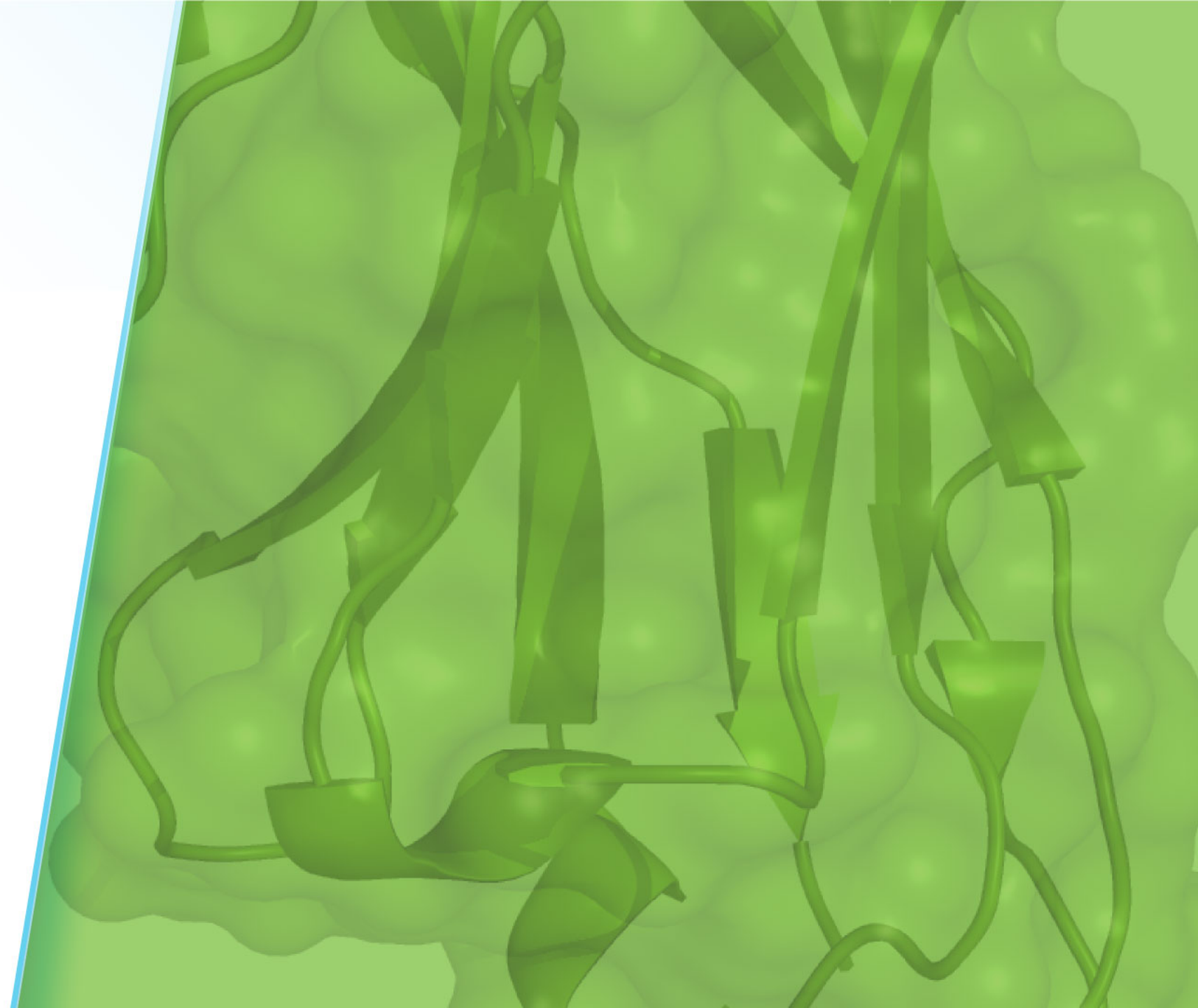


Innovation Driven Outcomes Focused

March 2021

INHIBR_x



Presentation disclaimer

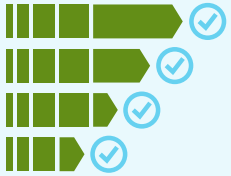
This presentation contains forward-looking statements. In some cases, you can identify forward-looking statements by the words “will,” “expect,” “intend,” “plan,” “objective,” “believe,” “estimate,” “potential,” “continue” and “ongoing,” or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements are based on management’s current beliefs and expectations. These statements include but are not limited to statements regarding Inhibrx, Inc.’s (the “Company”) business strategy, the Company’s plans to develop and commercialize its product candidates, the safety and efficacy of the Company’s product candidates, the Company’s plans and expected timing with respect to clinical trials and regulatory filings and approvals, and the size and growth potential of the markets for the Company’s product candidates. These statements involve substantial known and unknown risks, uncertainties and other factors that may cause the Company’s actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Additional information regarding the Company’s risks and uncertainties are described in its Registration Statement on Form S-1 filed with the Securities and Exchange Commission (“SEC”) on August 12, 2020 in the section titled “Risk Factors,” and in other filings the Company may make with the SEC from time to time.

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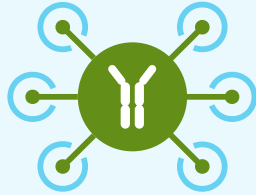
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Key investment highlights



Four clinical programs
with upcoming readouts



Proprietary single
domain antibody
(sdAb) platform



Potential rapid path
to first approval and
financial sustainability



Experienced leadership
team aligned with
investors

Validation from industry
leading partners

 Bristol Myers Squibb™

 bluebirdbio®
recode for life™

 **Chiesi**
People and ideas for innovation in healthcare

Key financial highlights
As of 2/28/2021

Cash
\$111.3M

Common
Stock
Outstanding
37.8M

Fully
Diluted
Outstanding
42.2M

Four differentiated clinical programs addressing large market opportunities



INBRX-109

Tetravalent DR5 agonist

- + Single agent activity in difficult to treat tumors
- + Potential rapid path to approval in chondrosarcoma, registration study starting in mid 2021
- + First combination cohorts initiated



INBRX-106

Hexavalent OX40 agonist

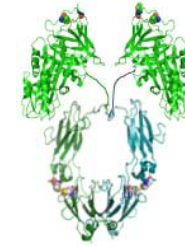
- + Potential across numerous tumors, including cold tumors
- + Strong mechanistic rationale for PD-1 combination
- + Multiple data readouts over the next 18 months



INBRX-105

PD-L1x4-1BB tetravalent conditional agonist

- + Potential across all PD-L1 expressing tumors
- + 4-1BB agonism is clinically validated
- + Strong mechanistic rationale for PD-1 combination
- + Multiple data readouts over the next 18 months



INBRX-101

AAT-Fc fusion protein

- + Potential for first meaningful advance for patients in 35 years
- + Estimated ~\$2B+ market size
- + Early PK data in AAT patients
- + Registration study could start in late 2022

Inhibrx's modular sdAb platform



Versatile and innovative formats enable validated complex target biology to be exploited



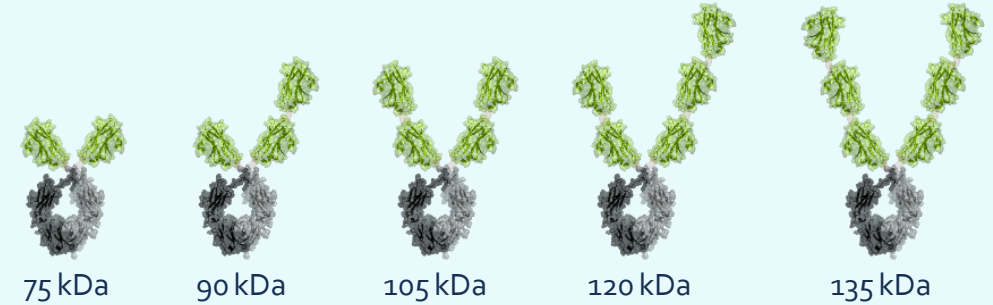
Precision engineering

- Multivalent – precise valency selection engineered to specific target biology
- Multispecific – engineered for optimal synergistic or co-dependent functionalities
- Smaller than conventional antibodies

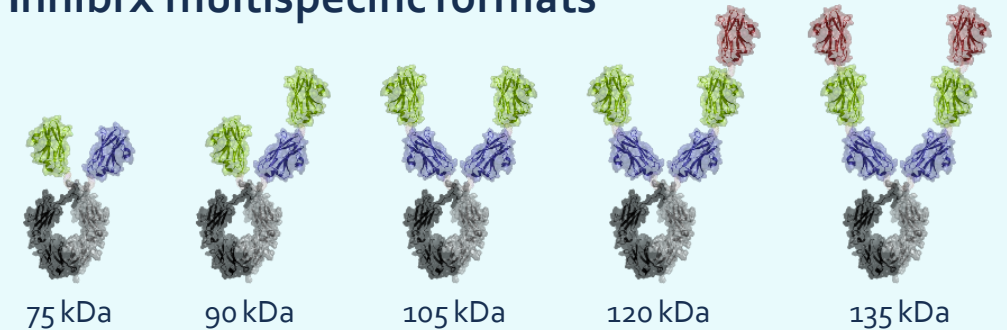


Readily manufactured at high yields using standard processes

Inhibrx multivalent formats



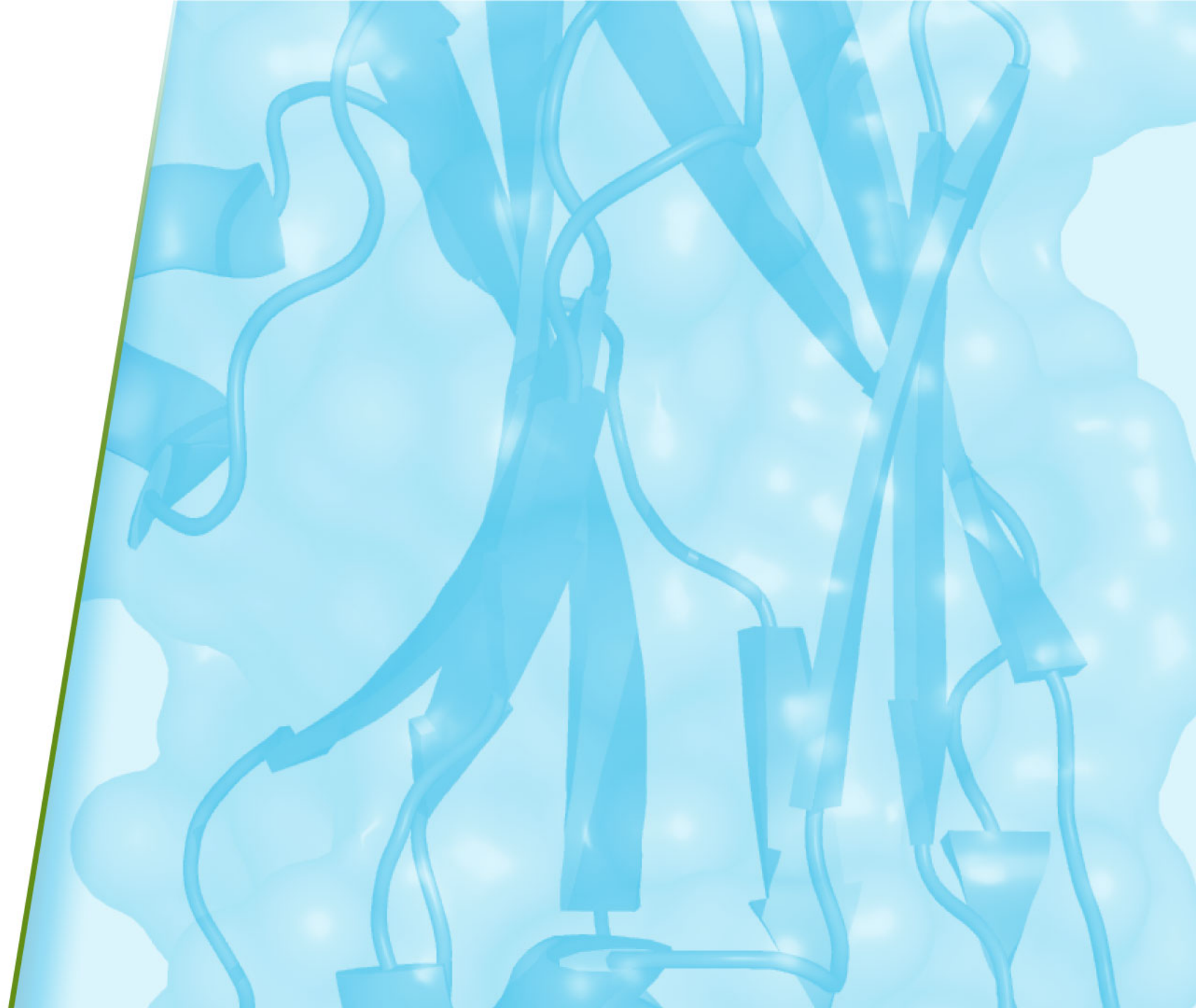
Inhibrx multispecific formats



INBRX-109

Tetravalent DR₅ Agonist

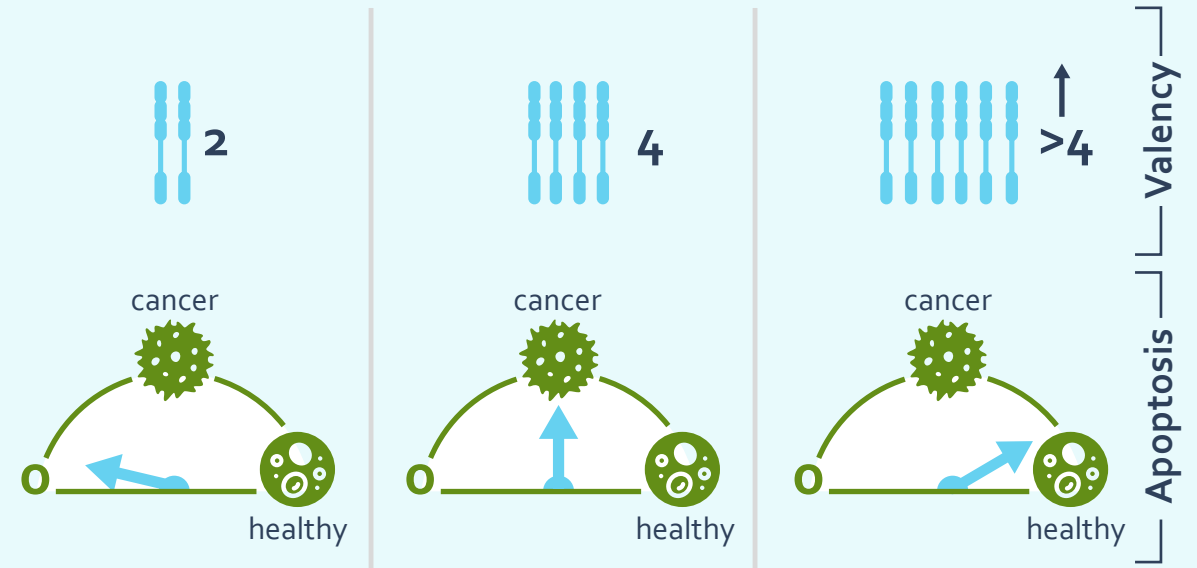
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Death receptor 5 target overview

- ✓ Death receptor 5 (DR5) is a receptor for the tumor necrosis factor-related apoptosis-inducing ligand (TRAIL)
- ✓ DR5 activation naturally eliminates damaged and neoplastic cells
- ✓ Higher order clustering of DR5 is required to drive signaling
- ✓ Potential to treat cancers that are unresponsive to immunotherapy

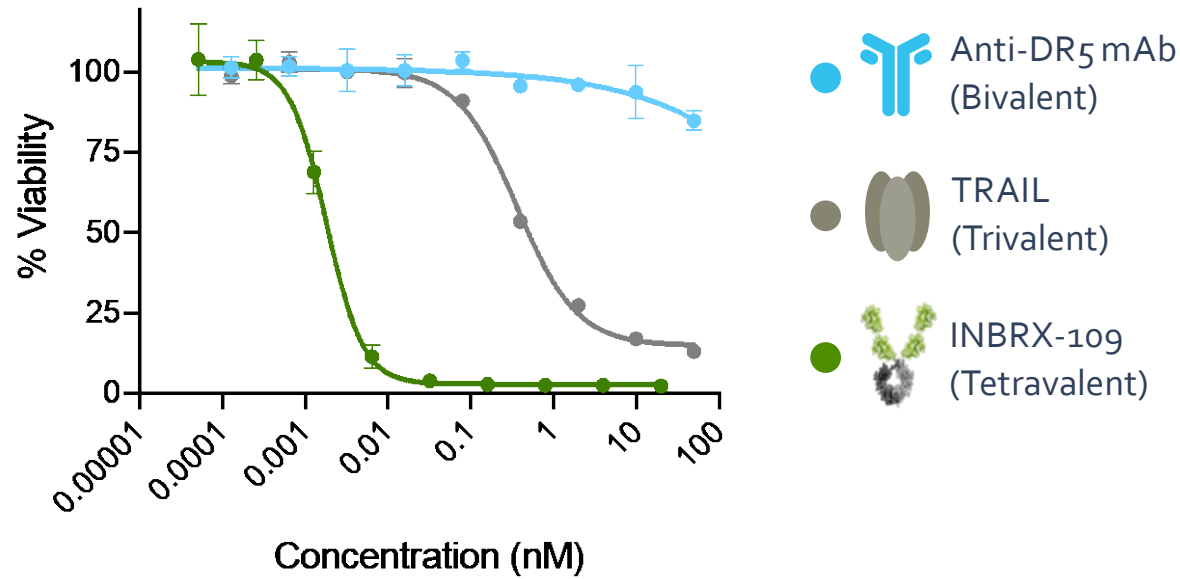
INBRX-109



DR5 requires the right valency to trigger apoptosis of cancer cells and spare healthy cells

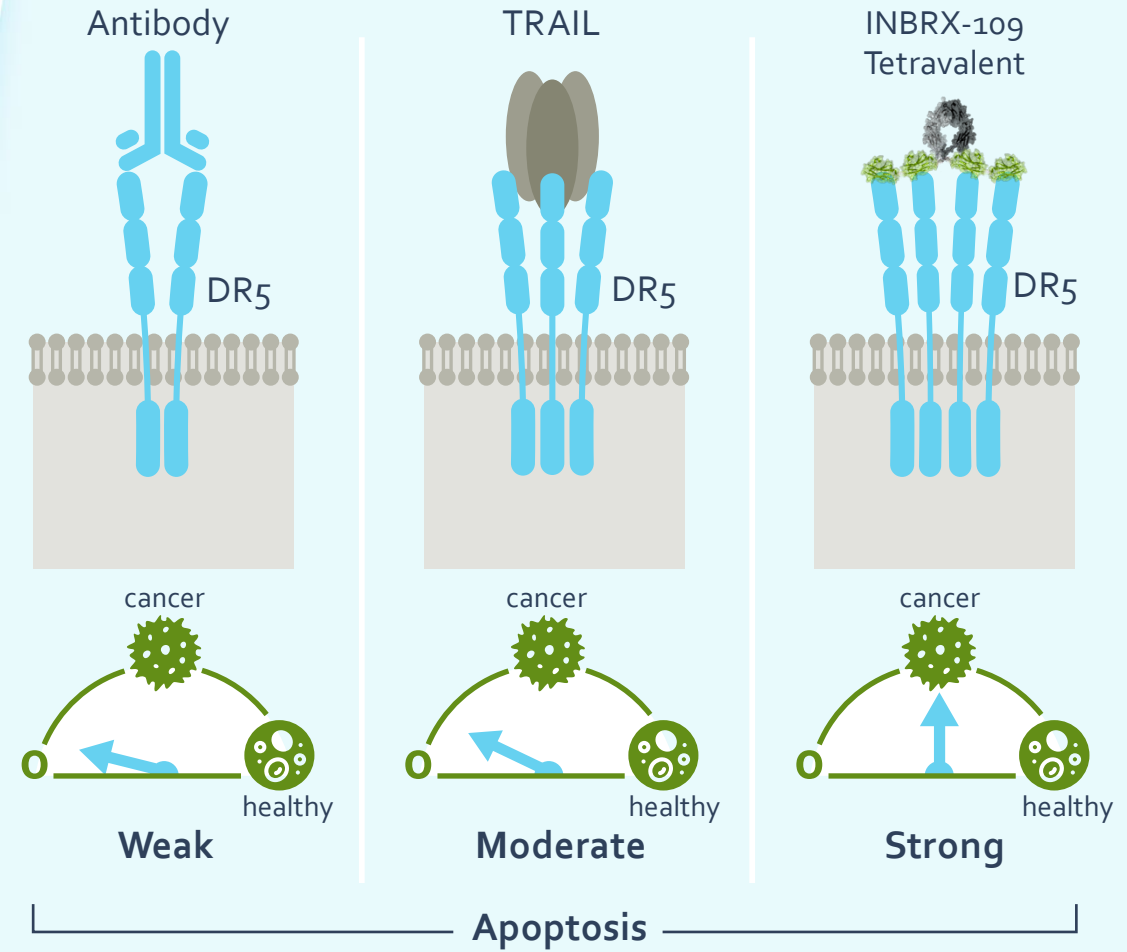
Valency drives DR5-mediated apoptosis

Impact of valency on DR5 induced tumor cell death



INBRX-109 is 100x more potent in preclinical assays compared to first generation bivalent and trivalent agonists

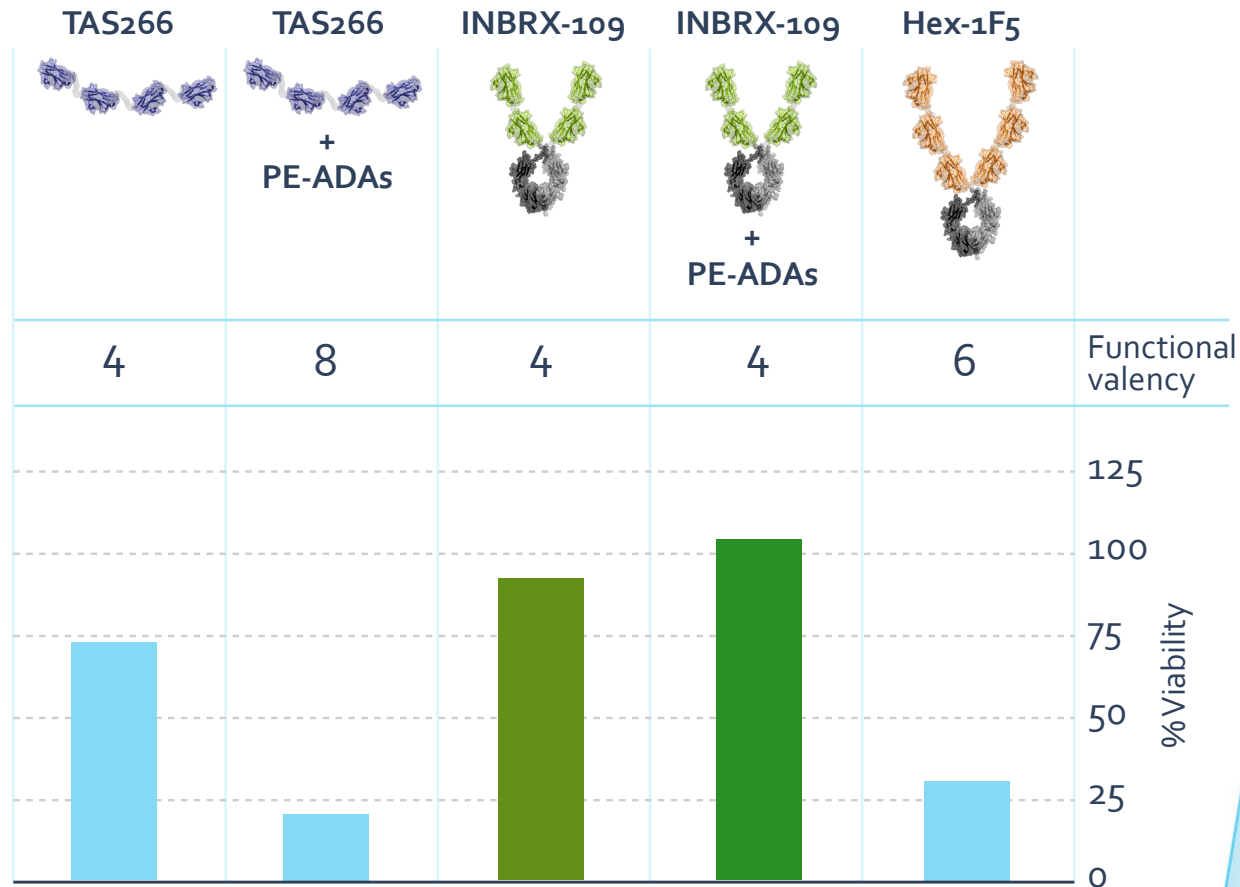
INBRX-109



INBRX-109 engineered to avoid hepatotoxicity

INBRX-109

Human hepatocyte toxicity assay



Therapeutic format selection designed to balance efficacy and safety

- ✓ Hepatocytes may be subject to on-target toxicity for DR5 pathway agonism
Previous tetravalent DR5 agonist failed in the clinic due to hepatotoxicity – likely due to hyper-clustering by anti-drug antibodies
- ✓ In vitro hepatic cell (HepaRG) death assay recapitulates toxicity of TAS266 + pre-existing anti-drug antibodies (PE-ADAs) in pooled human immunoglobulins
- ✓ Proper valency is key: Hexavalent (Hex-1F5) is also hepatotoxic

Tetrameric INBRx-109 did not induce hepatic cell apoptosis; lacks sites for PE-ADAs mediated crosslinking

Ph1 INBRX-109 trial design and status

First in human Phase 1 trial started Nov. 2018

 **PART 1:**
Dose escalation
0.3 to 30 mg/kg

 N=20


completed

Result: MTD not reached

 **PART 2:** Dose expansion cohorts


ongoing

Initial expansion cohort indications were selected based on *in vitro* and *in vivo* sensitivities to the DR5 pathway and clinical data from prior DR5 agonists

 **32** Chondrosarcoma

 **10** Synovial sarcoma

 **20** Malignant pleural mesothelioma

 **20** Colorectal adenocarcinoma

 **10** Gastric adenocarcinoma

 **PART 3:**
Combination studies


ongoing

 **20** Pancreatic adenocarcinoma 2nd line with FOLFIRI

 **20** Mesothelioma with Cis-/Carboplatin & Pemetrexed


planned

 **20** Ewing with Irinotecan

FUTURE POTENTIAL OPPORTUNITIES

- ✓ Solid tumors
+ IAP antagonists
- ✓ Hematologic tumors
+ Bcl-2 inhibitors

- ✓ NSCLC
+ various combo agents
- ✓ Gastric and colon cancer
+ various combo agents

- ✓ Additional sarcoma indications

- ✓ Investigation of a predictive biomarker of pathway sensitivity is ongoing

INBRX-109

Fast to market opportunity



Chondrosarcoma

Incidence rate
of ~1 in 200,000
persons per year

~1,400
cases per
year

USA

Worldwide

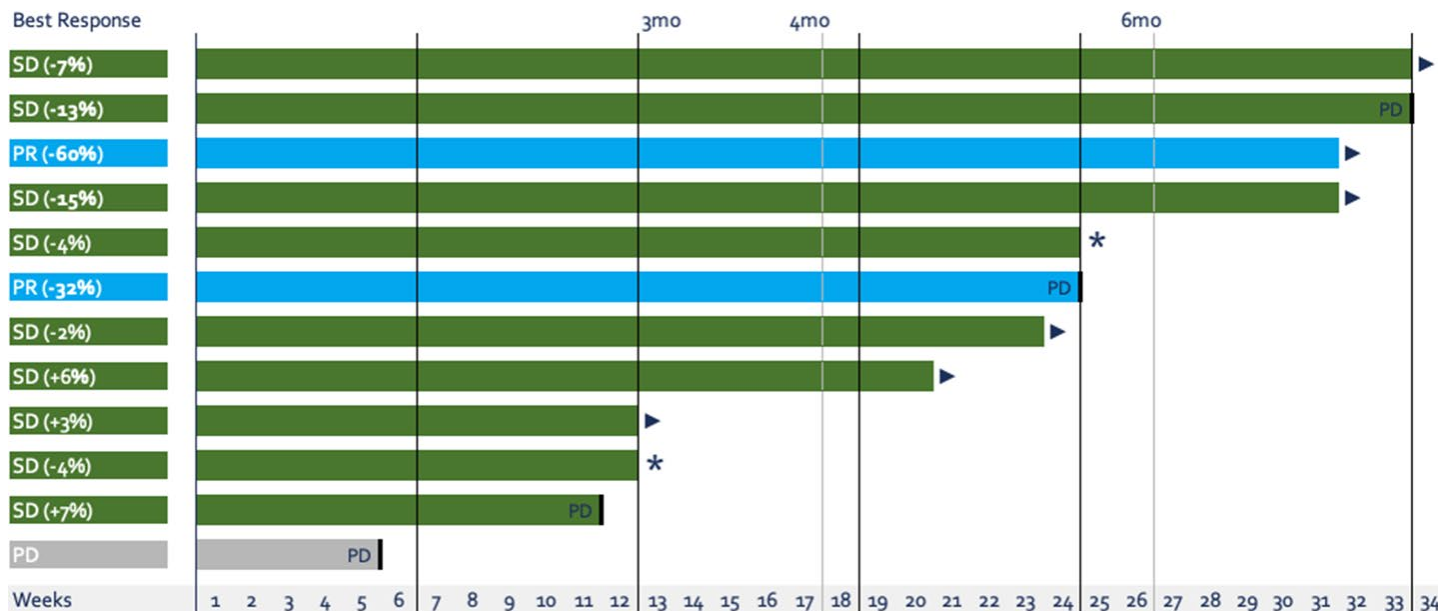
PFS from failed study

Therapeutic	IPI-g26 (HH)
Control arm	Placebo
Subject number	100 (2:1)
Efficacy data	PFS 3.7 mo vs 2.9 mo Placebo
Comment	Negative study

No approved therapeutic for the treatment of chondrosarcoma

INBRX-109 data and registration-enabling study design in chondrosarcoma

INBRX-109 in chondrosarcoma:



- Time on treatment in weeks
- Data cut point 30-Oct-2020, data from Ph1 INBRX-109 study, study ongoing, chondrosarcoma cohort ongoing
- Response per RECISTv1.1 per Investigator assessment, data subject to change (e.g., some data raw and not verified)
- PR=Partial Response, SD=Stable Disease, PD=Progressive Disease
- ▶ Subject ongoing
- * Off-study per subject request (e.g., resection) or Investigator discretion

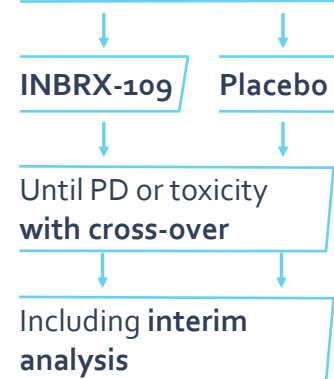
Potential registration-enabling study design:

Randomized, double-blind, placebo-controlled, Phase 2 study of INBRX-109 in unresectable or metastatic conventional chondrosarcoma

Randomization

Conventional chondrosarcoma, grade 2 and 3, unresectable or metastatic

Stratification by line of therapy & Grade



Endpoints

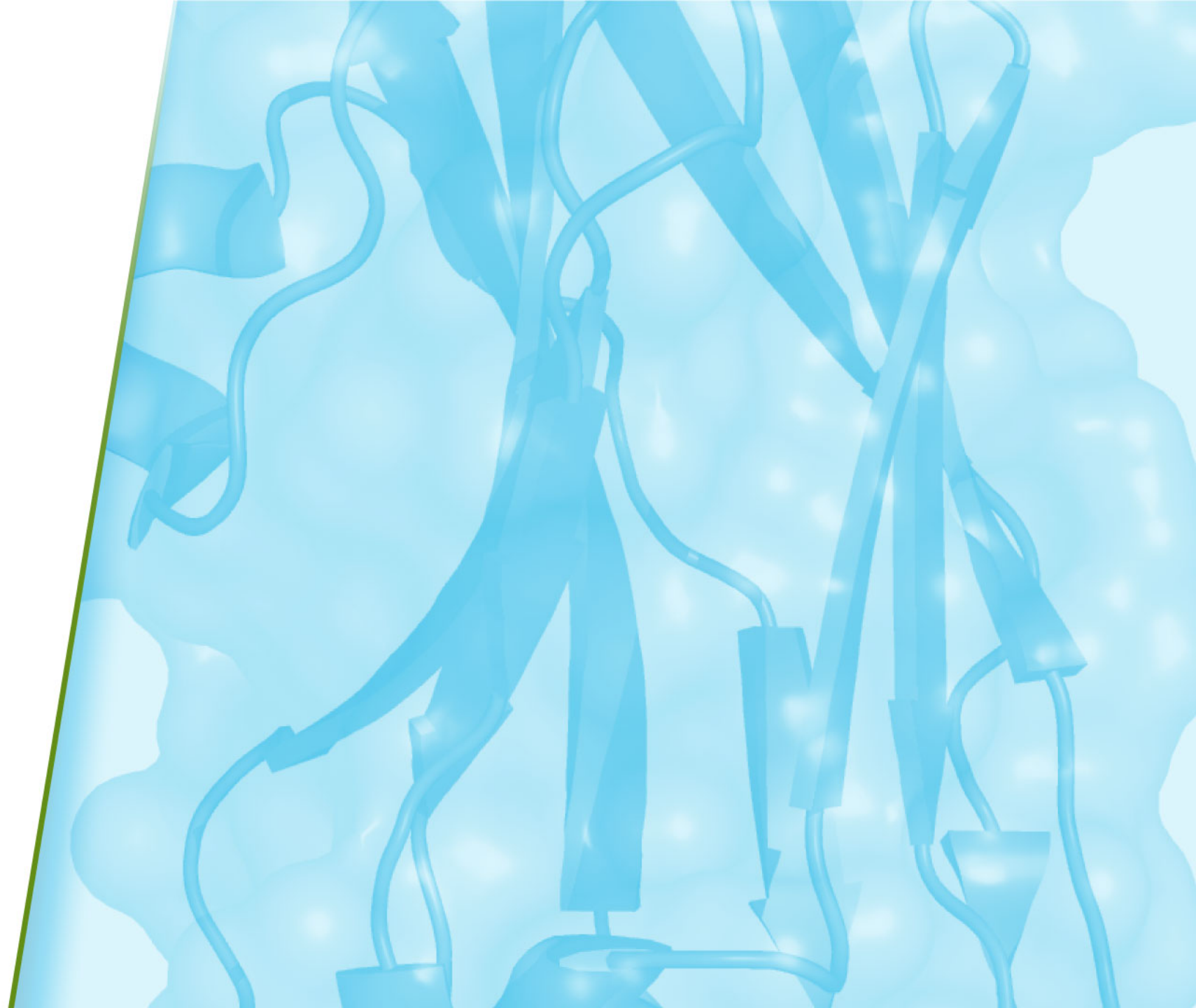
Primary: PFS

Secondary: overall survival, overall response rate, duration of response, disease control rate, quality of life

INBRX-106

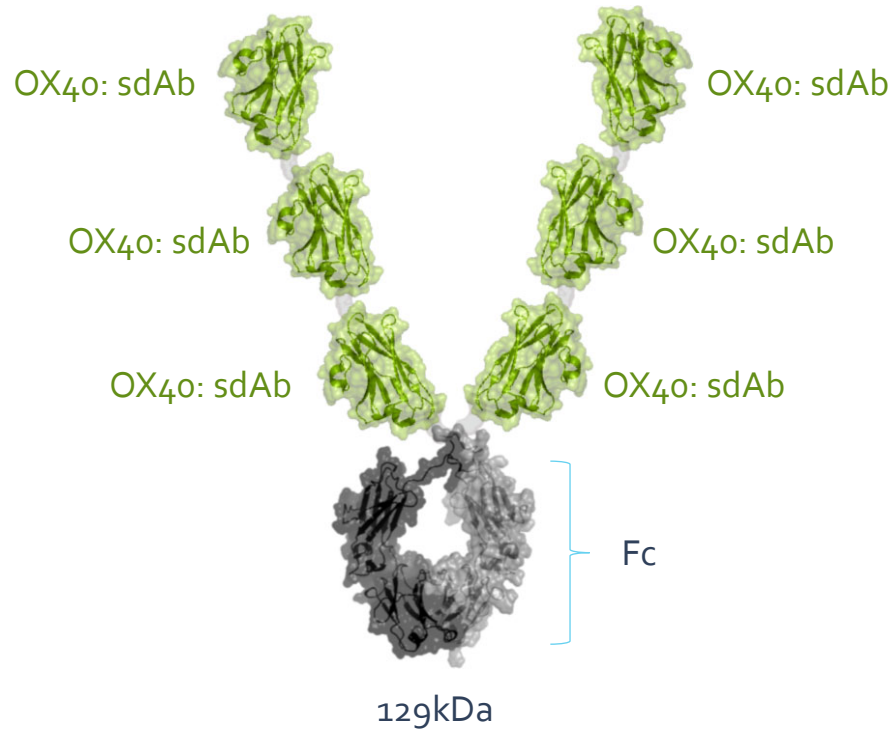
Hexavalent OX₄o Agonist

INHIBR_X



INBRX-106 hexavalent OX₄₀ agonist

INBRX-106



OX₄₀ is a co-stimulatory receptor on activated T-cells

Hexavalent engagement of OX₄₀:

- Provides co-stimulation to activated T-cells
- Reverses regulatory T-cell induced immune suppression
- Enhances T-cell functionality; additional benefit in combination with PD-1 blockade

Signs of activity at low doses observed in Phase 1 in multiple patients, including cold tumors and prior PD-1 failures

INBRX-106 is a best-in-class OX40 agonist

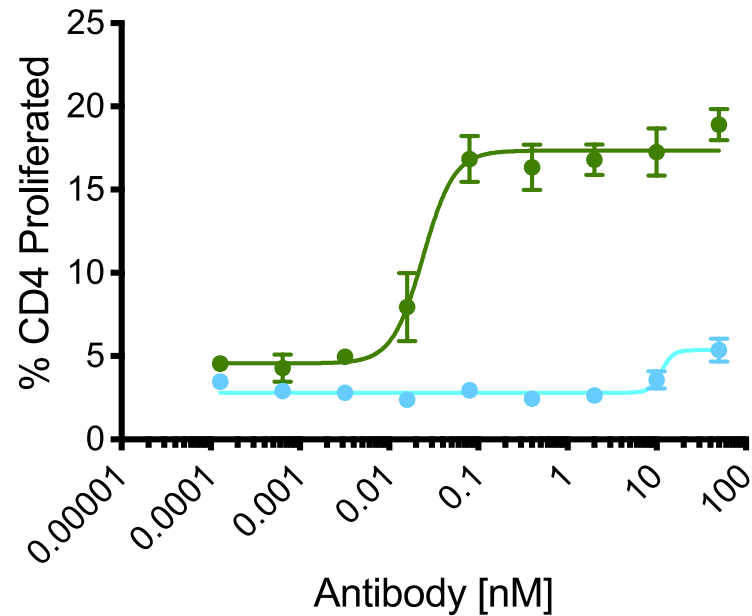
Valency	Isotype	Ligand blocking	Candidates	Status
Bi-	IgG1	Y	MOXR-0916	Discontinued
			GSK-3174998	Ph 1 (MM, 2019)
			BMS-986178	Ph 1 (2016)
			INCAGN-1949	Ph 1 (2016)
			ABBV-368	Ph 1 (HNSCC, 2020)
			IBI-101	Ph 1 (2018)
			MEDI-0562	Discontinued
Bi-	IgG2	Y	PF-04518600	Discontinued
Bi-	IgG1	N	BGB-A445	Ph 1 (2020)
Hex-	IgG1	N	INBRX-106	Ph 1 (2019)

INBRX-106 incorporates all known attributes for optimal OX40 agonism

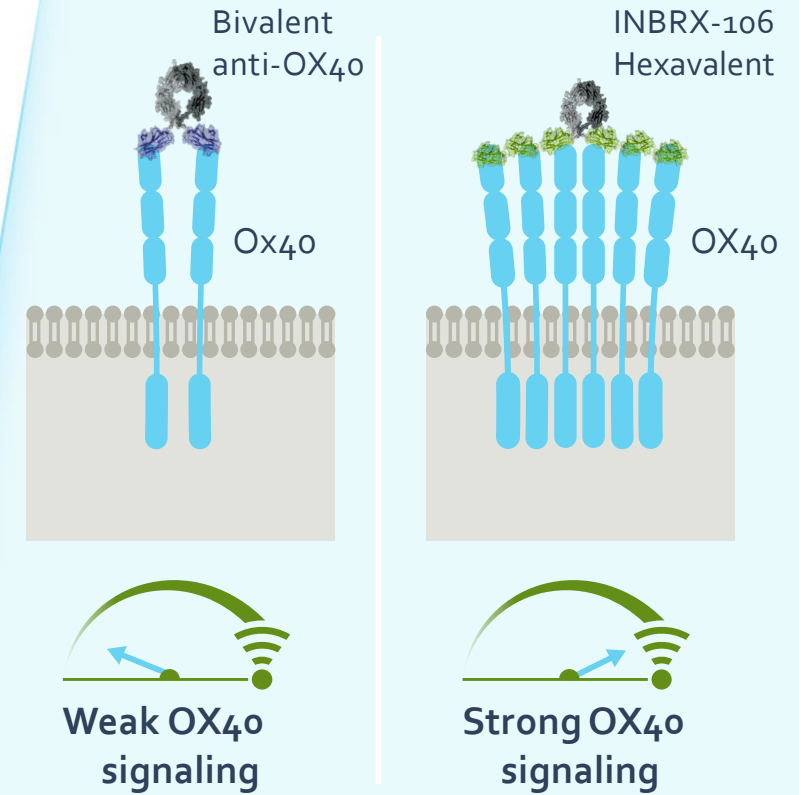
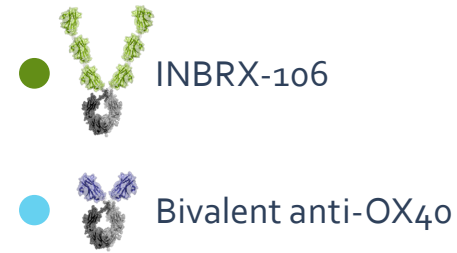
- Increased valency and effector enabled Fc domain have both been empirically shown to promote activity
- Lack of ligand blocking activity may provide APC activation and natural cellular crosstalk

Valency drives OX40 agonism

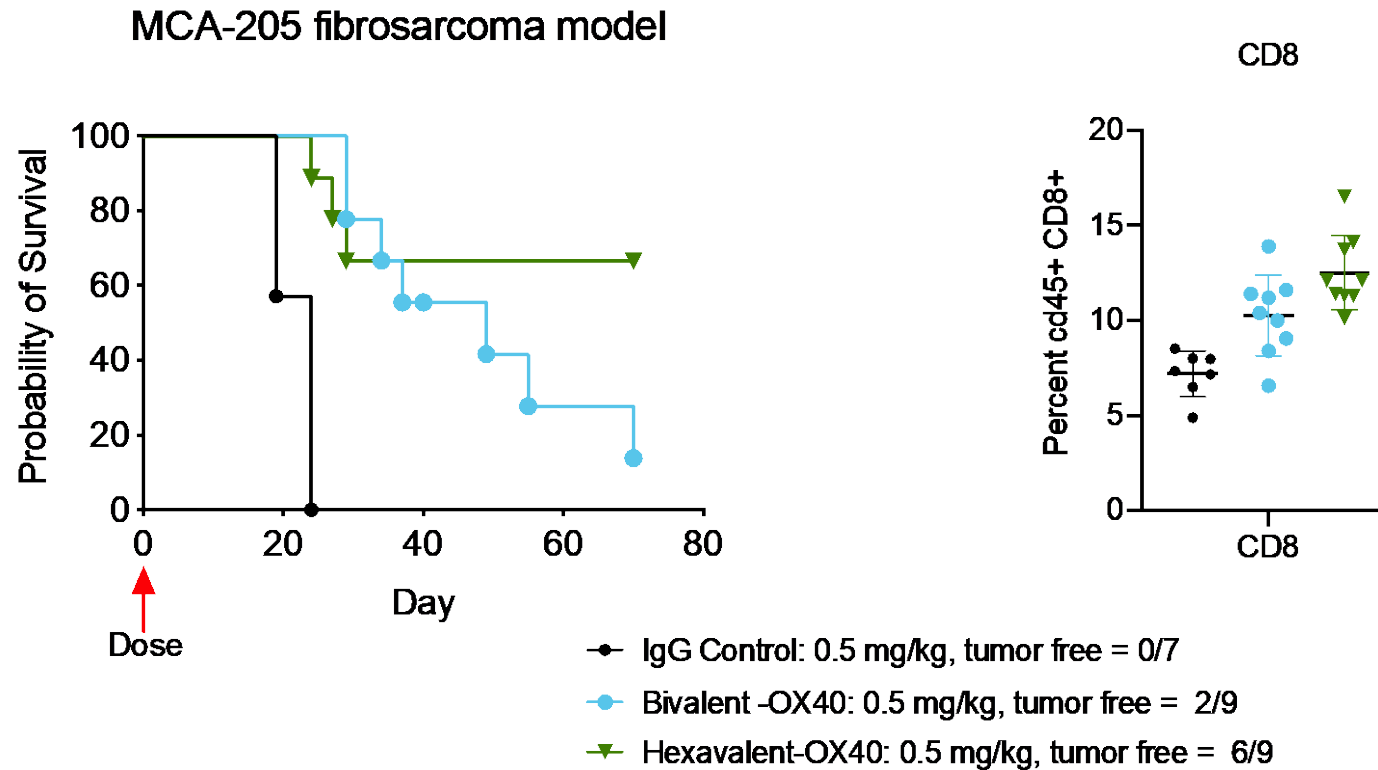
CD4⁺ T cell proliferation



- Suboptimal TCR stimulation can be enhanced through OX40 agonism
- INBRX-106 outperformed bivalent agonist



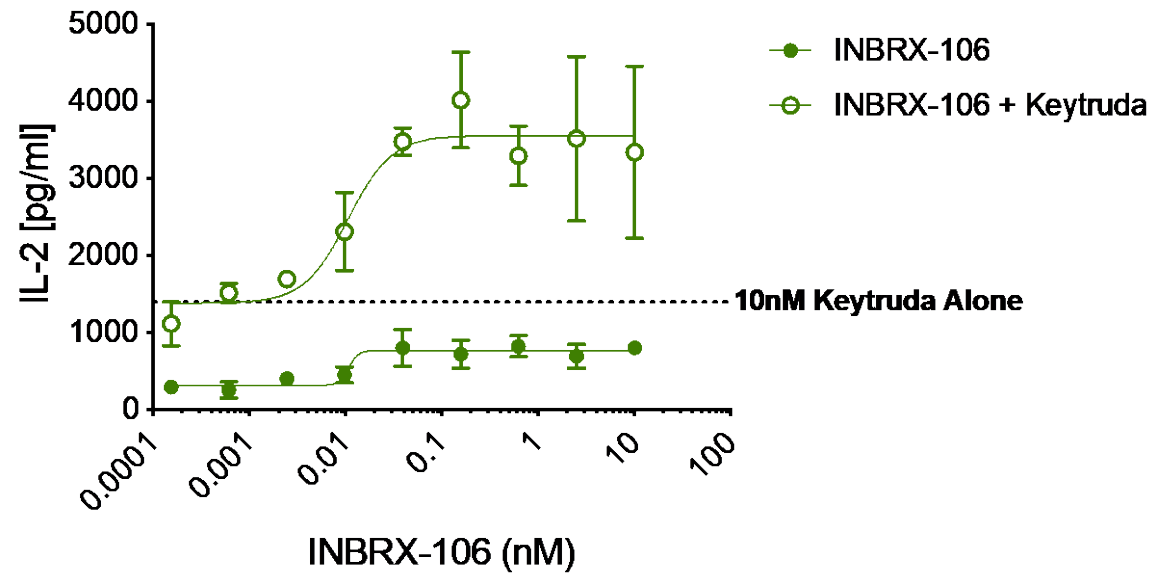
Hexavalent OX40 agonism potently induces anti-tumor immune activation



Hexavalent OX40 agonism impacts T-cell populations to tip the balance toward tumor eradication

OX40 agonism amplifies T-cell function when combined with PD1 blockade

Mix Lymphocyte Reaction: IL-2 Production



T-cell function can be enhanced through combined PD1 blockade and OX40 agonism

Phase 1 INBRX-106 trial design and status

First in human Phase 1 trial started December 2019

PART 1: Single agent dose escalation

 **Completed**

Dose Level mg/kg	Demographics	Tumor Type	Notable Prior Therapies and Best Response	Best Response RECIST	Notable Time on Treatment (weeks)
0.0003-0.003	59 M W	Small intestine cancer (GIST)	S/p 8 lines, no CPI	SD (+2%)	32
0.001-0.01	85 F W	Melanoma (cut)	S/p Pembrolizumab SD ~3.5y	SD (-23%)	40
0.003-0.01	69 M W	Bladder CA	S/p 2 lines, Nivolumab PD 5mo	PD	
0.01-0.1	56 F O	NSCLC, AD (PD-L1 40%)	S/p Carboplatin/ Pemetrexed/ Pembrolizumab PD 2mo	SD (not-measurable)	50*
0.03-0.1	54 M W	Esophageal AD		PD	
0.1	55 M W	Esophageal AD	S/p 4 lines, Pembrolizumab PD 3mo	SD (+12%)	12
0.1	78 M W	Prostate AD (CRPC)	S/p 6 lines, no CPI	SD (+6%; PSA-52%)	18
0.1	58 F W	RCC (sarcomatoid features)		PD	
0.3	70 F W	Chondrosarcoma	S/p 1 line, Spartalizumab/IL-15/IL-2 12mo SD	SD (+7%)	12
0.3	71 M W	HNSCC		NE (DLT)	
0.3	47 M W	Colon AD (KRAS mut)		PD	
0.3	60 M W	NSCLC, AD (PD-L1 0%)	S/p 6 lines, Nivolumab SD ~3.5y, Atezolizumab/Bevacizumab SD ~1.5y	SD (-2%)	30*
0.3	74 M O	RCC (clear cell)	S/p 2 lines, Nivolumab UK ~3y	SD (+6%)	9
0.3	80 F W	Breast AD (IDC)		PD	
1	72 F W	Atypical carcinoid pulmonary		PD	
1	46 M W	Rectal AD		PD	
1	71 M W	Pancreatic AD		PD	
3	55 F W	RCC		PD	
3	50 F W	Colon AD		iuPD	
3	65 M W	Pancreatic AD		NE	

PART 3: Dose escalation with Keytruda™



PARTS 2 & 4: Dose expansion cohorts



Single agent:
PD-L1+ Basket



INBRX-106
+ Keytruda™
(post PD-1/
PD-L1 CPI)

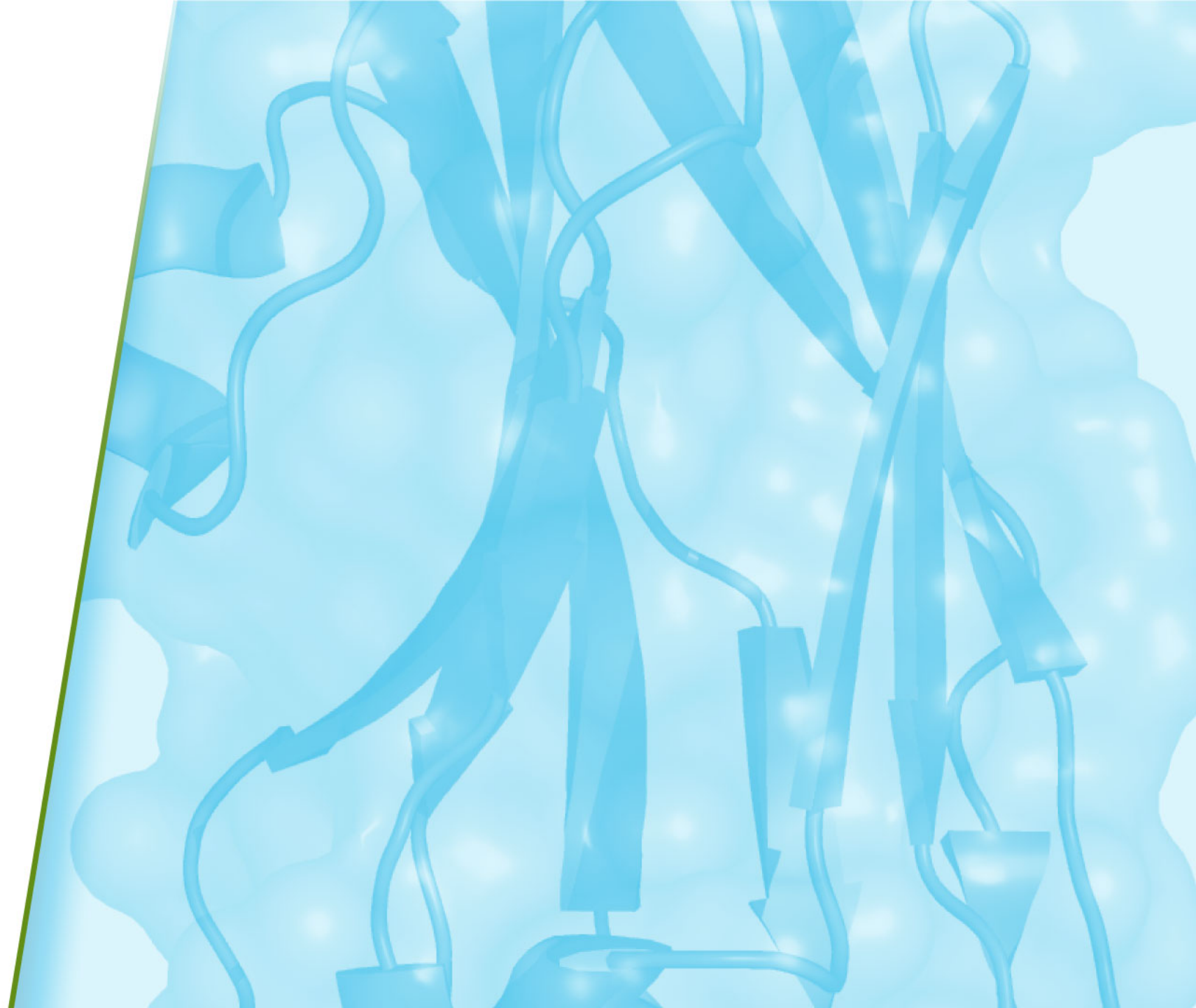
Combo:
PD-L1+ NSCLC
and
PD-L1+ Basket

- Data cut point **March 3, 2021**
- AD=adenocarcinoma, NSCLC=non-small cell lung cancer, RCC=renal cell carcinoma, HNSCC=head and neck squamous cell carcinoma, CPI=checkpoint inhibitor,
- PD=progressive disease, SD=stable disease, PR=partial response, CR=complete response, UK=unknown, NE=not evaluable
- Response per RECISTv1.1 per Investigator assessment, data subject to change (e.g., some data raw and not verified)
- *ongoing

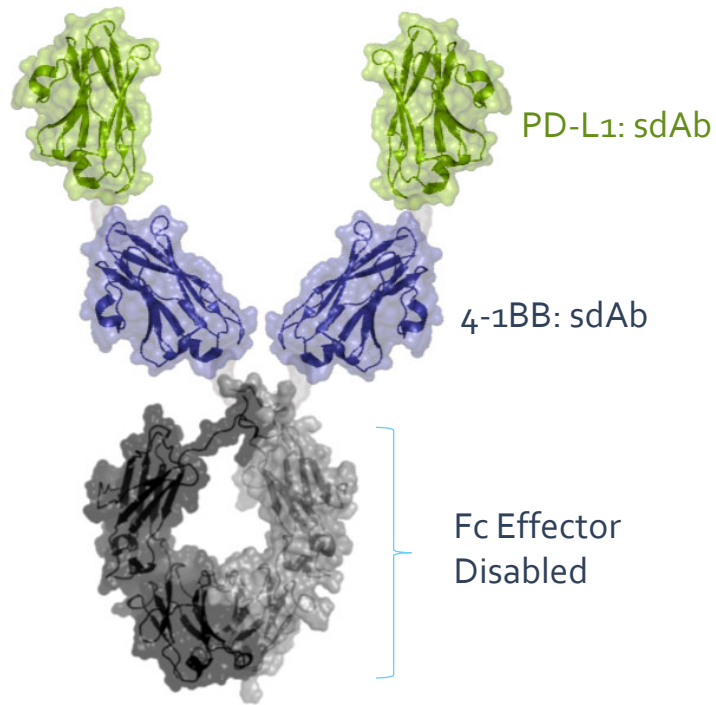
INBRX-105

PD-L1 x 4-1BB Multispecific

INHIBR_X



INBRX-105 is a tumor-targeted 4-1BB agonist



INBRX-105 is designed to provide spatially-restricted 4-1BB agonism at sites of PD-L1 expression

Highly expressed on tumor infiltrating immune cells, 4-1BB signaling promotes prolonged T-cell survival memory formation

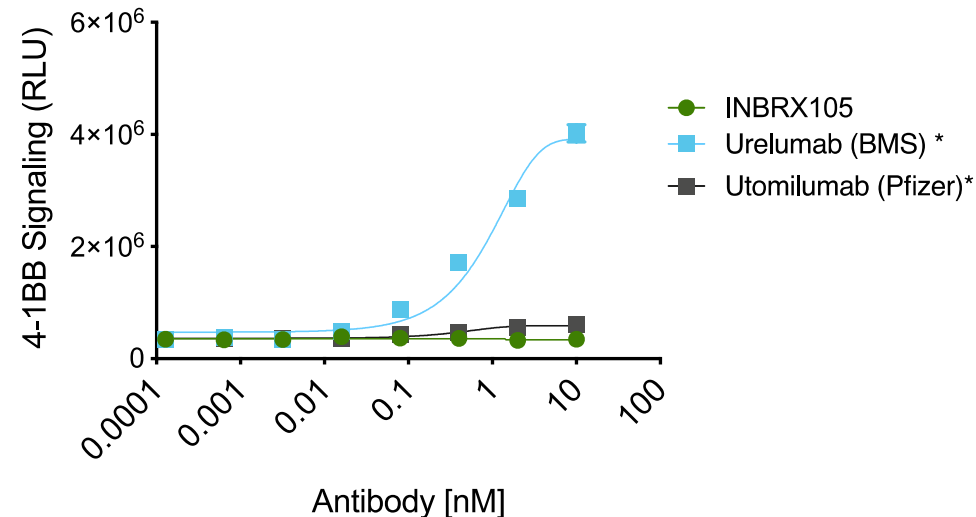
Constitutive 4-1BB agonism has achieved anti-tumor responses, but was limited by immune related toxicities

Focusing 4-1BB agonism to improve therapeutic index

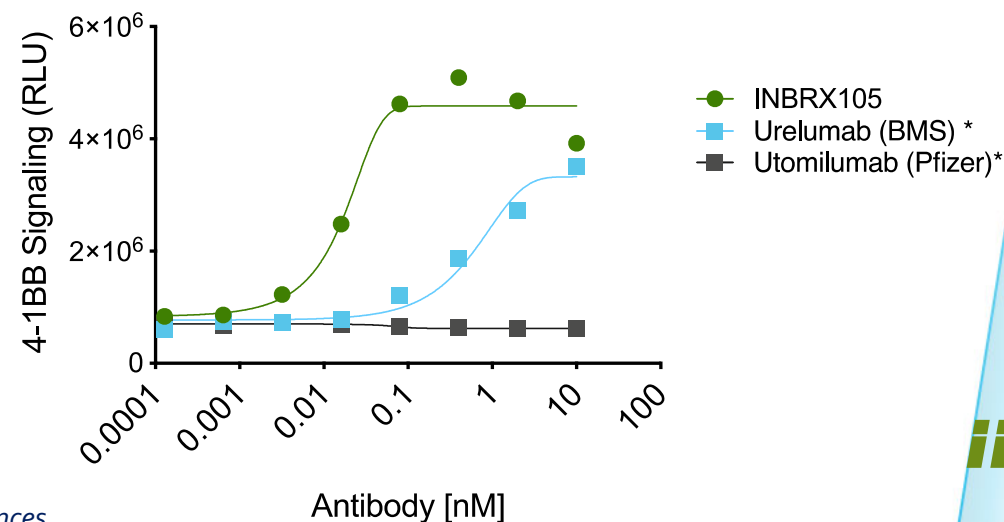
INBRX-105 selectively agonizes 4-1BB at sites of PD-L1 expression

- The tumor selective antigen, PD-L1, acts as an anchor to cluster 4-1BB binding VHHs
- PD-L1 indicates ongoing tumor inflammation, but is insufficient to predict response to checkpoint blockade alone
- INBRX-105 binds CRD1 domain of 4-1BB
 - Does not block ligand
 - Not a constitutive agonist, distinct from Urelumab
 - Achieves spatially restricted and potent 4-1BB agonism

4-1BB Reporter Cells Only



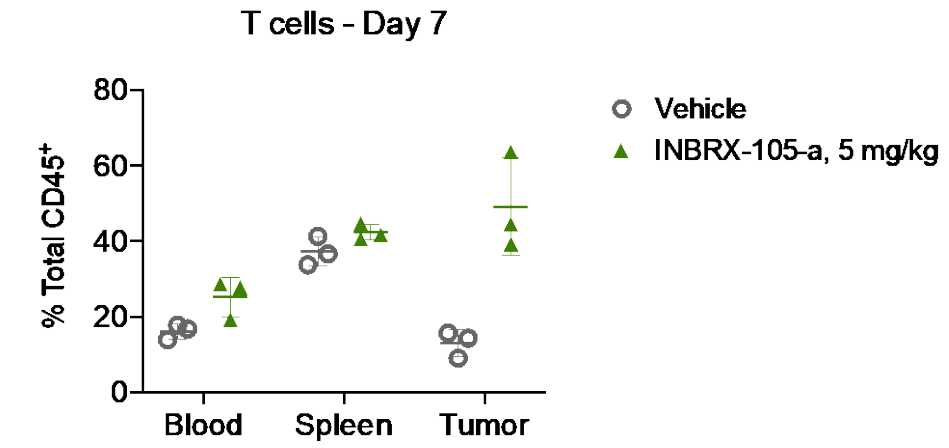
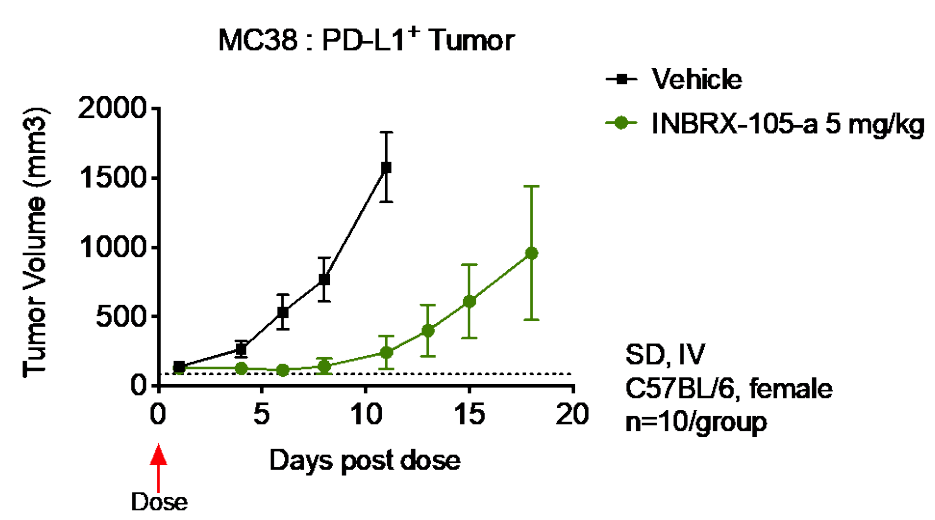
4-1BB Reporter Cells + PD-L1 Positive Cells



*analogs synthesized based on publicly disclosed sequences

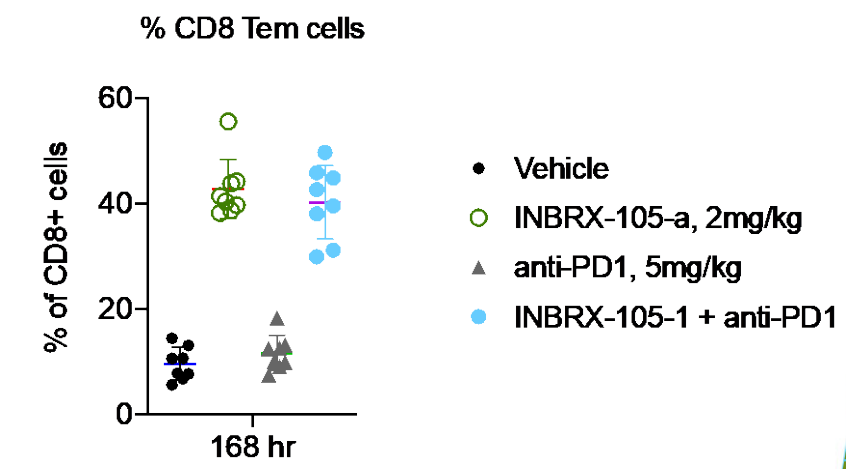
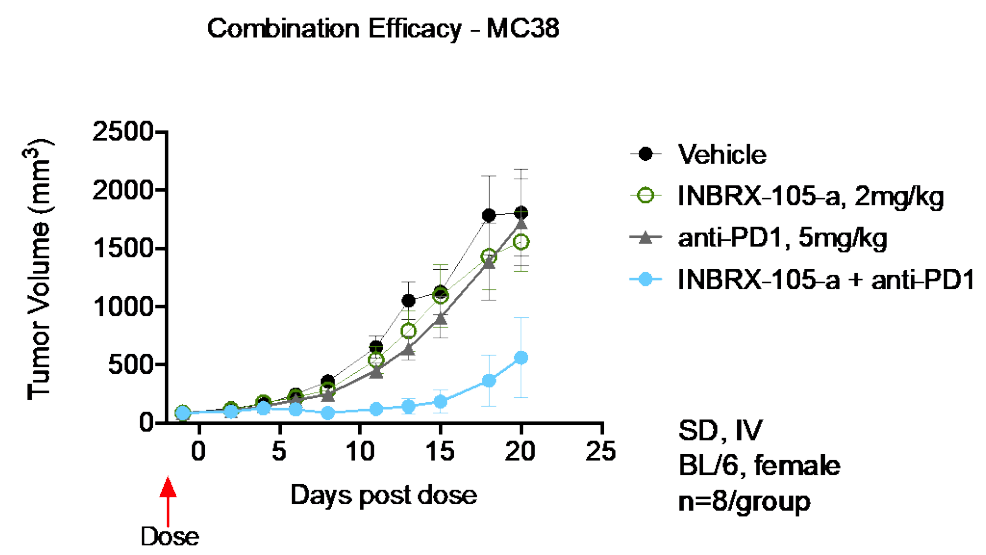
An INBRX-105-like surrogate drives robust tumor T-cell expansion and anti-tumor activity

Single agent study



Enhancement of tumor infiltrating T-cells

Combination study w/ PD1 antagonist – Low dose of INBRX-105 + an optimal dose of anti-PD1 is highly synergistic



4-1BB agonism drives enhanced CD8⁺ Tem

Phase 1 INBRX-105 trial design and status

First in human Phase 1 trial started Feb. 2019

INBRX-105

 **PART 1:**
Dose escalation
INBRX-105



Locally advanced or
metastatic solid tumors

- ☐ 8/18 (44%) at dose levels ≥ 0.1 mg/kg achieved stable disease
- ☐ Patients were not pre-screened for PD-L1 positivity
- ☐ Longest duration= 41 weeks
- ☐ Greatest reduction in tumor volume= 20% (by RECIST v1.1)
- ☐ MTD= 1 mg/kg

 **PART 2:**
Dose expansion
INBRX 105



32 patient single agent
expansion cohort, indications
selected based on known
sensitivity to 4-1BB and
checkpoint blockade

	N=8	PDL1+ NSCLC
	N=8	PDL1+ Melanoma
	N=8	PDL1+ HNSCC
	N=8	PDL1+ Basket

 **PART 3:**
Dose escalation
INBRX-105 + Keytruda™



Locally advanced or
metastatic solid tumors

 **PART 4:**
Dose expansion
INBRX-105 + Keytruda™



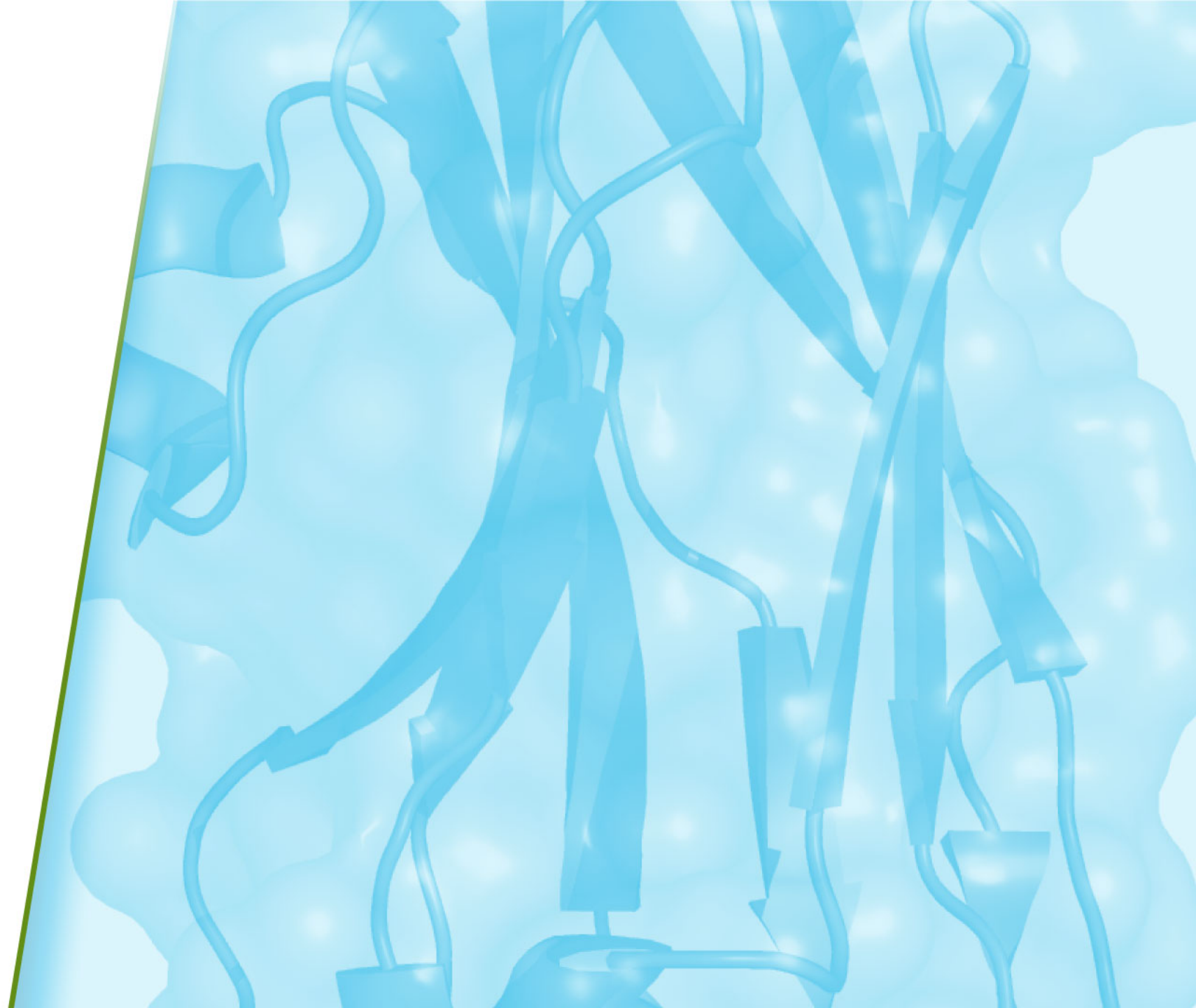
80 patient combination
expansion cohort, indications
selected based on known
sensitivity to 4-1BB and
checkpoint blockade

	N=20	PDL1+ NSCLC
	N=20	PDL1+ Melanoma
	N=20	PDL1+ Basket
	N=20	PDL1+ NSCLC, CPI naïve

INBRX-101

Recombinant Alpha-1
Antitrypsin Fc-fusion Protein

INHIBR_X



AATD and current therapy shortcomings

What is AATD?

AATD is an orphan respiratory inherited disease

Increases risk of developing pulmonary disease, resulting in progressive loss of lung function and decreased life expectancy

Small percentage of patients also develop liver disease

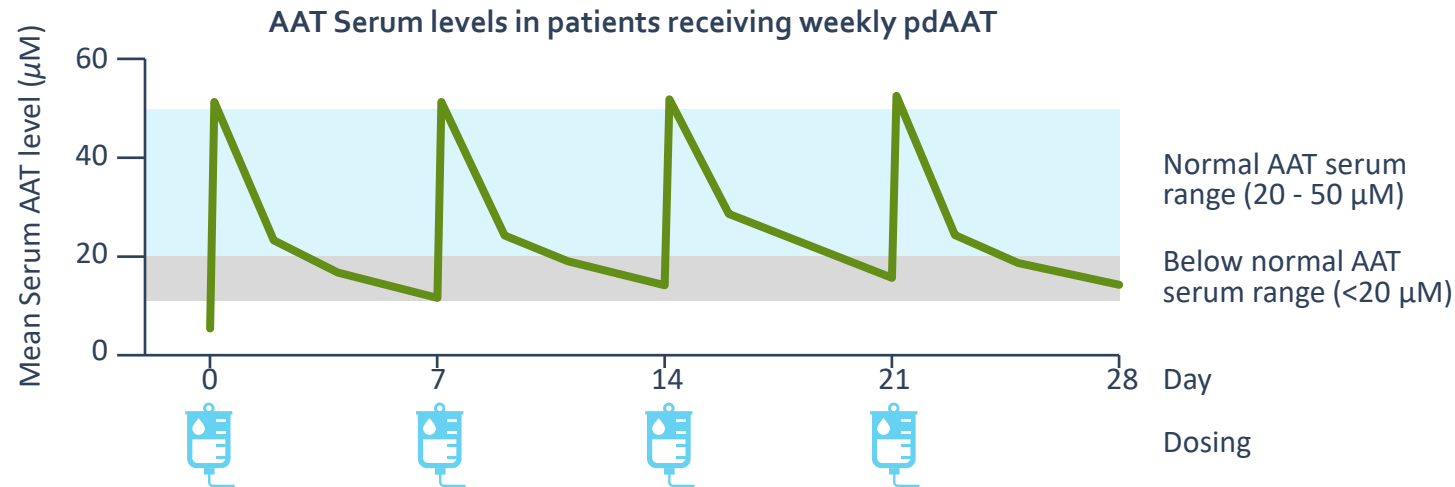
AATD standard of care

Current therapy is sub-optimal

Plasma derived AAT with weekly infusions is not able to maintain normal serum AAT levels

Weekly dosing is inconvenient, longer AAT half-life needed

Market size is >\$1.1B annually and growing



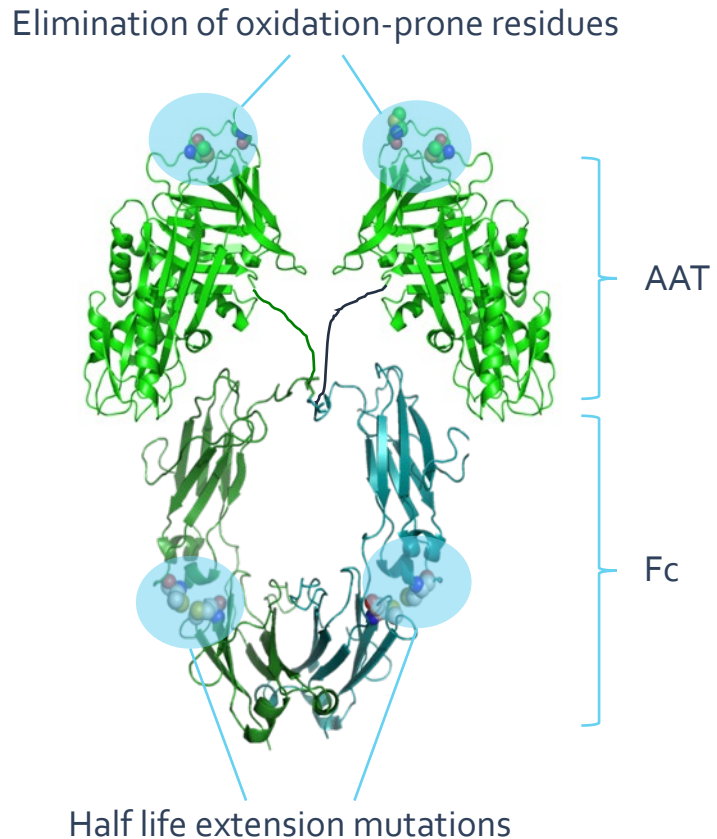
INBRX-101

Opportunity:

The global AATD augmentation therapy market size was valued at \$1.1B annually in 2018 and projected to reach \$1.9B by the end of 2026

INBRX-101 optimizing AAT augmentation therapy

INBRX-101



INBRX-101 is a precisely engineered recombinant human AAT-Fc fusion protein

- Potential to extend the dosing range, from weekly to every three weeks, while maintaining patients in the normal range of AAT exposure
- Overcame challenges of maintaining function of recombinant AAT while manufacturing at commercial scale
- Engineered to maximize the functional activity of AAT, particularly in the lung

INBRX-101: first human pharmacokinetic data

Preliminary human PK data for first five subjects dosed with 10 mg/kg single IV dose of INBRX-101

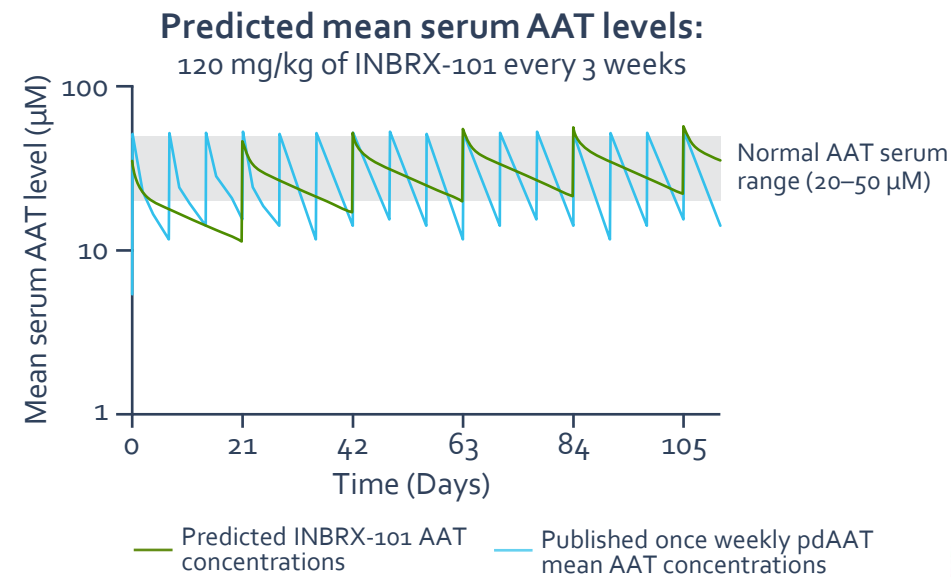
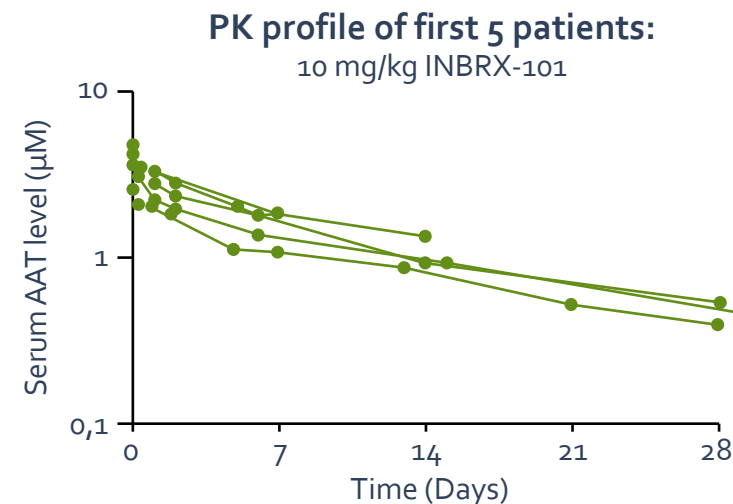
- Consistent with preclinical estimates
- Estimated human half-life is approximately 13 days

**Data from these subjects needs to be confirmed with additional subjects and higher doses*

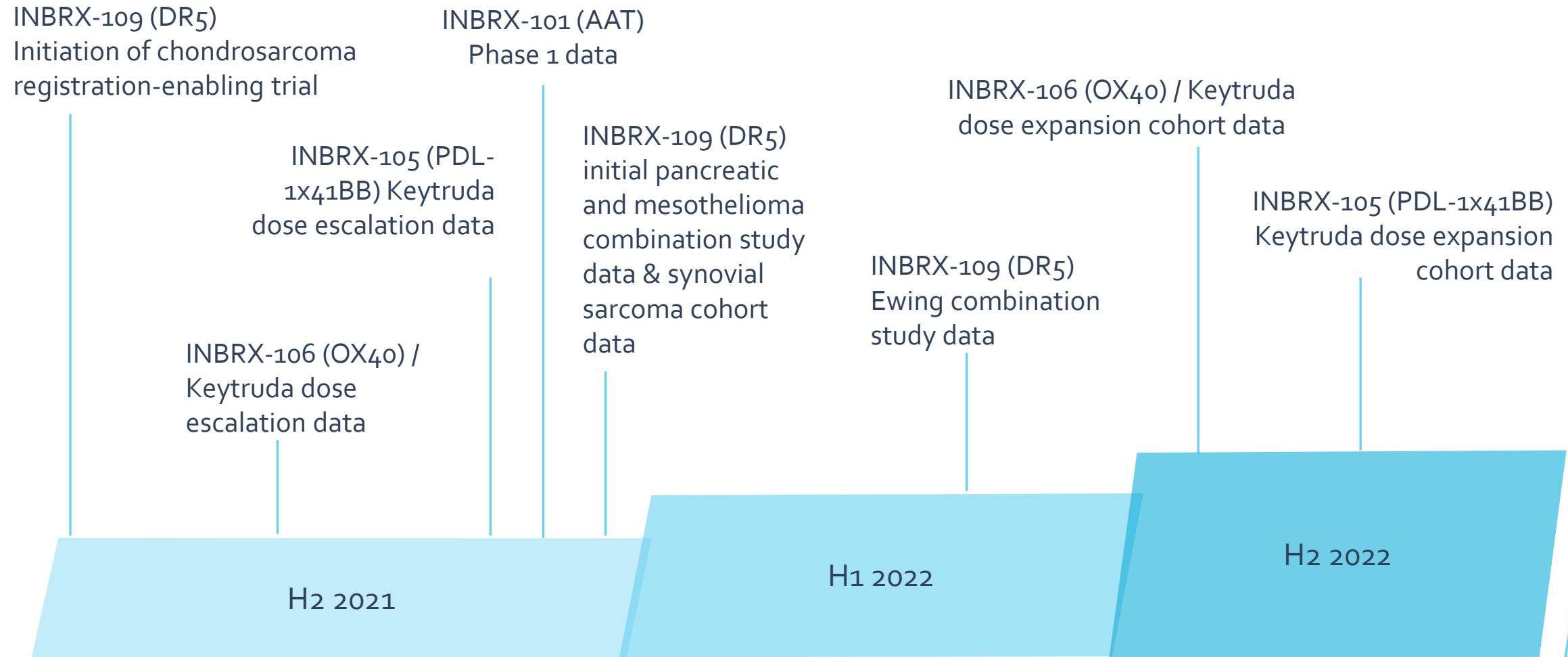
**Half-life estimate based on N = 3 subjects with sufficient PK sampling*

Functional AAT levels achieved with INBRX-101 (120 mg/kg IV q21d) are predicted to have improved exposure vs. published data for pdAAT (60 mg/kg IV q7d)

- Modeling predicts a dose of 120 mg/kg q21d should meet the goal of maintaining normal range ($> 20 \mu\text{M}$)

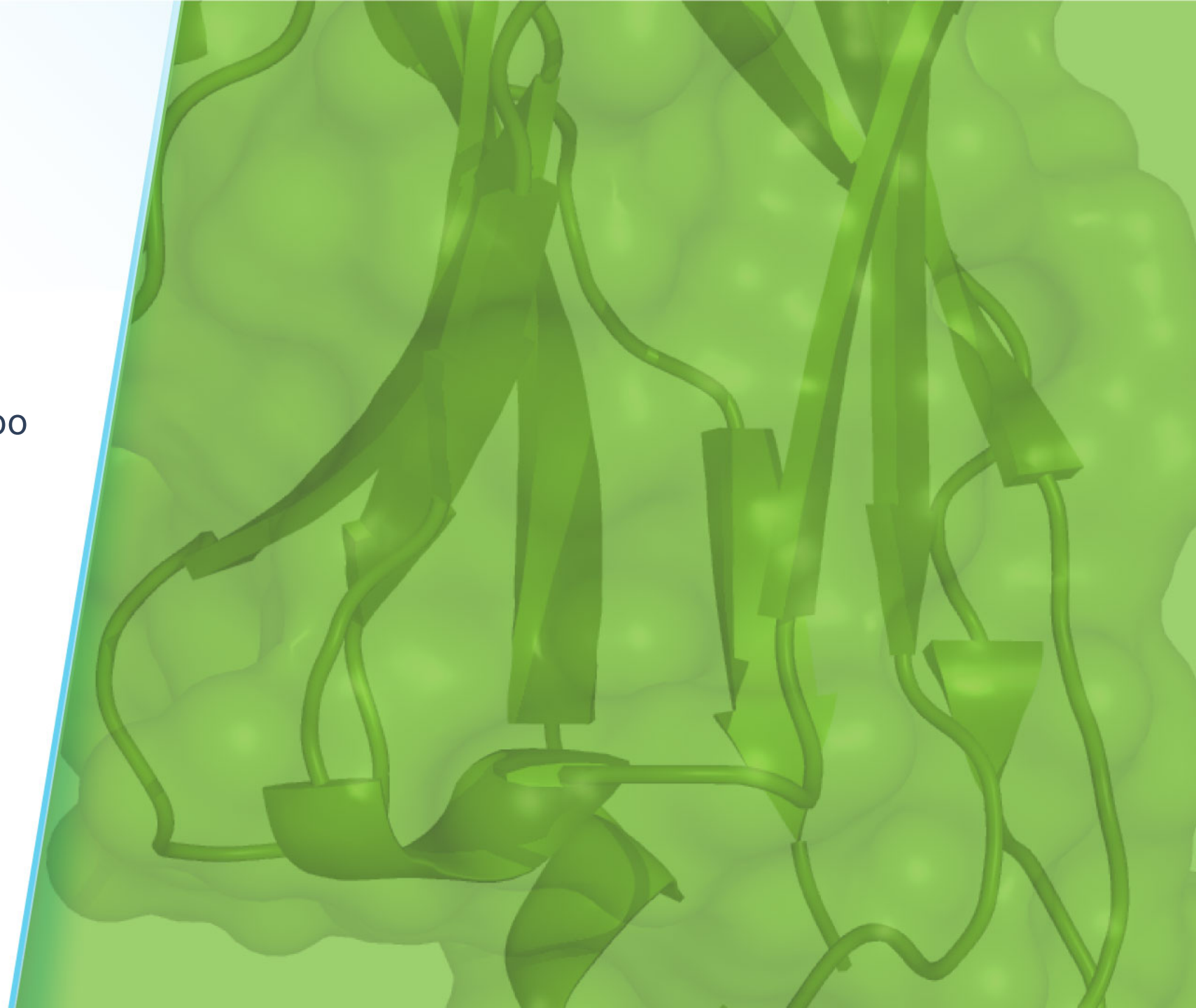


Near term expected clinical milestones



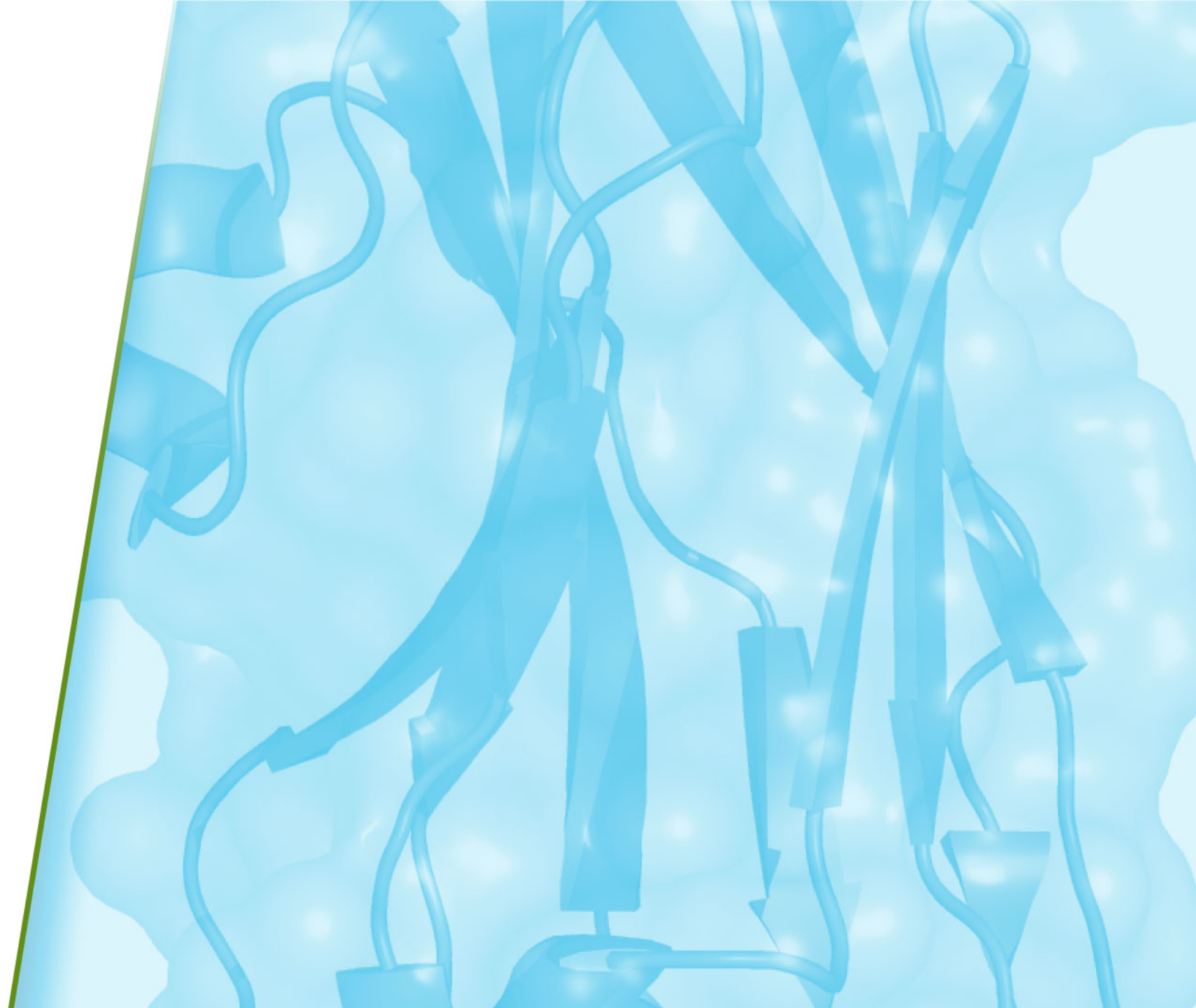
11025 N. Torrey Pines Rd, Ste 200
La Jolla, CA 92037
www.inhibrx.com

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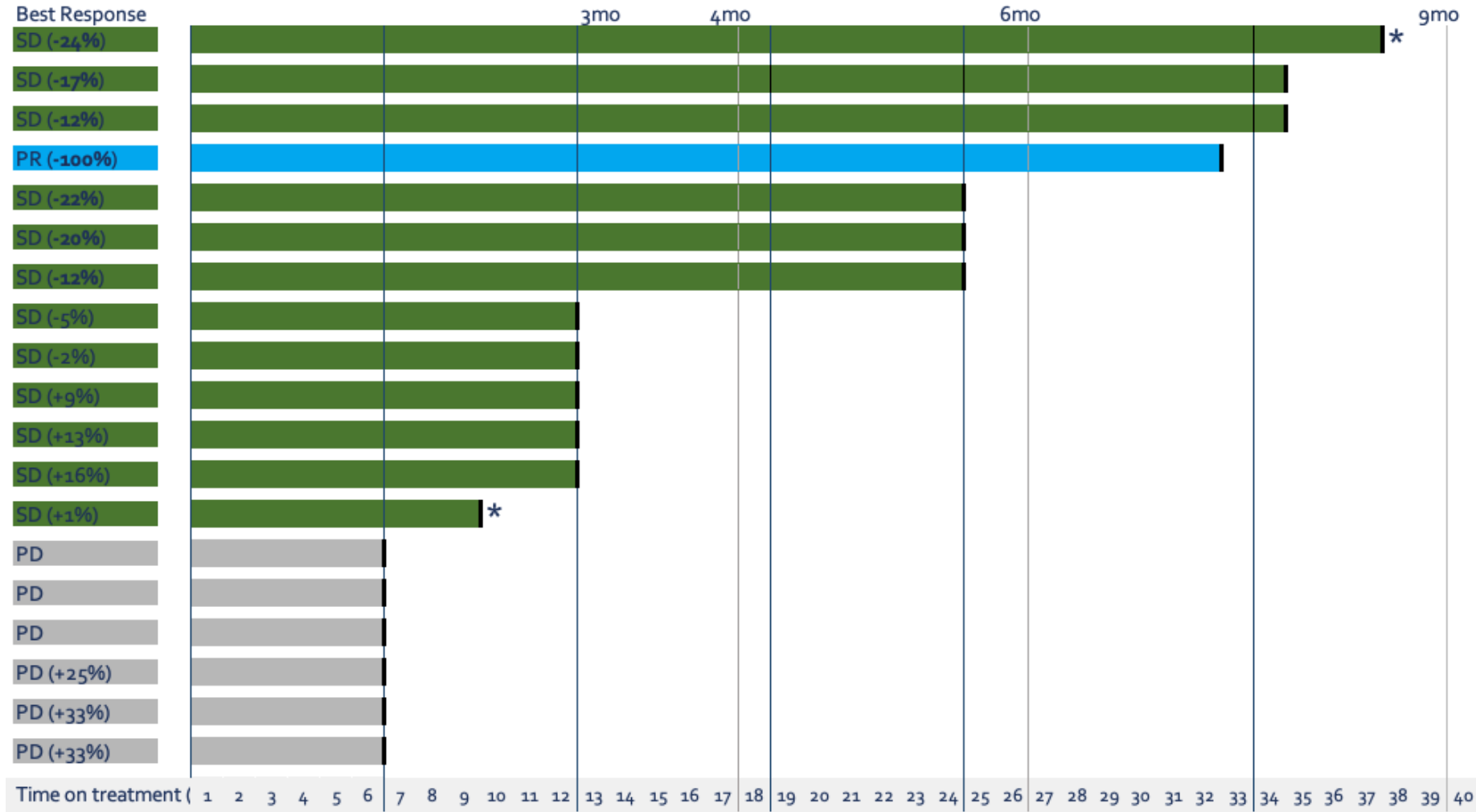


Supplementary Slides

INHIBR_x



INBRX-109 preliminary efficacy in malignant pleural mesothelioma, epithelioid subtype



- Time on treatment in weeks
- Data cut point **24-Nov-2020**, data from Ph1 INBRX-109 study, study ongoing, single agent mesothelioma cohort closed
- Response per RECISTv1.1 or modified RECIST, and per Investigator assessment, data subject to change (e.g., some data raw and not verified)
- Efficacy population (subjects who completed 2 cycles and had at least one tumor assessment, or discontinued early due to PD); three subjects not evaluable for efficacy were excluded
- PR=Partial Response, SD=Stable Disease, PD=Progressive Disease
- * Off-study per subject or Investigator request

INBRX-109

INHIBRX

INBRX-109 - favorable adverse event (AE) profile

AE Term	AE related to INBRX-109		
Grade per CTCAEv5.0	Gr 1&2 (N)	Gr 3 (N)	All Grade (N)
Fatigue	16	1	17
ALT increased	8	3	11
AST increased	9	2	11
Nausea	7	1	8
Diarrhea	7	0	7
Pyrexia	5	0	5
Abdominal pain	3	1	4
Rash	3	0	3
Headache	3	0	3
Decreased appetite	3	0	3

One death possibly attributed to study drug, acute hepatic failure in patient with mesothelioma (N=1/92, ~1%)
 9 out of 92 subjects with INBRX-109-related liver-related AE (~ 10%)

- INBRX-109-related AE reported ≥ 3 times, causality per Investigator assessment
- Data cut point **2-Feb-2021**, data from Ph1 INBRX-109 study, study ongoing
- Based on **92 subjects** with reported AE data
- Some data preliminary and subject to change (raw, unvalidated, and/or not QC); data with uncoded AE, missing AE terms, missing causality and missing severity was excluded