

Corporate Presentation As of May 4, 2023

#### Disclaimers

#### FORWARD-LOOKING STATEMENTS AND MARKET DATA

We caution you that this presentation contains forward-looking statements. All statements other than statements of historical facts contained in this presentation, including statements regarding our future results of operations and financial position, business strategy, research and development plans, the anticipated timing and phase of development, costs, design and conduct of our ongoing and planned preclinical studies and clinical trials for our product candidates, the timing and likelihood of regulatory filings and approvals for our product candidates, the potential to develop product candidates and the safety and therapeutic benefits of our product candidates, our ability to commercialize our product candidates, if approved, the impact of the COVID-19 pandemic and other epidemic diseases on our business, the pricing and reimbursement of our product candidates, if approved, the timing and likelihood of success, plans and objectives of management for future operations, and future results of anticipated product development efforts, are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these terms or other similar expressions. The inclusion of forward-looking statements should not be regarded as a representation by us that any of our plans will be achieved. Actual results may differ from those set forth in this presentation due to the risks and uncertainties inherent in our business, including, without limitation: we are early in our development efforts, have only recently begun testing our lead product candidate in clinical trials and the approach we are taking to discover and develop drugs based on our SNÅP platform is novel and unproven and it may never lead to product candidates that are successful in clinical development or approved products of commercial value; potential delays in the commencement, enrollment, and completion of preclinical studies and clinical trials; results from preclinical studies or early clinical trials not necessarily being predictive of future results; our dependence on third parties in connection with manufacturing, research and preclinical testing; acceptance by the FDA of INDs or of similar regulatory submissions by comparable foreign regulatory authorities for the conduct of clinical trials of TYRA-300 in pediatric achondroplasia; an accelerated development or approval pathway may not be available for TYRA-300 or other product candidates and any such pathway may not lead to a faster development process;

unexpected adverse side effects or inadequate efficacy of our product candidates that may limit their development, regulatory approval, and/or commercialization; the potential for our programs and prospects to be negatively impacted by developments relating to our competitors, including the results of studies or regulatory determinations relating to our competitors; unfavorable results from preclinical studies; our ability to maintain undisrupted business operations due to the COVID-19 pandemic or other epidemic diseases, including delaying or disrupting our preclinical studies and clinical trials, manufacturing, and supply chain; regulatory developments in the United States and foreign countries; our ability to obtain and maintain intellectual property protection for our product candidates and proprietary technologies; we may use our capital resources sooner than we expect; and other risks described in our prior filings with the Securities and Exchange Commission (SEC), including under the heading "Risk Factors" in our annual report on Form 10-K and any subsequent filings with the SEC. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof, and we undertake no obligation to update such statements to reflect events that occur or circumstances that exist after the date hereof. All forward-looking statements are gualified in their entirety by this cautionary statement, which is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions, and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

# Why invest in TYRA?

Differentiated assets

Precision small molecules targeting large opportunities in FGFR biology Lead asset: TYRA-300, the first oral FGFR3-selective inhibitor in the clinic

#### NASDAQ: TYRA

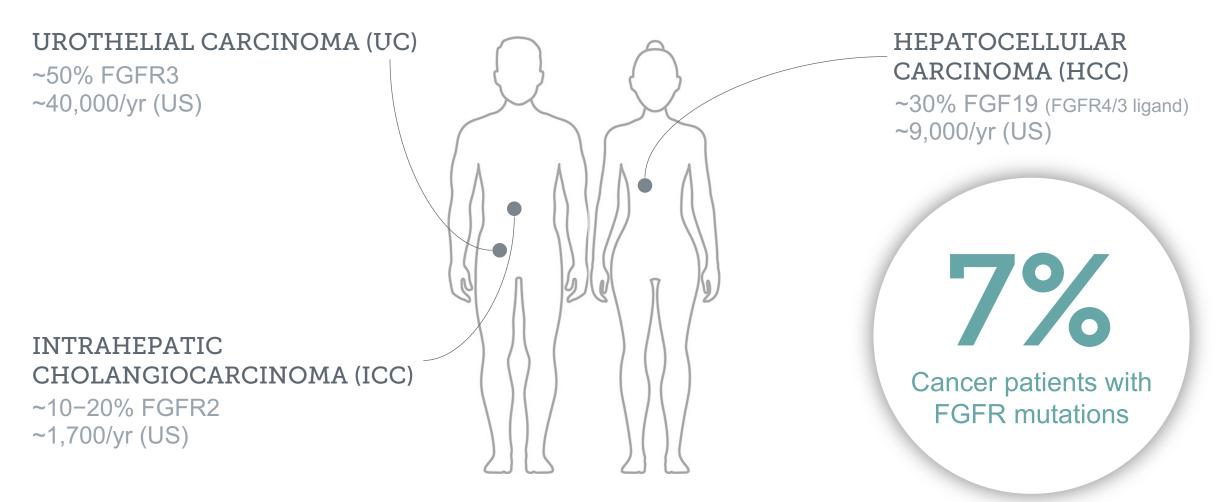
Accelerated design



CASH:\* \$241.7M

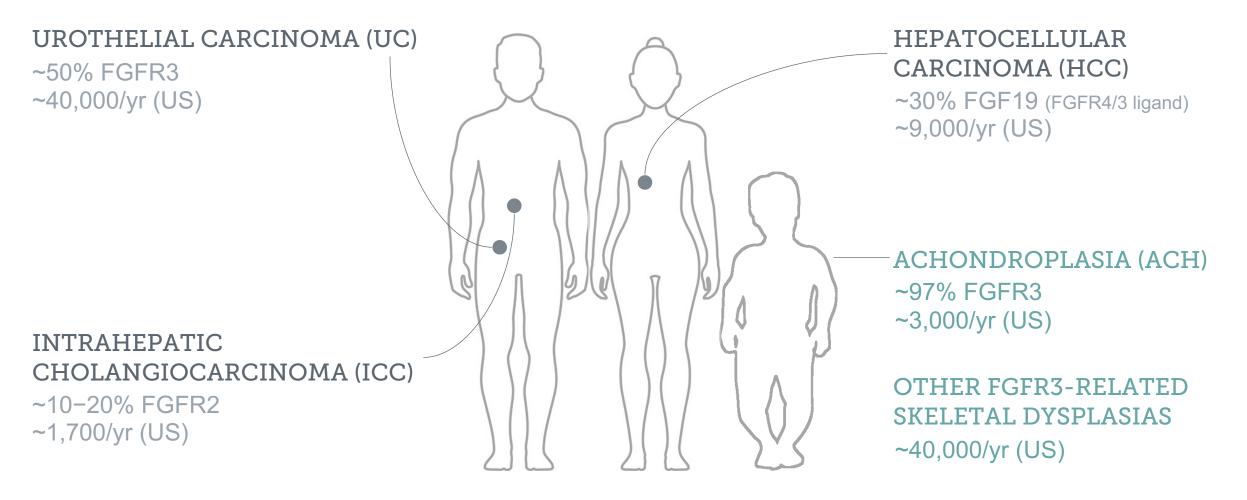
\*March 31, 2023

#### Alterations in the FGFR family: a major unmet need



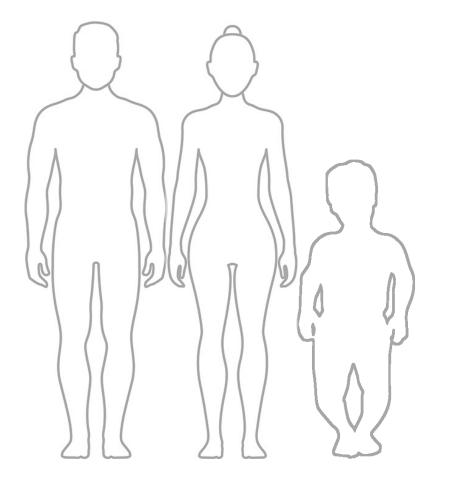
Note: oncology figures represent 2022 US incidence across all stages of the disease

#### Alterations in the FGFR family: a major unmet need



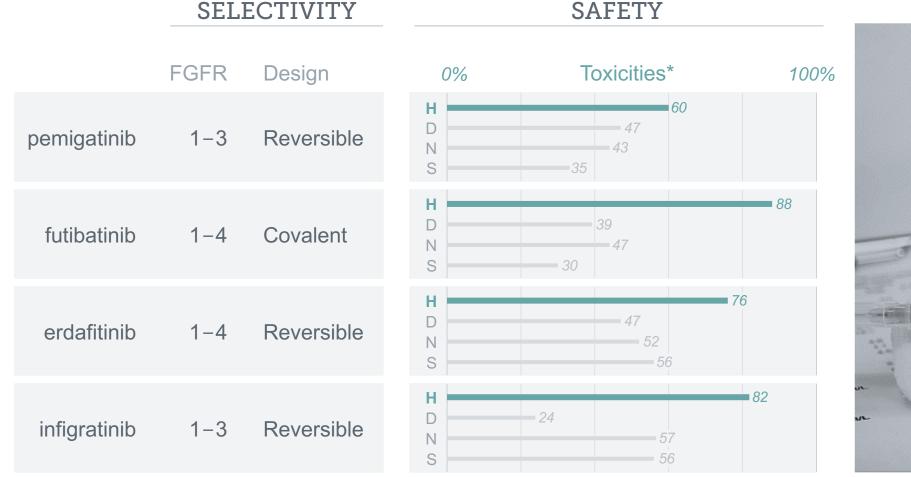
Note: oncology figures represent 2022 US incidence across all stages of the disease; skeletal dysplasias represent 2022 US pediatric prevalence

#### Approved FGFR inhibitors have significant liabilities



Approved drugs are pan-FGFR inhibitors				
pemigatinib	erdafitinib			
futibatinib	infigratinib			
Liabilities				
Tolerability	Off-target toxicities drive frequent dose interruptions and reductions			
Acquired resistance	Resistance mutations limit the durability of current drugs			

### FGFR1 drives hyperphosphatemia

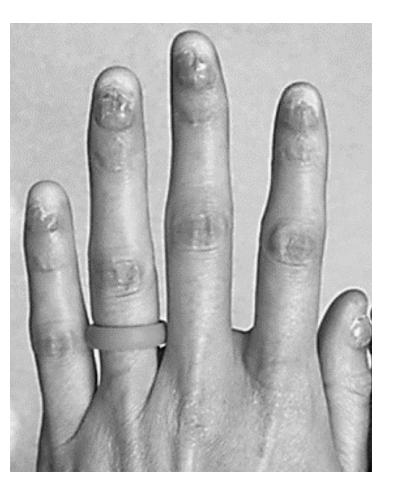


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Source: product labels and websites

### FGFR2 drives stomatitis and nail toxicity





Source: product labels and websites

#### FGFR4 drives gastrointestinal and liver toxicity





Source: product labels and websites

# FGFR1/2/4 toxicities limit dosing

	SELECTIVITY			SAFETY			
	FGFR	Design	0%	Toxicities*	100%	Discontinuation/ Reduction	DLT Driver
pemigatinib	1-3	Reversible	H D N S	47 43 35		23%	Hyper- phosphatemia (R1)
futibatinib	1-4	Covalent	H D N S	39 47 30	88	63%	AST/ALT increase (R4)
erdafitinib	1-4	Reversible	H D N S	47 52 56	76	66%	Hyper- phosphatemia (R1)
infigratinib	1-3	Reversible	H D N S	- 24 57 56	82	75%	Hyper- phosphatemia (R1)

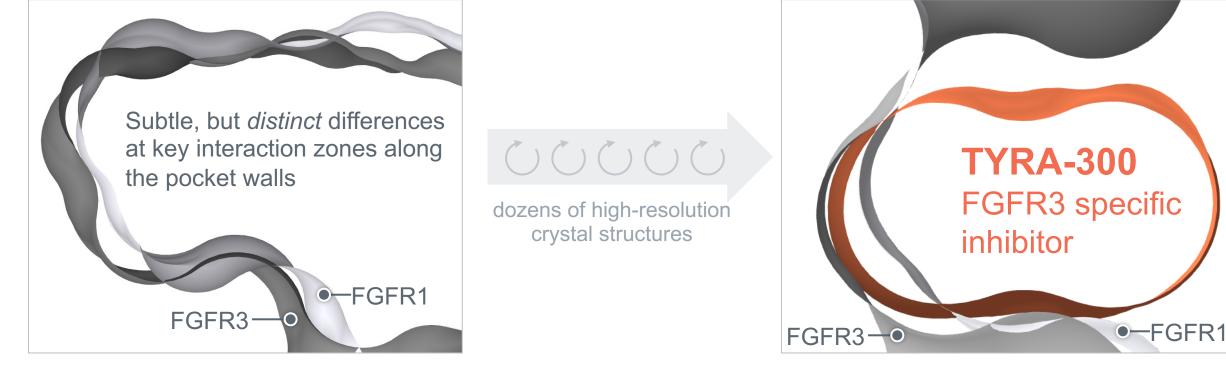
#### FGFR3 inhibition accelerates bone growth in children



Source: product labels and websites

# The challenge: FGFR family active sites are nearly identical

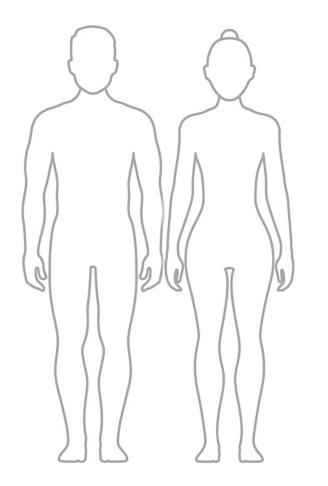
#### **FGFR** isoform selectivity



CRYSTALLOGRAPHY

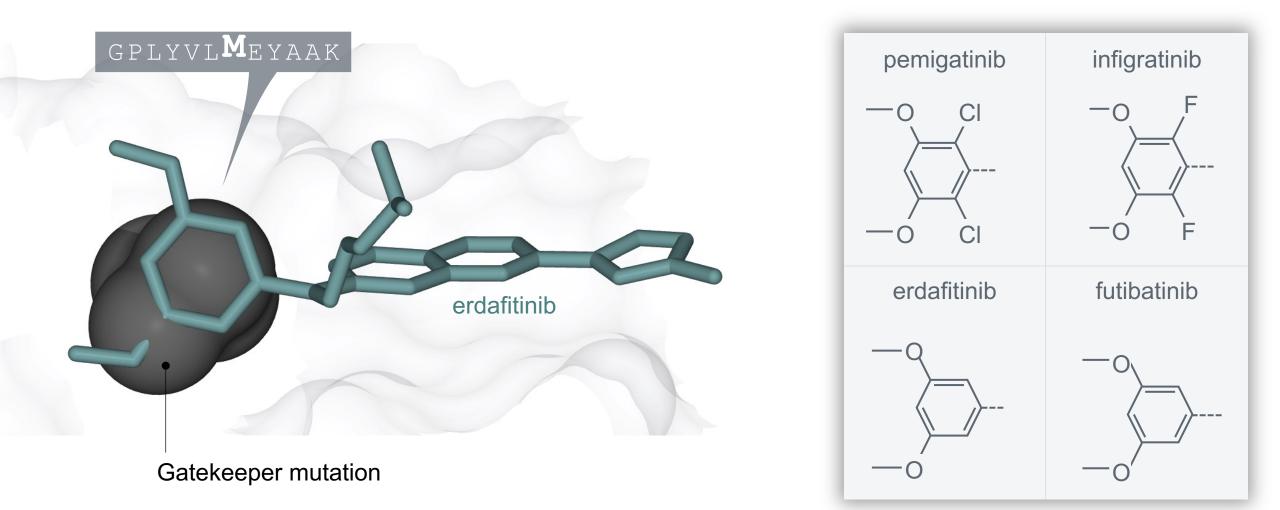
MOLECULAR MODEL

### Approved FGFR inhibitors have significant liabilities

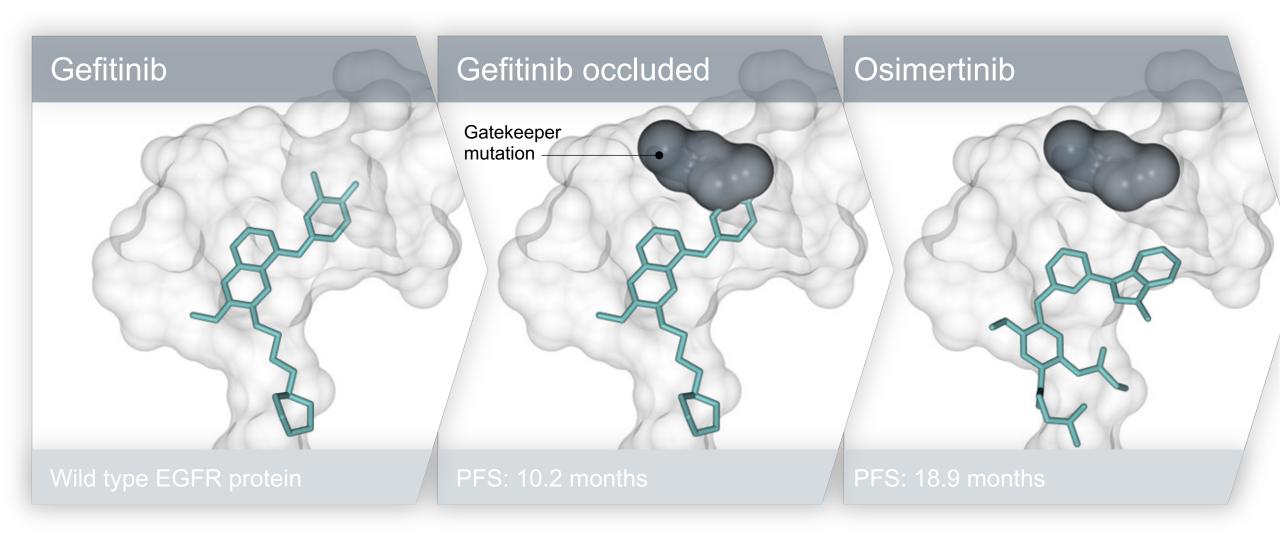


Approved drugs are pan-FGFR inhibitors				
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Liabilities				
Tolerability	Off-target toxicities drive frequent dose interruptions and reductions			
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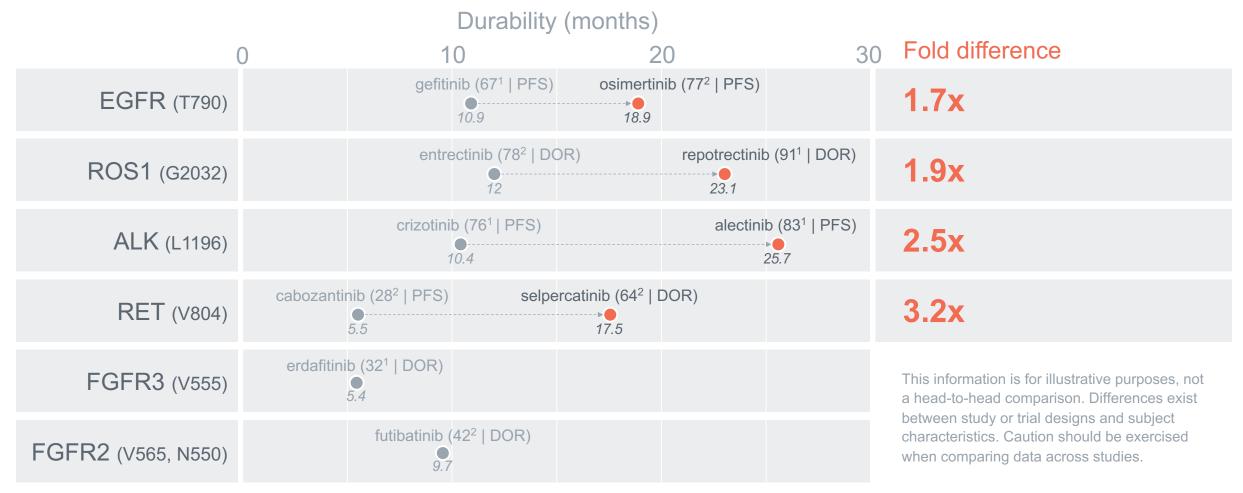
#### Acquired resistance is driven by sequence and structure FGFR3 Example



# Structural insights provide a rational path to address recurrence

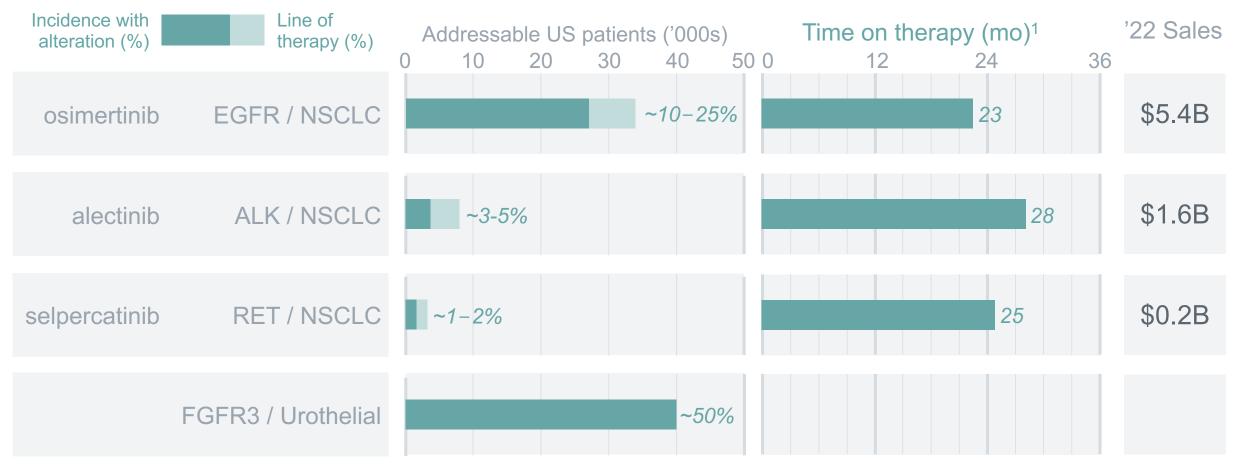


#### Next gen drugs extend progression free survival



1. Objective Response Rate (%); 2. Overall Response Rate (%)

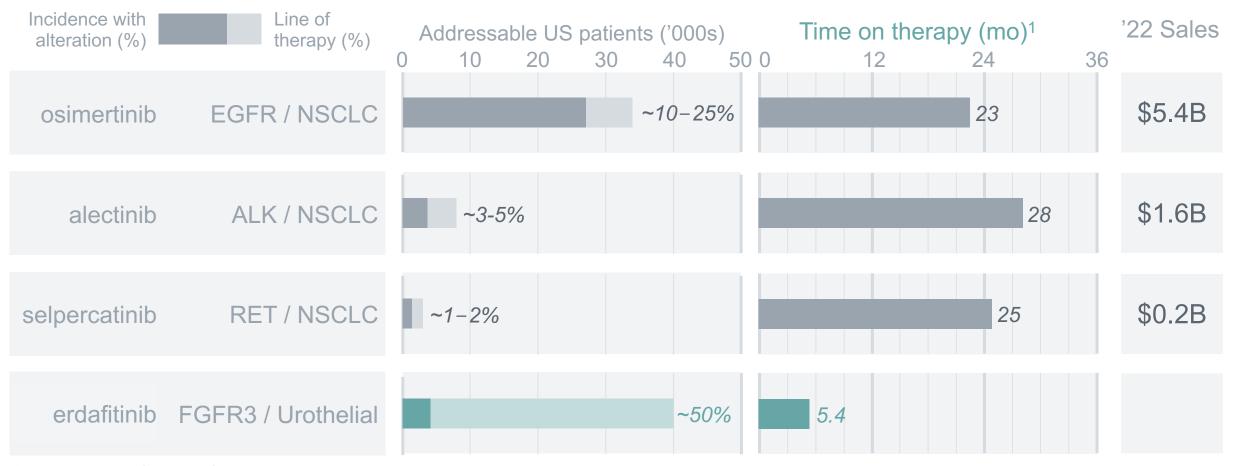
## FGFR3 positive urothelial cancer is an outsized opportunity



1. Median duration of exposure for earliest line study

Source: SEER, ACS, NCCN; UpToDate; Company filings; GlobalData; Wu et al, 2020; Zhang et al, 2016; Graham et al., 2018; Mok et al, 2020; Subbiah et al, 2020; Drilon et al, 2023; Kacew et al, 2020; Matulewicz, 2020; Rizzo, 2022; Necchi, 2020

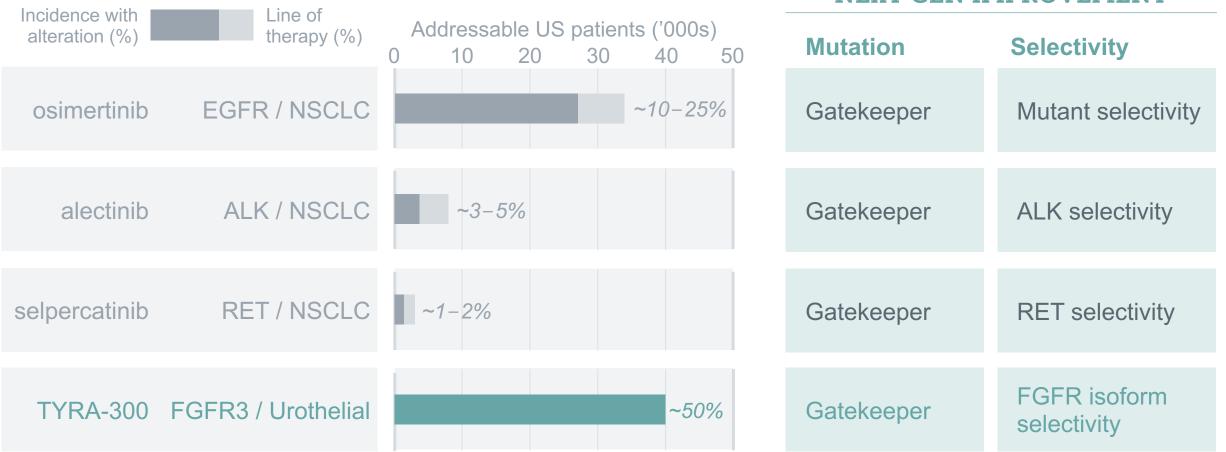
# Despite a large opportunity, pan-FGFR inhibitors fall short



1. Median duration of exposure for earliest line study

Source: SEER, ACS, NCCN; UpToDate; Company filings; GlobalData; Wu et al, 2020; Zhang et al, 2016; Graham et al., 2018; Mok et al, 2020; Subbiah et al, 2020; Drilon et al, 2023; Kacew et al, 2020; Matulewicz, 2020; Rizzo, 2022; Necchi, 2020

#### TYRA-300 is designed to address the unmet need

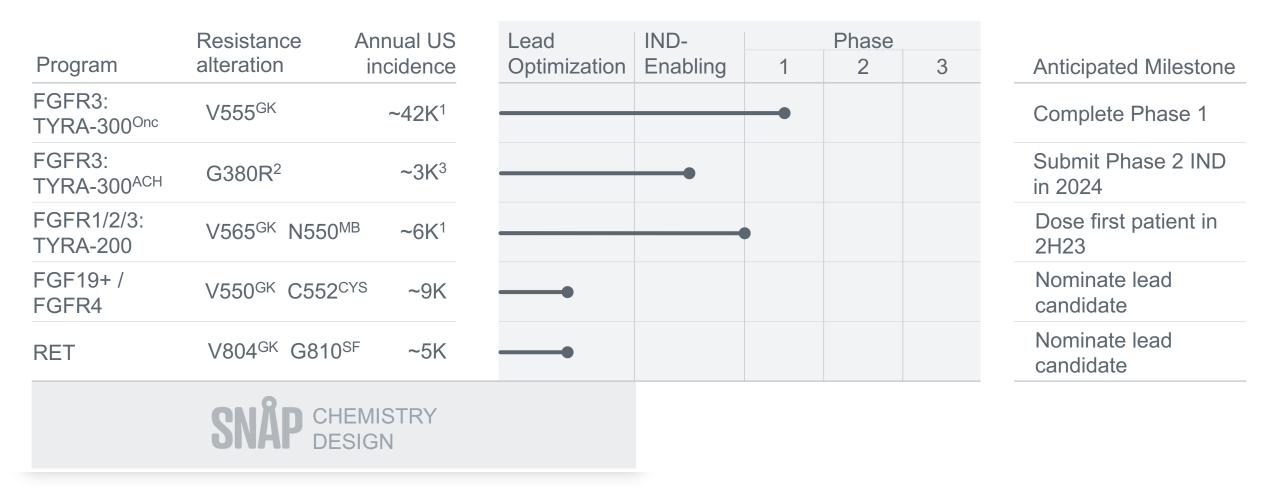


**NEXT GEN IMPROVEMENT** 

1. Median duration of exposure for earliest line study

Source: SEER, ACS, NCCN; UpToDate; Company filings; GlobalData; Wu et al, 2020; Zhang et al, 2016; Graham et al., 2018; Mok et al, 2020; Subbiah et al, 2020; Drilon et al, 2023; Kacew et al, 2020; Matulewicz, 2020; Rizzo, 2022; Necchi, 2020

#### We're building a pipeline of differentiated assets

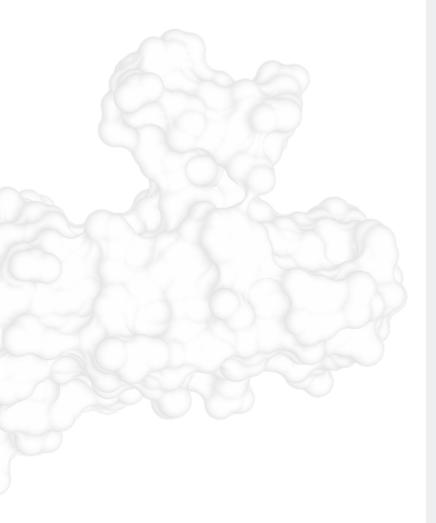


ACH: Achondroplasia, GK: Gatekeeper, CYS: Cysteine Mutant, SF: Solvent Front, MB: Molecular Brake

1. Represents incidence for lead indication and deaths for other solid tumors across all stages of the disease 2. Key activating mutation for ACH

3. Number represents US ACH prevalence rather than incidence

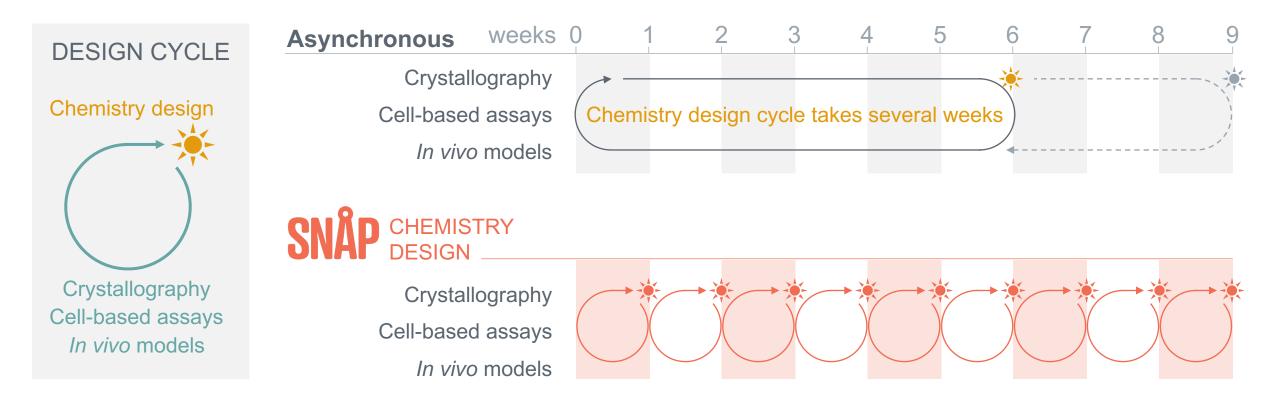




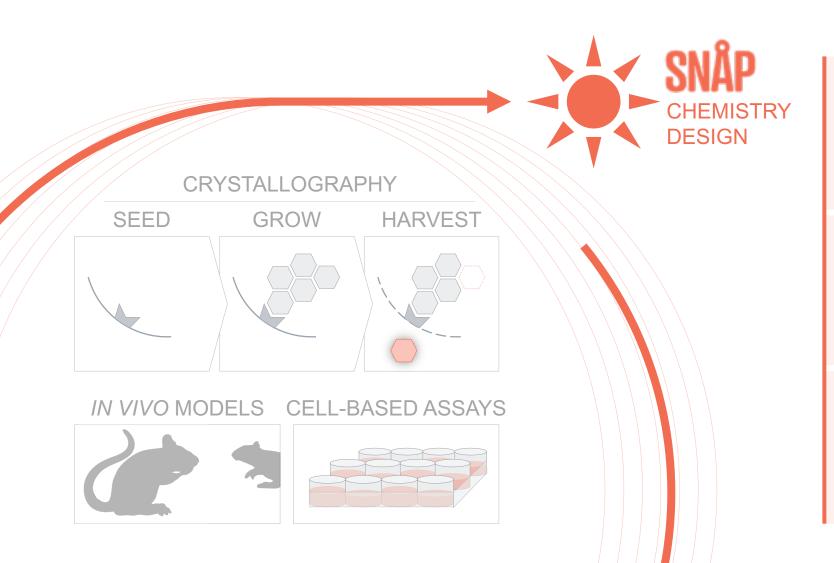
#### **Accelerated design**

Differentiated assets

#### Our unconventional approach accelerates discovery



#### We've optimized the drug design cycle in-house



#### CRYSTALLOGRAPHY

New compound to structure in as little as 3 days

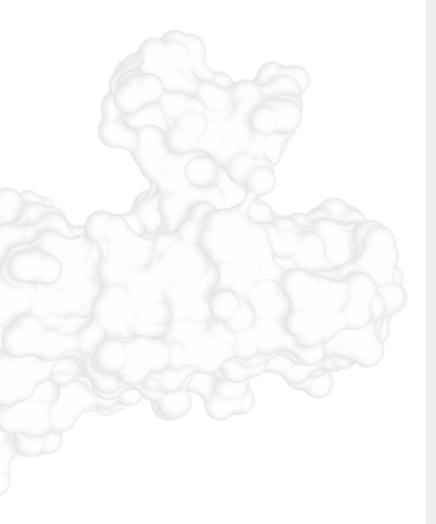
#### CELL-BASED ASSAYS

New compound to cellular data in as little as 2 days

#### IN VIVO MODELS

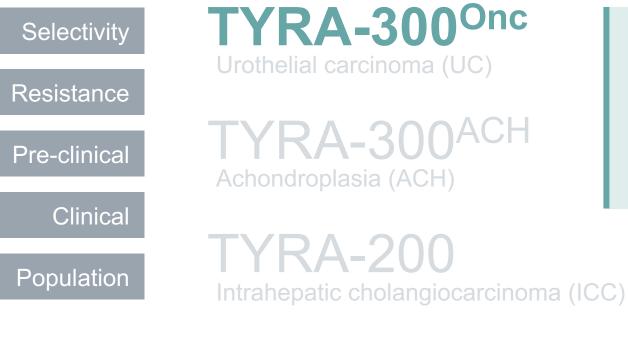
New compound to initial PD readout in as little as 5 Days





Accelerated design

#### **Differentiated Assets**

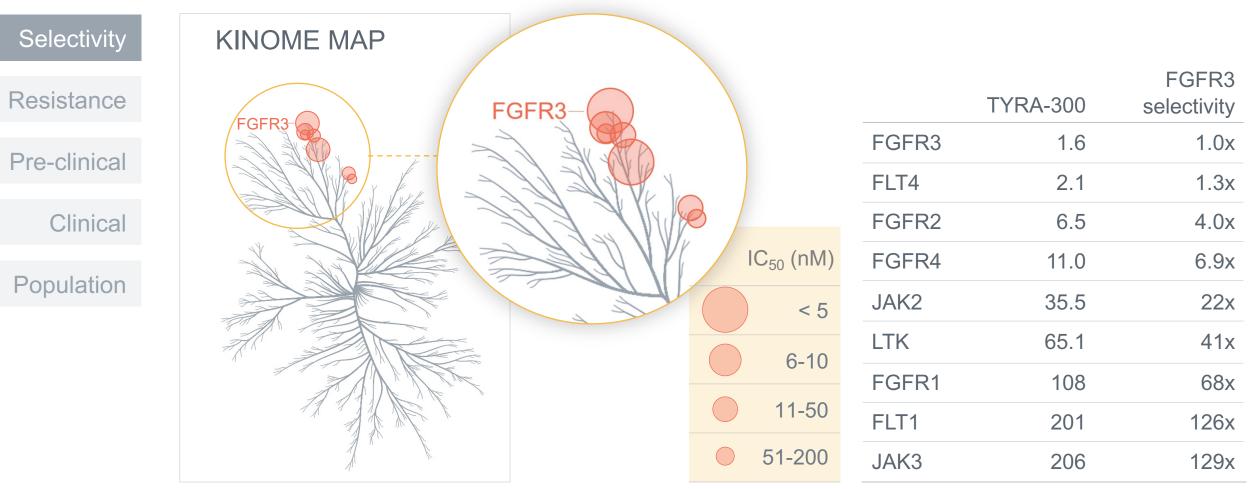


TYRA-300<sup>Onc</sup> Urothelial carcinoma (UC)

**FGFR3-selective** Gatekeeper agnostic Daily oral Large population

25

# TYRA-300 is more potent for FGFR3 than other FGFR isoforms

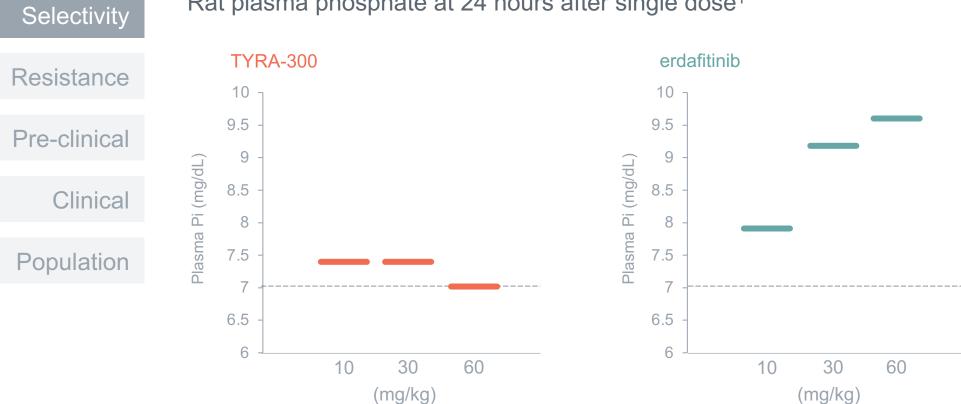


TYRA-300 was profiled in a scanMAX<sup>SM</sup> (KINOMEscan) screen, IC<sub>50</sub> data generated by Reaction Biology Inc.

### TYRA-300 is the first FGFR3-selective inhibitor in the clinic

Selectivity	TYRA-300 selectivity vs. approved or late-stage clinical compounds: Ba/F3 Cellular IC <sub>50</sub> (nM)						ellular IC <sub>50</sub> (nM)
, , , , , , , , , , , , , , , , , , ,		erdafitinib	futibatinib	pemigatinib	infigratinib	TYRA-300	
Resistance	FGFR1	5.5	3.9	12.3	15.3	113	
Pre-clinical	FGFR2	1.8	1.0	4.3	5.8	34.9	
	FGFR3	1.3	0.8	5.2	6.9	1.8	
Clinical	FGFR4	17.7	6.1	142	459	98.4	
Population							
Fold Selectivity for FGFR3							TYRA-300 shows
	FGFR1	4.2x	4.9x	2.4x	2.2x	63x -	<pre>_ significant isoform _ selectivity for</pre>
	FGFR2	1.4x	1.3x	0.8x	0.8x	19x	selectivity for FGFR3 over other
	FGFR4	14x	7.6x	27x	67x	55x	FGFR isoforms

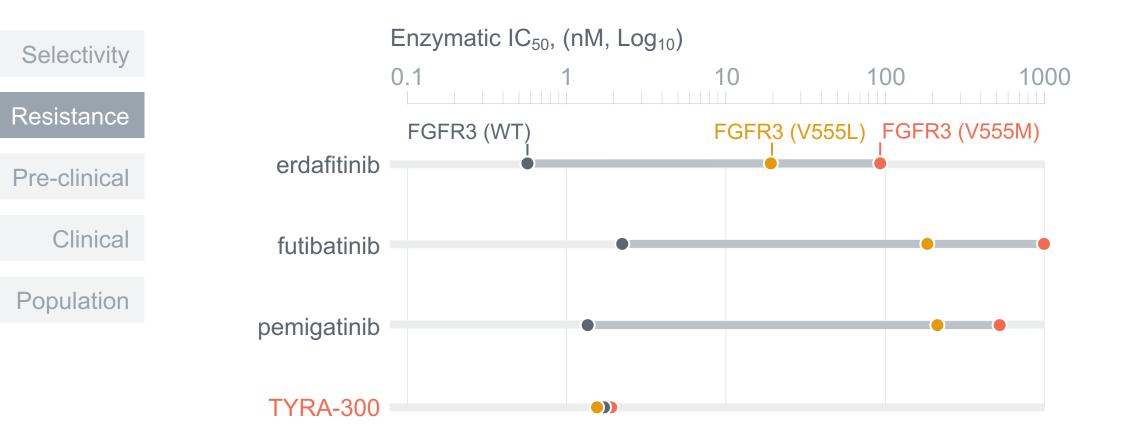
#### TYRA-300 did not elevate phosphate relative to erdafitinib



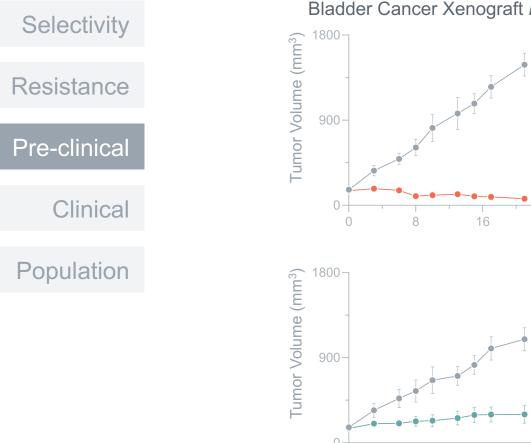
Rat plasma phosphate at 24 hours after single dose<sup>1</sup>

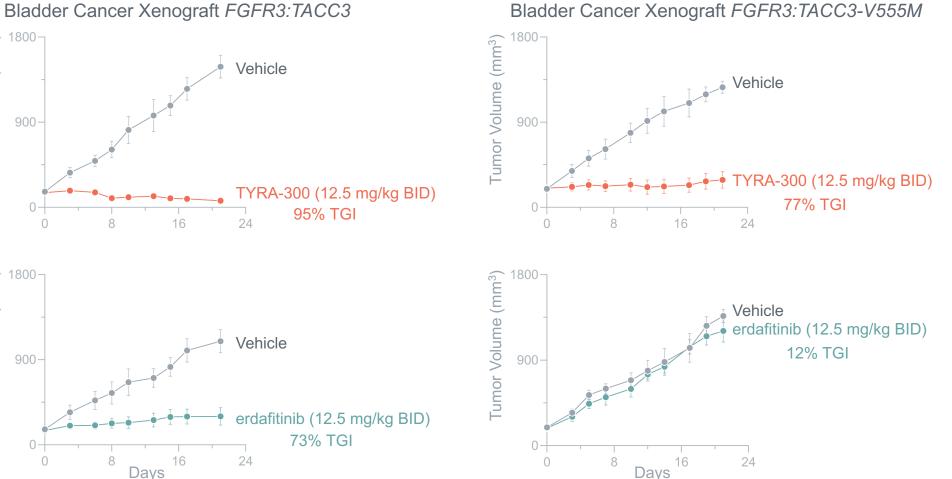
1. N=4 per group, pooled rat plasma; dotted line = pre-dose phosphate value of 3 dose groups

### TYRA-300 retains potency against FGFR3 gatekeeper mutations

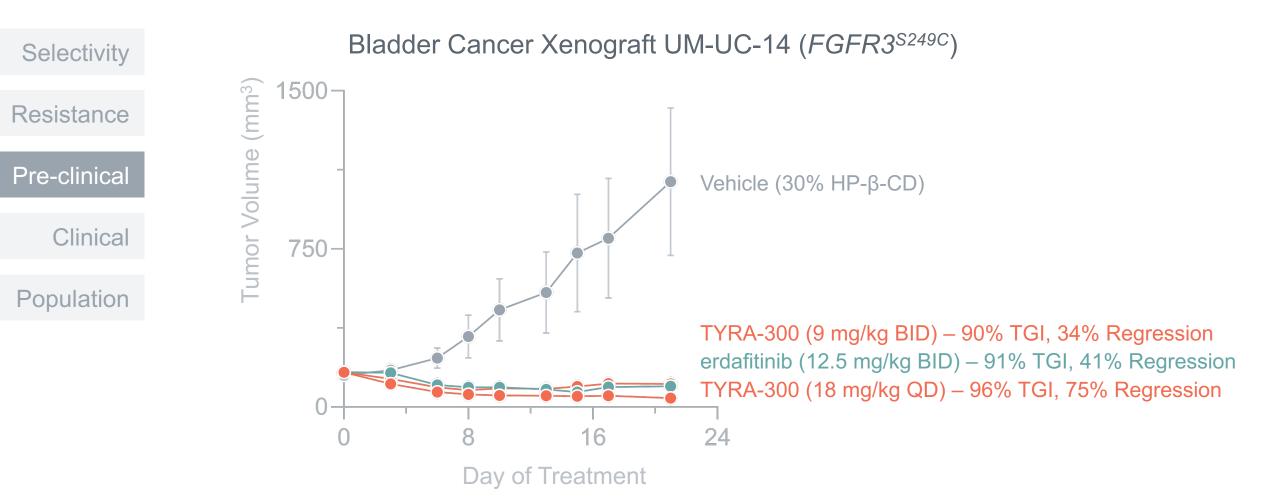


#### TYRA-300 is active in vivo in bladder cancer models





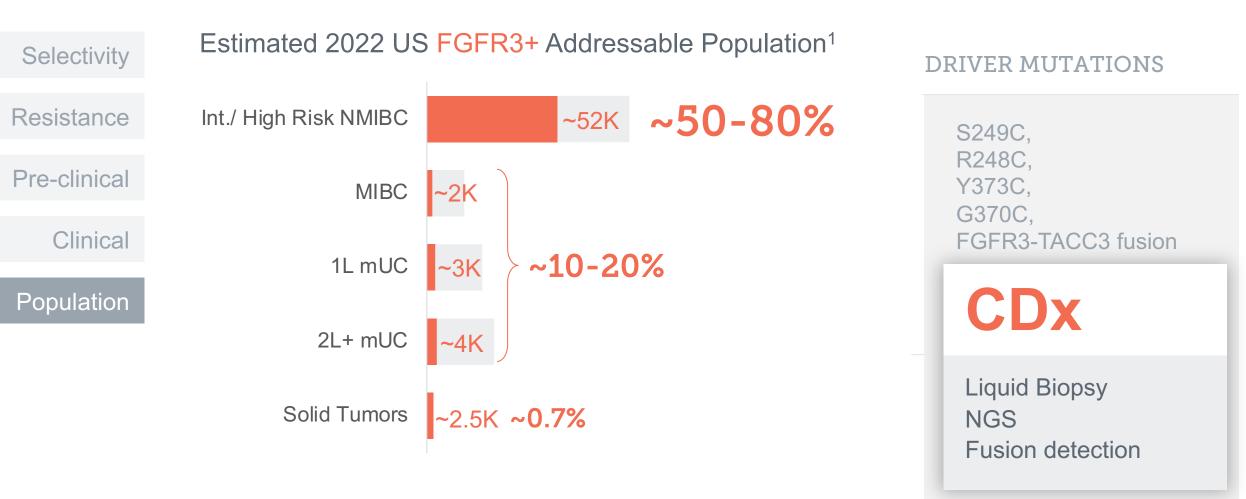
#### TYRA-300 regresses tumors in key urothelial xenografts



## Our Phase 1 trial is designed to identify the optimal RP2D



#### The addressable FGFR3 patient population is large



1. Bladder figures represent potential annual diagnosed incident and recurrent case estimates by addressable disease stage; Solid tumors figure based on annual deaths

Source: Clarivate Analytics; Kacew, 2020; Knowles, 2014; Murugesan, 2022

#### There are high unmet needs in all stages of bladder cancer

Selectivity	ADDRESSABLE (US) <sup>1</sup>		LEAD TX OPTION	UNMET NEED	
Resistance	Int. / High Risk NMIBC		IVE Chemo or BCG	25%−30% recur ≤1yr	
Pre-clinical	BCG Res.	52K	Immunotherapy		UROLOGY CYSTECTOMY
Clinical	NMIBC			~30-50% relapse	
Population	MIBC	2K	Neo/adjuvant chemo	to mUC	ONCOLOGY
	1L mUC	3K	Chemo or PD1 (+ ADC)	Tolorobility	
	2L/3L mUC	4K	erdafitinib or ADC	Tolerability	

1. Represents potential annual diagnosed incident and recurrent case estimates by addressable disease stage Source: Matulewicz, 2020; Mari et al, 2018

### Erdafitinib has demonstrated high response rates in UC

Selectivity		ERDAFITINIB DATA <sup>1</sup>	UNMET NEED
Resistance	Int. / High Risk NMIBC	75% 3mo CR <sup>2</sup> (n=8)	UROLOGY
Pre-clinical	BCG Res.	100% 3mo CR <sup>3</sup> (n=9)	
Clinical	NMIBC		CYSTECTOMY
Population	MIBC	N/A	Tolerability
	1L mUC	68% ORR with PD-14 (n=19)	ONCOLOGY
	2L/3L mUC	32-41% ORR⁵	

1. Data from FGFR3+ mutation or fusion patients 2. Interim data from intermediate risk patients 3. Interim data from BCG-unresponsive patients 4. Preliminary data from cis-ineligible patients in NORSE trial 5. Range from overall population to FGFR3 point mutation population in Erdafitinib label Source: Daneshmand, 2023 (ASCO GU); Catto, 2023 (ASCO GU); Powles, 2021 (ESMO); Erdafitinib label; Matulewicz, 2020; Mari et al, 2018



Selectivity

Pre-clinical

Clinical

TYRA-300<sup>Onc</sup> Urothelial carcinoma (UC)

TYRA-300<sup>ACH</sup> Achondroplasia (ACH) FGFR3-selective Daily oral Rationale for additional indications

TYRA-200 Intrahepatic cholangiocarcinoma (ICC)

### FGFR3 aberrations drive >97% of pediatric achondroplasia (ACH)

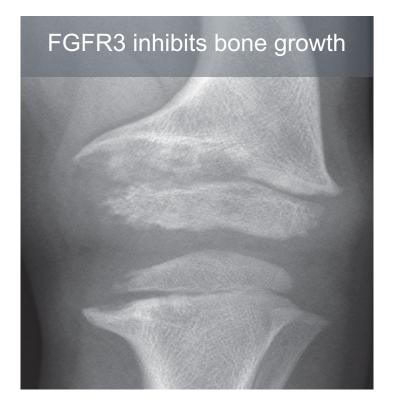
Population

Selectivity

Pre-clinical

Clinical





1. US pediatric prevalence: Vajo et al. 2000; US census

#### VOXZOGO was approved based on growth acceleration

Population

Selectivity

**Pre-clinical** 

Clinical

ACH Prevalence 2–5,000/year<sup>1</sup> >97% FGFR3 mutations

UNMET NEEDS

Height: VOXZOGO Disproportionate growth

Formulation / administration

Daily Injectable VOXZOGO



Other: Surgeries / supportive care

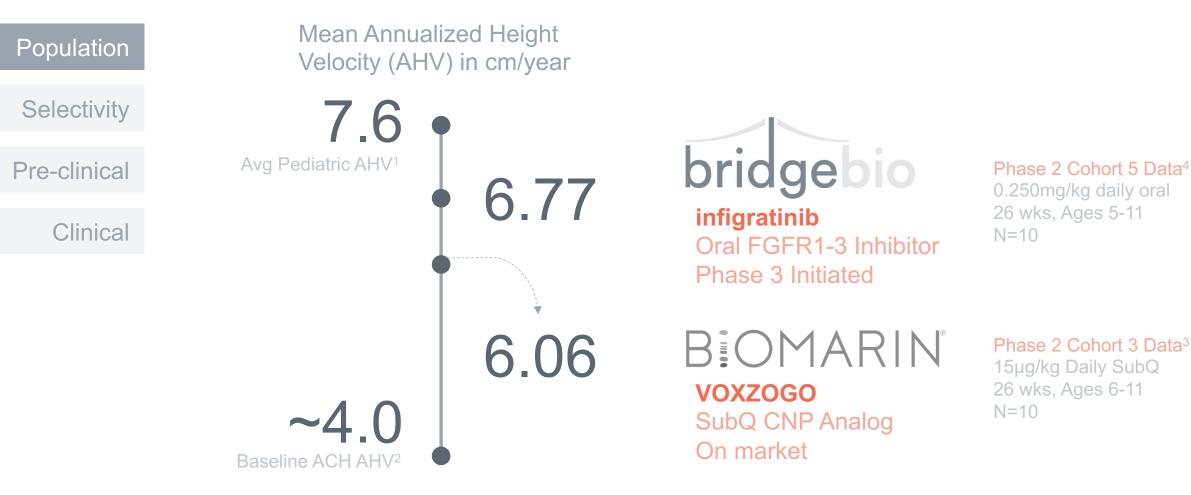
LEAD OPTION

**1.57**<sub>cm/year</sub>

Annual Height Velocity (AHV) Baseline Increase vs placebo

> Cranial or spinal stenosis, hydrocephalus, CV events and sleep apnea

# Oral pan-FGFR inhibitor infigratinib increased AHV in pediatric ACH



1. Merck Manuals 2. P2 baseline AHV ranges from 3.73 in infigratinib P2 cohort 5, to 4.01 in infigratinib P2 cohort 4, to 4.04 in vosoritide P2 cohort 3; P3 cohort ranges from 4.06 (placebo arm) to 4.26 (vosoritide arm) in VOXZOGO label; 3. Savarirayan, 2019; 4. BridgeBio corporate presentation March 6, 2023;

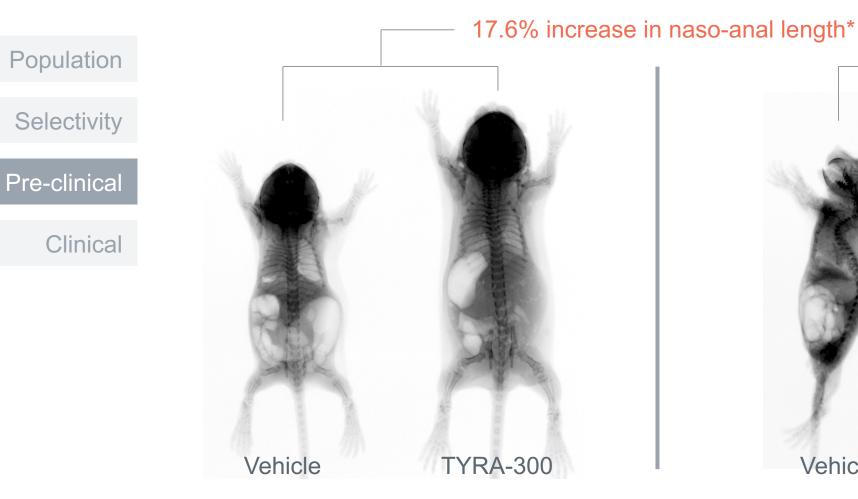
# TYRA-300 is more selective for FGFR3 than infigratinib

Population	TYRA-300 selectivity vs. approved or late-stage clinical compounds: Ba/F3 Cellular IC <sub>50</sub> (nM)						
		erdafitinib	futibatinib	pemigatinib	infigratinib	<b>TYRA-300</b>	
Selectivity	FGFR1	5.5	3.9	12.3	15.3	113	
Pre-clinical	FGFR2	1.8	1.0	4.3	5.8	34.9	
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Fold Selecti	vity for FGFR3	3				TYRA-
FGFR1	4.2x	4.9x	2.4x	2.2x	63x —	signific
FGFR2	1.4x	1.3x	0.8x	0.8x	19x	FGFR
FGFR4	14x	7.6x	27x	67x	55x	FGFR

TYRA-300 shows significant isoform selectivity for FGFR3 over other FGFR isoforms

# TYRA-300 increased bone growth in FGFR3<sup>Y367C/+</sup> model



Vehicle **TYRA-300** 

Experiment conducted in the lab of Laurence Legeai-Mallet at Imagine Institute in Paris, France Daily subcutaneous injection of TYRA-300 at 1.2 mg/kg/day for 15 days starting at Day 1; \*p<0.0001

### TYRA-300 increased bone growth in FGFR3<sup>Y367C/+</sup> model

Population Increase in length compared to vehicle-treated Y367C/+ mouse<sup>1</sup>

Coloctivity

Selectivity		Dose	Femur	Tibia	L4-L6
Pre-clinical		(mg/kg/day)		ΠDIα	L4-L0
Clinical	<b>TYRA-300</b>	1.2	24.4%*	38.3%*	23.9%*
	infigratinib <sup>2</sup>	2.02	20.9%	32.6%	12.1%
	infigratinib <sup>3</sup>	0.5 <sup>3</sup>	10.4%	16.8%	N/R
					*p<0.0001

Experiment conducted in the lab of Laurence Legeai-Mallet at Imagine Institute in Paris, France; data reflects separate experiments for TYRA-300 and infigratinib 1. 15 days subQ starting at day one; 2. Data from Komra-Ebri et al 2016 (Legai-Mallet lab); 3. Demuynck, 2019; 0.667 mg/kg human equivalent dose for 2.058mg/kg; 0.167 mg/kg human equivalent dose for 0.514mg/kg

# We plan to initially file a Phase 2 IND in Achondroplasia in 2024

Population	FGFR3 GERMLINE	OTHER GERMLINE	PEDIATRIC SHORT
Selectivity	MUTATIONS	MUTATIONS	STATURE
Pre-clinical Clinical	Achondroplasia (~3K) Hypochondroplasia (~2K) Craniosynostosis (~2.5K) Muenke syndrome (~1.4K) Thanatophoric dysplasia (~0.3K) Crouzon syndrome with acanthosis nigricans (~0.3K) SADDAN syndrome (~0.06K)	Leri-Weill Dyschondrosteosis (~30K) Recessive multiple epiphyseal dysplasia (~0.7K) Laron Syndrome (Growth Hormone Insensitivity) (~0.2K)	Genetic Short Stature (~90K <sup>1</sup> ) Idiopathic short stature (~700K <sup>2</sup> )

Addressable US pediatric population; Source: company research

1. Represents children ages 4-17 under 3 standard deviations from mean height

2. Represents children ages 4-17 under 2.25 standard deviations from mean height

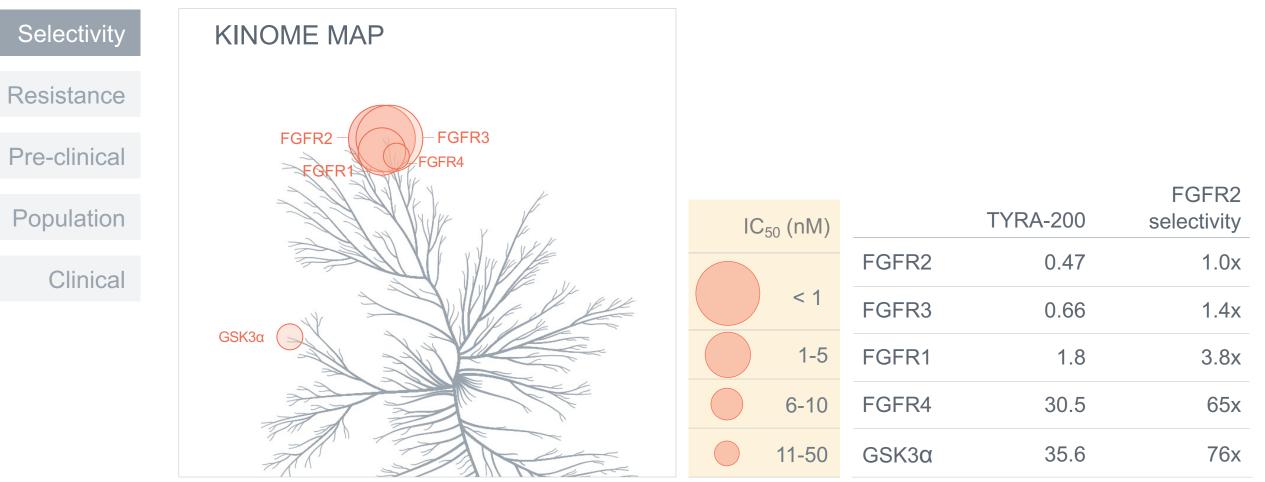


TYRA-300<sup>Onc</sup> Urothelial carcinoma (UC)

TYRA-300<sup>ACH</sup> Achondroplasia (ACH) Gatekeeper and molecular brake agnostic FGFR4-sparing Gateway to additional solid tumor indications

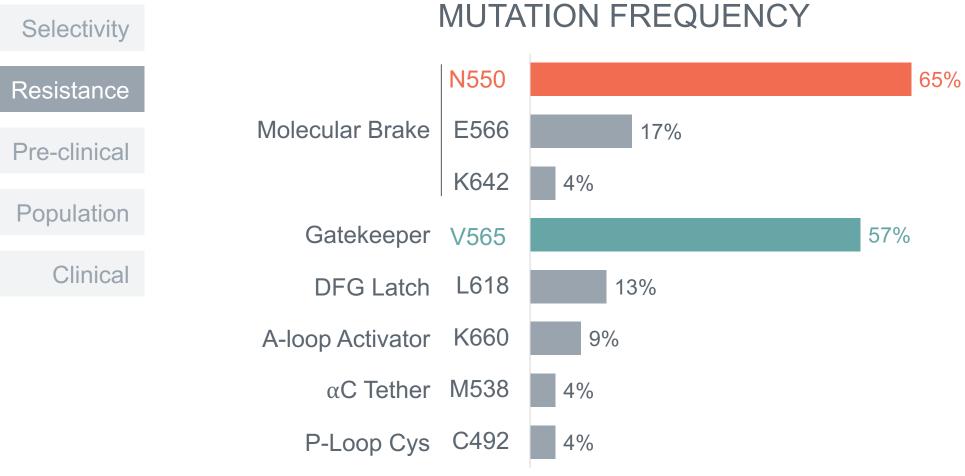
**TYRA-200** Intrahepatic cholangiocarcinoma (ICC)

# TYRA-200 is highly selective for FGFR1/2/3, and spares FGFR4



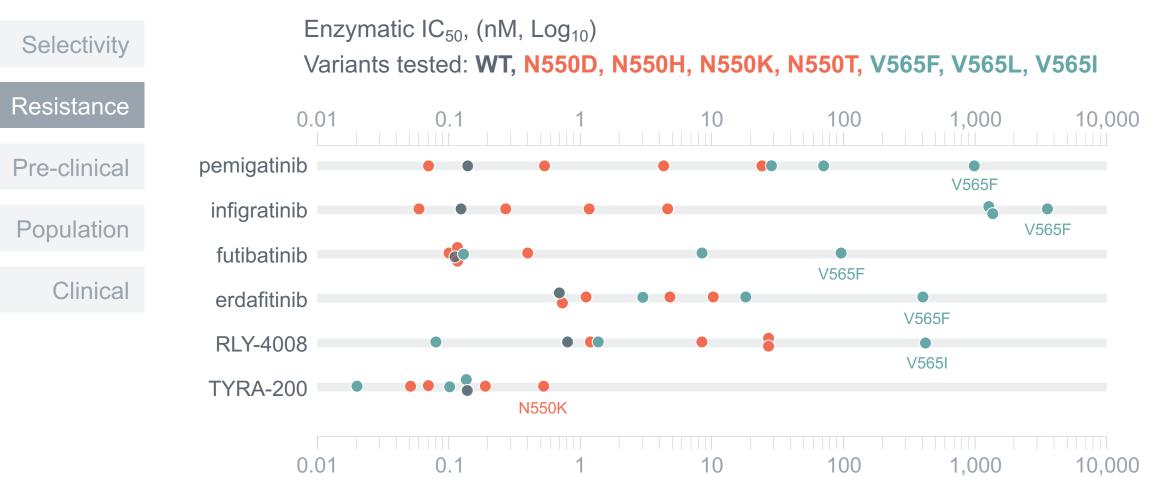
TYRA-200 was profiled in a scanMAX<sup>SM</sup> (KINOMEscan) screen, IC50 data generated by Reaction Biology Inc.

#### Polyclonal acquired drug resistance occurs often in FGFR2



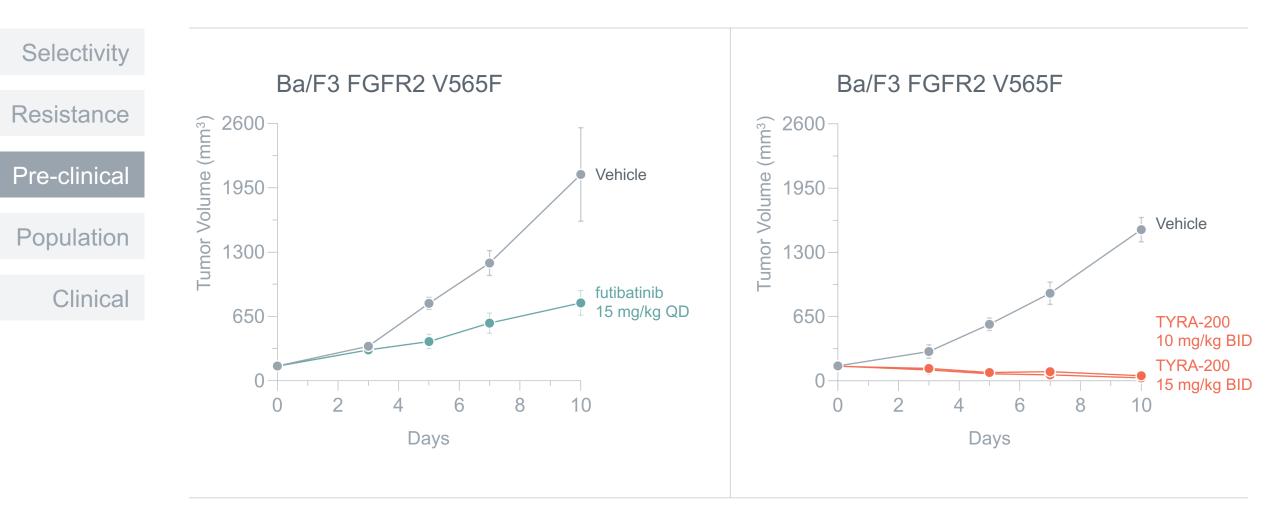
Data presented at EORTC (October 2020); N=46. Evaluable FGFR2-fusion Patients (ICC) on FGFR therapy w/ post-progression biopsy

### TYRA-200 retains potency for key acquired resistance mutations

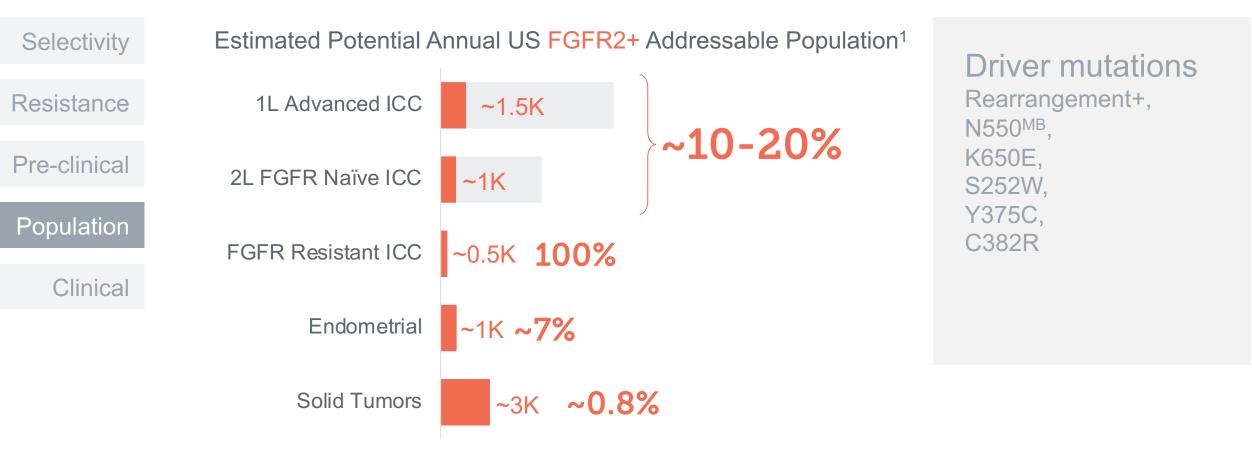


Enzymatic IC50 measurements generated at Reaction Biology Corp using Tyra enzymes. All experiments conducted under identical conditions, tested in duplicate.

### TYRA-200 regresses tumors with gatekeeper mutations



# TYRA-200 has multiple opportunities across FGFR2+ solid tumors



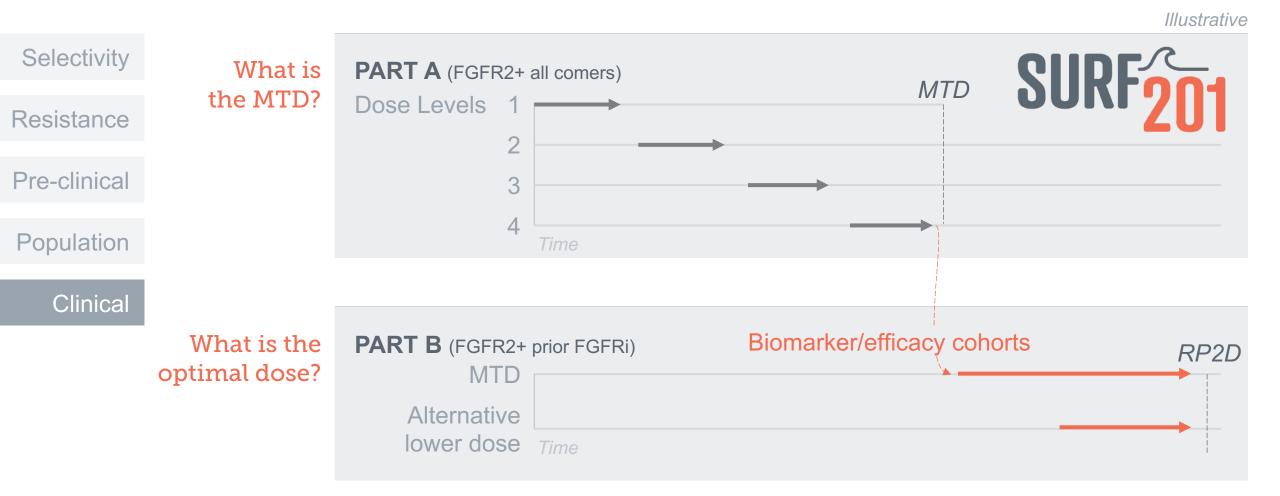
1. ICC figures represent potential annual incident and recurrent case estimates by addressable disease stage; Solid tumors figure based on annual deaths Source: SEER; Cleary, 2021; Conway, 2022; Oh, 2022; Goyal, 2020; Murugesan, 2022; Company Research

#### Acquired resistance is a key unmet need in FGFR2+ ICC

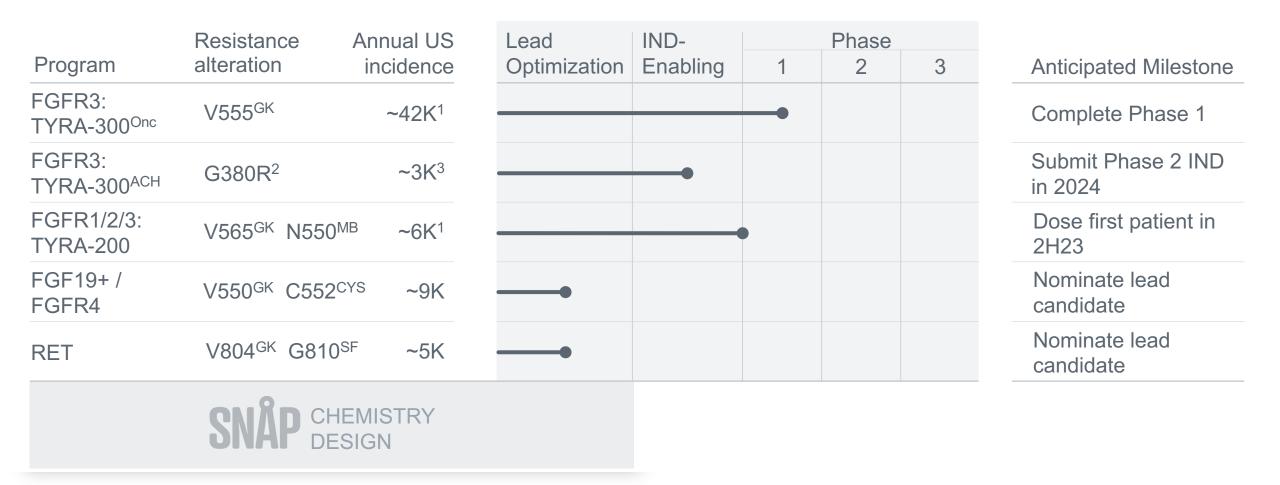
Selectivity	ADDRESS	SABLE (US) <sup>1</sup>	LEAD OPTION	UNMET NEED
Resistance	1 <sup>st</sup> Line	~1.5K	CPI + Chemo	Only ~27% of patients respond; Increased PFS (Durva+Gem/Cis:
Pre-clinical				7.2mo <sup>2</sup> )
Population	2 <sup>nd</sup> Line	~1K	FGFR2 Inhibitors	Increased PFS (futibatinib: 8.9mo <sup>3</sup> )
Clinical				~67% of FGFR2i responders relapse with resistance mutations <sup>4</sup>
	3 <sup>rd</sup> Line	~0.5K	Chemo or palliative	Polyclonal resistance; need for gatekeeper and molecular brake-agnostic approach

1. Represents estimated potential annual incident and recurrent case estimates by addressable disease stage 2. Oh et al, 2022; 3. Data presented at ASCO (June 2022); N=103; 4. Data presented at EORTC (October 2020); N=46. Evaluable FGFR2-fusion Patients (ICC) on FGFR therapy w/ post-progression biopsy

# Our Phase 1 trial will focus on FGFR resistance patients



#### We're building a pipeline of differentiated assets



ACH: Achondroplasia, GK: Gatekeeper, CYS: Cysteine Mutant, SF: Solvent Front, MB: Molecular Brake

1. Represents incidence for lead indication and deaths for other solid tumors across all stages of the disease 2. Key activating mutation for ACH

3. Number represents US ACH prevalence rather than incidence

# Why invest in TYRA?

Differentiated assets

Precision small molecules targeting large opportunities in FGFR biology Lead asset: TYRA-300, the first oral FGFR3-selective inhibitor in the clinic

#### NASDAQ: TYRA

Accelerated design



CASH:\* \$241.7M

\*March 31, 2023