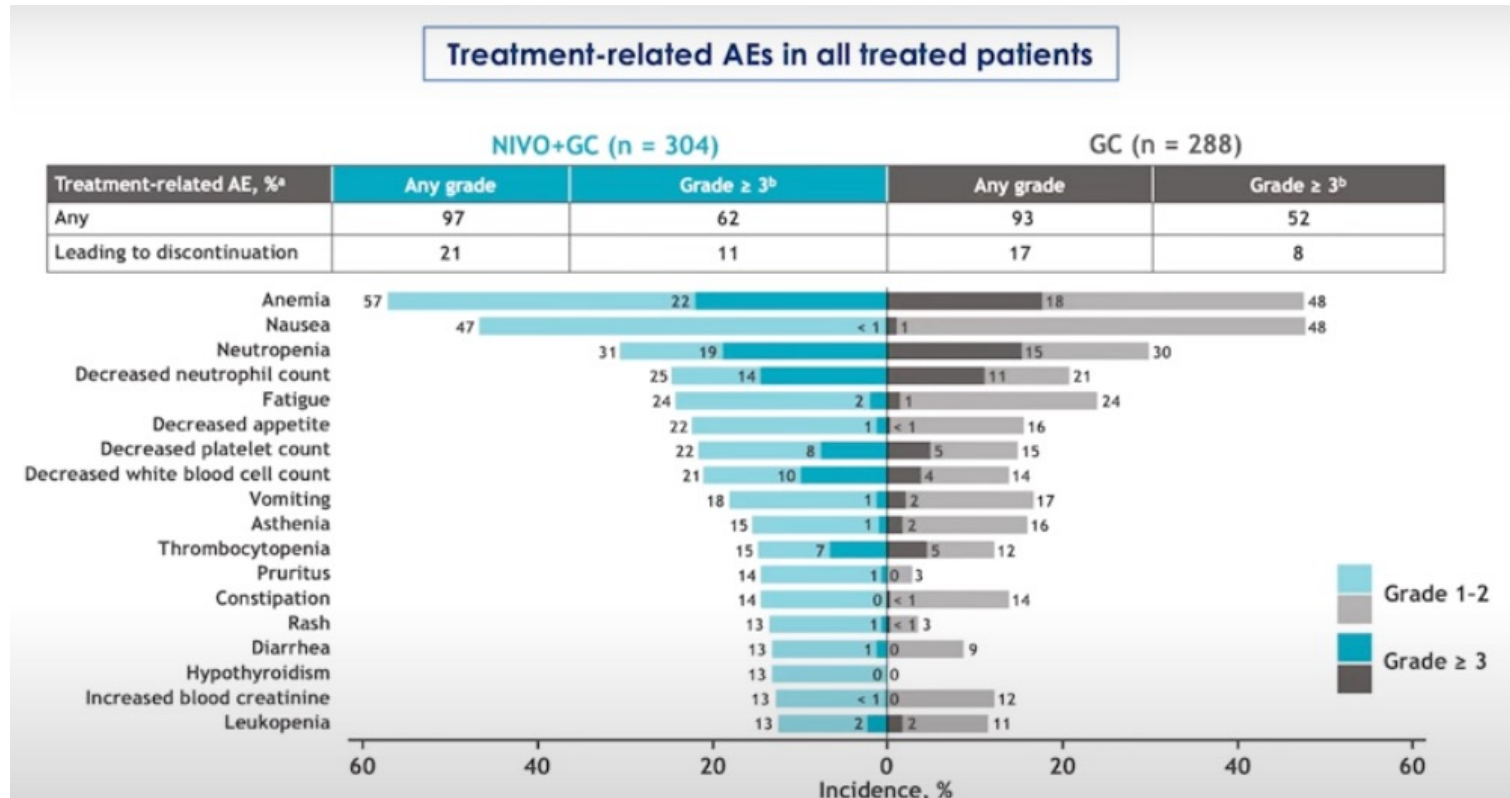
Checkmate 901: chimiothérapie par platine +/- nivolumab phase 3 ESMO 2023





Première ligne métastatique

Checkmate 901: chimiothérapie par platine +/- nivolumab phase 3 ESMO 2023

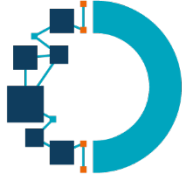




Première ligne métastatique

Checkmate 901: chimiothérapie par platine +/- nivolumab phase 3 ESMO 2023

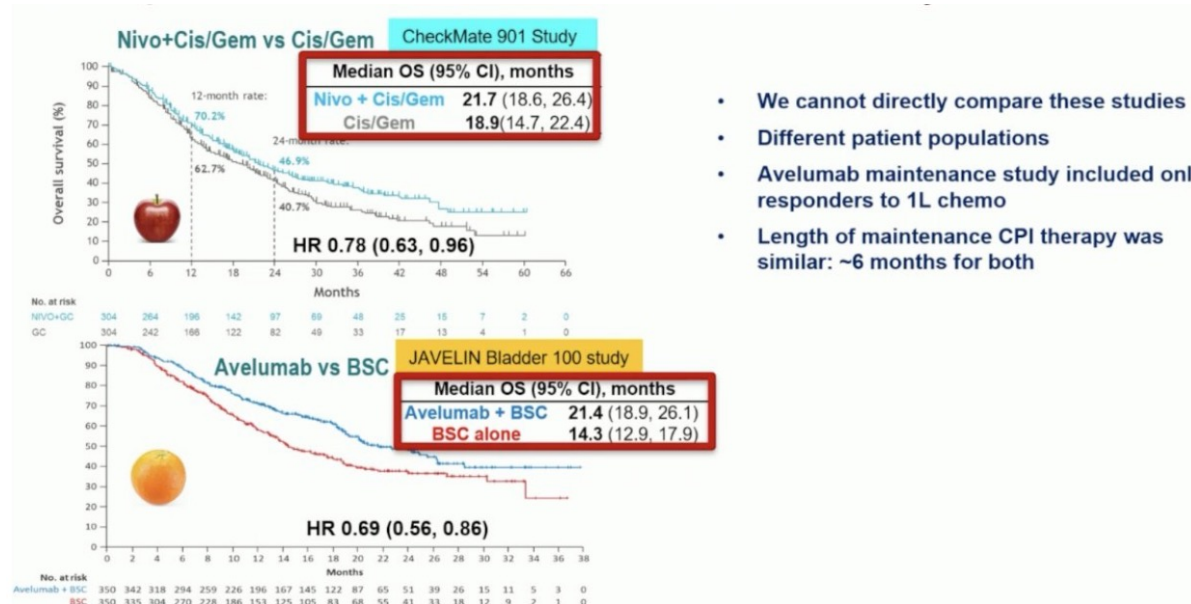
- Deuxième essai où la chimiothérapie par platine est dépassée en 1^{ère} L du carcinome urothélial M+
- Intérêt de l'association Chimio + IO vs chimio + maintenance IO ?
- Arrivée un peu trop tard ? Comment choisir ?



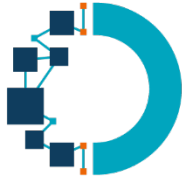
Première ligne métastatique

Checkmate 901: chimiothérapie par platine +/- nivolumab phase 3 ESMO 2023

- Deuxième essai où la chimiothérapie par platine est dépassée en 1^{ère} L du carcinome urothélial M+
- Intérêt de l'association Chimio + IO vs chimio + maintenance IO ?

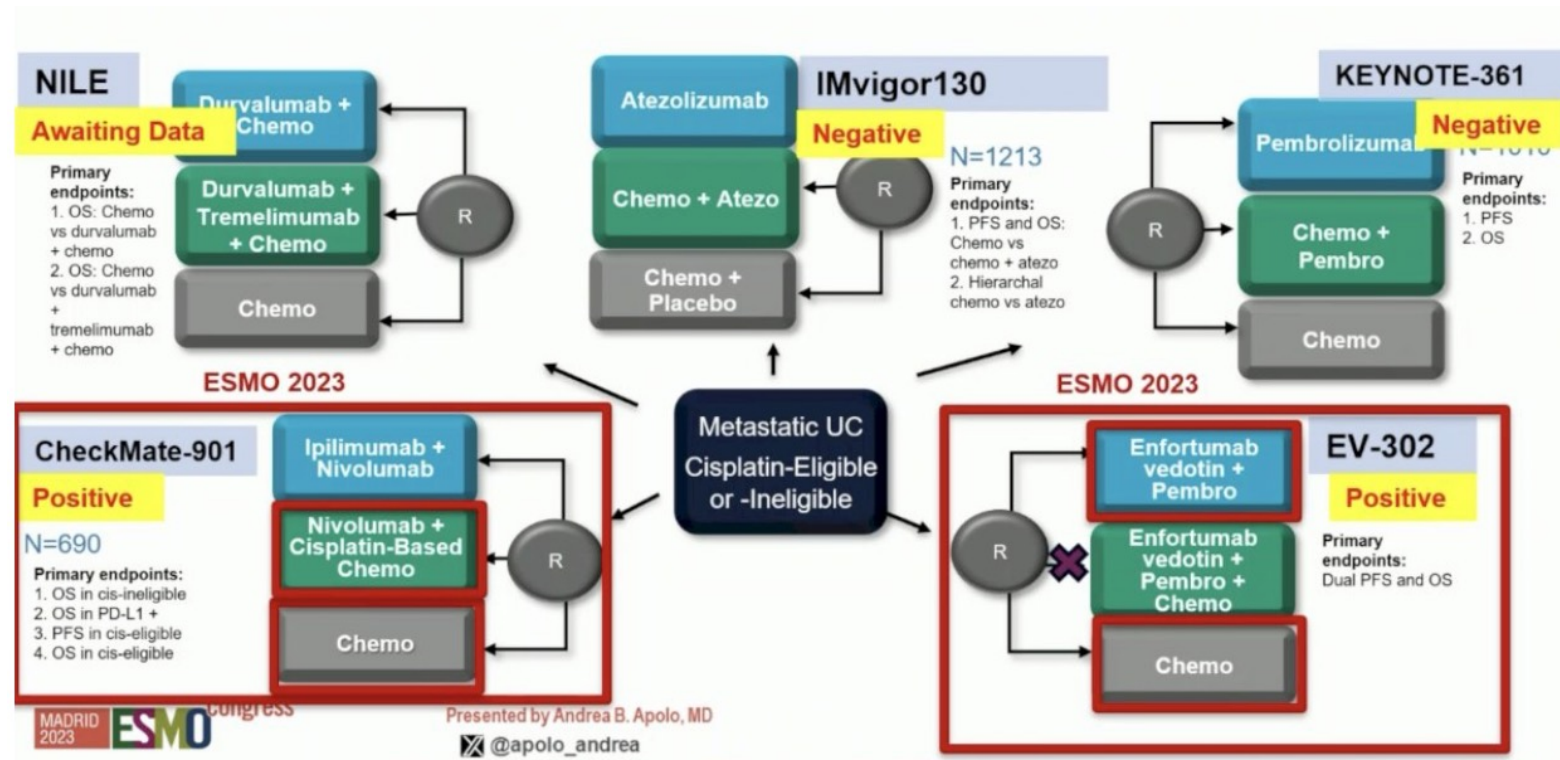


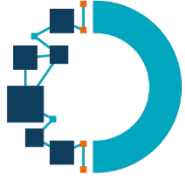
- We cannot directly compare these studies
- Different patient populations
- Avelumab maintenance study included only responders to 1L chemo
- Length of maintenance CPI therapy was similar: ~6 months for both



Première ligne métastatique

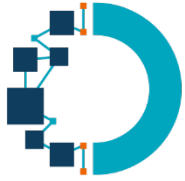
Comment choisir ?





Première ligne métastatique

Comment choisir ? Taux de réponse, durée de réponse, toxicité, survie globale

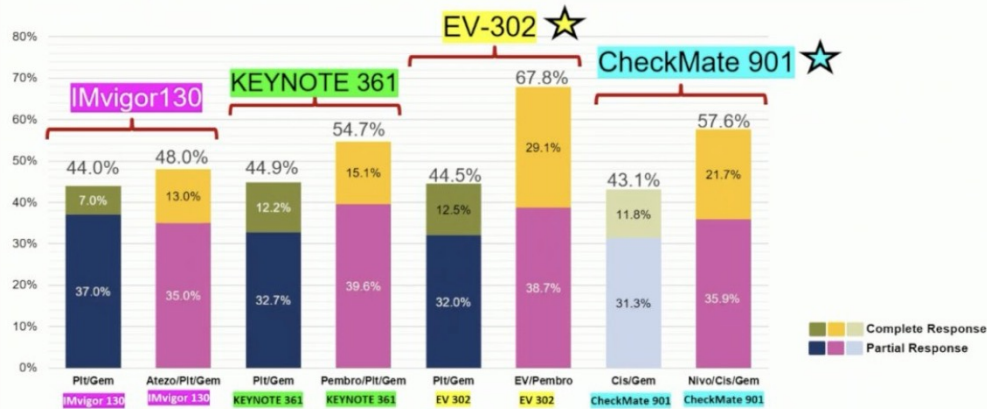


Première ligne métastatique

Comment choisir ? Taux de réponse, durée de réponse, toxicité, survie globale

ORRs with EV + Pembro and Nivo + Cis/Gem are higher than with platinum-based chemo or other combinations

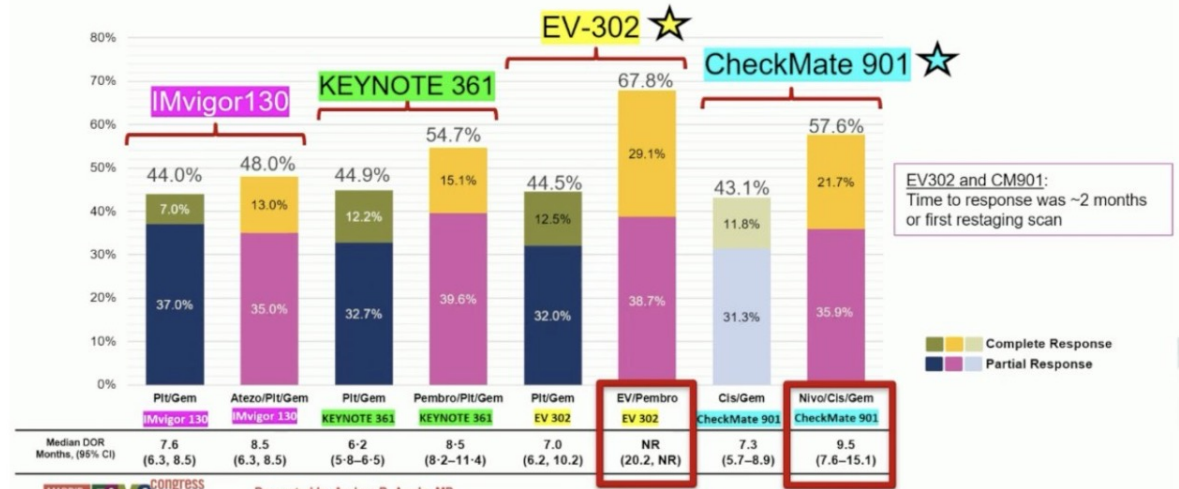
Cross-trial comparison on display



Gabry M, GU ASCO 2023; Powles T, et al Lancet Oncology 2021; Powles et al, ESMO 2023; van der Heijden et al., ESMO 2023

EV + Pembro's Duration of Response is longer

Cross-trial comparison on display



EV302 and CM901: Time to response was ~2 months or first restaging scan

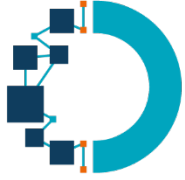
Presented by Andrew P. Apple, MD



Première ligne métastatique

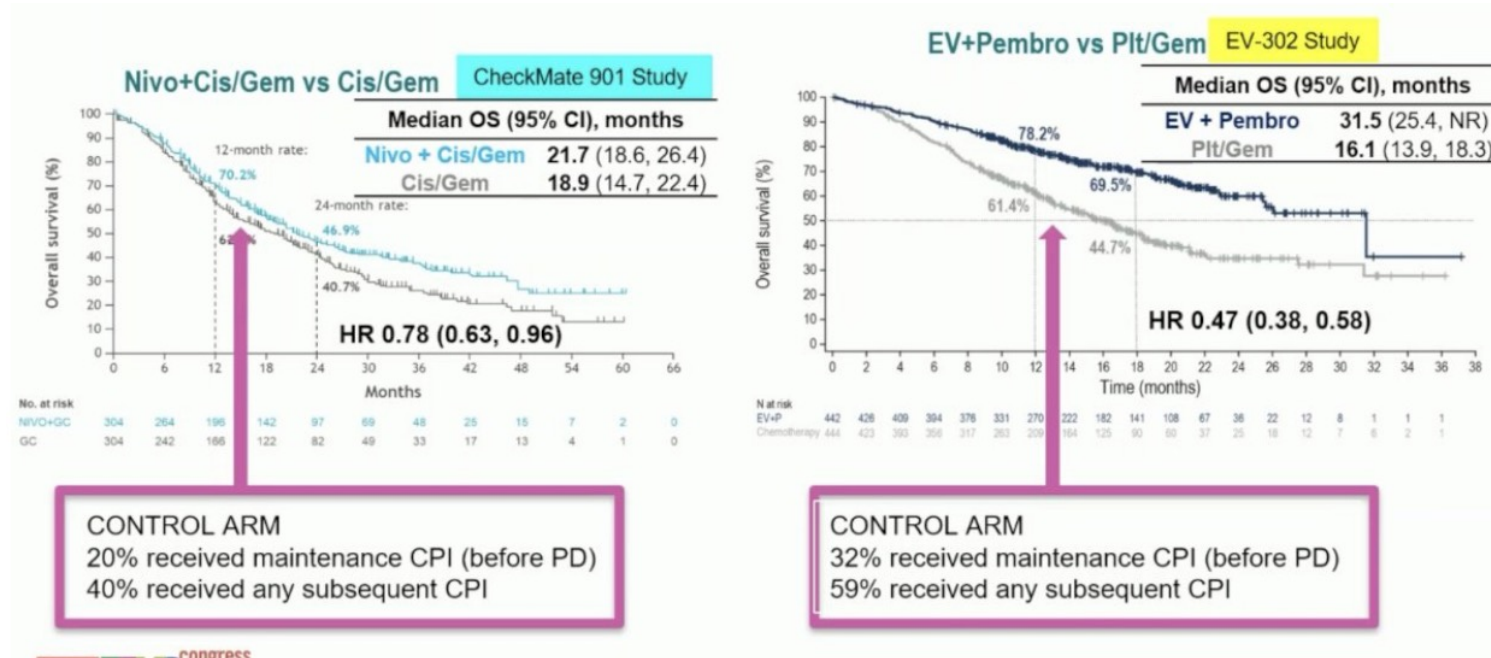
Comment choisir ? Taux de réponse, durée de réponse, toxicité, survie globale

- Toxicité grade 3 : 56% EV + P vs 62 % CHIMIO + N
- Profil de toxicité très différent
- Possibilité d'alléger la toxicité de l'EV ?

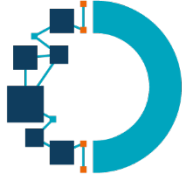


Première ligne métastatique

Comment choisir ? Taux de réponse, durée de réponse, toxicité, survie globale



- OS à 31,5 mois pour EV +P vs 21,7 mois pour chimio + N



Première ligne métastatique

Futur standard ?

First-Line

- Enfortumab vedotin + Pembrolizumab

Second-Line?

Cisplatin-eligible

- Cisplatin + gemcitabine
- Dose-dense methotrexate + vinblastine + doxorubicin + cisplatin (ddMVAC)

Cisplatin-ineligible

- Carboplatin + gemcitabine

Beyond-Second -Line

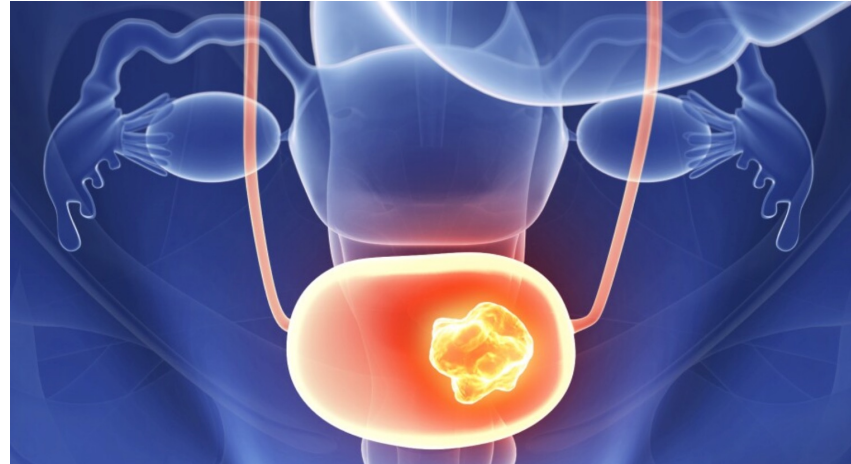
- Erdafitinib (if tumor + FGFR 2/3 genetic alterations)
- Sacituzumab govitecan
- Clinical trial
- Paclitaxel, docetaxel, or vinflunine



Métastatique : nouvelles drogues

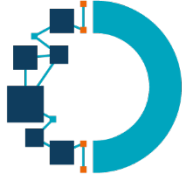
FGFR

Protéines de membranes



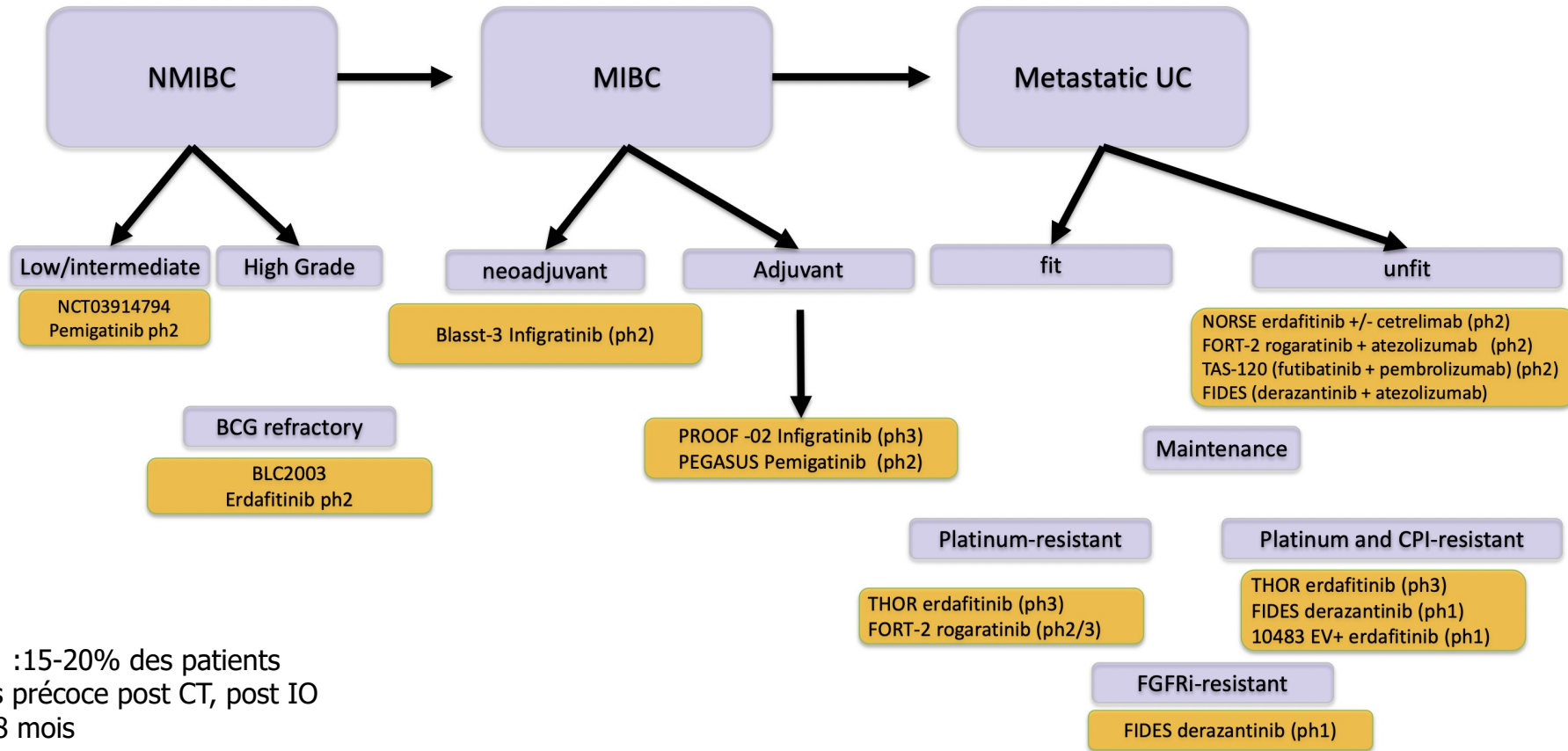
Réparation ADN

Angiogenèse



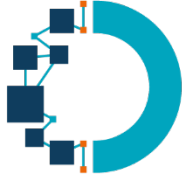
Métastatique : nouvelles drogues

FGFR



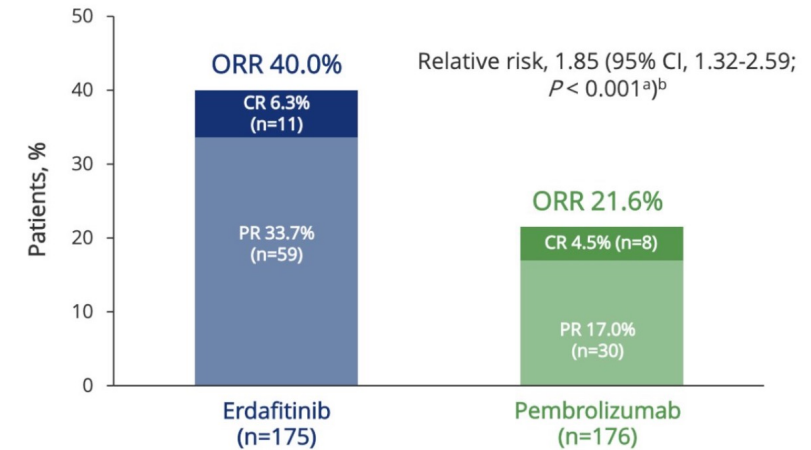
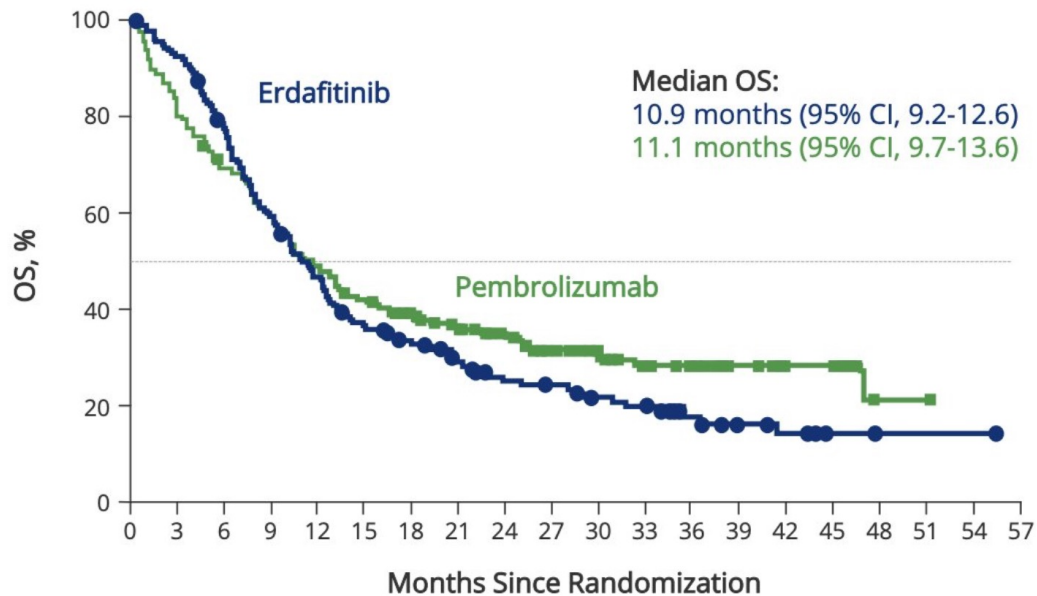
Altération de FGFR : 15-20% des patients
Erdafitinib en accès précoce post CT, post IO
40 % ORR, OS 13.8 mois

Y.Loriot ESMO 2022

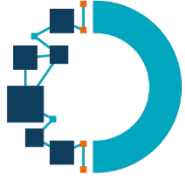


Métastatique : nouvelles drogues

FGFR : THOR cohorte 2 ERDAFITINIB vs PEMBROLIZUMAB chez FRGFR altéré 2ème L, ESMO 2023

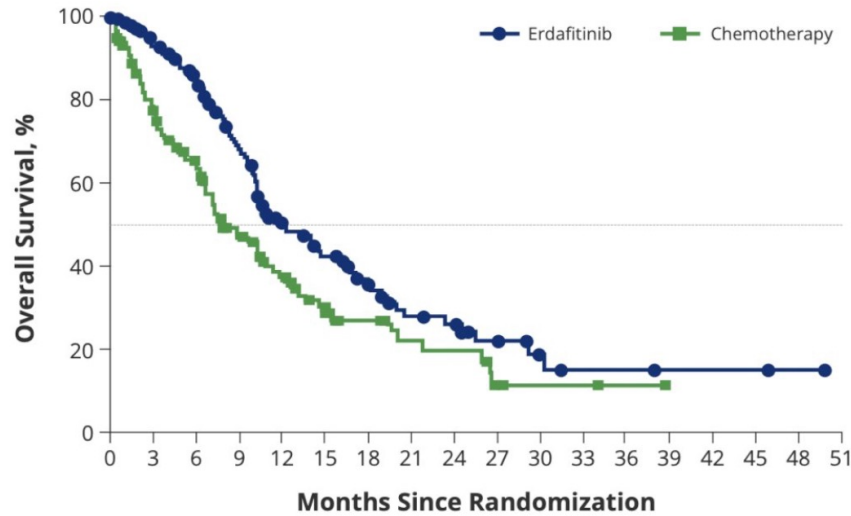


Objectif sur OS non atteint

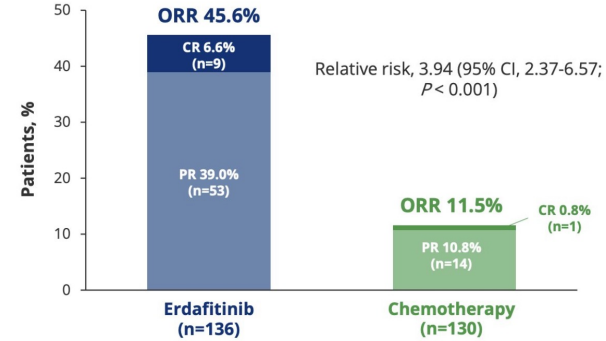


Métastatique : nouvelles drogues

FGFR : THOR cohorte 1 ERDAFITINIB vs chimiothérapie chez FRGFR altéré post IO, ASCO 2023



No. at risk	0	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51
Erdafitinib	136	117	97	74	46	35	25	17	15	9	5	3	3	2	2	2	1	0
Chemotherapy	130	87	66	43	30	18	13	9	8	3	2	2	1	0	0	0	0	0



Patients with AEs, n (%) ^a	Erdafitinib (n=135)		In the erdafitinib group: - 18 patients (13.3%) had treatment-related serious AEs - 1 treatment-related death occurred ^c - AEs with erdafitinib were mostly manageable with dose modifications and supportive care	Chemotherapy (n=112)		
	Any grade	Grade 3-4		Any grade	Grade 3-4	
≥1 treatment-related AE	131 (97.0)	62 (45.9)	In the chemotherapy group: - 27 patients (24.1%) had treatment-related serious AEs - 6 treatment-related deaths occurred ^d	97 (86.6)	52 (46.4)	
Hyperphosphatemia	106 (78.5)	7 (5.2)		Anemia	31 (27.7)	7 (6.3)
Diarrhea	74 (54.8)	4 (3.0)		Alopecia	24 (21.4)	0
Stomatitis	62 (45.9)	11 (8.1)		Nausea	22 (19.6)	2 (1.8)
Dry mouth	52 (38.5)	0		Neutropenia	21 (18.8)	15 (13.4)
PPE syndrome	41 (30.4)	13 (9.6)		Leukopenia	13 (11.6)	9 (8.0)
Onycholysis	31 (23.0)	8 (5.9)		Febrile neutropenia	9 (8.0)	10 (8.9)
Patients who discontinued study treatment, n (%)				Patients who discontinued study treatment, n (%)		
Discontinuation due to treatment-related AEs	11 (8.1%) ^b			Discontinuation due to treatment-related AEs	15 (13.4%) ^f	

Objectif sur OS atteint, baisse de 36 % du risque de décès

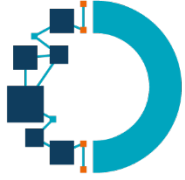


Métastatique : nouvelles drogues

FGFR : NORSE ERDAFITINIB +/- CETRELIMAB 1^{ère} L unfit, phase 2, ASCO 2023

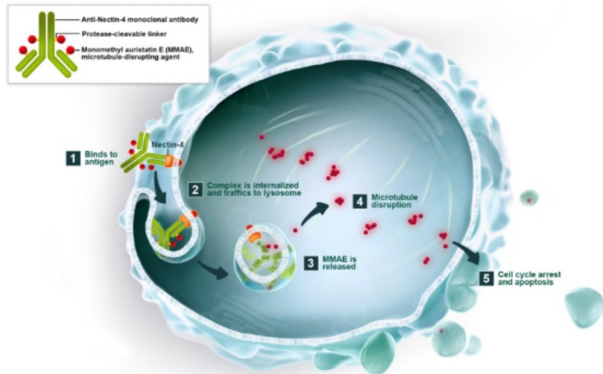
	ERDA+CET (n=44)	ERDA (n=43)
ORR, % (95% CI)	54.5 (38.8, 69.6)	44.2 (29.1, 60.1)
Confirmed CR, n (%)	6 (13.6)	1 (2.3)
DCR, % (95% CI)	79.5 (64.7, 90.2)	88.4 (74.9, 96.1)
Median DOR (95% CI), mo	11.10 (8.77, NE)	9.72 (4.60, NE)
Median PFS (95% CI), mo	10.97 (5.45, 13.63)	5.62 (4.34, 7.36)

Réponse objective...mais ne sera pas développé au-delà

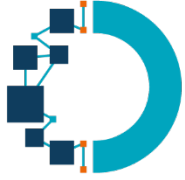


Métastatique : nouvelles drogues

Anticorps conjugués : Nectin-4, Trop-2, HER2

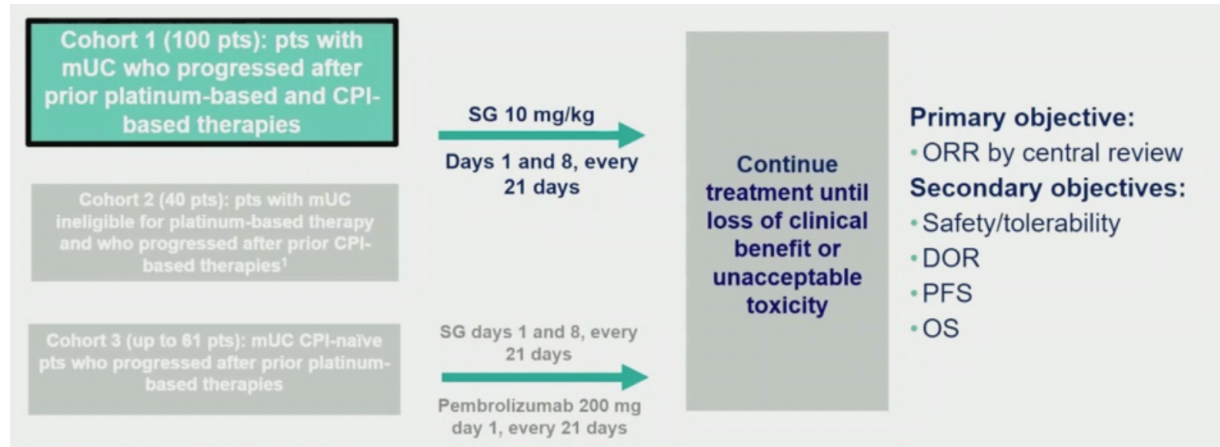


	Enfortumab vedotin	Sacituzumab govitecan	RC-48 (Disitamab vedotin)	DS-801
Target	Nectin-4	Trop-2	HER2	HER2
Linker	cleavable	Cleavable	cleavable	cleavable
Payload	MMAE	SN-38	MMAE	Deruxtecan (DNA topo I inh)
Indication	Post platinum and PD(L)1 mUC Ineligible for CDDP and treated with received 1 or more therapies	Post platinum and PD(L)1 mUC	NA	NA



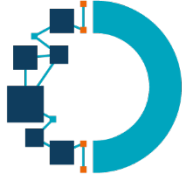
Métastatique : nouvelles drogues

Sacituzumab Govitecan : TROPHY-U-01, phase II



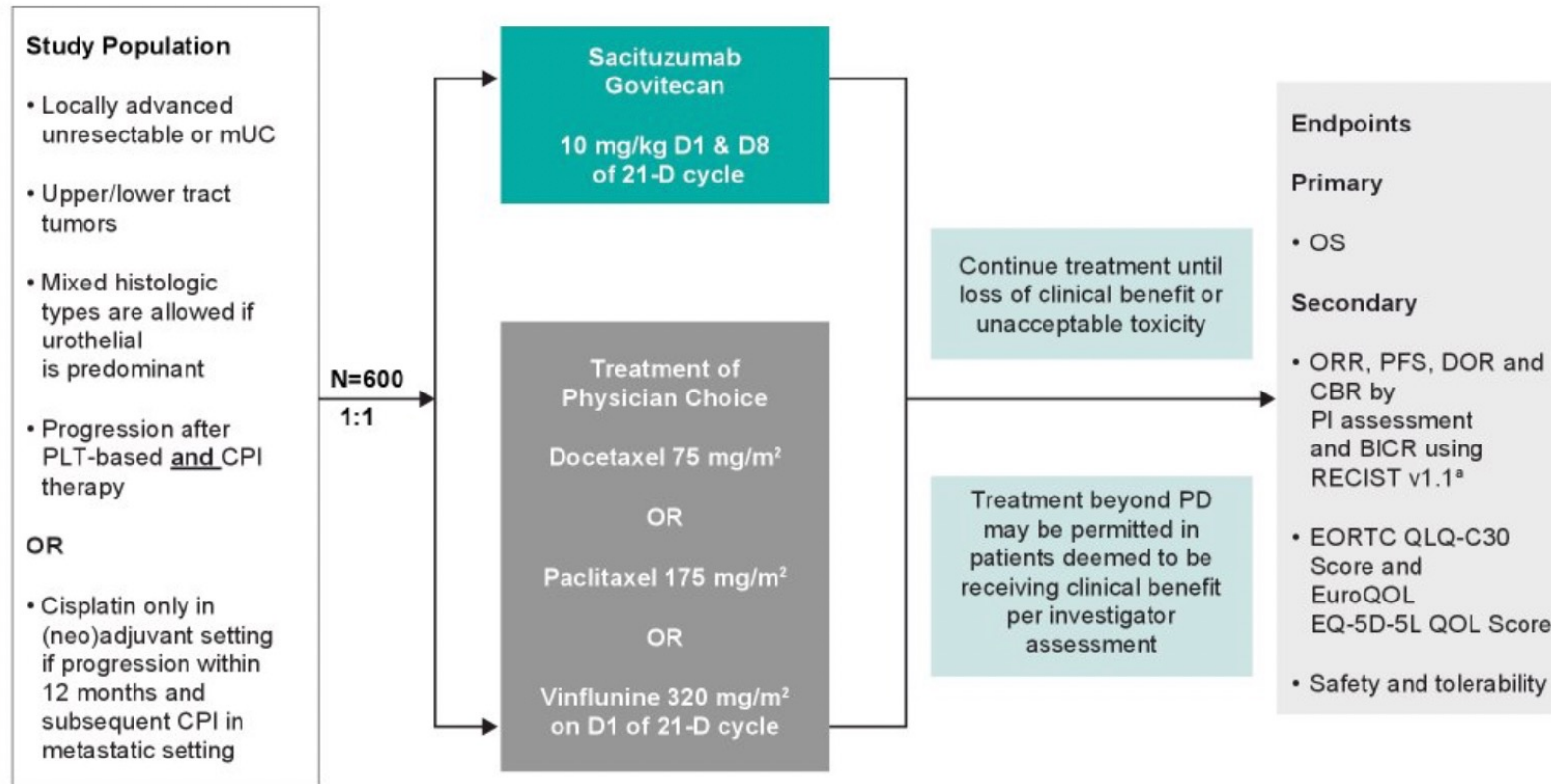
Demande d'approbation accélérée par la FDA

Variable	(N = 113)
Best response, No. (%)	
CR	6 (5)
PR	25 (22)
SD	38 (34)
PD	21 (19)
Not evaluable	8 (7)
Not assessed ^a	15 (13)
ORR	
No. of patients	31
% patients (95% CI)	27 (19 to 37)
CBR ^b	
No. of patients	42
% patients (95% CI)	37 (28 to 47)
Time to onset of response (months)	
Median	1.6
Range	1.2-2.9
Median DOR (months)	
Median	7.2
95% CI	4.7 to 8.6
Range	1.4-13.7

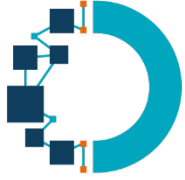


Métastatique : nouvelles drogues

Sacituzumab Govitecan : TROPICS-04

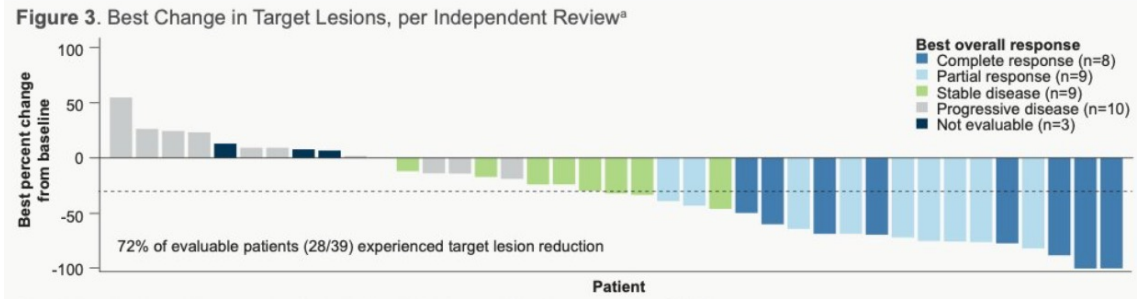


En cours



Métastatique : nouvelles drogues

TROPHY U01 cohorte 3 : Sacituzumab Govitecan + Pembrolizumab en 2^{ème} L platine résistant



Taux de réponse intéressant chez une population résistante au platine
A voir comment cela pourra être intégrer aux nouveaux référentiels

Figure 5. Progression-Free Survival

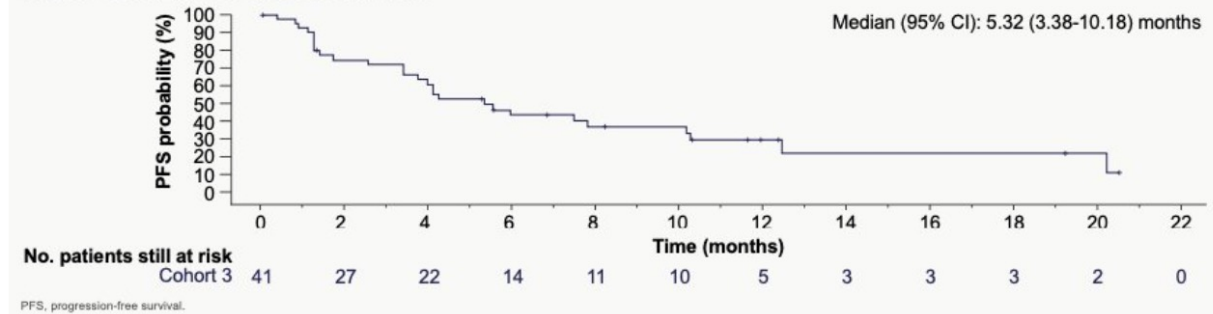
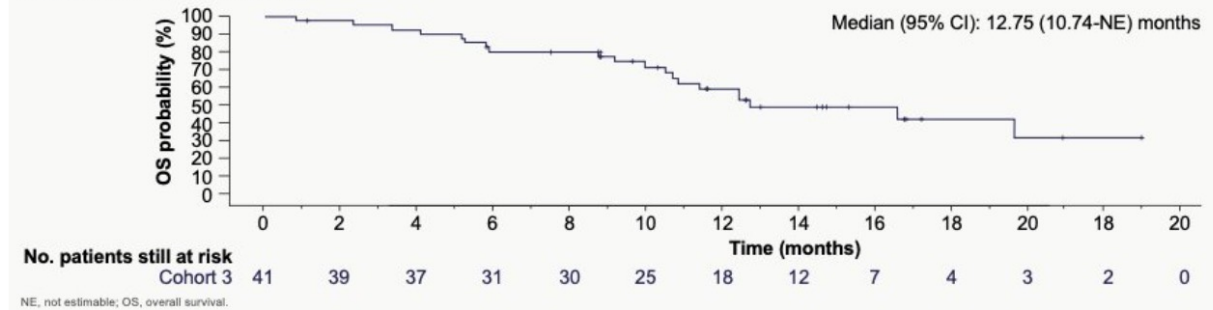
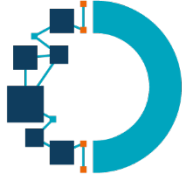


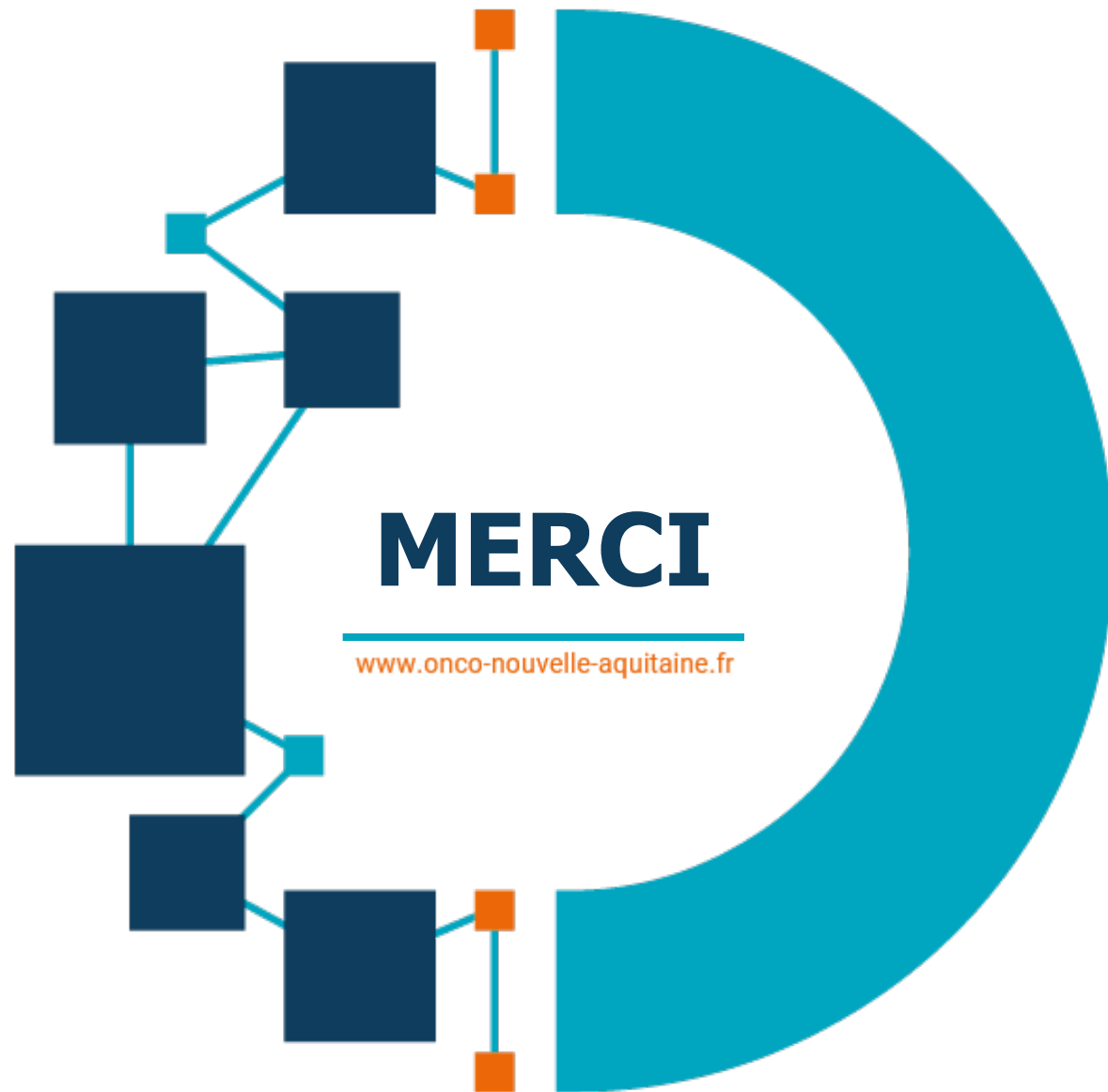
Figure 6. Overall Survival





Conclusions

- Chimiothérapie néoadjuvante ++ : MVAC dd> GC
- Développement des immunothérapies et ADC en péri-opératoire
- Développement des stratégies de préservation de vessie : en cours
- Nouvelles cibles : FGFR 3^{ème} L, sacituzumab govitecan, HER2...
- **Nouveautés 2023 : EV – P en 1^{ère} Ligne ++, CG + NIVO en 1^{ère} L**



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