INHIBRX Investor Presentation

Innovation Driven
Outcomes Focused



January 2025

Presentation disclaimer

This presentation of Inhibrx Biosciences, Inc. (the "Company") 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 the Company's 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, manufacturing matters, strength of intellectual property protection, and the size and growth potential of the markets for the Company's product candidates, and any implication that preclinical data or preliminary or topline results will be representative of the results of later trials. This presentation also contains certain projections and estimates regarding the Company's future financial performance, namely potential future revenue for certain of the Company's product candidates. This information also constitutes forward-looking information and is for illustrative purposes only and should not be relied upon as necessarily being indicative of any future results. The assumptions and estimates underlying this estimated financial information are inherently uncertain and subject to a wide variety of significant business, economic competitive and other risks and uncertainties that could cause actual results to differ materially from those contained in the prospective financial information. These potential financial information and other forwardlooking 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 from time to time in the "Risk Factors" section of our Securities and Exchange Commission filings, including those described in our Annual Report on Form 10-K as well as our Quarterly Reports on Form

10-Q, and supplemented from time to time by our Current Reports on Form 8-K. The Company may not actually achieve the plans, intentions or expectations disclosed in its forward-looking statements, and you should not place undue reliance on the Company's forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements the Company makes. The forward-looking statements in this presentation represent the Company's views as of the date of this presentation. The Company anticipates that subsequent events and developments will cause its views to change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company has no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing the Company's views as of any date subsequent to the date of this presentation.

The investigational product candidates discussed in this presentation have not been approved or licensed by the U.S. Food and Drug Administration or by any other regulatory authority, and they are not commercially available in any market. This presentation also contains estimates and other statistical data made by independent parties and by the Company relating to market size and growth and other data about its 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 the Company's future performance and the future performance of the markets in which it operates are necessarily subject to a high degree of uncertainty and risk.

The Inhibrx logo is a registered trademark of Inhibrx Biosciences, Inc. All third-party trademarks used herein are registered trademarks of their respective owners.

This presentation shall not constitute an offer to sell or the solicitation of an offer to buy securities.



Our mission: To discover & develop effective biologic treatments for people with life-threatening conditions

Key financial highlights: (as of 9/30/2024) 150+ \$196.3M **INHIBR** employees with Cash and cash **Biosciences** an experienced equivalents leadership team 2024 14.5M 19.5M* INBRX-101 acquisition Common stock **Fully diluted** by Sanofi outstanding outstanding 2020 * Includes 4.0M employee and BOD IPO option reserve and approximately 1M pre-funded warrants 2018 outstanding first IND 2010

INHIBRY founded



>300
ozekibart (INBRX-109)
Patients treated
to date

>175
INBRX-106
Patients treated

to date

In-house expertise:

- Oiscovery
- Protein engineering
- **Output** Cell biology
- Translational research

- Chemistry
- Manufacturing and controls
- Clinical development and operations
- **O** Commercial



Inhibrx's innovative approach to therapeutic discovery

Our core belief:

Our technology and protein engineering expertise enables us to efficiently identify optimal therapeutic formats bespoke to the target biology.

Modular protein engineering platforms



Single domain antibodies



Recombinant proteins

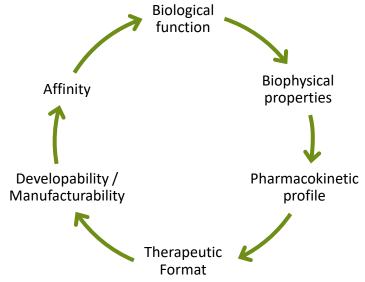


Engineered cytokines

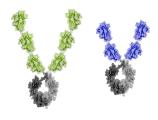


Engineered Fc Domains

Rapid and iterative optimization process Biological function



Therapeutics tailored to disease biology



Multi-valent molecules Molecule delivers higher clustering correlating with greater

activity and more robust signal



Multi-specific molecules

Molecule binds to multiple targets allowing cross linking – a novel way of delivering the drug closer to where its needed



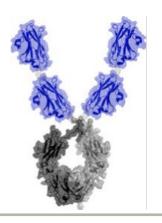
Fc-Fusion Proteins
Endow proteins with
antibody-like PK properties



Current clinical pipeline

Programs

Upcoming milestones



ozekibart (INBRX-109) tetravalent DR5 agonist

- +Registration-enabling chondrosarcoma data
- +2-3L Ewing sarcoma and 3-4L colorectal data

Mid 2025 Q3 2025

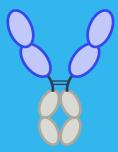


INBRX-106 hexavalent OX40 agonist

- +Phase 2 randomized HNSCC initial data vs. Keytruda
- + Phase 1/2 CPI r/r NSCLC data

2H 2025





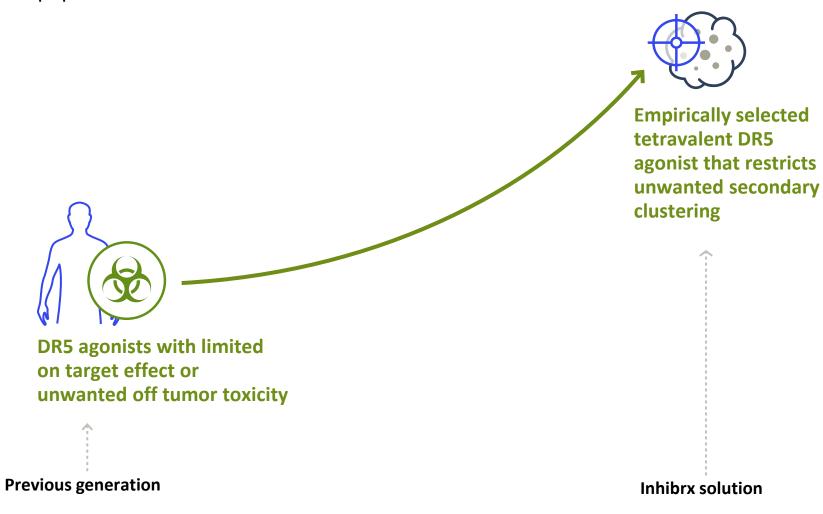
ozekibart (INBRX-109)

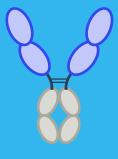
tetravalent DR5 agonist



Goal:

To develop a more precise DR5 agonist able to selectively induce apoptosis in tumor cells





ozekibart (INBRX-109)

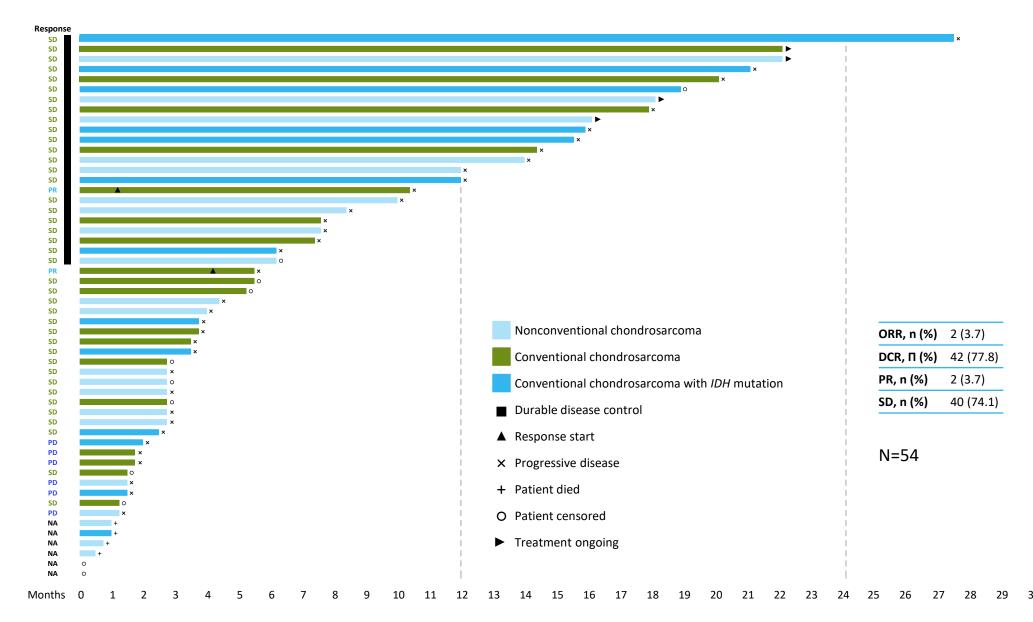
tetravalent DR5 agonist

Clinical Data



Phase 1 data in unresectable or metastatic conventional chondrosarcoma







Ongoing registration-enabling trial in unresectable or metastatic conventional chondrosarcoma



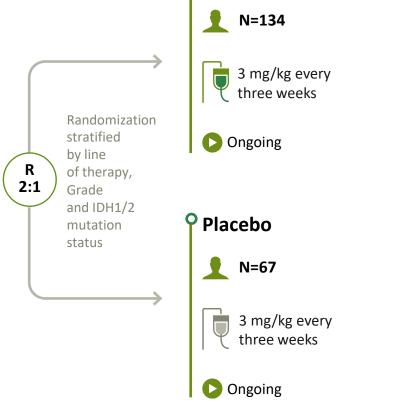


Data readout expected mid-2025

- + FDA fast track designation and orphan-drug designation
- + EMA orphan-drug designation



Conventional chondrosarcoma, Grades 2 and 3, unresectable or metastatic.



o ozekibart (INBRX-109)





Secondary endpoints:

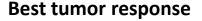
Overall survival, quality of life, overall response rate, duration of response, disease control rate, safety, etc.

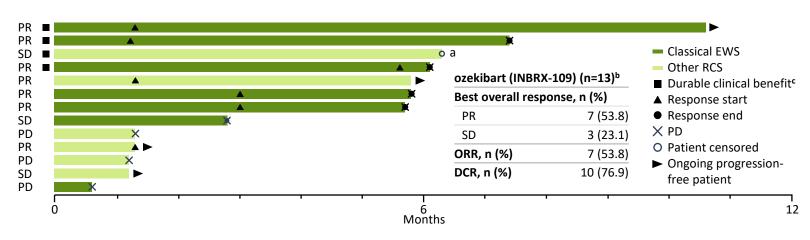
DSMB reviewed interim analyses in April 2024 and made the recommendation for trial continuation



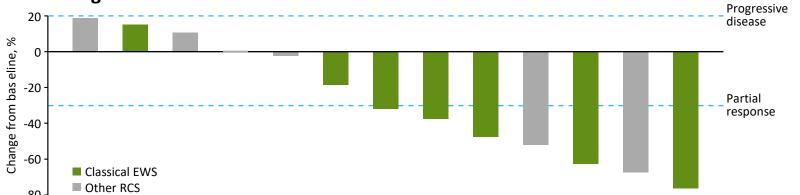
Early results in phase 1 metastatic, unresectable Ewing sarcoma







Best change from baseline in tumor size



Efficacy

76.9%

Disease control rate was 76.9%, or 10 out of 13 patients as measured by RECISTv1.1.

53.8%

7 patients who achieved partial responses (53.8%), 5 of which were observed in classical EWS patients (71.4%) and 2 of which were observed in RCS patients (33.3%)

Safety

- + Most common adverse events (diarrhea, nausea, and fatigue) were consistent with the known safety profile of IRI/TMZ
- + One patient had increased alanine aminotransferase (grade 1); no other liver-related AEs were reported

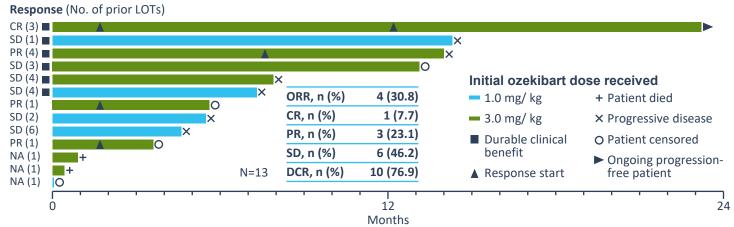
Data cutoff: September 8, 2023. CR, complete response; DCR, disease control rate; EWS, Ewing sarcoma; ORR, objective response rate; PD, progressive disease; PR, partial response; RCS, round cell sarcoma; SD, stable disease; AE, adverse event. a Patient discontinued treatment to undergo tumor resection surgery. b One patient had not reached the first set of restaging scans and was considered nonevaluable. c Durable clinical benefit was defined as having SD, PR, or CR for >6 months. Best response prior to progression is displayed; however, if a patient's first scan result was progressive disease, then that result is displayed. EWS, Ewing sarcoma; RCS, round cell sarcoma.



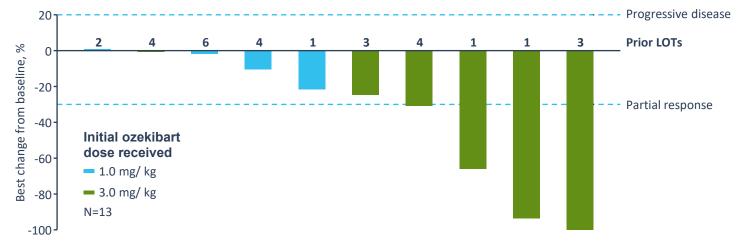
Early results in colorectal adenocarcinoma in combination with FOLFIRI



Response and time on treatment



Best change from baseline in tumor size



Efficacy

- Of the 13 patients who received ozekibart, 4 had responses (30.8%; partial response, n=3; complete response, n=1)
 - One of the partial responders had received 4 prior lines of therapy.
 The patient with a complete response had received 3 prior lines
- → All the remaining patients with postbaseline scans (n=6) had stable disease (SD), with a disease control rate (response + SD) of 76.9% (10 of 13 patients)
 - Three of the 6 patients with SD had a decrease of >10% in the size of their target lesion compared with baseline
- + Durable disease control (≥180 days) was observed in 6 patients (46.2%)
- Median progression-free survival was 7.85 months

Safety

- Treatment-emergent adverse events (TEAEs) of any cause were reported in all patients (grade ≥3, 84.6%), with alopecia (n=7) and anemia, dehydration, fatigue, hyponatremia, and nausea (each n=6) being the most common
- Ozekibart-related TEAEs were reported in 84.6% of patients (grade ≥3, 30.8%), with nausea (n=5) and increased alanine aminotransferase, diarrhea, and fatigue (each n=4) being the most common
- Ozekibart-related TEAEs resulted in interruption of ozekibart in 3 patients and discontinuation in 1 patient
- → A treatment-related TEAE (neutropenic sepsis possibly related to ozekibart and very likely related to fluorouracil and irinotecan) led to death in 1 patient



Ongoing phase 1/2 trial in Ewing sarcoma and colorectal adenocarcinoma





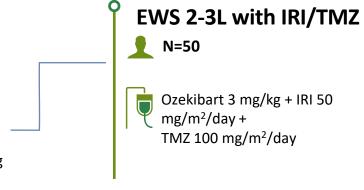
Data readouts expected mid-2025



- LA/M, unresectable, R/R EWS
- Aged ≥12 to <85 years
- EWSR1-FLI1, -ERG or -FEV rearrangement
- 1-2 prior lines of chemotherapy in metastatic setting
- Prior IRI + TMZ allowed
- No chronic or acute liver disease



- LA/M, unresectable, R/R colorectal adenocarcinoma
- Aged 18 to <85 years
- 2-3 prior lines of systemic therapy
- Prior IRI allowed, if not immediate prior line of therapy
- No chronic or acute liver disease







N=50

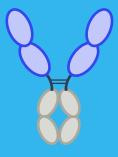


Ozekibart 3 mg/kg + FOLFIRI (FU, 2400 mg/m²; leucovorin, 400 mg/m²; IRI, 180 mg/m²)

- Primary endpoints:
 Clinical response, including
 ORR and DOR per RECIST 1.1.,
 safety (AEs and DLTs)
- Secondary endpoints:

 PFS, pharmacokinetics
 and immunogenicity (ADAs)
- clinical response, predictive diagnostic biomarkers





Ozekibart (INBRX-109)

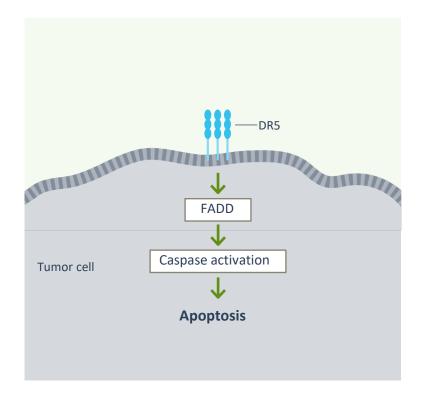
tetravalent DR5 agonist

Preclinical data and MOA

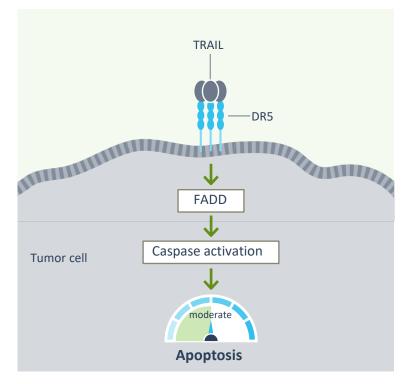


ozekibart (INBRX-109) is a potent inducer of extrinsic cell death via the DR5 pathway

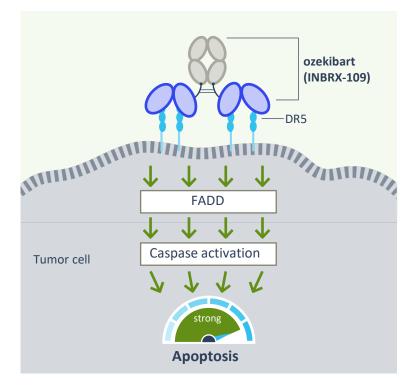




DR5 (TRAIL-R2) is a pro-apoptotic receptor for TRAIL that is widely expressed on the surface of damaged, transformed or tumor cells, but rarely and at low levels on normal cells. ¹⁻⁴ TRAIL selectively induces programmed cell death via activation of the FADD and downstream caspase pathway, therefore playing an important role in tumor and viral immune surveillance⁵



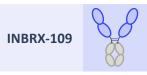
While the DR5 trimer is the minimal functional unit for TRAIL activity, clustering of multiple receptors at the cell-cell interface results can generate more potent apoptotic activity⁶⁻⁸



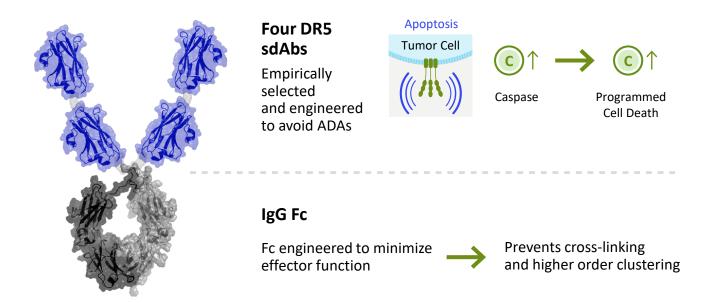
Ozekibart (INBRX-109), a tetravalent DR5 agonist, is designed to simultaneously engage four DR5 molecules to drive enhanced clustering/signaling in tumor cells while minimizing off-target effects



ozekibart (INBRX-109): a next generation DR5 agonist with an optimized balance of efficacy and safety



Death Receptor 5 (DR5 / TRAIL-R2) is highly expressed on tumorigenic, transformed or damaged cells but not normal cells, making DR5 a promising therapeutic target in oncology¹⁻⁴



ozekibart (INBRX-109) characteristics:

| Tetravalent | Empirically designed to simultaneously engage four DR5 molecules |
|---------------------------------|---|
| Immunogenic Epitopes removed | Prevents unwanted higher order clustering via anti-drug antibodies |
| Effector Disabled Fc | Prevents higher order clustering and allows for antibody-like PK |
| Smaller Size | sdAb backbone limits molecule size (106 kDa) which may allow for better tumor penetration |



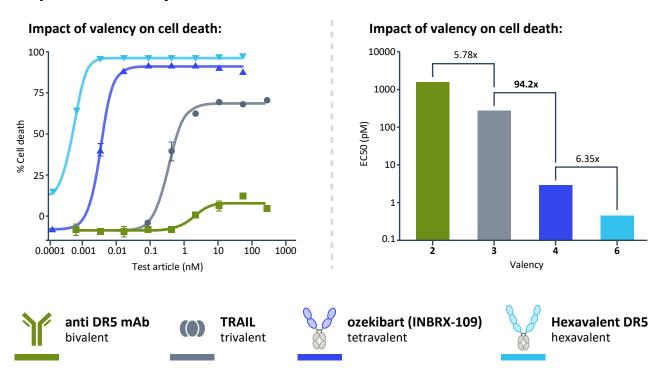
15

ozekibart (INBRX-109) is precision-engineered for optimal potency and safety



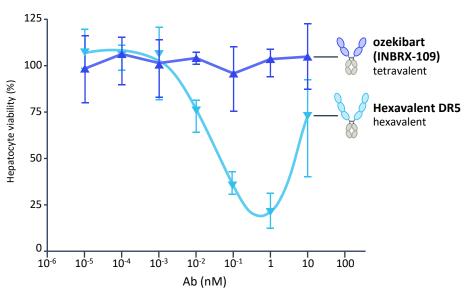
Valency drives both DR5-induced tumor cell death and hepatocyte destruction

Impact of valency on DR5-mediated cell death



Impact of valency on hepatotoxicity

InSphero 3D inSight[™] human liver microtissue model:





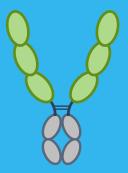
ozekibart (INBRX-109) is a best-in-class DR5 agonist with no competition



| CANDIDATE | VALENCY | SIZE (KDA) | STATUS |
|--------------------------------------|--------------|------------------|---------------------|
| INBRX-109 | Tetravalent | 105 | Ongoing |
| TAS-266* | Tetravalent | 60 | ○ Terminated |
| Eftozanermin alpha (TRAIL-Fc fusion) | Hexavalent | 167 | ○ Terminated |
| GEN1029 | Dodecavalent | 150 ka (2x mAbs) | ♦ Terminated |
| IGM-8444 | Decavalent | ~950 | ○ Terminated |
| Dulanermin (recombinant TRAIL) | Trivalent | 150 | ⊘ Terminated |
| Tigatuzumab | | | ♦ Terminated |
| LBY-135 | | | ⊘ Terminated |
| Conatumumab | Bivalent | 150 | ◯ Terminated |
| Drozitumab | | | ○ Terminated |
| Lexatumumab | | | ○ Terminated |

^{*}TAS-266 was ultimately terminated due to hyper-clustering of TAS266 caused by pre-existing anti-sdAb antibodies (PE-ADAs). This hyper-clustering increased the effective valency of TAS266, causing apoptosis of healthy liver cells. The sdAb modifications made to INBRX-109 reduce recognition by PE-ADAs in humans, which lessens the potential for hyper-clustering and increased valency.





INBRX-106

hexavalent OX40 agonist

Goal:

To develop a potent OX40 agonist able to induce robust signal activation



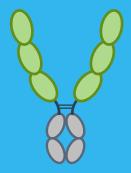


Bivalent OX40 agonists elicit weak downstream signals with limited clinical activity

Previous generation

Inhibrx solution





INBRX-106

hexavalent OX40 agonist

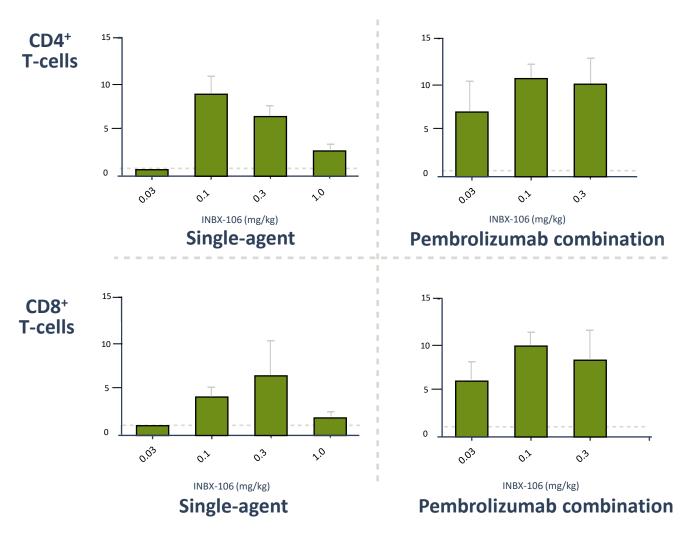
Clinical Data



INBRX-106 is a biologically active drug in patients



Max fold change from baseline in percentage of Ki-67⁺ memory cells



- Observed PD consistent with T-cell costimulation by INBRX-106
- INBRX-106 induced dose-dependent proliferation of CD4⁺ and CD8 ⁺ memory T-cells
- Expected bell-shaped response curve was observed
- Based on published data for bivalent OX40 agents, INBRX-106 shows superior single-agent biological activity, as measured by frequency of peripheral activated CD8+ T-cells



Data cut: July 16, 2024. RP2D, recommended phase 2 dose.

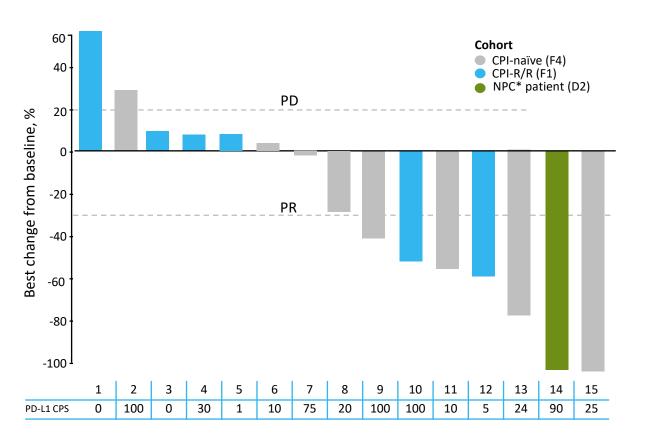
^a Current RP2D selected dose for combination (single agent escalation still in progress).

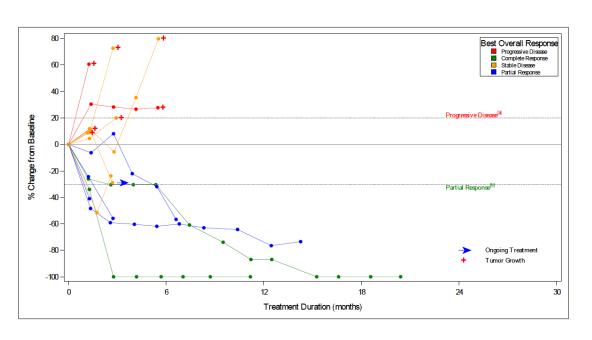
b Combo data at this dose level is representative of cohorts E1 (closed) and F4 (active).

Phase 1 data: PD-L1+ CPI-R/R or CPI-naive HNSCC

INBRX-106 with pembrolizumab







- + The HNSCC patient population included was heterogeneous (1L+) and included CPI-naive patients and those with CPI-R/R disease
- + More than half of patients experienced a reduction in target lesions, including two patients who achieved durable complete responses

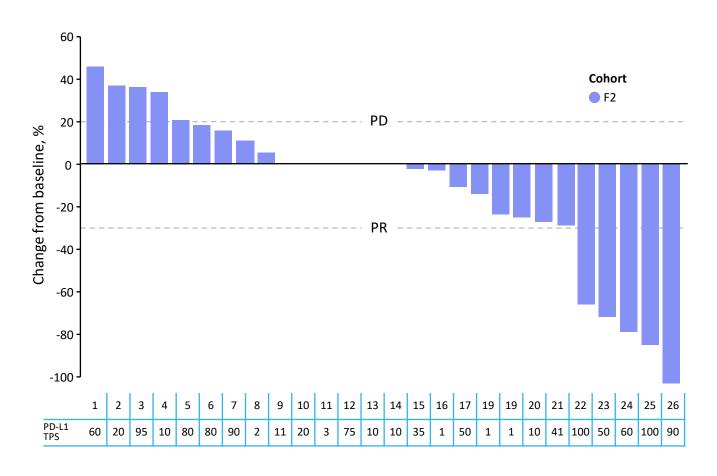


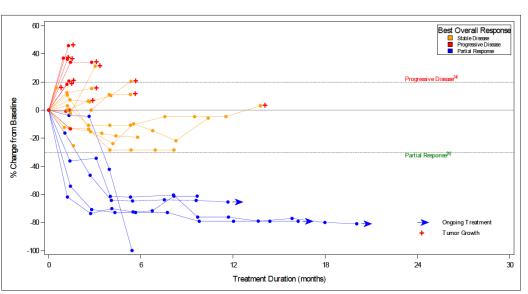
21

Phase 1 data: PD-L1+ CPI-R/R NSCLC

INBRX-106 with pembrolizumab







- + The NSCLC patients included were heavily pretreated (prior lines: median, 3.5; range, 1-11) and all had received prior CPI (some patients received several lines of CPI treatment)
- + Most patients experienced a reduction in or stabilization of target lesions. Three of the patients have had ongoing responses for more than a year.



Seamless Phase 2/3 study in 1L R/M HNSCC with PD-L1 CPS ≥20

INBRX-106 with pembrolizumab





Phase 2 data readout expected 2H 2025

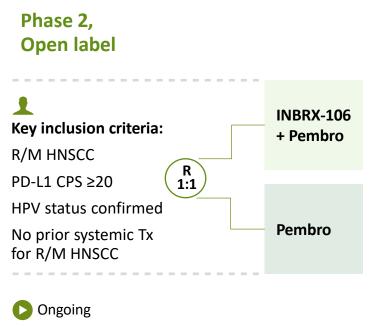
Proof of concept study:

If successful in HNSCC, has the potential to work broadly against all approved checkpoint indications

Randomization will be stratified by:

- + Disease status (locoregional advanced vs metastatic)
- + HPV status (positive
- vs negative).
- + ECOG PS (0 vs 1)

time to chemotherapy; Tx, treatment.



Gating Phase 2/3

ORR Primary Criteria:

Secondary Criteria:

- + DOR
- + CBR
- + PFS_{6m}
- + safety

Phase 3,
Double blind

INBRX-106
+ Pembro

Pembro

Survival Follow-up

Co-primary endpoint:

PFS and OS.

Secondary endpoints:

ORR, DOR, CBR, TTCx, safety, PROs.

Clinicaltrials.gov (NCT06295731). Protocol version 1.0; January 31, 2024. INBRX-106 to be administered every 3 weeks. Pembro 200 mg to be administered every 3 weeks. 1L, first line; CBR, clinical benefit rate; cORR, confirmed objective response rate; CPS, combined positive score; DOR, duration of response; ECOG PS, Eastern Cooperative Oncology Group performance status; HNSCC, head and neck squamous cell carcinoma; HPV, human papillomavirus; OS, overall survival; PD-L1, programmed cell death 1 ligand 1; pembro, pembrolizumab; PFS, progression-free survival; PFS6mo, progression-free survival rate at 6 months; PRO, patient-reported outcome; R, randomization; R/M, recurrent/metastatic; TTCX,

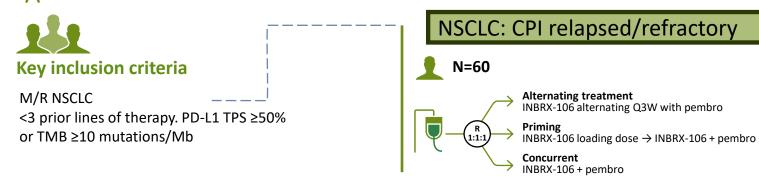


Ongoing Phase 1/2 trial in metastatic/recurrent NSCLC and HNSCC





Readouts expected 2H 2025

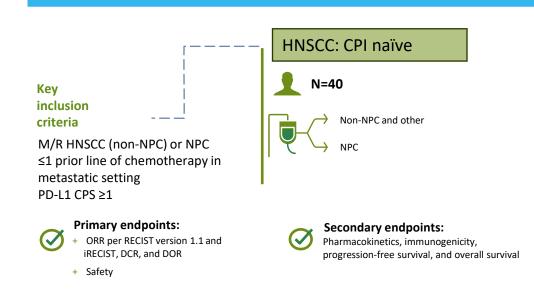


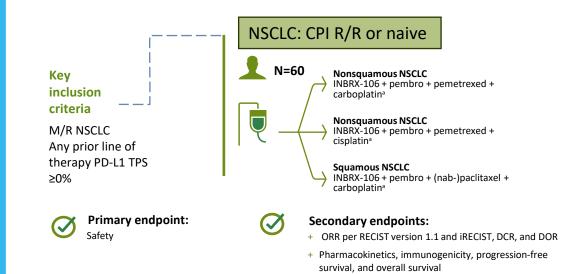


- + Objective response rate (ORR) per Response Evaluation Criteria in Solid Tumors (RECIST) version 1.1 and iRECIST, disease control rate (DCR), and duration of response (DOR)
- + Safety

Secondary endpoints:

Pharmacokinetics, immunogenicity, progression-free survival, and overall survival

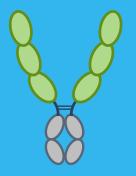




ClinicalTrials.gov identifier, NCT04198766. Protocol version 7.0; March 5, 2024. a Chemo will be administered during the first 4 cycles. Pemetrexed can be continued after 4 cycles until progression or up to 35 cycles. Chemo, chemotherapy; CPI, checkpoint inhibitor; CPS, combined positive score; HNSCC, head and neck squamous cell carcinoma; M/R, metastatic/recurrent; NPC, nasopharyngeal carcinoma; NSCLC, non-small cell lung cancer; PD-L1, programmed cell death 1 ligand 1; pembro, pembrolizumab; q3w, every 3 weeks; R, randomization; R/R, relapsed/refractory; TMB, tumor mutational burden; TPS, tumor proportion score.







INBRX-106

hexavalent OX40 agonist

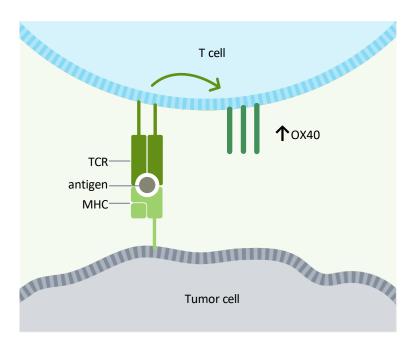
Preclinical Data and MOA



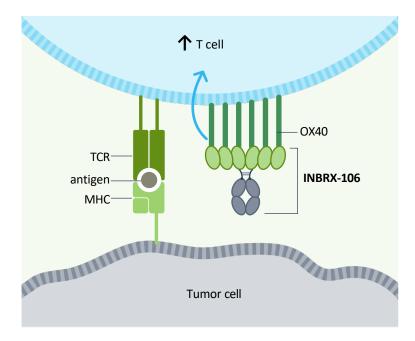
INBRX-106: mechanism of action

INBRX-106

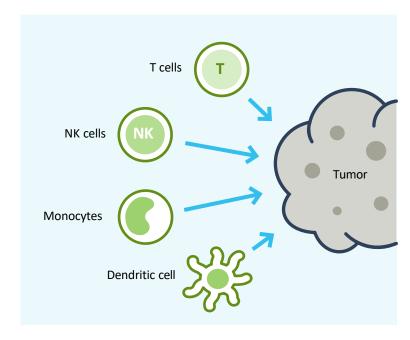
Effective OX40 agonism potentiates the body's immune response towards a tumor



The T-Cell Receptor (TCR) recognizes a tumor-associated antigen presented via MHC. In response, OX40 is upregulated on tumor reactive TILs facilitating an immune response directed towards the tumor.



Due to its six OX40 sdAb domains, binding of hexavalent INBRX-106 facilitates higher order clustering versus bivalent and tri-valent endogenous OX40L amplifying the downstream costimulatory signal.



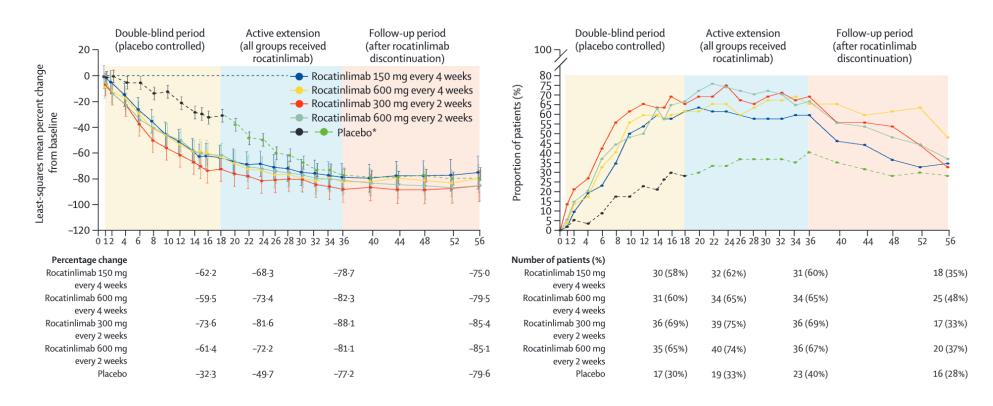
Costimulatory signaling via OX40 and the TCR-MHC receptors induce survival and proliferation of activated antigen-specific CD4 T cells, increases memory T cell generation, CD8+ effector T cells, and suppress the inhibitory capacity of regulatory T cells.



OX40 T-cell costimulation in human disease is validated by OX40 antagonists in autoimmune disease



An anti-OX40 antibody to treat moderate-to-severe atopic dermatitis: a multicenter, double-blind, placebo-controlled phase 2b study

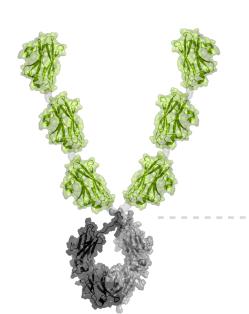




INBRX-106: uniquely designed to maximize OX40 signaling activation strength, leading to enhanced t-cell-driven anti-tumor activity

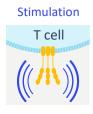


INBRX-106 is designed to boost anti-tumor T-cell activity by maximizing the strength of the OX40 co-stimulatory pathway



Six OX40 sdAbs

Designed to agonize OX40 while allowing endogenous OX40L binding











IgG Fc

Effector enabled Fc facilitates higher order clustering and greater downstream OX40 pathway signaling

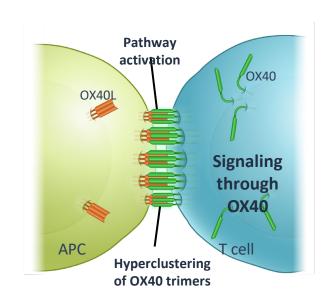
INBRX-106 features:

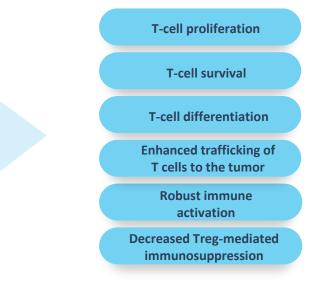
| Hexavalent | Simultaneously engage multiple OX40 to drive enhanced clustering/signaling | |
|----------------------------|---|--|
| Hyperclustering | Receptor hyperclustering enables more efficient coactivation of key OX40 low expressing cells such as CD8 ⁺ T-cell activation | |
| Non-Competitive Binding | Complements natural ligand (OX40L) activity | |
| Effector Enabled | Facilitates further higher-order clustering | |
| Smaller Size | sdAb backbone limits molecule size (129 kDa) which may allow for better tumor penetration | |



Receptor hyperclustering induces stronger OX40 signaling and more effective t-cell-driven anti-tumor activity

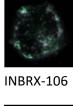






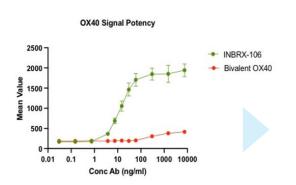


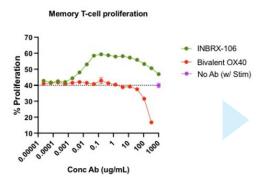
OX40 antibody detection

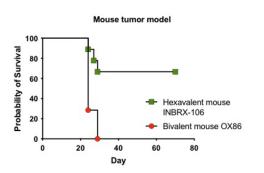




Bivalent



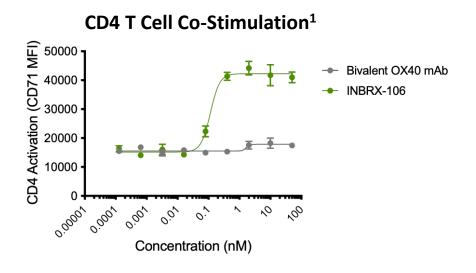




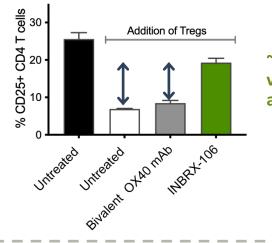


INBRX-106 drives superior CD4⁺ and CD8 ⁺ T-cell activation and reduces T_{reg} suppression

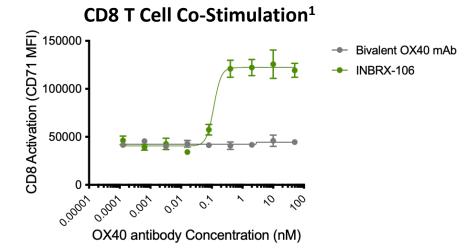




Reversal of T_{reg} Suppression²



~2-fold increase vs bi-valent and untreated



- Hexavalent INBRX-106 engagement drives superior co-stimulation of both CD4 and CD8 T-cells versus bi-valent OX40 mAbs
- INBRX-106, but a not bivalent OX40 mAb, reduces regulatory T-cell (T_{reg}) mediated suppression of effector T-cells (T_{eff})



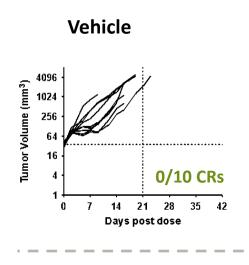
^{1.} T-cell activation monitored by assessing CD71 expression following suboptimal anti-CD3-mediated stimulation

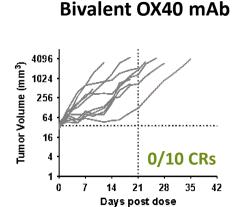
^{2.} Reversal of Treg suppression assessed by CD25 upregulation following anti-CD3 stimulation

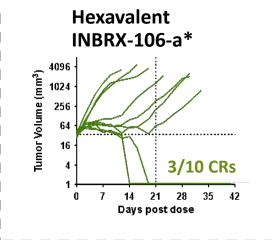
Hexavalent OX40 and PD-1 antibody combination results in enhanced antitumor activity in CPI-resistant tumor models

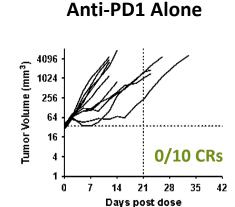


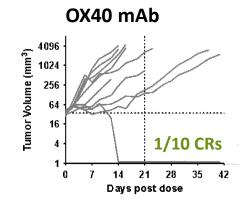
Syngeneic B16F10 Mouse Tumor Model



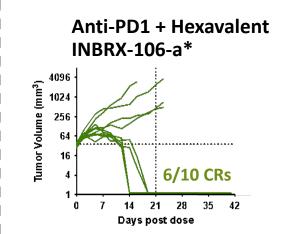








Anti-PD1 + Bivalent



- OX40 agonism upregulates PD-L1 expression on CD4 and CD8 T-cells supporting rationale of combination with anti-PD1 agents
- Hexavalent INBRX-106-a*
 demonstrated single-agent,
 single-dose activity in checkpointinhibitor responsive and resistant
 syngeneic tumor models
- INBRX-106-a* induced more robust anti-tumor activity as single agent and in combination with anti-PD1



INBRX-106 is a first and potentially best-in-class multi-valent OX40 agonist



| CANDIDATES | VALENCY | STATUS |
|----------------|---------|---------------------|
| INBRX-106 | Неха- | Phase 2/3 |
| GEN1055/BNT315 | Dodeca- | Phase 1 |
| MOXR-0916 | Bi- | ◯ Terminated |
| GSK-3174998 | Bi- | ◯ Terminated |
| BMS-986178 | Bi- | ◯ Terminated |
| INCAGN-1949 | Bi- | ○ Terminated |
| ABBV-368 | Bi- | ◯ Terminated |
| IBI-101 | Bi- | ◯ Terminated |
| MEDI-0562 | Bi- | ◯ Terminated |
| PF-04518600 | Bi- | ◯ Terminated |
| BGB-A445 | Bi- | ◯ Terminated |
| BAT6026 | Bi- | ◯ Terminated |



Investor Relations:

KELLY DECK, CPA CFO

11025 N. Torrey Pines Road Suite 140 La Jolla, CA 92037

858.795.4260

ir@inhibrx.com



INHIBR