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CONCLUSIONS

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In a small pediatric cohort (N=11) consisting primarily of refractory HGG and LGG with *FGFR* alteration, erdafitinib was associated with clinically meaningful disease control with acceptable safety

• Investigator-assessed ORR was 9.1%, DCR 72.7%, and mPFS 29.5 months

These findings support the continued research of *FGFR* inhibitors in pediatric patients with advanced solid tumors who harbor susceptible *FGFR* alterations and have exhausted alternative treatment options

DCR, disease control rate; FGFR fibroblast growth factor receptor; HGG, high-grade glioma; LGG, low-grade glioma; mPFS, median progression-free survival; ORR, objective response rate

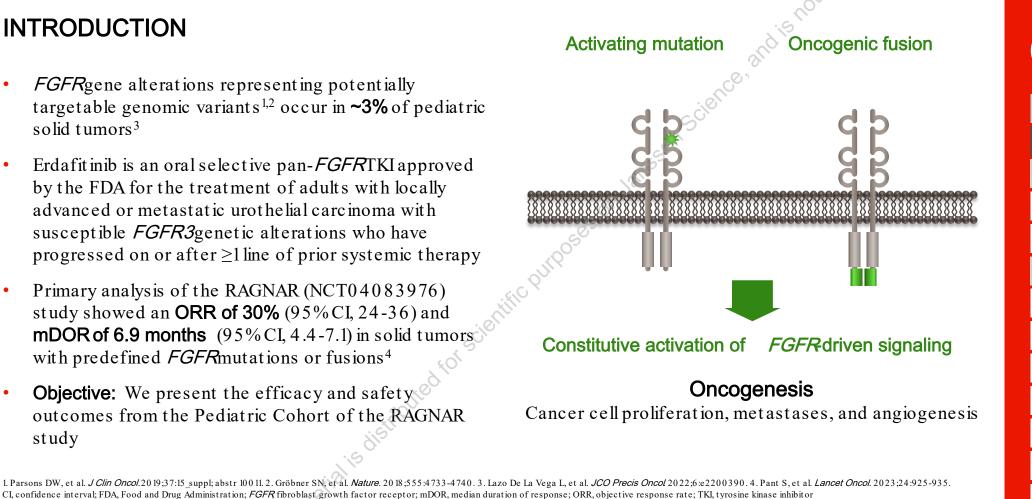
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INTRODUCTION

- FGFR gene alterations representing potentially targetable genomic variants^{1,2} occur in ~3% of pediatric solid tumors³
- Erdafitinib is an oral selective pan-FGFRTKI approved by the FDA for the treatment of adults with locally advanced or metastatic urothelial carcinoma with susceptible *FGFR3* genetic alterations who have progressed on or after ≥ 1 line of prior systemic therapy
- Primary analysis of the RAGNAR (NCT04083976) study showed an **ORR of 30%** (95% CI, 24-36) and mDOR of 6.9 months (95% CI, 4.4-7.1) in solid tumors with predefined *FGFR* mutations or fusions⁴
- **Objective:** We present the efficacy and safety outcomes from the Pediatric Cohort of the RAGNAR study



CONCLUSIONS INTRODUCTION METHODS **Study Participants** Study Design RESULTS **Baseline Characteristics** FGFRAlterations Tumor Response by Histology Tumor Response by FGFR Alterations Pediatric Case Study Adult Case Study Safety APPENDIX

NAVIGATION

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METHODS

Study Participants (Pediatric Cohort)

- RAGNAR (NCT04083976): a tumor-agnostic, phase 2, single arm, open-label study of the efficacy and safety of erdafitinib in patients with advanced solid tumors and eligible *FGFR* alterations
- RAGNAR included a dedicated pediatric cohort
 - Planned enrollment:
 - o 20 previously treated patients
 - Additional 6 newly diagnosed patients (with no SoC treatment options)

Key Inclusion Criteria

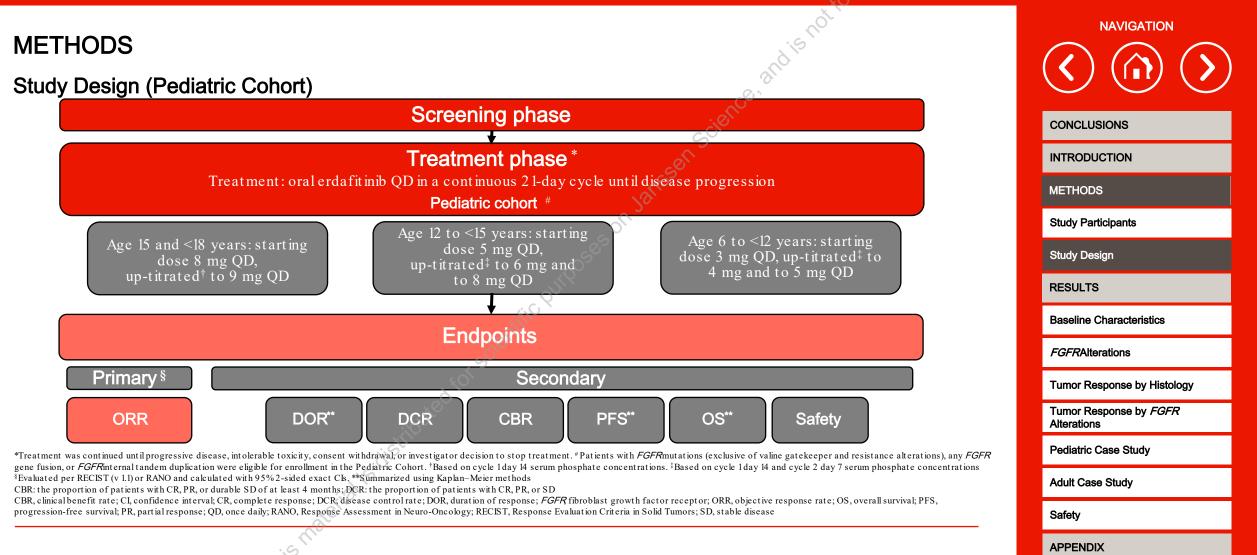
- Age ≥6 to <18 years: histologic evidence of unresectable, locally advanced, or metastatic solid tumor
- *FGFR*mutations, gene fusions, or internal tandem duplications
- Measurable disease
- Disease progression requiring treatment change before study screening or newly-diagnosed disease without acceptable standard therapies

FGFR fibroblast growth factor receptor; SoC, standard of care

Key Exclusion Criteria

- Prior chemotherapy, targeted therapy, or investigational anticancer agent within 15 days or <5 half-lives before first erdafitinib dose, up to 30 days prior
- Presence of *FGFR*gatekeeper and resistance mutations
- Hematologic malignancy (i.e., myeloid and lymphoid neoplasms)
- Active malignancies other than for disease requiring therapy
- Patients with previous FGFR inhibitor treatment

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RESULTS

Baseline Characteristics

- 11 pediatric patients received erdafitinib
 - LGG: 6 (54.5%)
 - HGG: 3 (27.3%)
 - STS and temporal neurocytoma: 1(9.1%) each
- Most patients were female (7/11[63.6%])
- Median age was 13 (range, 6-16) years
- 1/11 (9.1%) patient was newly diagnosed, and 10/11 (90.9%) patients received ≥1 previous line of systemic therapy
 - 8 (72.7%) had prior cancer-related surgery
 - 6 (54.5%) had prior radiotherapy.

CR, complete response; HGG, high-grade glioma; LGG, low-grade glioma; ORR, objective response rate; PD, progressive disease; PR, partial response; SD, stable disease; STS, soft-tissue sarcoma	

			2	
Treated patients	LGG n=6	HGG n=3	Other n=2	Total N=11
Age, median (range), years	10.5 (6-16)	13.0 (13-15)	15.0 (15-15)	13.0 (6-16)
Sex, female, n (%)	4 (66.7)	1(33.3)	2 (100)	7 (63.6)
Race, n (%)	61			
Asian	1(16.7)	1(33.3)	0	2 (18.2)
Black or African American	0	1(33.3)	1(50.0)	2 (18.2)
White	4 (66.7)	0	1(50.0)	5 (45.5)
Not Reported	1(16.7)	1(33.3)	0	2 (18.2)
Number of prior lines of anti	-cancer thera	apies, n (%)		
1	4 (66.7)	1(33.3)	0	5 (45.5)
2	0	2 (66.7)	0	2 (18.2)
≥3	1(16.7)	0	2 (100)	3 (27.3)
Median (range)	1(0-3)	2 (1-2)	4 (3-5)	1(0-5)
Response to last line of prior	systemic the	rapy, n (%)		
CR	2 (33.3)	0	0	2 (18.2)
PR	0	1(33.3)	0	1(9.1)
SD	3 (50)	1(33.3)	1(50)	5 (45.5)
PD	0	1(33.3)	1(50)	2 (18.2)

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RESULTS

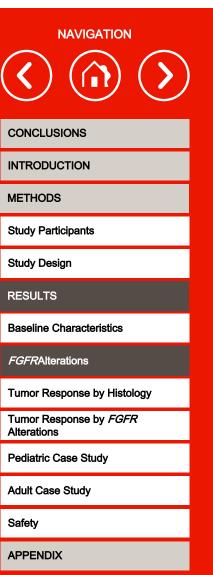
FGFRAlterations

- Gene alterations observed:
 - FGFR1n 7 (63.6%) patients
 - FGFR3 in 3 (27.3%) patients
 - *FGFR2* in 1 (9.1%) patient
- *FGFR*alteration types:
 - Fusions in 6 (54.5%) patients
 - Mutations in 4 (36.4%) patients
 - Tandem duplication in 1 (9.1%) patient
- Among patients with HGG/LGG tumors, *FGFR* (alterations (77.8%) and gene fusions (55.6%) were most commonly observed

	Evaluable	Alter	Altered FGFRGene			<i>FGFR</i> Alteration Type		
	Patients (N=11) n (%)	FGFR1	FGFR2	FGFR3	Fusion	Mutation	Duplication	
Total	11 (100)	7 (63.6)	1 (9.1)	3 (27.3)	6 (54.5)	4 (36.4)	1 (9.1)	
LGG	6 (54.5)	5 (83.3)	1(16.7)	0	3 (50.0)	2 (33.3)	1(16.7)	
HGG	3 (27.3)	2 (66.7)	0	1(33.3)	2 (66.7)	1(33.3)	0	
Other*	2 (18.2)	0	0	2 (100)	1(50.0)	1(50.0)	0	
*STS and the	mporal neuroca							

*STS and temporal neurocytoma (leach)

FGFR fibroblast growth factor receptor; HGG, high-grade glioma; LGG, low-grade glioma; STS, soft-tissue sarcoma



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RESULTS

Tumor Response by Histology (Per Investigator)

	N	ORR n (%) [95%Cl]	DCR n (%) [95%Cl]	Median DOR [95% CI], months	Median PFS, months	Median OS, months
Total	11	1 (9.1) [0.2-41.3]	8 (72.7) [39.0-94.0]	19.75 [NE-NE]	29.47	NE
LGG	6	0 [NE-NE]	6 (100) [54.1-100]	200	NE	NE
HGG	3	1(33.3)[0.8-90.6]	2 (66.7) [9.4-99.2]	19.75 [NE-NE]	29.47	NE
STS	1	0 [NE-NE]	0 [NE-NE]	.005	0.53	1.0 2
Temporal neurocytoma	1	0 [NE-NE]	0 [NE-NE]		1.4 1	NE

At data cut -off (December 4, 2023) with a median efficacy follow -up of 9.7 months,

- The ORR (95% CI) was 9.1%(0.2-41.3)
 - 1 patient with HGG achieved PR lasting 19.75 months
- Durable SD \geq 4 months was observed in all 6 patients with LGG and in 1/3 patient with HGG
- 9/11 (8 1.8%) of patients were censured for OS, and 2/11 (18.2%) died

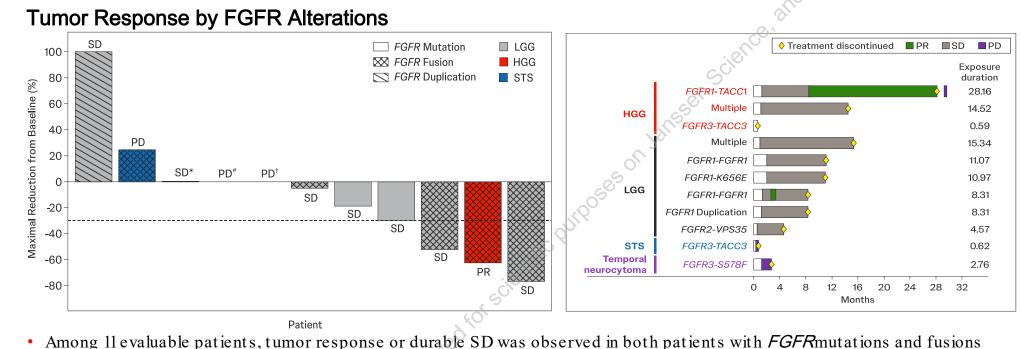
Durable SD: defined as duration of at least 4 months

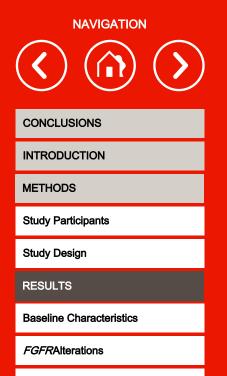
CI, confidence interval; DCR, disease control rate; DOR, duration of response; HGG, high-grade glioma; LGG, low-grade glioma; NE, not evaluable; ORR, objective response rate; OS, overall survival; PR, partial response; PFS, progression-free survival; SD, stable disease; STS, soft tissue sarcoma

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RESULTS

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Tumor Response by Histology

Tumor Response by *FGFR* Alterations

Pediatric Case Study

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FGFR fibroblast growth factor receptor; HGG, high-grade glioma; LGG, low-grade glioma; ORR, objective response rate; PD, progressive disease; PR, partial response; SD, stable disease; STS, soft tissue sarcoma

*Patient with HGG and FGFRmutation; # Patient with HGG and FGFR fusion; *Patient with temporal neurocytoma and FGFR mutation

- 1 patient with PR had a HGG and FGFR4TACC1 fusion

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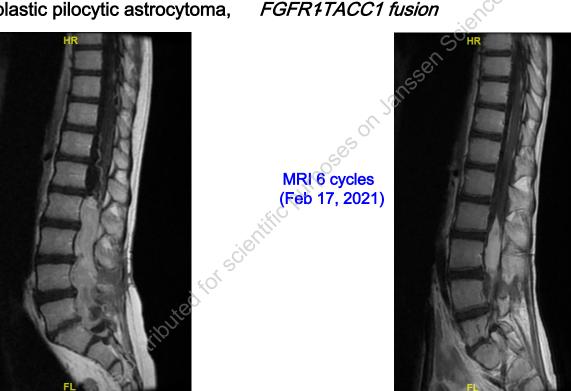
- Of 7 patients with durable SD ≥4 months, 3 had FGFR1 mutations, 2 had FGFR1 fusions, 1 had FGFR2 fusion, and 1 had FGFR1

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RESULTS

Pediatric Case Study: PR of 19.75 Months 13-year-old patient with anaplastic pilocytic astrocytoma,





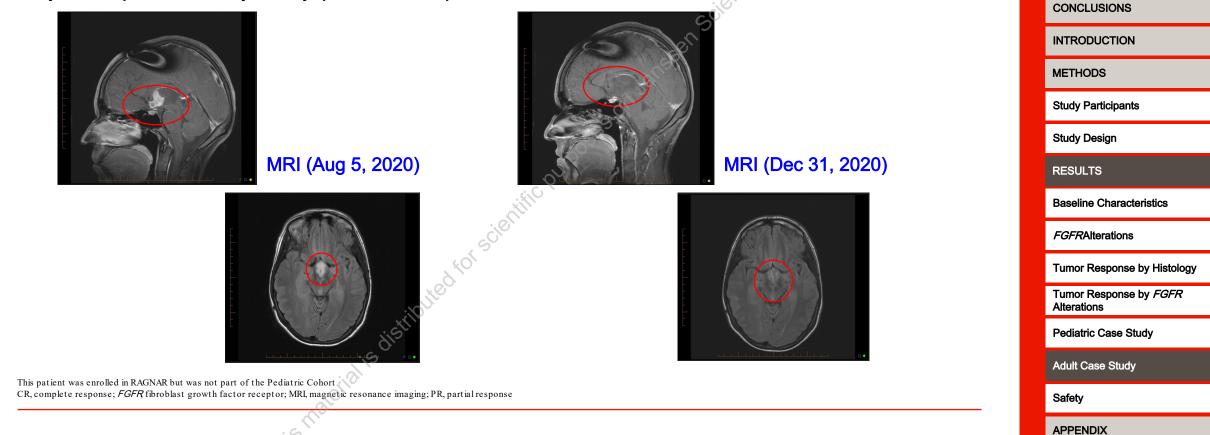
FGFR, fibroblast growth factor receptor; MRI, magnetic resonance imaging; PR, partial response



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RESULTS

Adult Case Study: $PR \rightarrow CR$ of 29.1 Months 26-year-old patient with dysembryoplastic neuroepithelial tumor and *FGFR1 K656E* mutation



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RESULTS

Safety

- All erdafit inib-treated patients had at least 1 TEAE
- Adverse events unique to the pediatric population were observed:
 - Events of growth disorder were reported by 4/11 (36.4%) patients
- 4 patients with limb fracture
- 1 patient additionally had Gr 3 epiphysiolysis
- No central serous retinopathy events occurred
- 72.7% (8/11) of patients had Gr ≥3 TEAEs; 5/11 (45.5%) were considered treatment-related
- Most TEAEs were managed with dose modification and symptomatic or conservative management
- 72.7% (8/11) of patients had serious TEAEs
 - 4 (36.4%) were considered treatment-related (tibia fracture, dehydration, epiphysiolysis, and neuropathy peripheral)
- No treatment-related deaths were reported

ALT, Alanine aminotransferase; Gr, grade; TEAE, treatment-emergent adverse event

TEAE by preferred term in	N=11			
≥25% of patients, n (%)	Any grade	Gr ≥3		
Diarrhea	7 (63.6)	0		
Hyperphosphatemia	7 (63.6)	1 (9.1)		
Pain in extremity	5 (45.5)	0		
ALT increased	4 (36.4)	0		
Nausea	4 (36.4)	0		

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