



ACTUALIZACIÓN EN
URO-ONCOLOGÍA:
UPDATE 2024

Madrid, 28 de febrero de 2024

Secuenciación terapéutica en cáncer renal

Natalia Vidal Cassinello

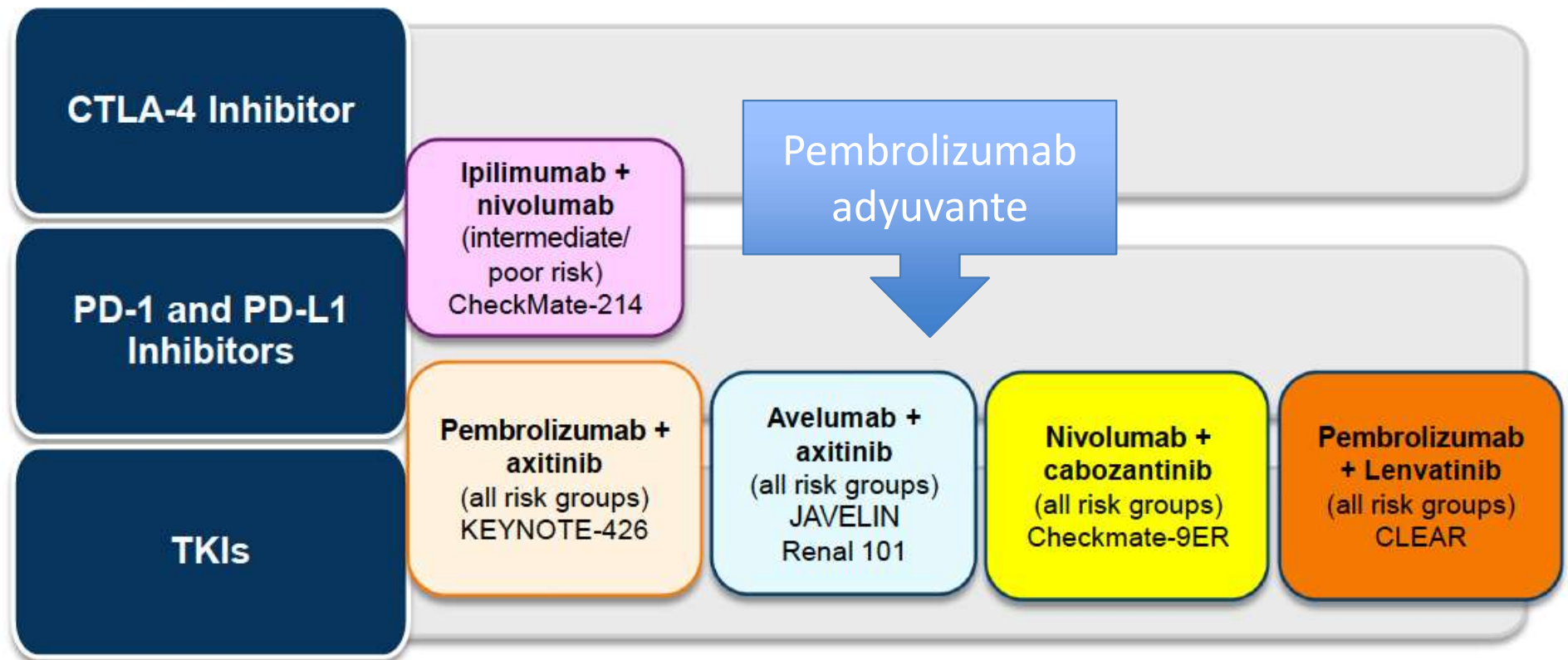
Oncología Médica

Hospital Clínico San Carlos

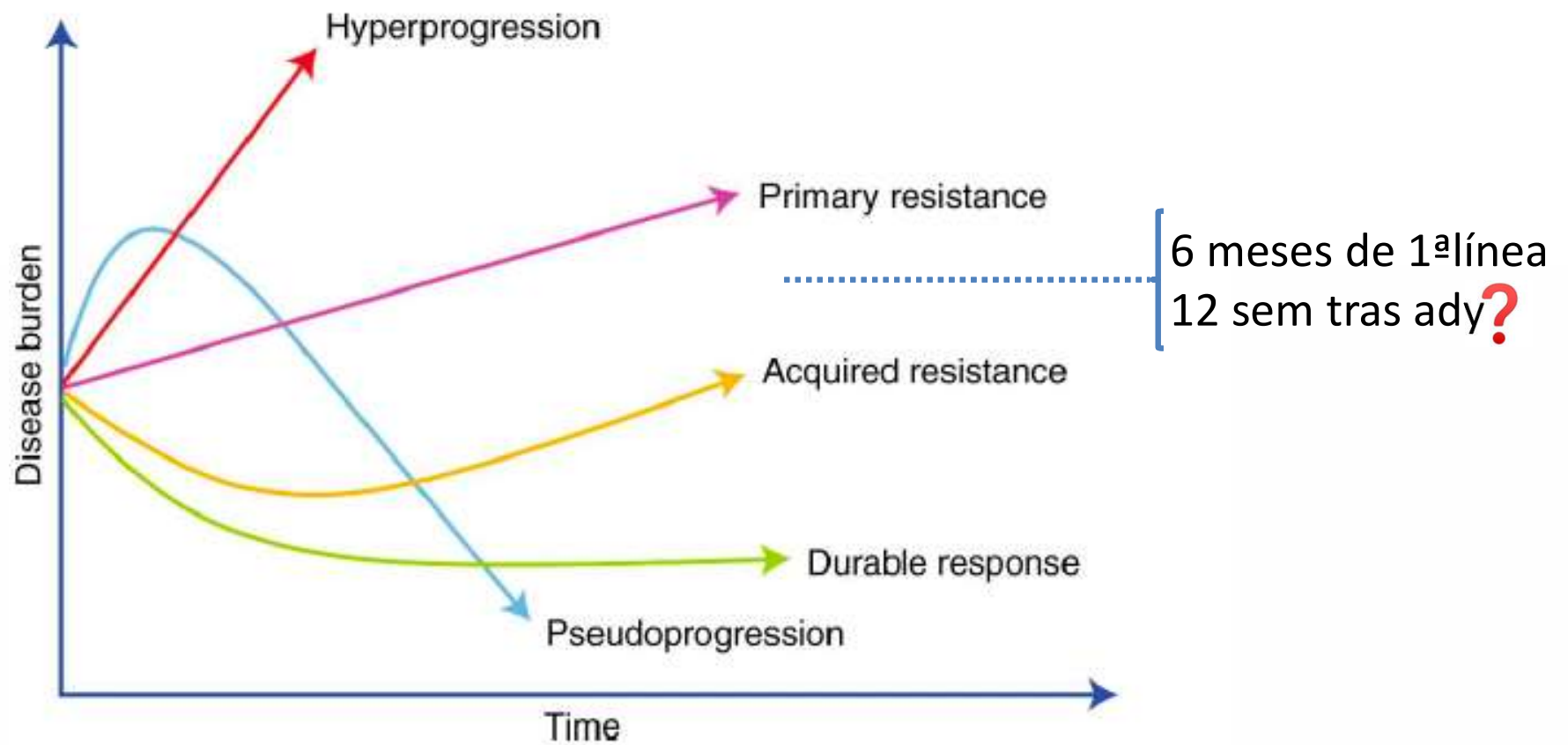
Conflictos de interés

- He participado en reuniones médicas organizadas por Janssen, Pfizer, Eisai, Sanofi, AstraZeneca, Astellas, Roche, MSD.
- He participado como consultora en: Janssen y Astellas

Panorama de la primera línea



Patrones de progresión





¿Qué hacemos después de las combinaciones?

¿Qué dicen las guías?



National
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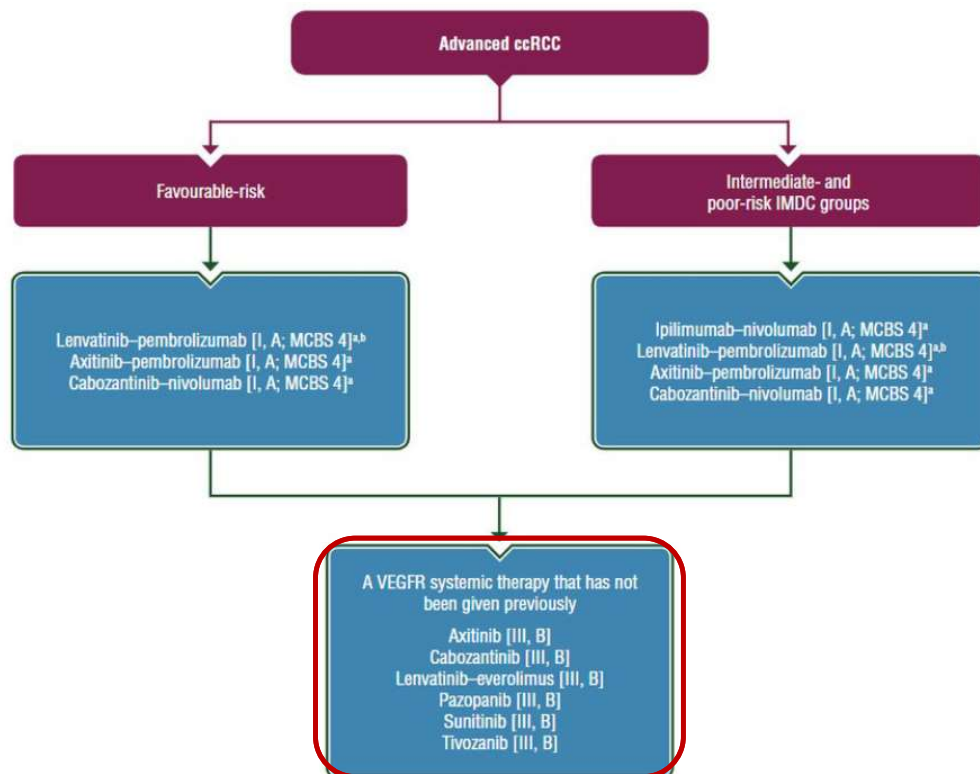
NCCN Guidelines Version 2.2024 Kidney Cancer

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PRINCIPLES OF SYSTEMIC THERAPY FOR RELAPSE OR STAGE IV DISEASE

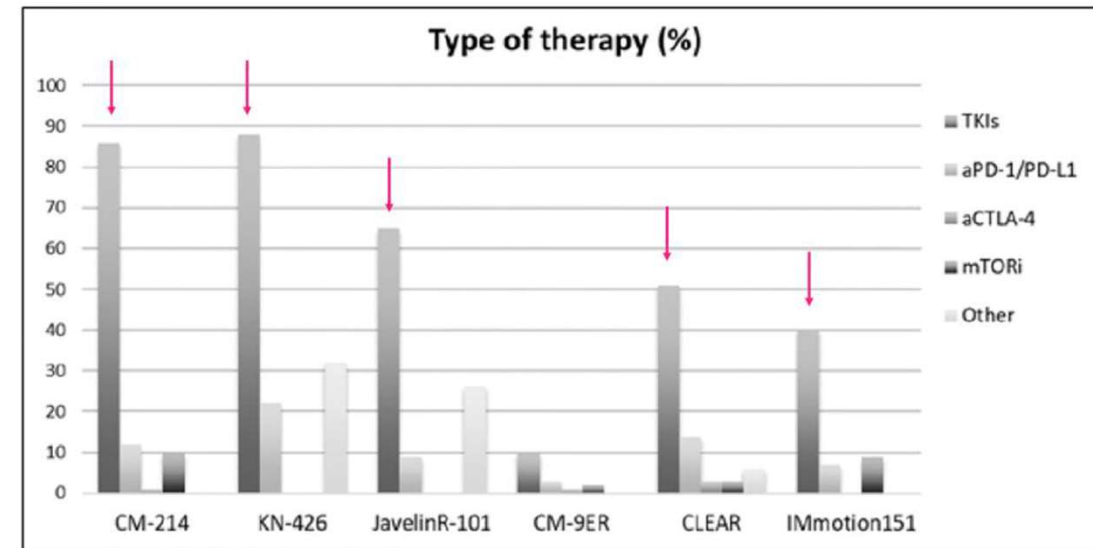
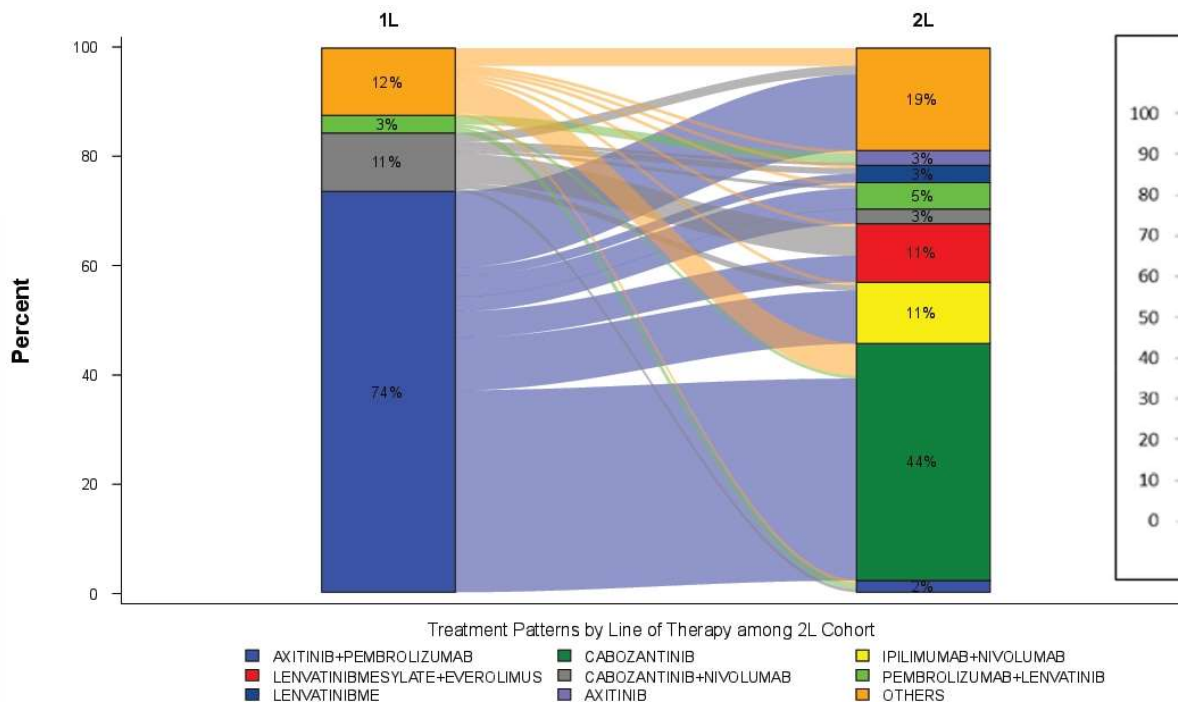
SUBSEQUENT THERAPY FOR CLEAR CELL HISTOLOGY (IN ALPHABETICAL ORDER BY CATEGORY)			
Immuno-oncology (IO) Therapy History Status	Preferred Regimens	Other Recommended Regimens	Useful in Certain Circumstances
IO Therapy Naïve	• None	• Axitinib + pembrolizumab^b • Cabozantinib • Cabozantinib + nivolumab^b • Ipilimumab + nivolumab^b • Lenvatinib + everolimus • Lenvatinib + pembrolizumab^b • Nivolumab^b	• Axitinib • Everolimus • Pazopanib • Sunitinib • Tivozanib^g • Belzutifan (category 2B) • Bevacizumab^h (category 2B) • High-dose IL-2 for selected patients^d (category 2B) • Temsirolimus^e (category 2B) • Axitinib + avelumab^b (category 3)
Prior IO Therapy	• None	• Axitinib • Belzutifan^f • Cabozantinib • Lenvatinib + everolimus • Tivozanib^g	• Axitinib + pembrolizumab^b • Cabozantinib + nivolumab^b • Everolimus • Ipilimumab + nivolumab^b • Lenvatinib + pembrolizumab^b • Pazopanib • Sunitinib • Bevacizumab^h (category 2B) • High-dose IL-2 for selected patients^d (category 2B) • Temsirolimus^e (category 2B) • Axitinib + avelumab^b (category 3)

¿Qué dicen las guías?



	Standard of care	Alternative
Prior IO	Any VEGF-targeted therapy that has not been used previously in combination with IO [4]	
Prior TKI	nivolumab [1b] cabozantinib [1b]	axitinib [2b]

¿Qué hacemos en la práctica clínica?





¿Qué evidencia tenemos de TKI tras IO?

Tras TKI e IO secuencial: ESTUDIOS RETROSPECTIVOS

Treatment	N	mPFS, mo	ORR, %
TKI ¹	70	6.4	28
TKI (Cabozantinib/Axitinib) ²		8	33
TKI (sun, axi, pazo, ca) ³			36
TKI (sun, axi, paz) ⁴			41
TKI (post: CPI+VEG) ⁵			15 vs 45
Pazopa ⁶			Not reported
Cabozant ⁷			36
Cabozantin ⁸			22
Cabozantinib vs other ⁹		1 (mTTD)	54 vs 38
Cabozantinib ¹⁰		7.6 (mTTF)	20
Lenvatinib +/- everolimus ¹¹	55	6.2	21.8
TKI vs mTOR ¹²	314	6.1 vs 2.8 (mTTD)	30 vs 3.6

ORR: 20-54%
PFS or TTF
6-13 months

1.Nadal R, Ann Oncol 2016; 2.Derosa L, Ann Oncol 2017; 3.Auvray M, EJC 2019; 4.Shah AT, EJC 2019; 5.Dudani, Eur Urol 2019; 6.Cao X, Clin Genitourin Cancer 2020; 7.McGregor BA, EJC 2020; 8.Gan CL, Cancer Med 2021; 9.Marteau F, ASCO GU; 2021 10.Zhang H, Kidney Cancer 2021; 11.Wiele AK, Oncologist 2021; 12.Graham J, Eur Urol Oncol 2021.

Tras TKI e IO secuencial: ESTUDIOS PROSPECTIVOS

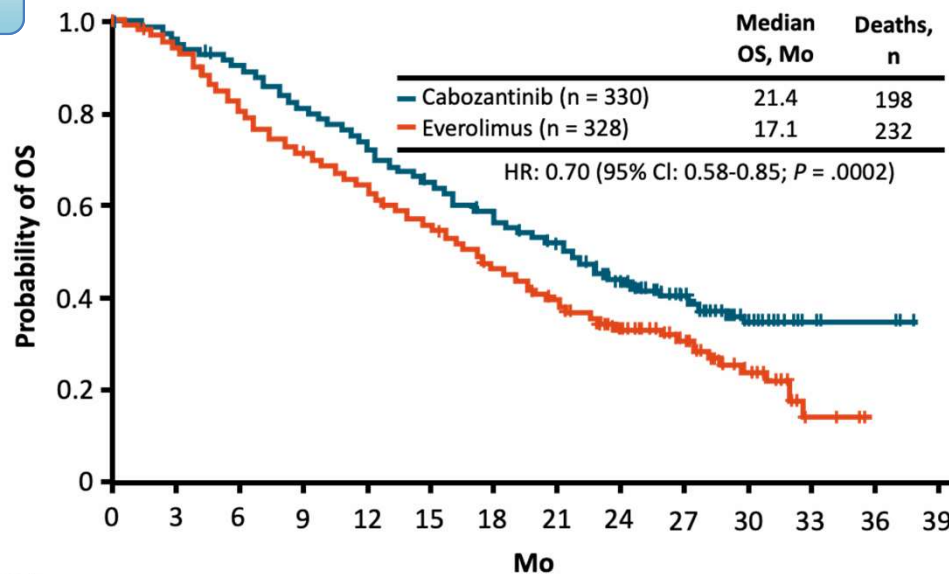
DRUG	STUDY	N	ORR (%)	PFS
Cabozantinib	Post-Hoc METEOR	18	22	Not reached
Tivozanib	Post-Hoc		Reported	7.3
Axitinib				8.8
Cabozantinib				9.3
Sunitinib				5.6
Cabozantinib (Teleglenestat)				9,2
Cabozantinib	Phase II Ca		30 Prev IO-IO: 33 Prev IO-TKI: 28	Short follow-up
Cabozantinib (Atezolizumab)	Phase III CONTACT-03	259	41	10.8

ORR: 19-45%
PFS or TTF
5.6-9.3 months

CABOZANTINIB

METEOR Trial: Fase III Cabozantinib vs Everolimus tras TKI

PFS

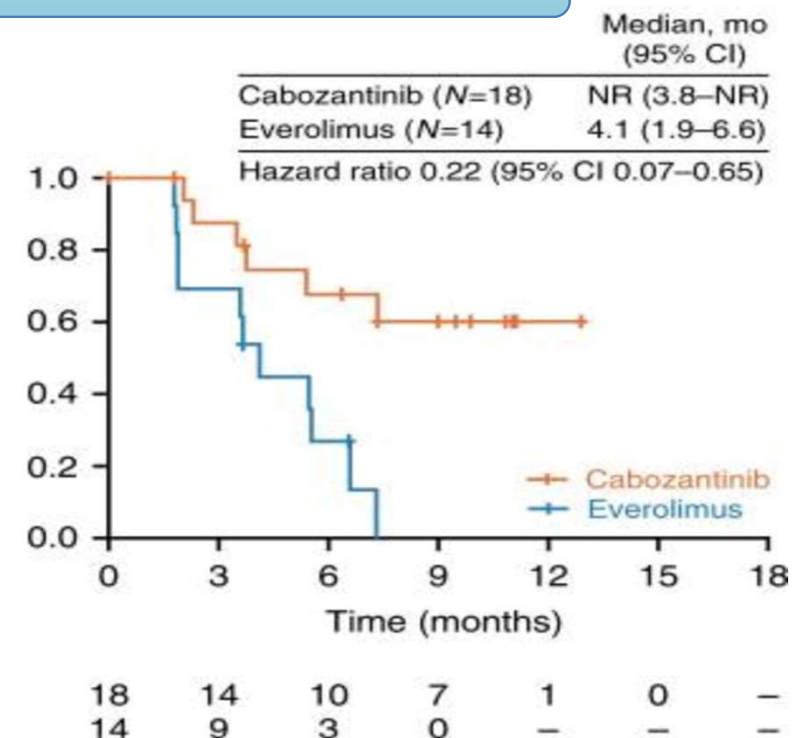


Patients at Risk, n

Cabozantinib	330	318	297	266	240	213	188	163	114	76	30	6	3	0
Everolimus	328	308	364	231	205	177	148	121	82	54	23	3	0	0

ORR global 17% con cabo vs 3% con eve

PFS del 5% de IO previa

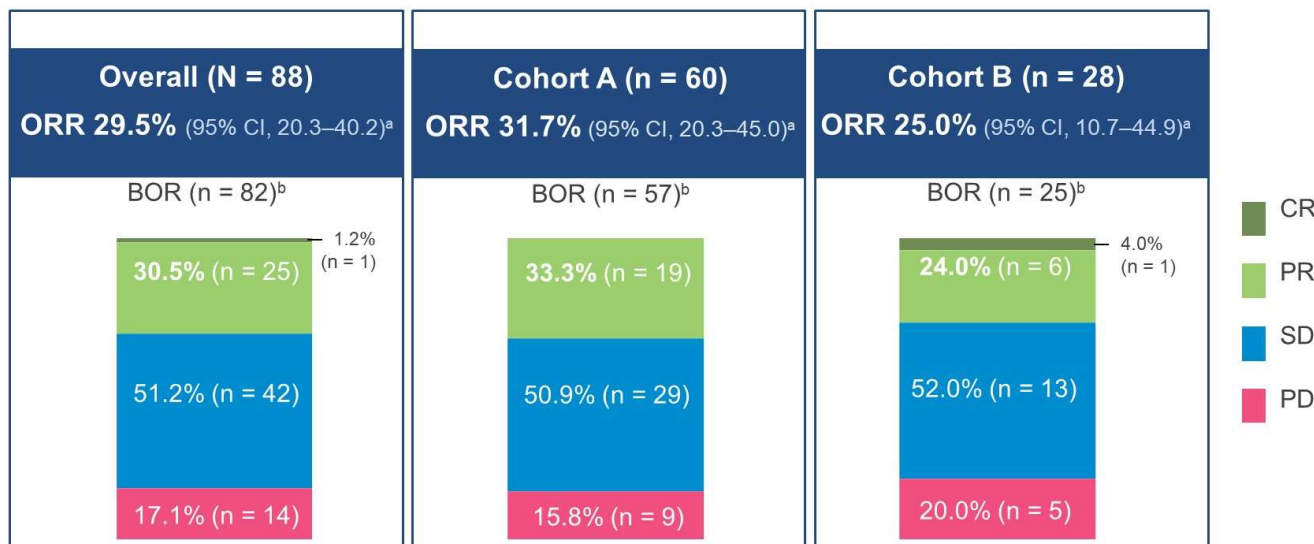
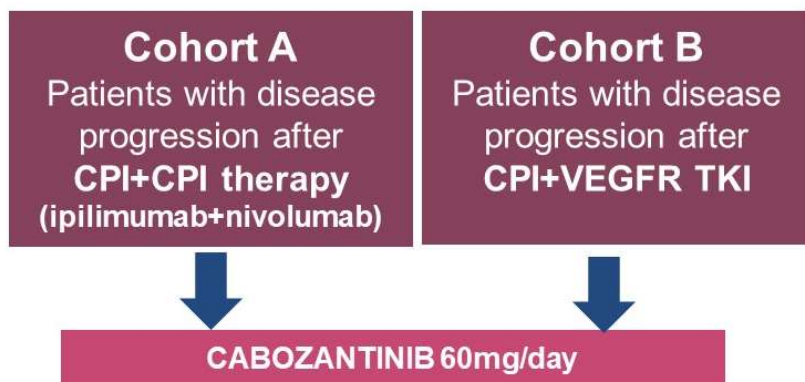


Motzer. Br J Cancer. 2018;118:1176.

CABOZANTINIB

CaboPoint: Fase II Cabozantinib tras IO (ongoing)

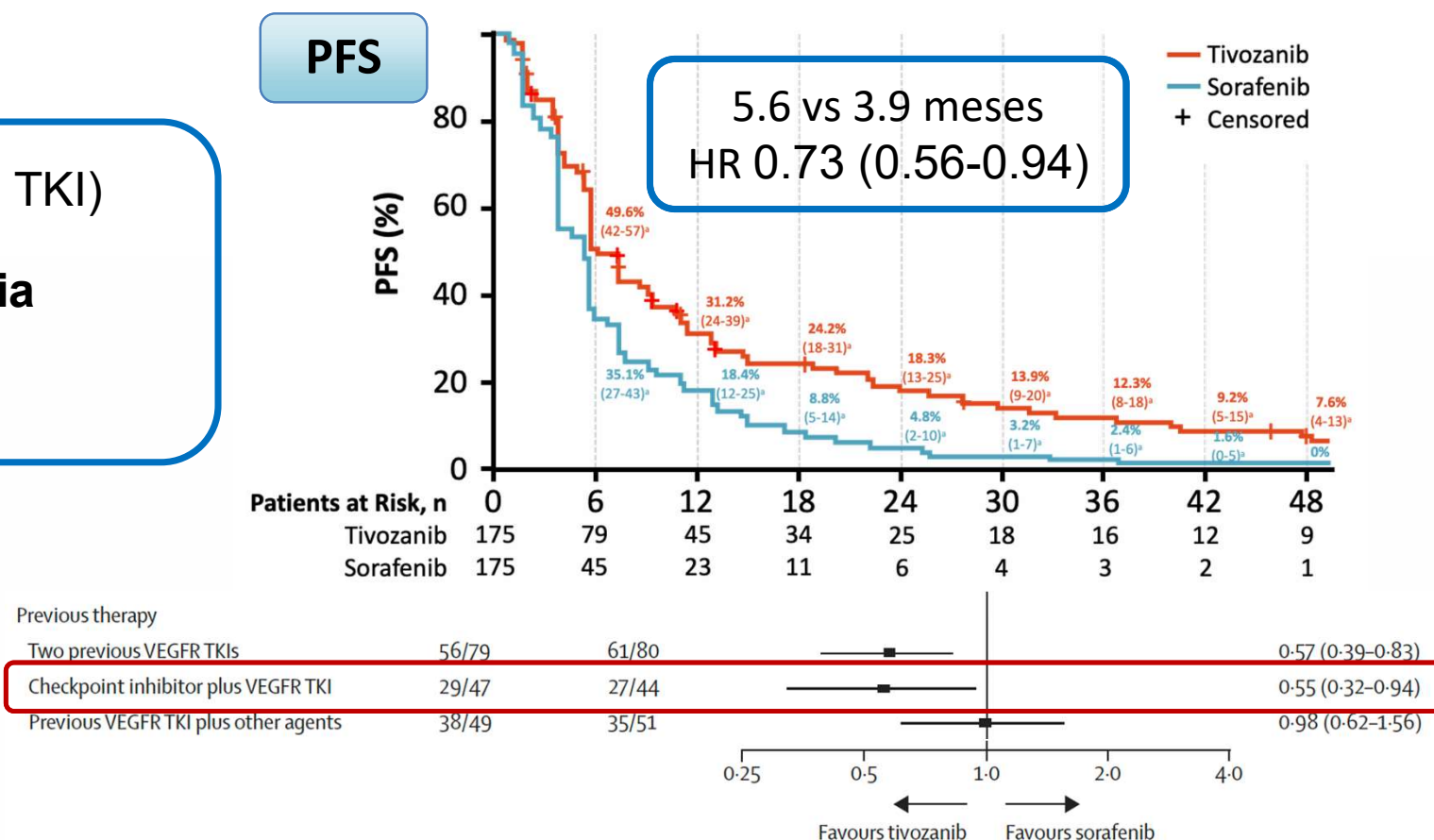
ORR (obj 1º)



TIVOZANIB

TIVO-3: Fase III con Tivozanib vs Sorafenib tras TKI (+/-IO)

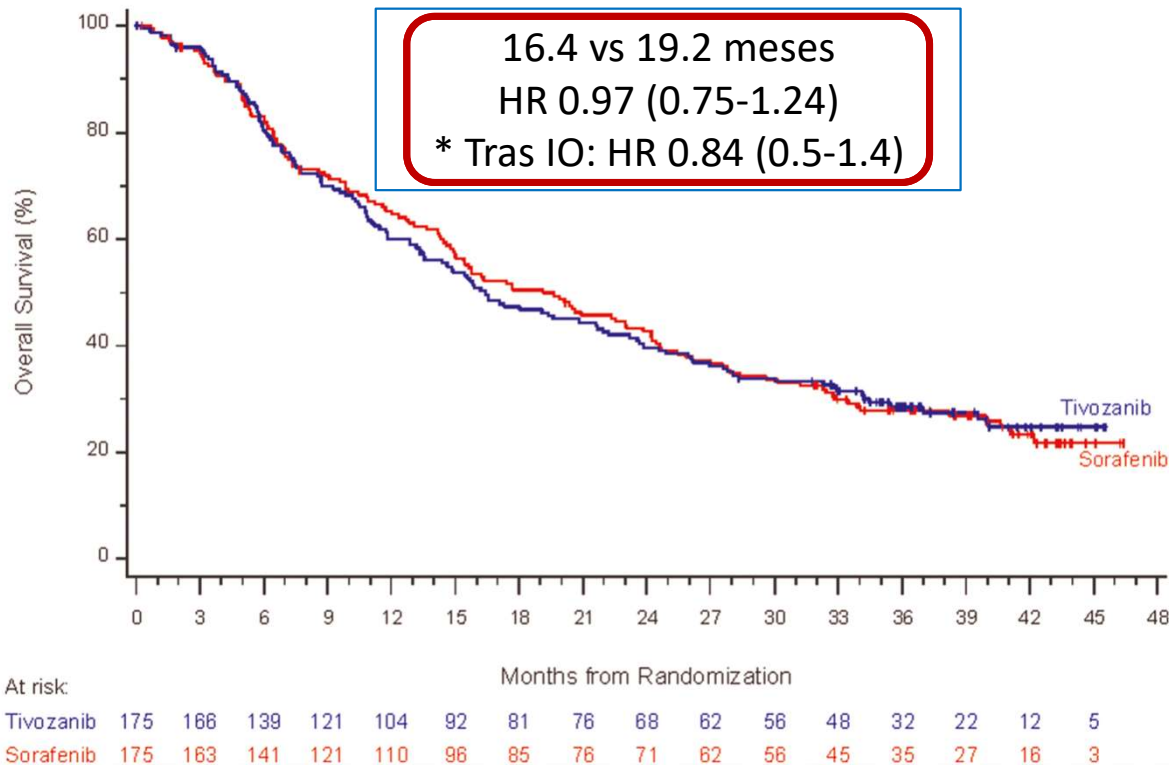
- ≥ 2 líneas previas (≥ 1 TKI)
→ **26% TKI e IO previa**
- **ORR: 18% vs 8%**



TIVOZANIB

TIVO-3: Fase III con Tivozanib vs Sorafenib tras TKI (+/-IO)

OS



Crossover permitido (no cuantificado)

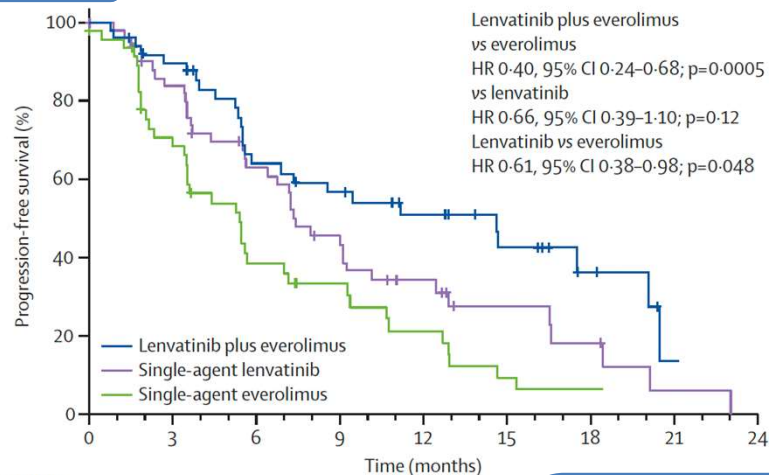
Menos AEs gr 3-4 con Tivozanib

- Interrupción de tratamiento: 48% vs 63%
- Reducción de dosis por Aes: 24% vs 38%

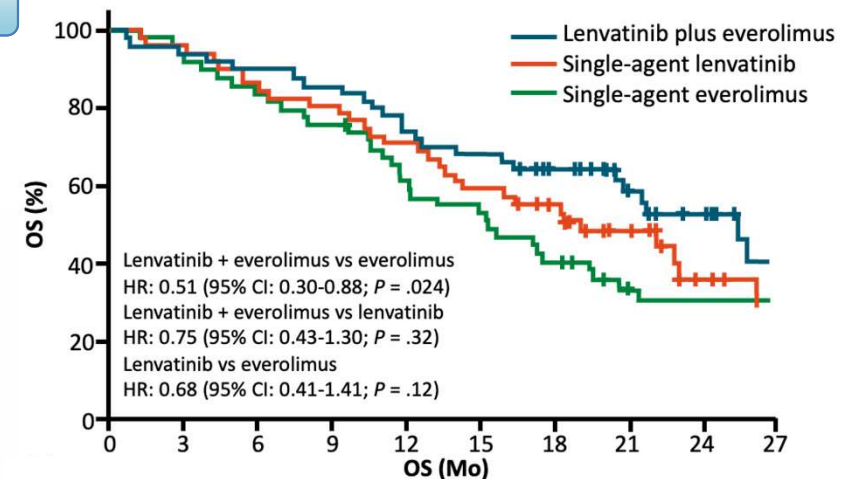
LENVATINIB + EVEROLIMUS

Fase II randomizado Lenva, Eve o Lenva/eve tras TKI

PFS



OS



Number at risk

Lenvatinib plus everolimus	51	41	27	23	16	10
Single-agent lenvatinib	52	41	29	20	11	6
Single-agent everolimus	50	29	15	11	7	3

- **3% IO previa** (5 pacientes)
- **ORR: 43% con lenva/eve, 27% con lenva, 6% con everolimus**



¿Tiene sentido continuar la IO a la progresión?

¿Podemos rescatar con Ipi a la
progresión a anti PD1/PDL1?

Rescate con Ipi en 1ª línea

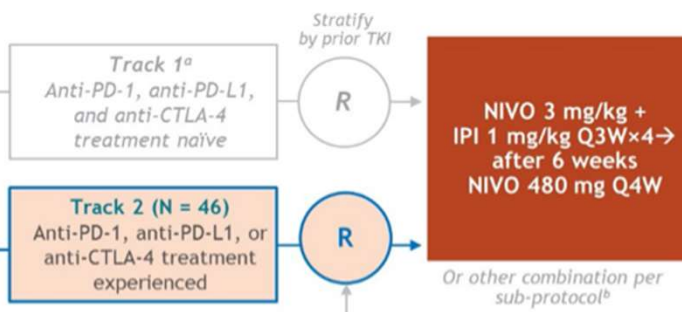
	HCRN GU16-260 ¹	TITAN-RCC ²	OMNIVORE- RCC ³
N	123	207	83
Previous TKI allowed	No	Yes	Yes
First line (n(%))	123 (100)	108 (52)	42 (51)
Sequence	Nivo -> IpiX4	Nivo -> IpiX4	Nivo -> IpiX2
ORR for Nivo/Ipi, %	13	18	4
CR, %	0	3	0

Evidencia en línea posteriores

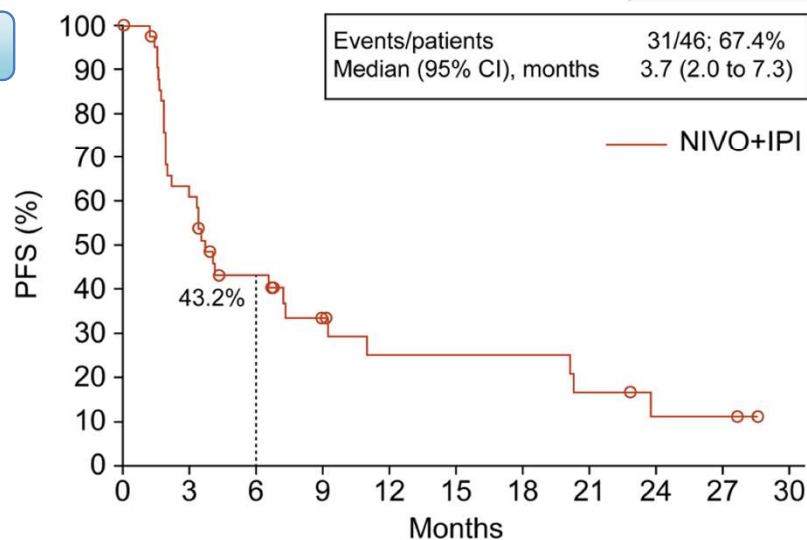
FRACTION study: Fase II adaptativo

Key inclusion criteria

- Histologically confirmed clear cell aRCC
- Life expectancy ≥ 3 months and KPS $\geq 70\%$
- Patients with toxicity from any prior anticancer treatment must be grade ≤ 1 or baseline before study treatment
- No history of life-threatening toxicity with prior I-O treatment



PFS



ORR

DOR 16.4 meses

Nivolumab plus ipilimumab (N=46)

All treated patients

Objective response rate (95% CI), %	17.4 (7.8 to 31.4)
Disease control rate (95% CI), %*	58.7 (43.2 to 73.0)
Best overall response, n (%)	
Complete response	0
Partial response	8 (17.4)
Stable disease	19 (41.3)
Progressive disease	14 (30.4)
Not evaluable/available†	5 (10.9)

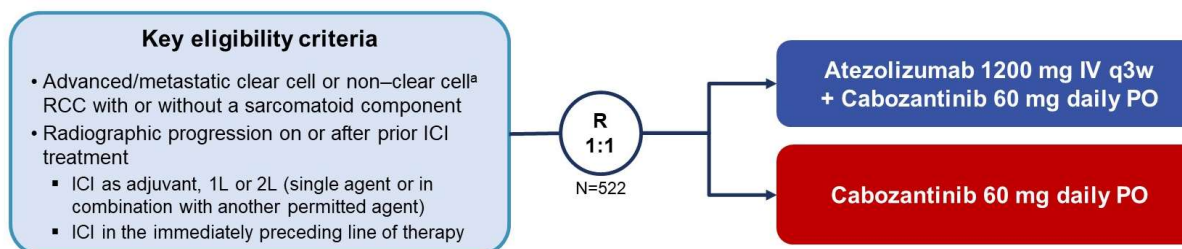
Patients with measurable tumor PD-L1 expression

Objective response rate (95% CI), %	
PD-L1 $\geq 1\%$	12.5 (0.3 to 52.7)
PD-L1 $< 1\%$	14.3 (3.0 to 36.3)

¿Y mantener un antiPD1/PDL-1 a la progresión?

CONTACT-03:

Fase III Cabo +/-Atezo tras PD a IO



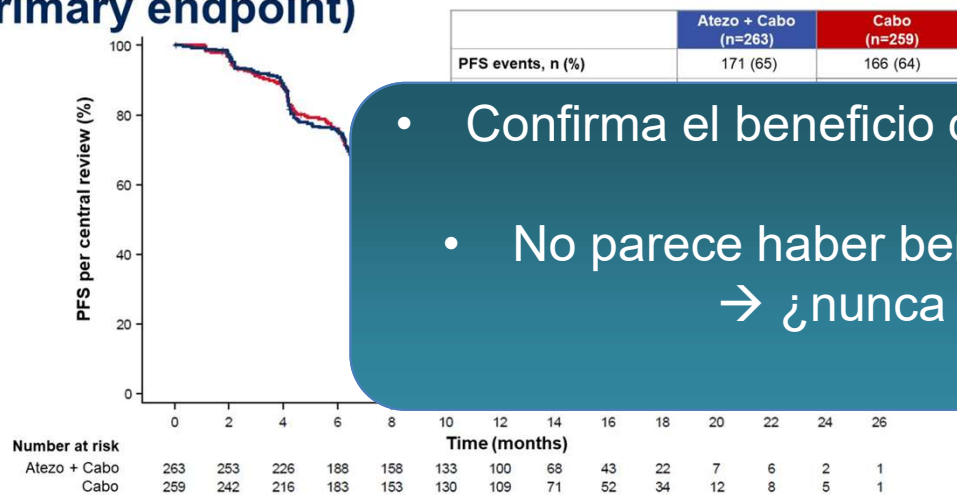
Most common prior systemic cancer treatment

	Atezo + Cabo (n=263)	Cabo (n=259)
First-line treatment, n (%)^{a,b}	262 (99.6)	258 (99.6)
Ipilimumab + nivolumab	80 (30.5)	70 (27.1)
Sunitinib	77 (29.4)	72 (27.9)
Pazopanib	36 (13.7)	43 (16.6)
Axitinib + pembrolizumab	36 (13.7)	28 (10.9)
Nivolumab	6 (2.3)	10 (3.9)
Avelumab + axitinib	7 (2.7)	6 (2.3)
Bempegaldesleukin + nivolumab	3 (1.1)	9 (3.5)
Lenvatinib + pembrolizumab	6 (2.3)	3 (1.2)
Sorafenib	3 (1.1)	1 (0.4)
Second-line treatment, n (%)^{a,b}	119 (45.2)	125 (48.3)
Nivolumab	104 (87.4)	116 (92.8)
Ipilimumab + nivolumab	4 (3.4)	3 (2.4)
Axitinib + pembrolizumab	2 (1.7)	3 (2.4)
Adjuvant treatment, n (%)^{a,b}	8 (3.0)	4 (1.5)
Sunitinib	2 (25)	2 (50)

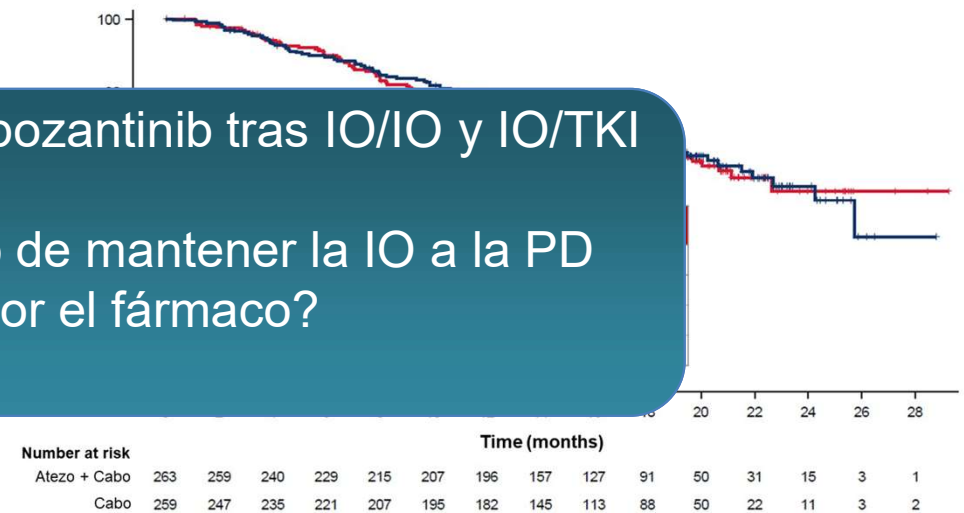
CONTACT-03:

Fase III Cabo +/-Atezo tras PD a IO

Primary analysis of centrally reviewed PFS (primary endpoint)



Interim analysis of OS (primary endpoint)

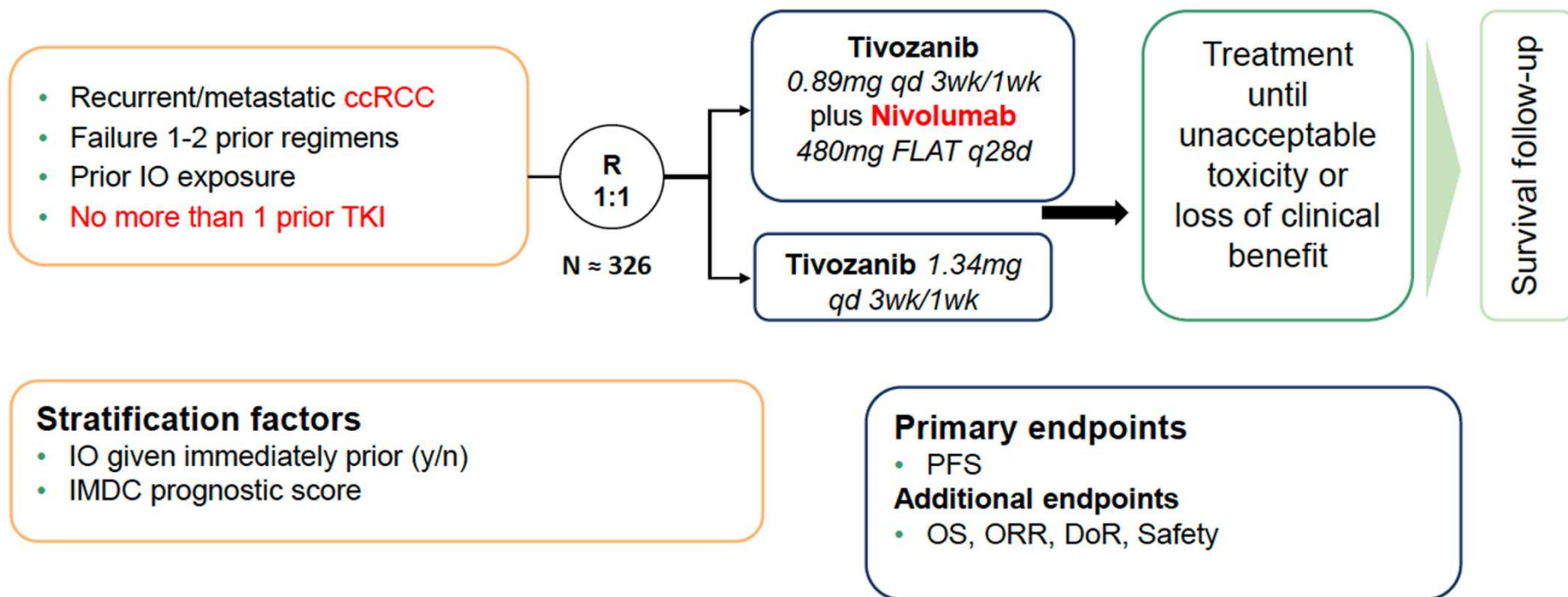


- Confirma el beneficio de Cabozantinib tras IO/IO y IO/TKI
- No parece haber beneficio de mantener la IO a la PD
→ ¿nunca o es por el fármaco?

ORR: 40,5 vs 40,9%

TiNivo-2

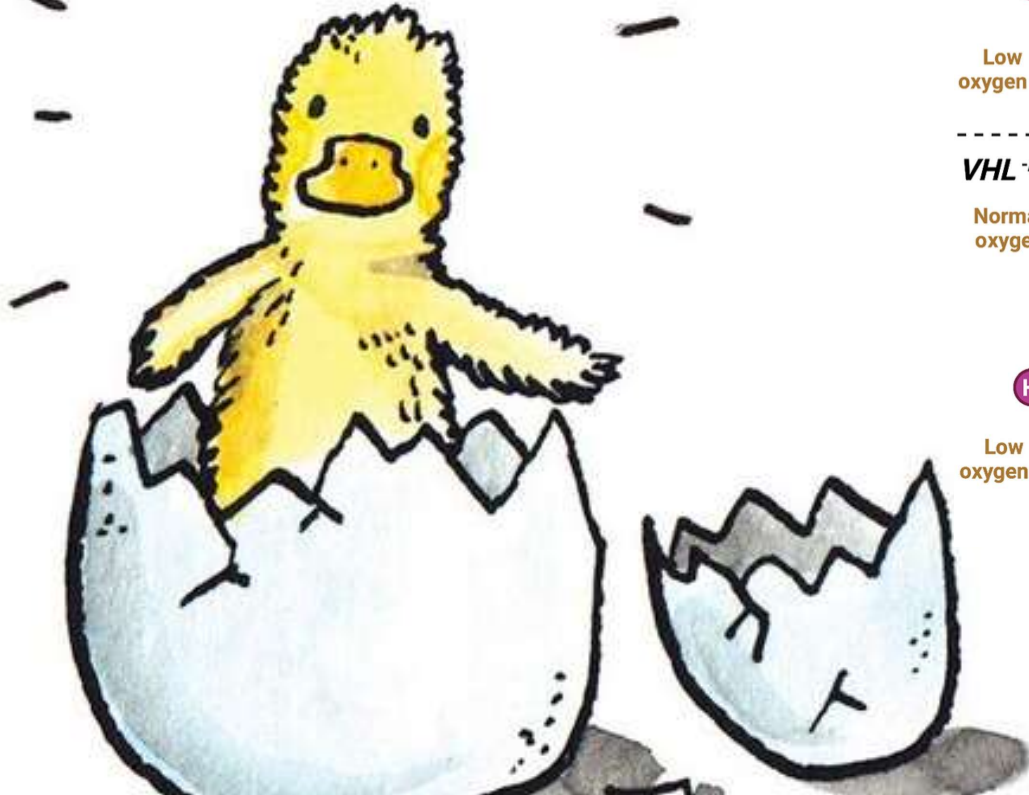
Fase III tras PD a IO: ongoing



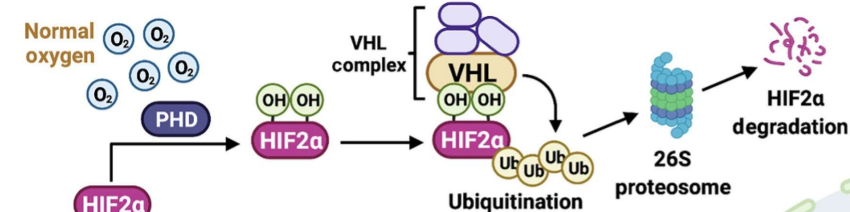


NUEVOS FÁRMACOS

BELZUTIFAN



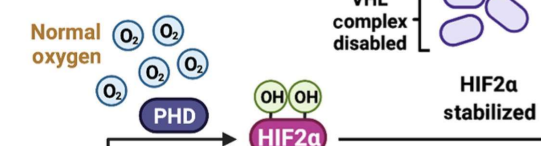
VHL ^{+/+} or VHL ^{+/-} cells



Low oxygen

O₂ → PHD → HIF2α (not hydroxylated)

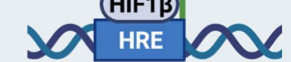
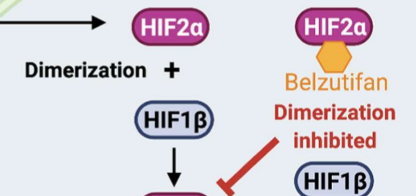
VHL ^{-/-} cells



Low oxygen

O₂ → PHD → HIF2α (not hydroxylated)

Constitutive hypoxia response



Hypoxia response genes

- ↑ VEGF (Angiogenesis)
- ↑ Cyclin D1 (Cell cycle)
- ↑ EPO (Erythropoiesis)
- ↑ GLUT1 (Glycolytic metabolism)

LITESPARK-001

Fase I Belzutifan

Key Eligibility Criteria

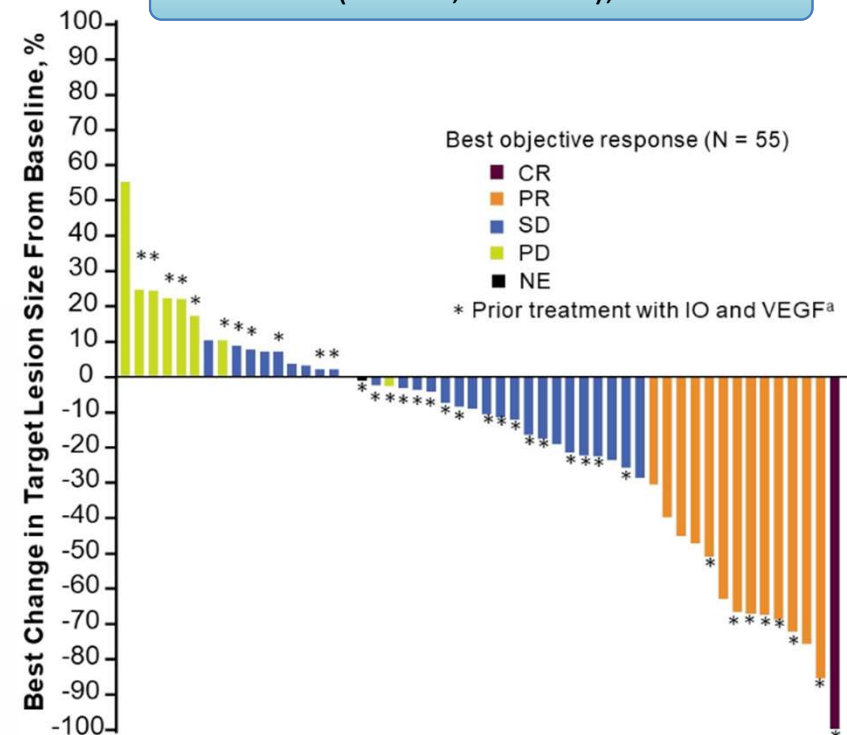
- Locally advanced/metastatic solid sporadic ccRCC
- Received ≥ 1 prior treatment for ccRCC
- Measurable disease per RECIST v1.1
- ECOG PS 0 or 1

N = 55

Belzutifan
120 mg orally QD
Up to 1 year

All-Cause AEs in $\geq 20\%$ (N = 55), n (%)	Any Grade	Grade 3	Grade 4/5
Any	55 (100)	33 (60)	6 (11)
Anemia	42 (76)	15 (27)	0 (0)
Fatigue	39 (71)	3 (5)	0 (0)
Dyspnea	27 (49)	3 (5)	0 (0)
Nausea	20 (36)	1 (2)	0 (0)
Cough	17 (31)	0 (0)	0 (0)
Hypoxia	17 (31)	9 (16)	0 (0)
Vomiting	16 (29)	0 (0)	0 (0)
Edema, peripheral	15 (27)	0 (0)	0 (0)

ORR: 25% (CR: 2%; PR: 24%); DCR: 80%



LITESPARK-005

Fase III Belzutifan vs Everolimus

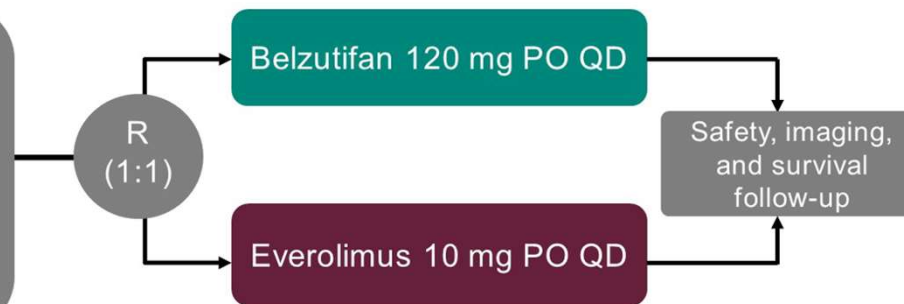
Key Eligibility Criteria

- Unresectable, locally advanced or metastatic clear cell RCC
- Disease progression after 1-3 prior systemic regimens, including ≥ 1 anti-PD-1/L1 agent and ≥ 1 VEGFR-TKI
- Karnofsky Performance Status score $\geq 70\%$

Stratification Factors

- IMDC prognostic score^a: 0 vs 1-2 vs 3-6
- Prior VEGF/VEGFR-targeted therapies: 1 vs 2-3

- Median follow-up^b at IA2: 25.7 months



Primary End Points: PFS per RECIST v1.1 by BICR; OS

Key Secondary End Point: ORR per RECIST v1.1 by BICR

Other Secondary End Points: Safety; PROs

	Belzutifan (N = 374)	Everolimus (N = 372)
# Prior VEGF/VEGFR-TKIs		
1	50.0%	51.1%
2-3	50.0%	48.9%
# Prior lines of therapy ^b		
1	12.3%	14.0%
2	42.0%	44.6%
3	45.2%	40.3%

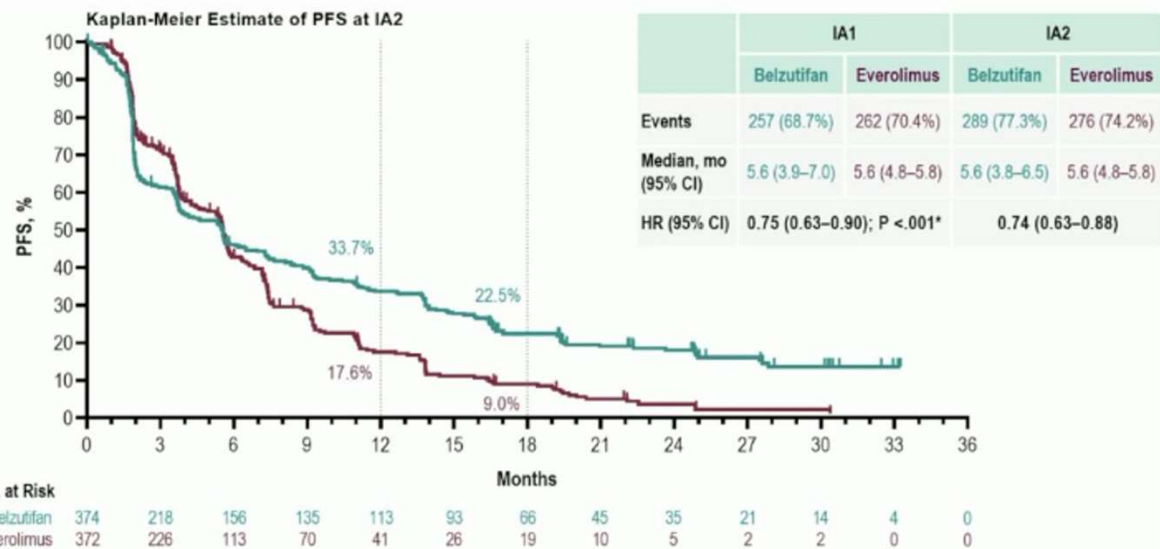
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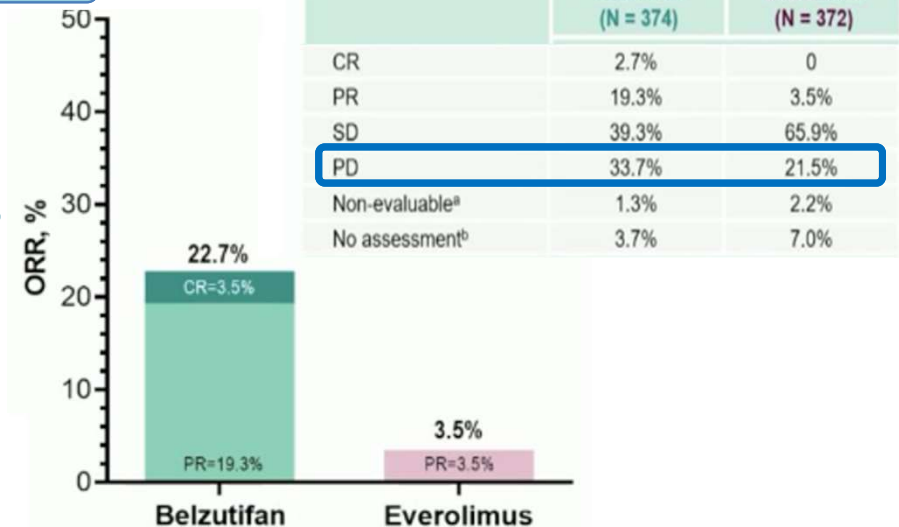
LITESPARK-005

Fase III Belzutifan vs Everolimus

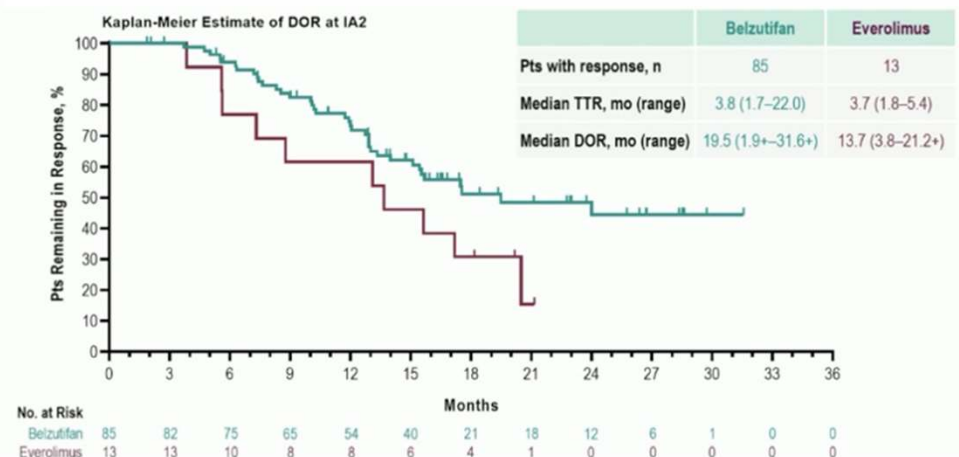
PFS



ORR



DOR

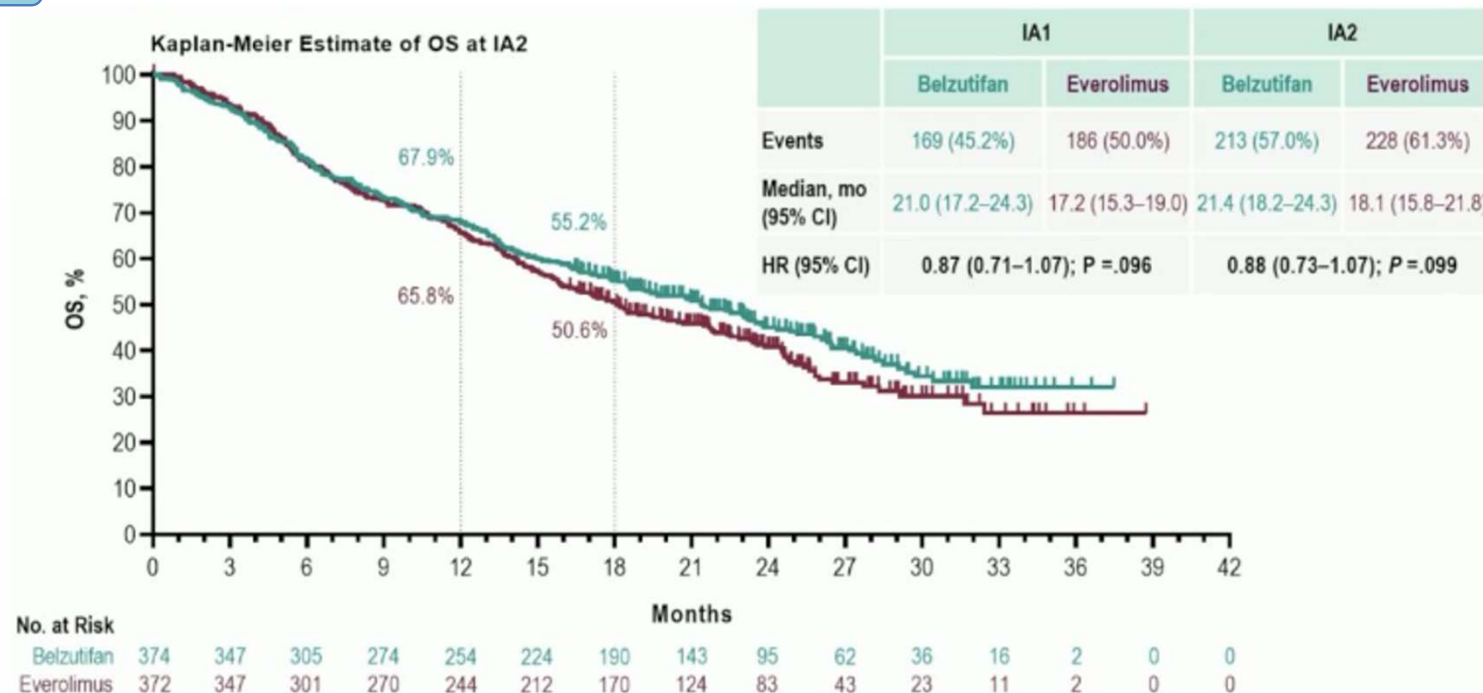


Albiges L, et al. ESMO 2023

LITESPARK-005

Fase III Belzutifan vs Everolimus

OS



LITESPARK-005

Fase III Belzutifan vs Everolimus

AEs

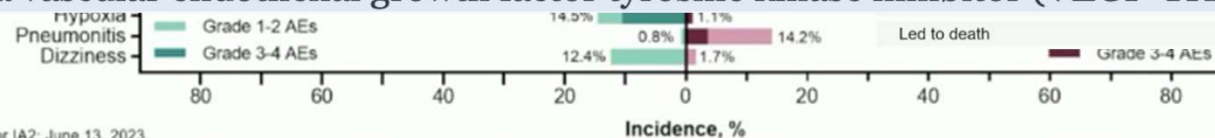
All-Cause AEs in $\geq 10\%$ of Patients in Either Arm



FDA approves belzutifan for advanced renal cell carcinoma

On December 14, 2023, the Food and Drug Administration approved belzutifan (Welireg, Merck & Co., Inc.) for patients with advanced renal cell carcinoma (RCC) following a programmed death receptor-1 (PD-1) or programmed death-ligand 1 (PD-L1) inhibitor and a vascular endothelial growth factor tyrosine kinase inhibitor (VEGF-TKI).

Increase
Hy



Data cutoff date for IA2: June 13, 2023.

Everolimus
(N = 360)

3.9 (0.0–33.2)

357 (99.2%)

225 (62.5%)

137 (38.1%)

53 (14.7%)

19 (5.3%)

322 (89.4%)

142 (39.4%)

47 (13.1%)

2 (0.6%)^b

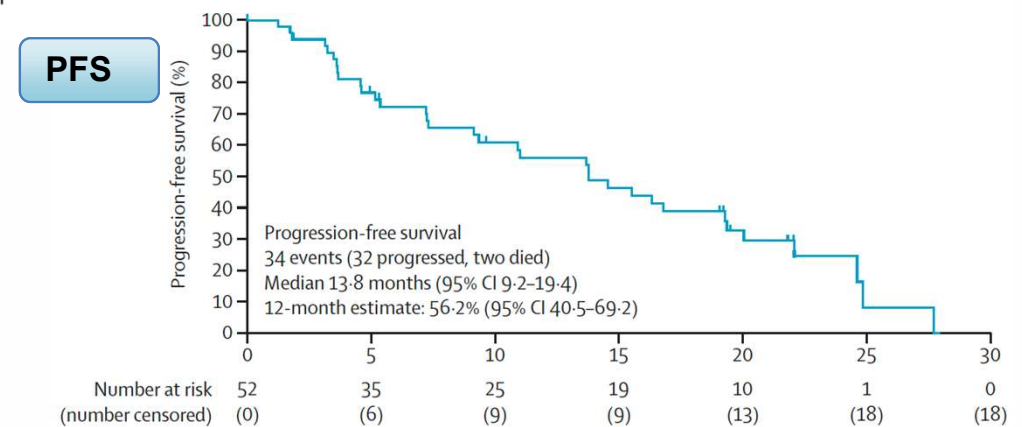
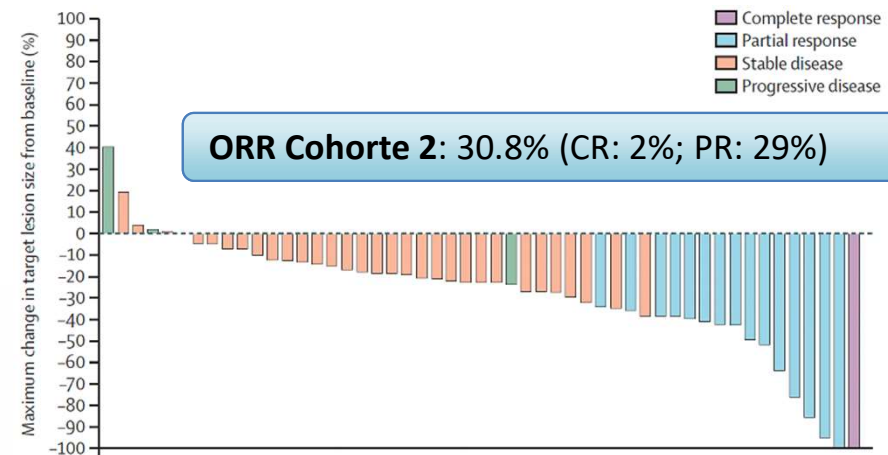
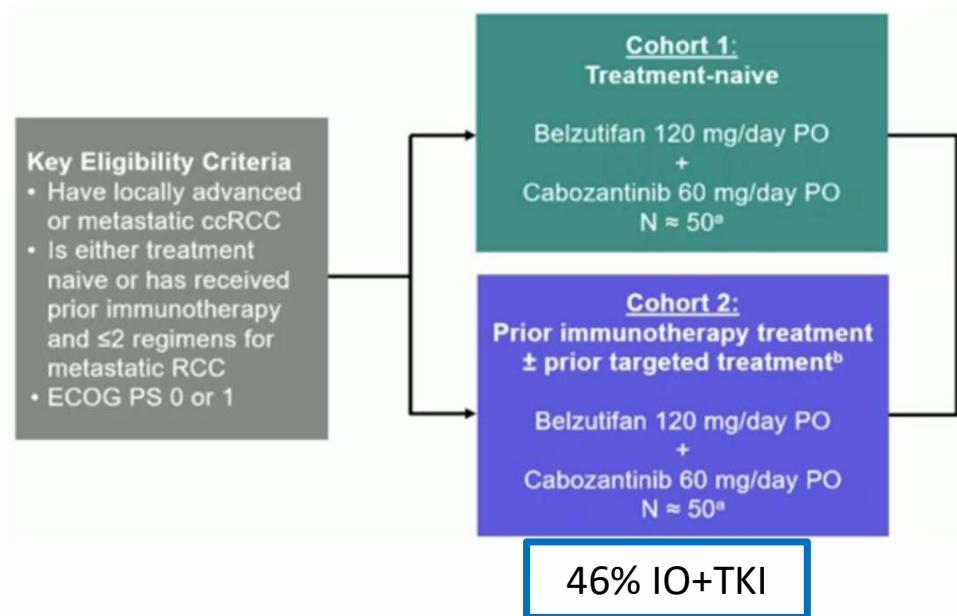
OTROS FÁRMACOS PROMETEDORES

Trial Description	Drug
VÍA ANGIOGÉNESIS	XL-092 (Stellar-001 y 002) Sitravatinib (MGCD516) Batiraxcept (AVB-S6-500) ⁸⁹ Zr-TLX250 (Zr-Girentuximab)
INMUNOTERAPIA	MEDI 5752 (anti-PD1/CTLA4) CBM-588 (producto bacteriano) +Nivo/Ipi
VÍAS METABÓLICAS	Ciforadenant (antagonista del receptor de adenosinaA2a)
INHIBIDORES PARP	Olaparib Talazoparib Niraparib



Combinaciones

LITESPARK-003: Fase II Belzutifan+Cabozantinib



Combinaciones

KEYMAKER 03B: Fase IB/II

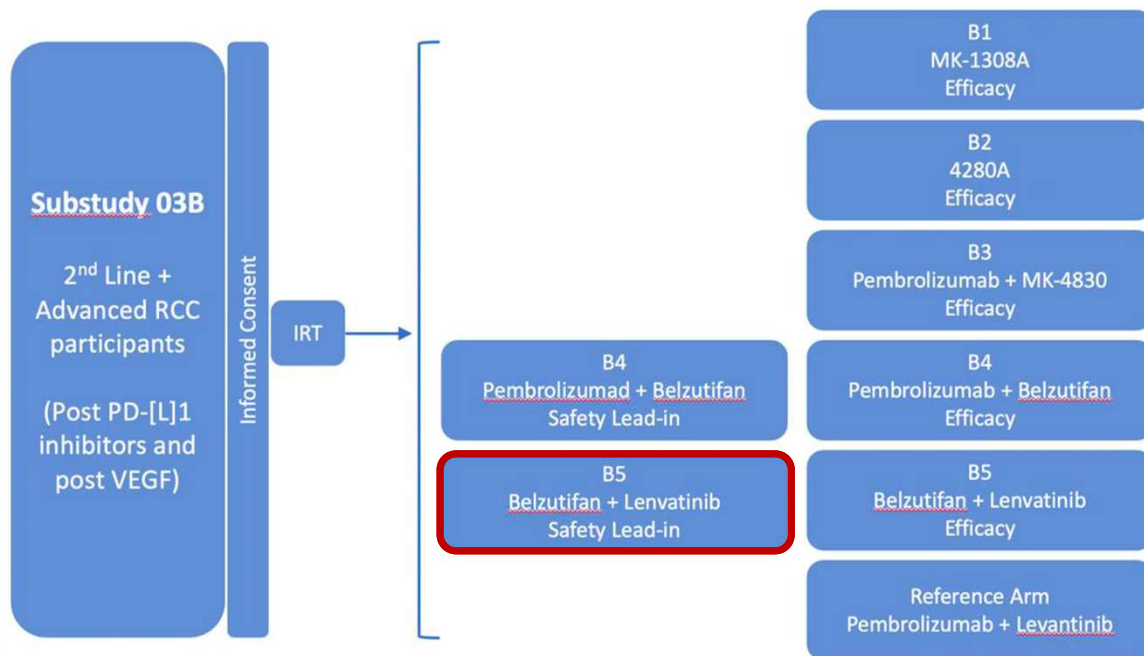
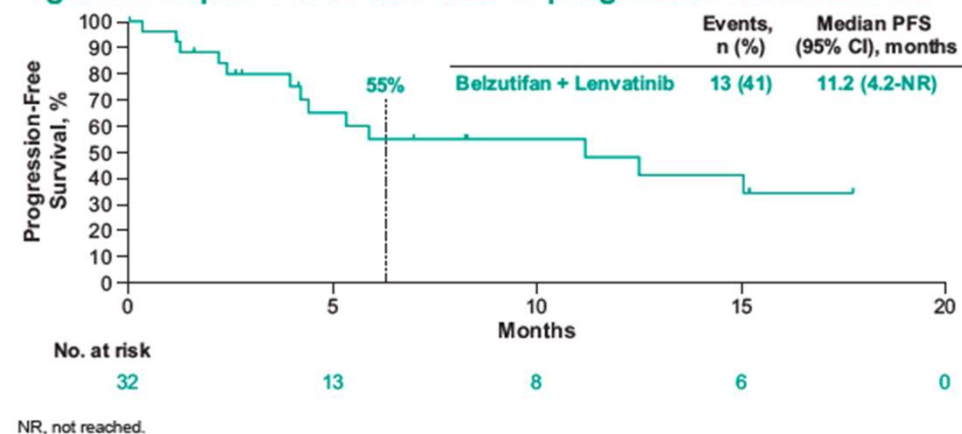


Table 2. Best overall response per RECIST v1.1 by BICR for patients who had the opportunity to receive ≥ 2 postbaseline scans

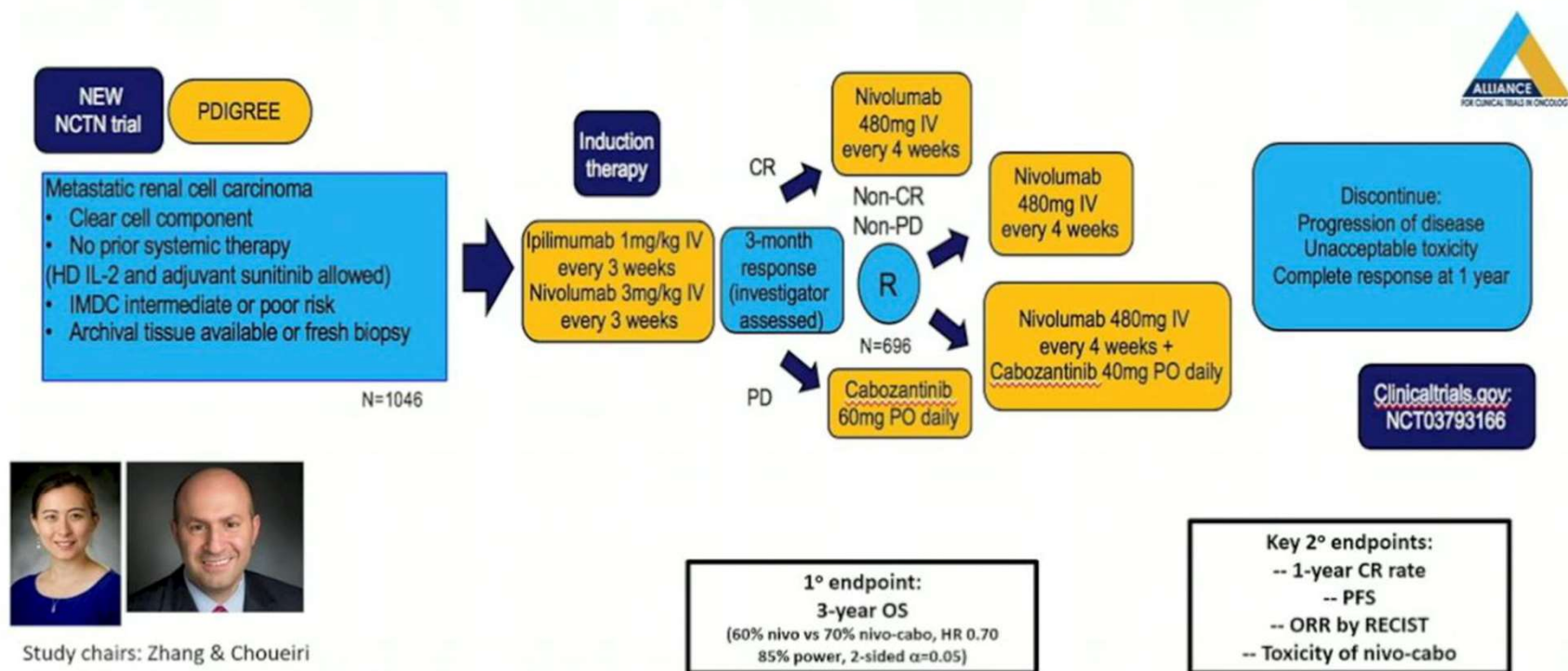
	Belzutifan Plus Lenvatinib n = 24
ORR, % (95% CI)	50 (29-71)
CBR ^a %, (95% CI)	54 (33-74)
Best overall response, n (%)	
CR	0
PR	12 (50)
SD	9 (38)
PD	1 (4)
Not assessed ^b	2 (8)
Duration of response, median (range), months	NR (1.4+ to 14.0+)
Response lasting ≥ 12 months, %	74

Figure 6. Kaplan-Meier estimate of progression-free survival



Nuevas estrategias

PD-Inhibitor nivolumab and Ipilimumab followed by nivolumab vs VEGF TKI cabozantinib with nivolumab (PDIGREE, A031704) – schema



Study activated in NCTN May 2019

PDIGREE: Alliance trial A031704
Clinicaltrials.gov: NCT03793166

CONCLUSIONES

- **El panorama de la 2ª línea ha cambiado** → a la espera de resultados de estudios fase 3 para identificar la mejor secuencia.
- A la hora de elegir el mejor tratamiento siempre debemos **tener en cuenta**: el tratamiento previo, el objetivo, el perfil de toxicidad, las comorbilidades y preferencias del paciente.
- Hoy por hoy, el tratamiento con mayor evidencia a la PD de las combinaciones es un **TKI que no haya recibido previamente**.
- Actualmente **no hay evidencia para poner IO a la PD de IO**.
 - ¿Posible papel en combinación con nuevos fármacos?
 - ¿Selección según el mecanismo de resistencia a IO?
- **Belzutifan** aumenta ORR y PFS a largo plazo, sin claro beneficio en OS y mayor tasa de progresiones como mejor respuesta.
 - Papel todavía no claro, ¿en combinación? ¿en población seleccionada?

ACTUALIZACIÓN EN URO-ONCOLOGÍA:
UPDATE 2024

Gracias

