



7th ANNUAL
UC
COURSE

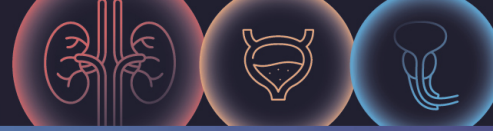
Emerging personalized
therapies for the management
of urothelial carcinomas

7th MAY 2026
MADRID



The optimal management of FGFR + disease

Guillermo de Velasco MD, PhD
Medical Oncologist,
Hospital 12 de Octubre, Madrid



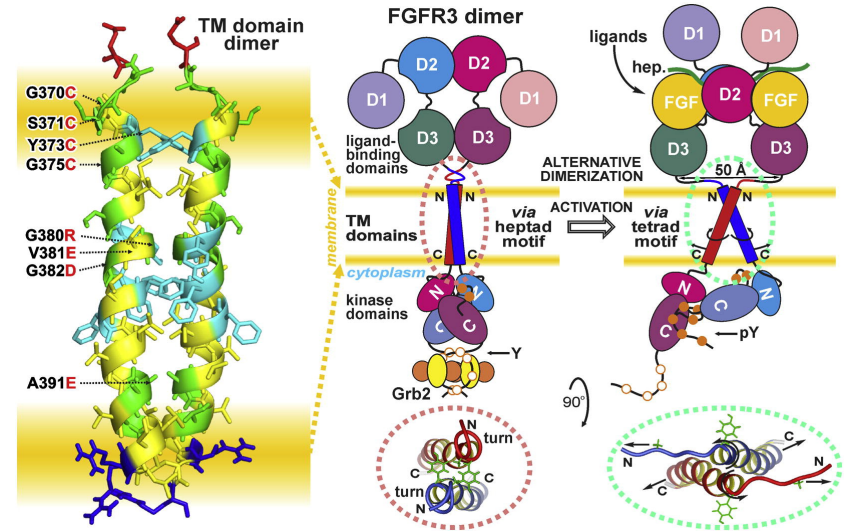
COIs

Advisory Board: Astellas , Arcus Biosciences, Astra Zeneca, BMS; EISAI, Ipsen, Janssen , MSD, Pfizer

Invited Speaker: Astellas, Adium, Astra Zeneca, Bayer, BMS, Ipsen,, Merck, MSD, Novartis,
Pierre Fabre, Pfizer, Roche



- Family of 4 receptor tyrosine kinases (FGFR1–4);
- FGFR5/FGFRL1 lacks kinase domain
Physiologic roles: embryogenesis, wound healing, angiogenesis, phosphate homeostasis (FGFR1 + Klotho axis)
- Oncogenic activation = mutations, amplifications, fusions/rearrangements
- Fusions force receptor dimerization → constitutive kinase → MAPK + PI3K-AKT + STAT signaling





Targeted treatment begins with testing: Identify FGFR+ patients today

~20% testados

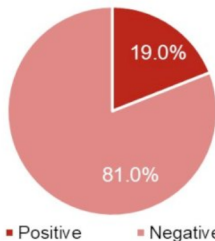
Table 1. Patient Demographics

Characteristic	Genomic Testing Status with FGFR3		
	Overall Patients N = 3,661 (100%)	With Genomic Test N = 1,495 (40.8%)	Without Genomic Test N = 2,166 (59.2%)
(Md, Q1, Q3)	74.0 (67.0, 81.0)	73.0 (67.0, 80.0)	75.0 (68.0, 81.0)
Race, n (%)[#]			
White	2,514 (68.7%)	1,029 (68.8%)	1,485 (68.6%)
Black	197 (5.4%)	61 (4.1%)	136 (6.3%)
Asian	39 (1.1%)	18 (1.2%)	21 (1.0%)
Other	219 (6.0%)	89 (6.0%)	130 (6.0%)
Unknown	692 (18.9%)	298 (19.9%)	394 (18.2%)
Practice Type, n (%)^{#*}			
2L	514 (14.0%)	282 (18.9%)	232 (10.7%)
3L	164 (4.5%)	116 (7.8%)	48 (2.2%)
4L+	115 (3.1%)	85 (5.7%)	30 (1.4%)
ECOG at advanced diagnosis, n (%)^{#*}			
0-1	1,426 (39.0%)	689 (46.1%)	737 (34.0%)
2+	348 (9.5%)	148 (9.9%)	200 (9.2%)
Unknown	1,887 (51.5%)	658 (44.0%)	1,229 (56.7%)
Stage at initial MIBC diagnosis[*]			
Localized MIBC	1,183 (32.3%)	450 (30.1%)	733 (33.8%)
Locally Advanced	947 (25.9%)	298 (19.9%)	649 (30.0%)
Metastatic	1,489 (40.7%)	731 (48.9%)	758 (35.0%)
Not documented	42 (1.1%)	16 (1.1%)	26 (1.2%)
Primary Site, n (%)[*]			
Upper tract	721 (19.7%)	342 (22.9%)	379 (17.5%)
Lower tract	2,940 (80.3%)	1,153 (77.1%)	1,787 (82.5%)
NGS FGFR3 tested			
Yes	-	1,465 (98%)	-
No	-	30 (2.0%)	-

Sólo 40% testados

Figure 1. FGFR3 status

A- Overall Result



B- By Primary Tumor Location

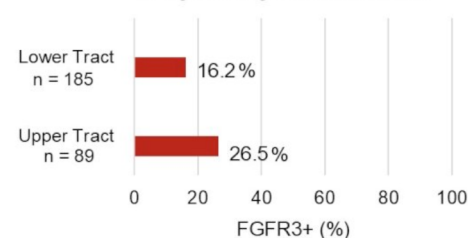
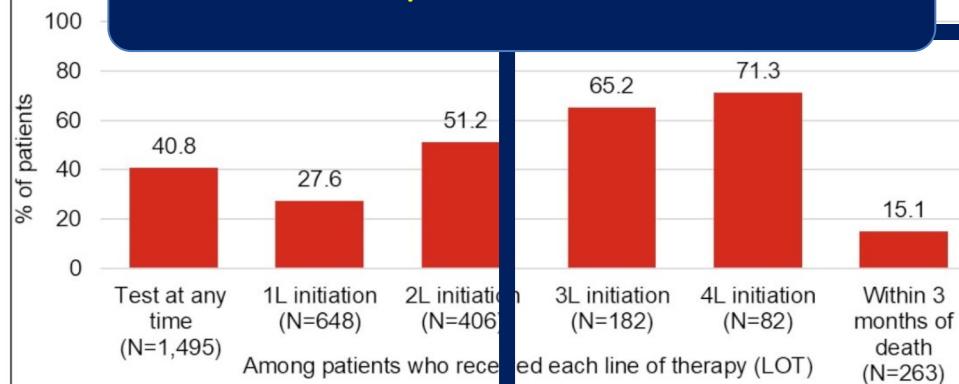
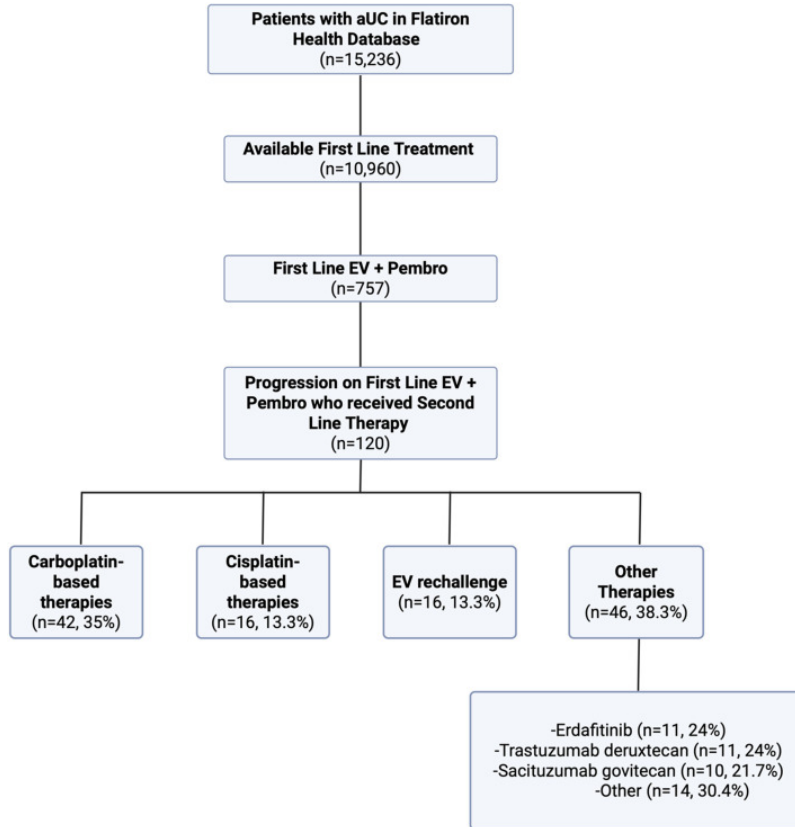


Figure 2

<1/3 antes de 3L





**Figure 1: THOR Cohort 1 study design****Cohort 1****Key Eligibility Criteria**

- Age \geq 18 years
- Metastatic or unresectable UC
- Disease progression
- Prior treatment with anti-PD-(L)1
- 1–2 lines of systemic therapy
- Select *FGFR3/2* alterations (mutations or fusions)
- ECOG PS 0–2

R
1:1**Erdaftinib**

Once-daily erdaftinib 8 mg with pharmacodynamically guided up-titration to 9 mg

Investigator's choice of chemotherapy

Docetaxel or vinflunine once every 3 weeks

Treat until disease progression or unacceptable toxicity

Stratification factors:

Region (North America vs Europe vs rest of world), ECOG PS (0 or 1 vs 2), and disease distribution (presence vs absence of visceral [lung, liver, or bone] metastases)

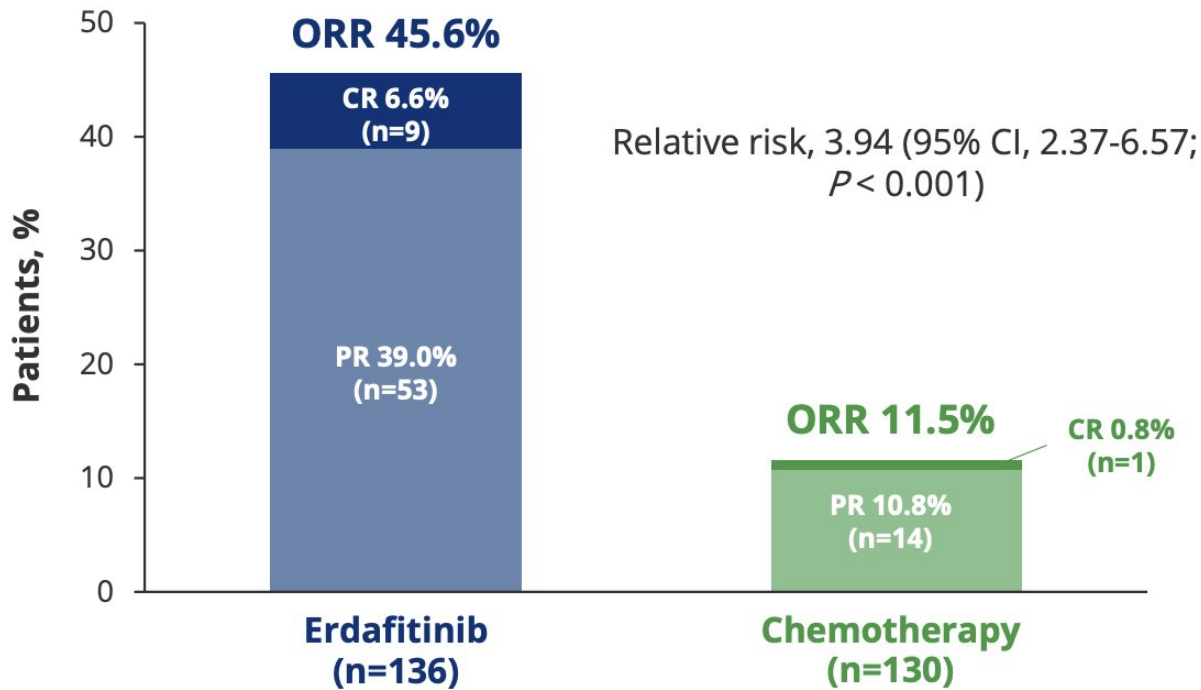
Endpoints**Primary:** OS**Key secondary endpoints:** PFS, ORR (both investigator-assessed per RECIST v1.1); safety

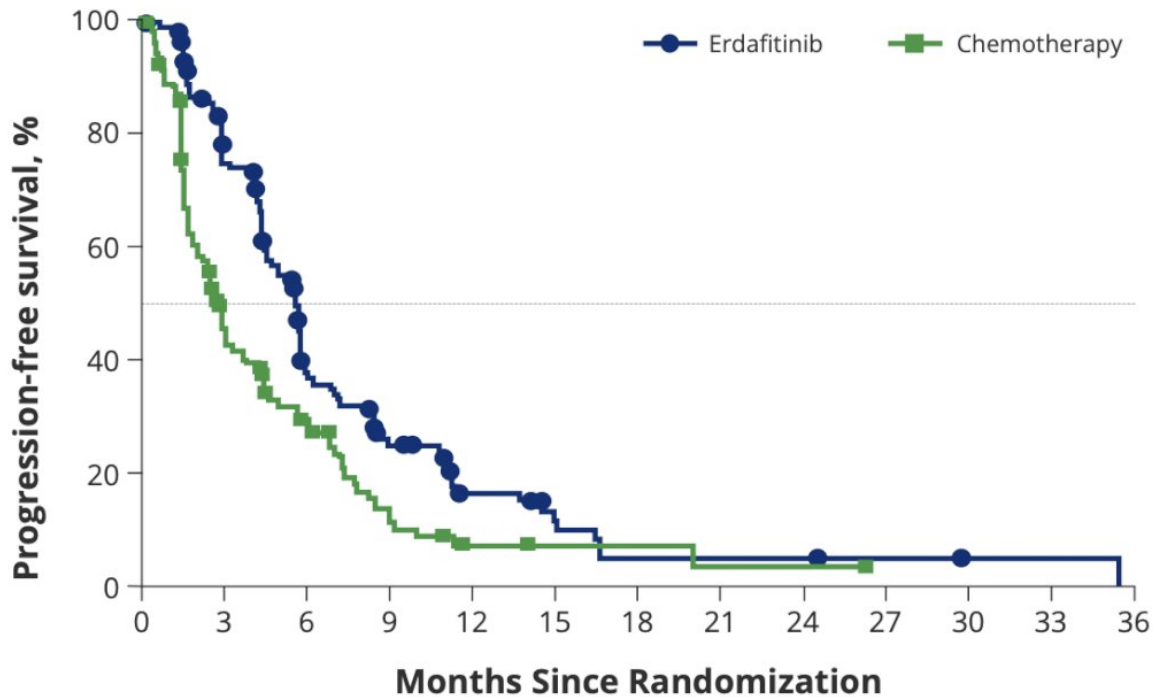
ECOG PS, Eastern Cooperative Oncology Group performance status; FGFR, fibroblast growth receptor; PD-1, programmed cell death protein 1; PD-L1, programmed death ligand 1; UC, urothelial carcinoma.



Characteristic	Erdafitinib (n=136)	Chemotherapy (n=130)
Age, median (range), years	66 (32-85)	69 (35-86)
Men, n (%)	96 (70.6)	94 (72.3)
Race, n (%)		
White	81 (59.6)	63 (48.5)
Asian	37 (27.2)	40 (30.8)
Black or African American	0	1 (0.8)
Multiple	0	1 (0.8)
Not reported	18 (13.2)	25 (19.2)
Presence of visceral metastases, n (%)	101 (74.3)	97 (74.6)
Liver	31 (22.8)	38 (29.2)

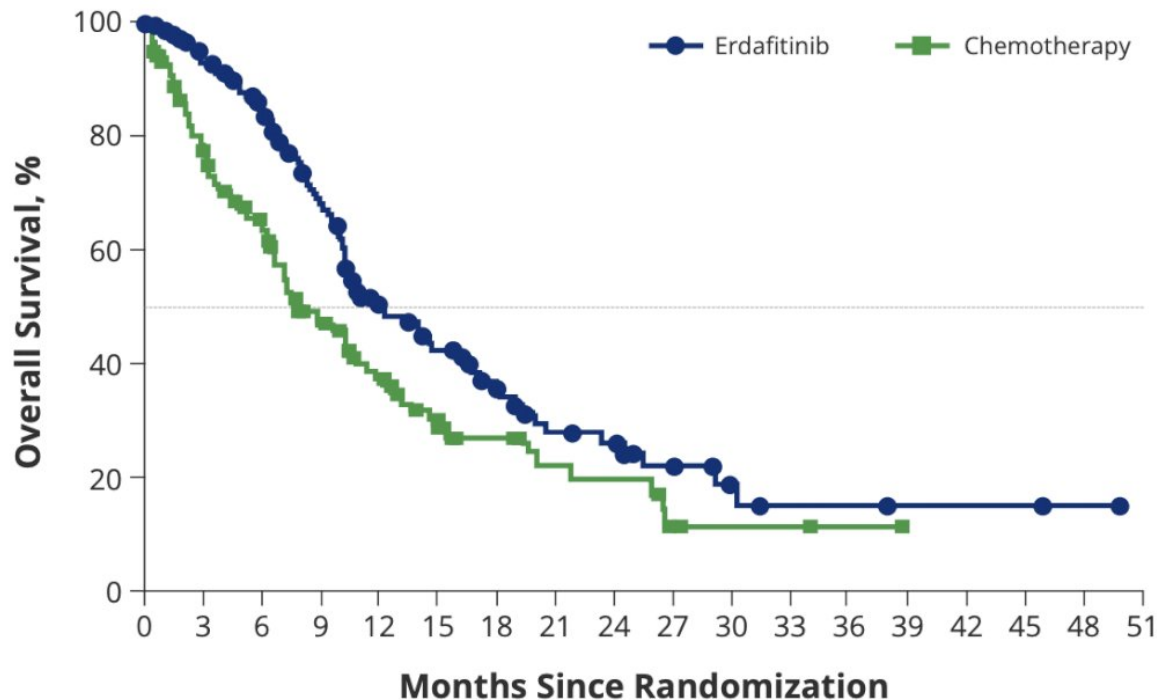
Characteristic	Erdafitinib (n=136)	Chemotherapy (n=130)
ECOG PS 0-1, n (%)	124 (91.2)	117 (90)
Primary tumor upper tract, n (%)	41 (30.1)	48 (36.9)
PD-L1 low (CPS <10), n (%)	89 (92.7) ^a	68 (86.1) ^a
<i>FGFR</i> alt, n (%) ^b	(n=135)	(n=129)
Mutations	108 (79.4)	107 (82.3)
Fusions	25 (18.4)	19 (14.6)
Mutations and fusions	2 (1.5)	3 (2.3)
Prior lines of systemic therapy ^c		
1 line	45 (33.1)	33 (25.4)
2 lines	90 (66.2)	97 (74.6)





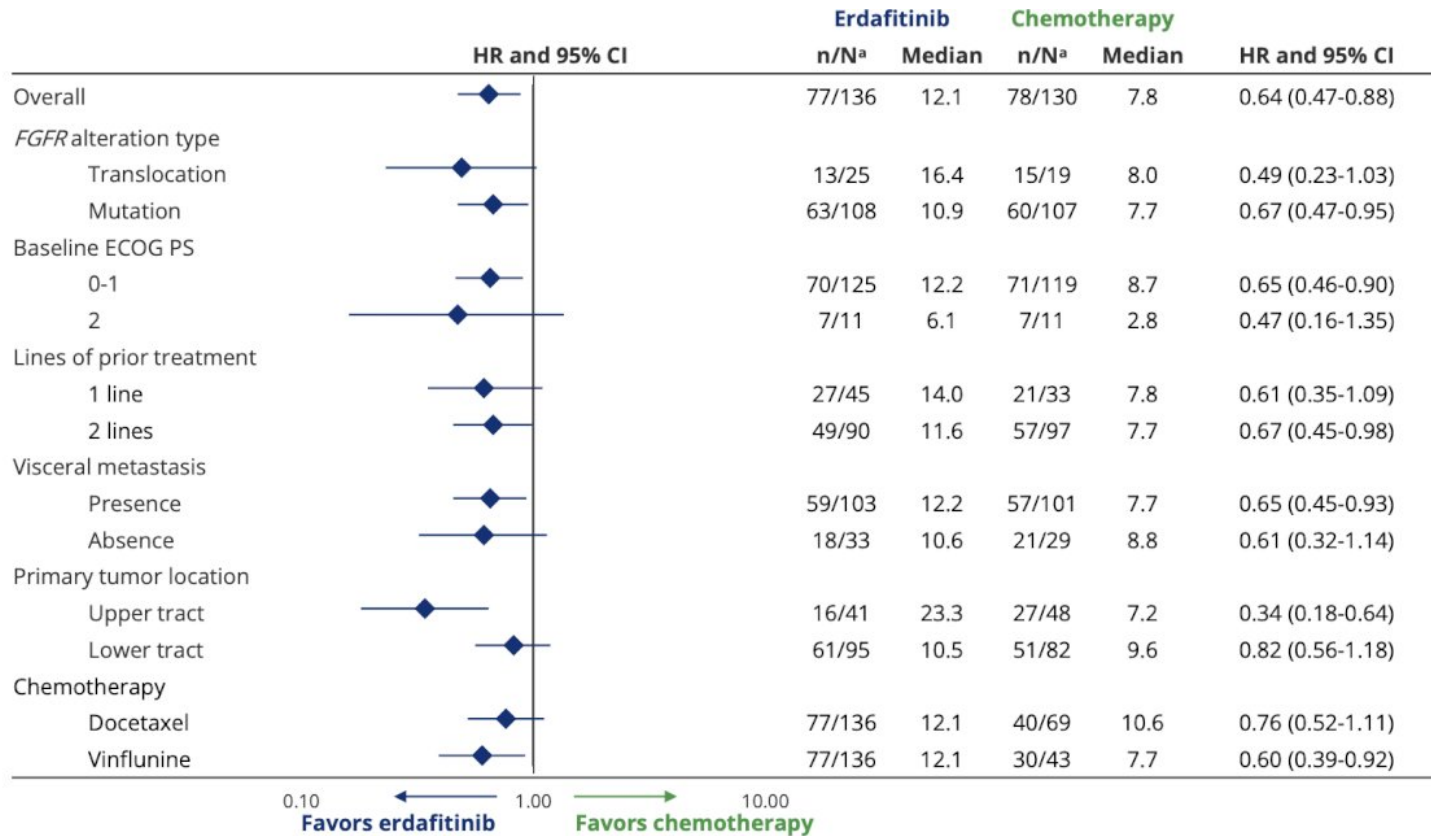
No. at risk	0	3	6	9	12	15	18	21	24	27	30	33	36
Erdafitinib	136	90	39	24	12	7	3	3	3	2	1	1	0
Chemotherapy	130	43	23	9	4	2	2	1	1	0	0	0	0

Loriot Y. *et al.* (2023). *N Engl J Med.*



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

Loriot Y. *et al.* (2023). *N Engl J Med.*

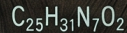


Loriot Y. *et al.* (2023). *N Engl J Med.*

TRATAMIENTO INNOVADOR DEL CARCINOMA UROTELIAL
METASTÁSICO: UN PASO ADELANTE, PERO...

EL ELEFANTE EN
LA HABITACIÓN

TOXICIDAD DE ERDAFITINIB



OJO: RETINOPATÍA
Serosa Central
EYE: CSR/RPED

UÑAS: ONICOLISIS
NAILS: ONYCHOLYSIS

FOSFATO ALTO:
HIPERFOSFATEMIA
HIGH PHOSPHATE

BOCA SECA /
ESTOMATITIS
DRY MOUTH /
STOMATITIS

CANSANCIO
FATIGUE

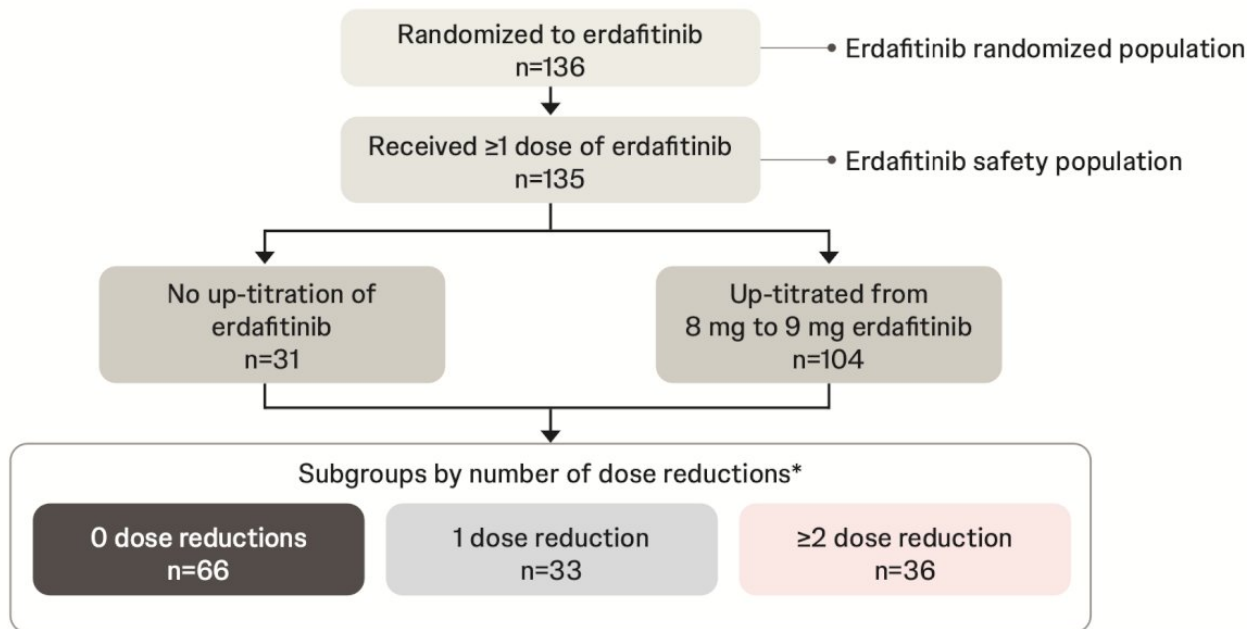
CREATININA ALTA
HIGH CREATININE





Impact of Dose Reductions on the Efficacy of Erdafitinib in Patients with Advanced or Metastatic Urothelial Carcinoma (mUC): A Post-hoc Analysis of the Phase 3 THOR Study Cohort-1 Evaluating Erdafitinib versus Chemotherapy

Figure 2: Disposition of patients included in subgroup analyses by dose reductions



*De-escalation from 9 mg to 8 mg not included.



Impact of Dose Reductions on the Efficacy of Erdafitinib in Patients with Advanced or Metastatic Urothelial Carcinoma (mUC): A Post-hoc Analysis of the Phase 3 THOR Study Cohort-1 Evaluating Erdafitinib versus Chemotherapy

Table 1: Baseline characteristics by number of erdafitinib dose reductions

Characteristics	Number of dose reductions		
	0 (n=66)	1 (n=33)	≥2 (n=36)
Age, median (range), years	65.0 (34–84)	65.0 (32–85)	69.5 (50–81)
Age, n (%)			
<65 years	32 (48.5)	16 (48.5)	11 (30.6)
65–69 years	13 (19.7)	9 (27.3)	7 (19.4)
70–74 years	9 (13.6)	1 (3.0)	11 (30.6)
≥75 years	12 (18.2)	7 (21.2)	7 (19.4)
Female, n (%)	17 (25.8)	12 (36.4)	11 (30.6)
Race, n (%)			
Asian	13 (19.7)	11 (33.3)	13 (36.1)
White	45 (68.2)	17 (51.5)	18 (50.0)
Not reported	8 (12.1)	5 (15.2)	5 (13.9)
Primary tumor location, n (%)			
Lower tract	51 (77.3)	22 (66.7)	21 (58.3)
Upper tract	15 (22.7)	11 (33.3)	15 (41.7)
Visceral metastases, n (%)			
Present	51 (77.3)	24 (72.7)	25 (69.4)
Absent	15 (22.7)	9 (27.3)	11 (30.6)
PD-(L)1 status, n/total (%)			
CPS ≥10	5/46 (10.9)	0/22 (0)	2/27 (7.4)
CPS <10	41/46 (89.1)	22/22 (100)	25/27 (92.6)
Previous lines of systemic therapy, n (%)			
1	24 (36.4)	11 (33.3)	10 (27.8)
2	42 (63.6)	22 (66.7)	25 (69.4)
3	0	0	1 (2.8)



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Table 2: OS and PFS by number of erdafitinib dose reductions

	Erdafitinib randomized population (n=136)	Erdafitinib safety population		
		Number of dose reductions		
		0 (n=66)	1 (n=33)	≥2 (n=36)
Overall Survival				
Median (95% CI), mo	12.1 (10.3, 16.4)	10.0 (8.1, 10.9)	10.3 (8.5, 16.8)	23.2 (18.2, NE)
6-mo rate (95% CI), %	85 (77, 90)	77 (63, 86)	87 (69, 95)	97 (81, 100)
12-mo rate (95% CI), %	51 (41, 60)	36 (23, 50)	43 (24, 60)	81 (63, 91)
PFS				
Median (95% CI), mo	5.6 (4.4, 5.7)	4.2 (2.8, 5.4)	5.6 (4.0, 5.9)	10.8 (5.8, 13.7)
6-mo rate (95% CI), %	37 (28, 46)	20 (10, 32)	31 (15, 49)	68 (50, 81)
12-mo rate (95% CI), %	17 (10, 25)	7 (2, 16)	10 (1, 32)	34 (18, 51)

Mo, months; OS, overall survival; PFS, progression-free survival.



Impact of Dose Reductions on the Efficacy of Erdafitinib in Patients with Advanced or Metastatic Urothelial Carcinoma (mUC): A Post-hoc Analysis of the Phase 3 THOR Study Cohort-1 Evaluating Erdafitinib versus Chemotherapy

Table 4: TEAEs leading to dose reduction of erdafitinib with incidence $\geq 10\%$

n (%)	Number of dose reductions	
	1 (n=33 ^a)	≥ 2 (n=36)
Stomatitis	7 (21.2)	12 (33.3)
Palmar-plantar erythrodysesthesia	2 (6.1)	10 (27.8)
Onycholysis	5 (15.2)	7 (19.4)
Onychomadesis	4 (12.1)	5 (13.9)
Diarrhea	3 (9.1)	5 (13.9)
Dry mouth	2 (6.1)	4 (11.1)
Hyperphosphatemia	2 (6.1)	4 (11.1)

AE, adverse event; TEAE, treatment-emergent adverse event. ^aOne of these 33 participants is not included in this analysis as they did not meet the criterion for dose reduction based on the exposure data. However, the AE data indicate that the participant had a dose reduction due to an AE.



Impact of Dose Reductions on the Efficacy of Erdafitinib in Patients with Advanced or Metastatic Urothelial Carcinoma (mUC): A Post-hoc Analysis of the Phase 3 THOR Study Cohort-1 Evaluating Erdafitinib versus Chemotherapy

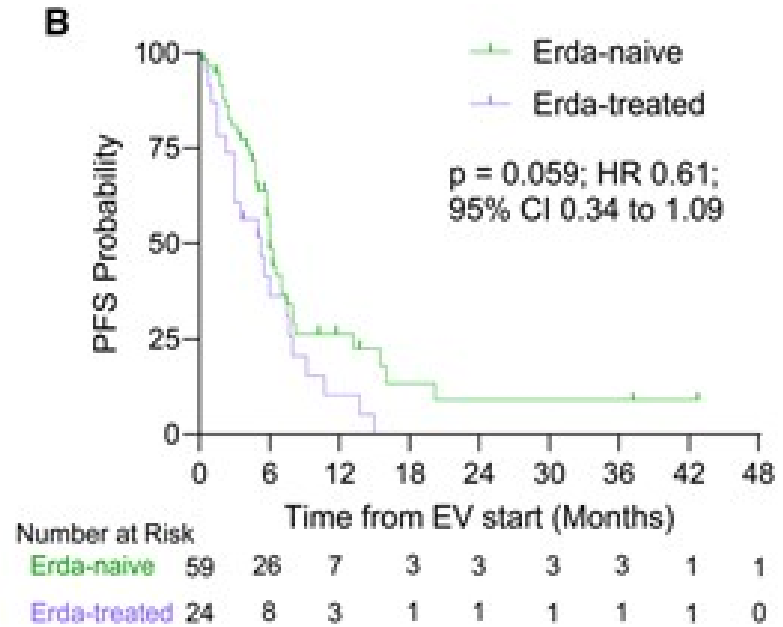
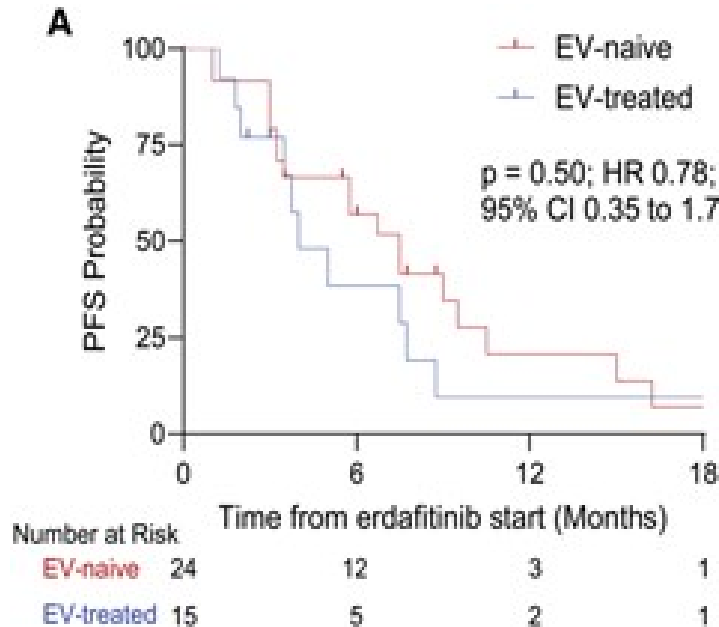
Table 3: Objective responses by number of erdafitinib dose reductions (unconfirmed)

n (%)	Erdafitinib randomized population (n=136)	Erdafitinib safety population		
		Number of dose reductions		
		0 (n=66)	1 (n=33)	≥2 (n=36)
ORR	62 (45.6)	22 (33.3)	17 (51.5)	23 (63.9)
Best overall response				
Complete response	9 (6.6)	0	4 (12.1)	5 (13.9)
Partial response	53 (39.0)	22 (33.3)	13 (39.4)	18 (50.0)
Stable disease	50 (36.8)	24 (36.4)	14 (42.4)	12 (33.3)
Progressive disease	14 (10.3)	11 (16.7)	2 (6.1)	1 (2.8)
Not evaluable	10 (7.4)	9 (13.6)	0	0
Disease control rate ^a	112 (82.4)	46 (69.7)	31 (93.9)	35 (97.2)

ORR, objective response rate; ^aComplete response + partial response + stable disease.



Erda antes o después de EV

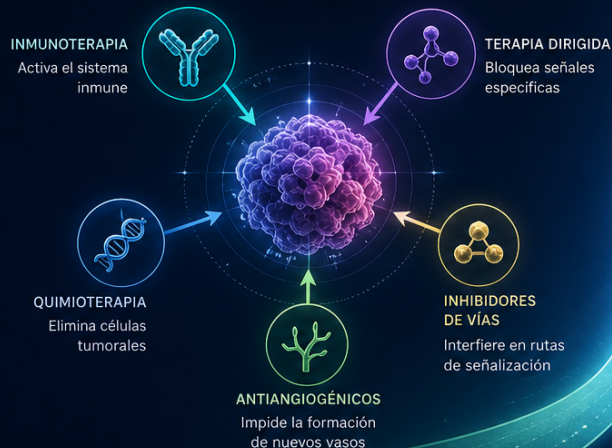




¿HACIA DÓNDE VAMOS?

COMBINACIONES

Sinergia terapéutica para mejores resultados



El cáncer es complejo.
La combinación de estrategias potencia la eficacia y supera resistencias.



PACIENTE EN EL CENTRO

Tratamiento personalizado
Medicina de precisión



Nuevas moléculas, nuevos mecanismos.
Fármacos más inteligentes para lograr mejores resultados con menos toxicidad.

MEJORES FÁRMACOS

Fármacos de nueva generación más precisos y efectivos



✓ CONCEPTO CLAVE

Combinaciones complementarias y mejores fármacos:
dos caminos convergentes hacia un mismo objetivo: mejorar la vida de nuestros pacientes.



ETCTN 10483: Phase Ib Trial of Erdafitinib (E) Combined With Enfortumab Vedotin (EV) Following Prior Therapy For Metastatic Urothelial Carcinoma (mUC) With FGFR 3/2 Alterations

Rohit K Jain¹, Yuanquan Yang², Laura Graham³, Faustine Ong⁴, Zhengming Chen¹, Bishoy Faltas¹, Di (Maria) Jiang⁵, Risa Wong⁶, Sumati Gupta⁷, Anishka D'souza⁸, Waddah Arafat⁹, Jazlyn Heiligh⁴, Timothy W. Synold¹⁰, Scott Tagawa¹, Lorraine Pelosof¹¹, Jingsong Zhang⁴, Guru Sonpavde¹²



Experimental Therapeutics Clinical Trials Network
Team Driven. Cancer Therapy Focused.
National Cancer Institute's National Institutes of Health

1:Weill Cornell Medical College, New York, NY 2: Ohio State University Cancer Center ,Columbus, OH 3: University of Colorado Cancer Center, Aurora, CO 4:Moffitt Cancer Center, Tampa, FL 5: Princess Margaret Cancer Center, Toronto, ON 6: UPMC, Pittsburgh PA 7: Huntsman Cancer Institute, Salt Lake City, UT 8:USC, Los Angeles, CA 9: UT Southwestern Cancer Center, Dallas, TX 10:City of Hope Cancer Center, Duarte, CA 11:National Cancer Institute, Bethesda, MD 12: Advent Health Cancer Institute , Orlando, FL

METHODS/SCHEMA

- Locally advanced unresectable or mUC
- Upper/lower tract tumors
- Mixed histology types are allowed if urothelial is predominant
- Progression after platinum-based and anti PD-1/PD-L1therapy
- Positive FGFR 3/2 activating alterations
- Measurable disease
- ECOG 0-2

Dose escalation cohort

- Erdafitinib 8 mg Q day for 28 days plus EV at starting dose of 1 mg/kg D1,8,15 every 28 days
- 3 +3 design
- 6-18 patients

- ctDNA (Guardant 360 at baseline)
- Baseline FFPE tumor Tissue for PD-L1, Nectin 4 expression
- C1D15, C1D17,C2D1 plasma levels of erdafitinib and free MMAE for PK studies

Dose expansion cohort

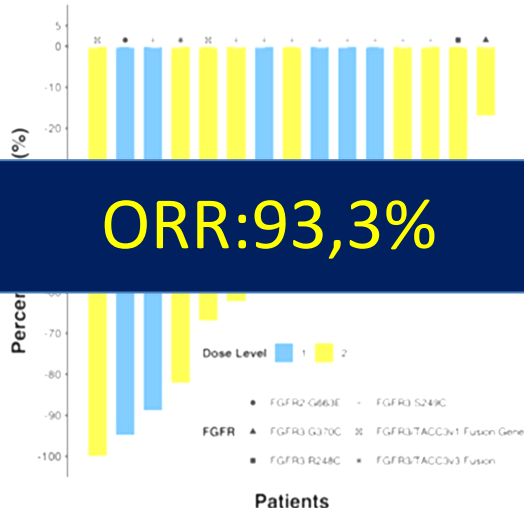
- Erdafitinib 8 mg Q day for 28 days plus EV at RP2D on D1,8,15 every 28 days
- 12 patients

- Imaging q8 weeks until progressive disease
- ctDNA (Guardant 360 at progression of disease)

End of treatment

- Primary endpoints: Safety, MTD and RP2D
- Secondary endpoints: Safety, ORR, DOR, PFS and OS

MTD: Maximum tolerable dose; RP2D: Recommended Phase 2 Dose; DOR: Duration of Response; DLT: Dose-Limiting Toxicity

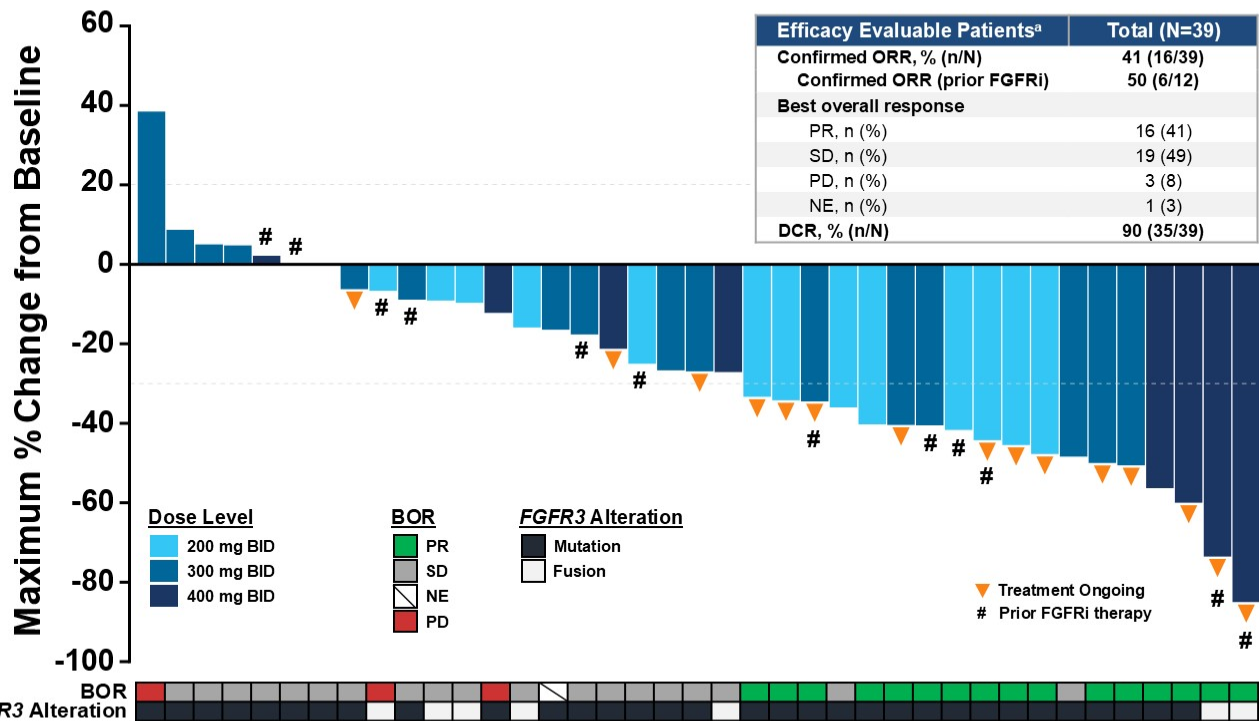


A first-in-human phase 1 study of LY3866288 (LOXO-435), a potent, highly isoform-selective FGFR3 inhibitor (FGFR3i) in advanced solid tumors with FGFR3 alterations: Initial results from FORAGER-1

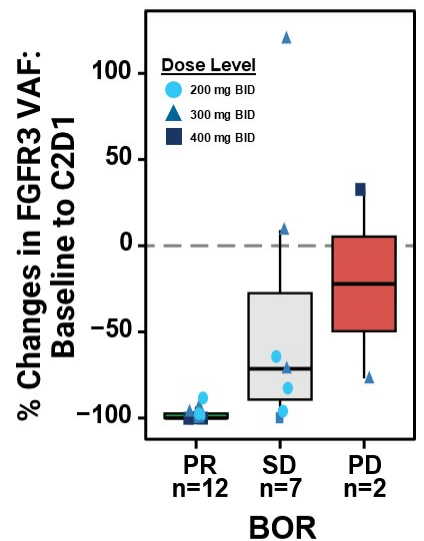
Gopa Iyer¹, Hiromichi Ebi², Natalie Cook³, Xin Gao⁴, Shigehisa Kitano⁵, Nobuaki Matsubara⁶, Melissa A. Reimers⁷, Arlene O. Siefker-Radtke⁸, Miso Kim⁹, Matthew D. Galsky¹⁰, Debbie GJ. Robbrecht¹¹, Jun Guo¹², Bernhard J. Eigl¹³, Clare Schaverien¹⁴, Brent D. Butts¹⁴, Eunice Yuen¹⁴, Sylwia Szymczak¹⁴, Xiang Zhao¹⁴, Ryan C. Widau¹⁴, Alexandra Drakaki¹⁵

¹Department of Medicine, Memorial Sloan Kettering Cancer Center, New York, NY, USA; ²Division of Molecular Therapeutics, Aichi Cancer Center Research Institute, Nagoya, Japan; ³The Christie NHS Foundation Trust and Division of Cancer Sciences, Faculty of Biology, Medicine and Health, University of Manchester, Manchester, UK; ⁴Massachusetts General Hospital Cancer Center, Boston, MA, USA; ⁵Department of Advanced Medical Development, The Cancer Institute Hospital of Japanese Foundation for Cancer Research, Tokyo, Japan; ⁶National Cancer Center Hospital East, Chiba, Japan; ⁷Department of Internal Medicine, Washington University in St Louis, St. Louis, MO, USA; ⁸Department of Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX, USA; ⁹Seoul National University Hospital, Seoul, Republic of Korea; ¹⁰Division of Hematology and Medical Oncology, Tisch Cancer Institute, Icahn School of Medicine at Mount Sinai, New York, NY, USA; ¹¹Medical Oncology, Erasmus MC Cancer Institute, Rotterdam, the Netherlands; ¹²Peking University Cancer Hospital & Institute, Beijing, China; ¹³British Columbia Cancer Agency, Vancouver, Canada¹⁴; Eli Lilly and Company, Indianapolis, IN, USA; ¹⁵Division of Hematology/Oncology, Department of Medicine, UCLA David Geffen School of Medicine, Los Angeles, CA, USA

Radiographic Response and *FGFR3* Variant Allele Frequency in *FGFR3*-Altered Efficacy Evaluable mUC Patients Receiving ≥ 200 mg BID (n=39)



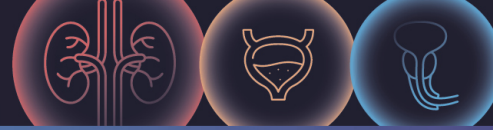
FGFR3 Variant Allele Frequency^b



- Decreases in *FGFR3* Variant Allele Frequency (VAF) at C2D1 correlate with BOR
- 21/39 patients had detectable *FGFR3* VAF at baseline

• Responses were also observed in non mUC patients: intrahepatic cholangiocarcinoma and ovarian (Brenner) cancer (n=1 each).

Data cutoff date of 02 Dec 2024. ^aEfficacy evaluable patients are those with measurable disease who had at least 1 post-baseline response assessment or had discontinued treatment before the first post-baseline response assessment. ^bChanges in ctDNA were assessed using Guardant 360 from patients' plasma samples.



A randomised phase III Study of Enfortumab vedotin with pembrolizumab +/-Vepugratinib 1st line in FGFR3 altered advanced urothelial cancer (FORAGER-2) NCT07218380

- 1st line metastatic UC
- FGFR3 DNA+ve
- Fit for EVP
- PS 0-2

Safety run in

R

Enfortumab vedotin with pembrolizumab + Vepugratinib

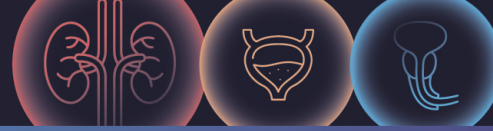
Enfortumab vedotin with pembrolizumab

Initial safety run-in enrolling Phase I data suggest tolerable and safe (n=6)

FGFR 3 screening from plasma with expected positivity of 25%

PFS is primary endpoint

Global randomized phase III needs 450 patients. EVP can start prior to randomisation to allow FGFR3 results.



El FGFR+ que no se testa, no se trata y en 2026 eso ya
no tiene excusa



El FGFR+ que no se testa, no se trata y en 2026 eso ya no tiene excusa

- Menos del 40% de los pacientes se testan
- Menos de 1 de cada 3 antes de la tercera línea.

Con erdafitinib **demostrando OS** paciente sin test es un paciente al que le estamos robando opciones



La toxicidad no es el enemigo → es la señal de que el fármaco
está funcionando

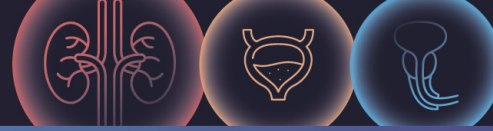


La toxicidad no es el enemigo → es la señal de que el fármaco está funcionando

- Los datos de dosis-reducción del THOR son contraintuitivos pero contundentes: los pacientes con ≥ 2 reducciones de dosis tienen una OS
- Tratar la toxicidad no es fracasar, es la estrategia.



Erdafitinib es el presente, pero el futuro se llama combinación y ya tiene un ORR del 93%



**La mejor terapia dirigida que existe... es
un oncólogo que no se rinde**