

INBRX-106

Investor Overview

September 2026

INHIBRX

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INBRX-106 is the first clinically active OX40 agonist and T-cell costimulatory therapy



Combination with pembro demonstrates superiority to pembro mono in 1LR/M HNSCC

- ORR: 48.3% vs 26.5%
- Depth of Response
- CR Rate: 13.8% vs 0%
- PFS: 9.6 months vs 4.9 months
- PFS6 Improvement: (72.4% vs. 42.8%)
- These data are supported by superior t-cell proliferation (up to 15-fold increase) and activation (up to 4-fold increase) vs pembrolizumab alone



Potentially practice-changing efficacy profile in HPV+ patients

- ORR: 80% vs 33%
- CR Rate: 30% vs 0%
- PFS Data: NR vs 4.6 months
- PFS6 Rate: 90% vs 33%
- Expansion of Phase 2 to include 50 additional HPV+ patients may serve as potential path to accelerated approval by end of '28/early '29. HPV+ HNSCC is an open \$4B+ market



Large expansion opportunity in highly immunogenic tumors

- Bladder, NSCLC, Melanoma, MSI High/TMB High, TNBC present \$50B+ commercial opportunity
- Ongoing neoadjuvant lung cancer study serves as proof of concept for broad expandability with pembrolizumab across highly immunogenic tumors



Potential for new paradigm of treatment with cancer vaccines

- Potential \$50B+ market
- HPV+ HNSCC data and over 20 years of academic research support the strong mechanistic rationale of INBRX-106 +cancer vaccines (OX40 agonism potency when foreign antigen is presented)

OX40 agonism enhances anti-tumor T cell activity in combo with PD-1 blockade

INBRX-106



T-cell activation critical steps:



The ignition

Signal 1: TCR tumor antigen recognition

Patients must have an immune response to their tumor(s) for signal 2 and check point inhibition to be impactful



The accelerator

Signal 2: OX40 T-cell co-stimulation

OX40 agonism enhances proliferation, survival and memory formation for tumor specific T-cells



The brake

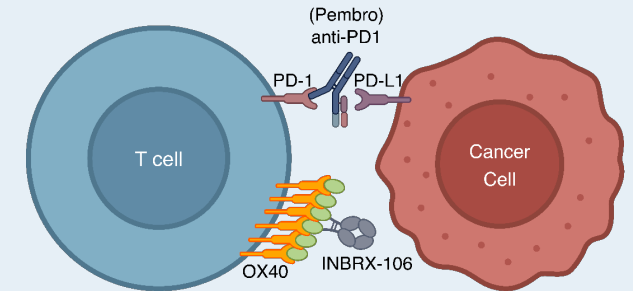
Check point inhibition

PD-1 signaling (in T-cells) activated via PD-L1 expressed in APCs and tumor cells dampens signal 1 and 2. PD-1 inhibition is necessary to remove this brake

INBRX-106 is designed to:

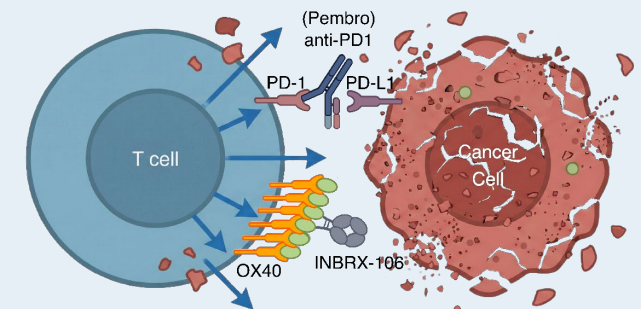
- ✓ Supercharge the immune system against the tumors ¹⁻⁴
- ✓ Reverse immune suppression ¹⁻⁴
- ✓ Complement checkpoint inhibitors (anti-PD-1/PD-L1), enhancing activity

Optimized T cell activation by OX40 agonism and PD-1 blockade



T cell activation restored/enhanced

Synergistic Tumor destruction via INBRX-106 and Pembro



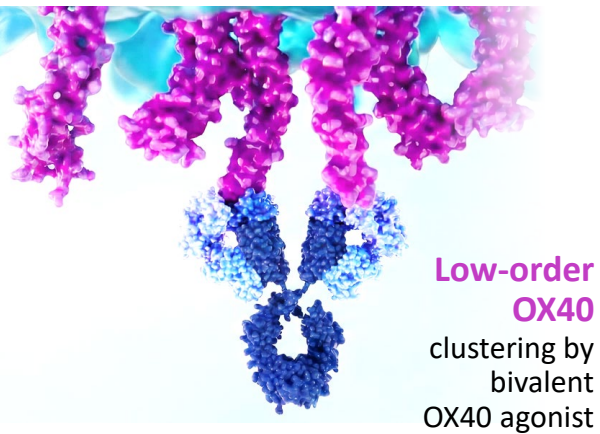
Dual Immunotherapy:
Releasing the Brakes and Stepping on the Gas

Underwhelming activity among the 1st generation of bivalent OX40 therapeutics leads to INBRX-106 hexavalent OX40

INBRX-106



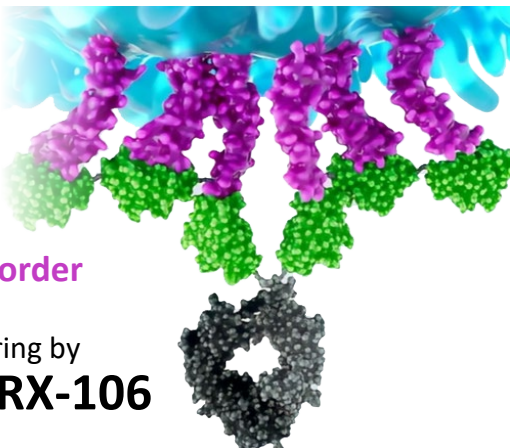
Bivalent OX40 Agonists



Low-order OX40 clustering by bivalent OX40 agonist

Next Generation

Hexavalent OX40 Agonist



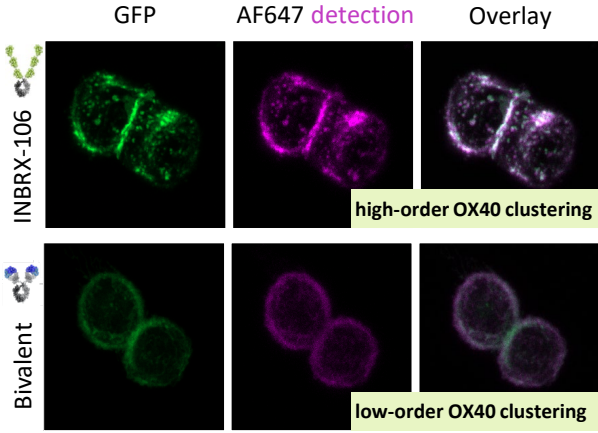
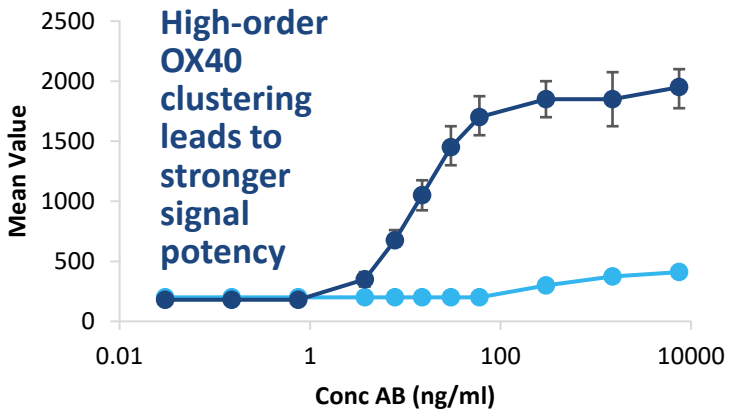
High-order OX40 clustering by INBRX-106

Advantages of INBRX-106 format

- Hexavalent** Simultaneously *engages* multiple OX40s to drive more potent clustering/signaling
- Hyper-clustering** Receptor hyperclustering enables more *efficient co-stimulation* of OX40 (key for OX40 low expressing cells such as CD8 + T-cells)

Limitations of bivalent attempts

- Suboptimal target engagement** Bivalent IgG formats fail to drive high-order OX40 clustering required for co-stimulatory signaling
- Insufficient T-cell activation** Weak clustering impairs signaling and stalls proliferation



*Holay et al. Journal for Immunotherapy of Cancer 2025

— Bivalent OX40 Agonist (Roche Analog) — Hexavalent INBRX-106



Initial Study Design of HexAgon: Seamless Phase 2/3 study in 1L R/M HNSCC with PD-L1 CPS ≥ 20

INBRX-106



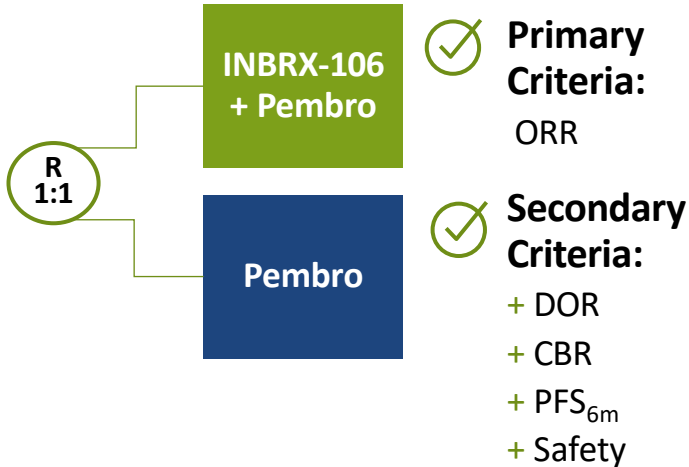
Head-to-head study serves as proof of concept, validating INBRX-106

Phase 2, Open label



Key inclusion criteria:

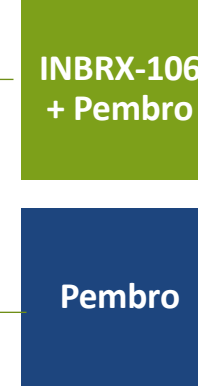
R/M HNSCC
PD-L1 CPS ≥ 20
HPV status confirmed
No prior systemic Tx for R/M HNSCC



Phase 3, Double blind



R 1:1



Original Goals of HexAgon-HN Design

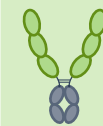
- ❑ - Contribution of components - Randomized add-on (106 + pembro vs pembro) cleanly isolates the benefit added by 106, aligns with regulatory expectations
- ❑ - Seamless Phase 2/3- fastest path to market

Randomization stratified by: Disease status (locoregional advanced vs metastatic), HPV status (positive vs negative), ECOG PS (0 vs 1). In KEYNOTE-048, pembrolizumab achieved an ORR of 23.3% in the PD-L1 CPS ≥ 20 HNSCC population

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; PFS_{6mo}, progression-free survival rate at 6 months; PRO, patient-reported outcome; R, randomization; R/M, recurrent/metastatic; TTCx, time to chemotherapy; Tx, treatment.

Baseline characteristics

INBRX-106

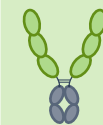


Baseline characteristics (randomized population)*	106 + Pembro N=33	Pembro N=35	Total N=68
Median age, y (min, max)	62.0 (35, 80)	66.0 (44, 89)	64.5 (35, 89)
Age ≥65y, n (%)	13 (39.4)	21 (60.0)	34 (50.0)
Male, n (%)	30 (90.9)	28 (80.0)	58 (85.3)
ECOG PS 1, n (%)	17 (51.5)	18 (51.4)	35 (51.5)
Distant metastatic disease, n (%)	18 (54.5)	21 (60.0)	39 (57.4)
HPV positive, n (%)	10 (30.3)	9 (25.7)	19 (27.9)
PD-L1 CPS ≥50, n (%)	24 (72.7)	23 (65.7)	47 (69.1)
Prior systemic therapy, n (%)**	21 (63.6)	19 (54.3)	40 (58.8)

Arms overall well-balanced

*Median follow-up: 8.02 months (INBRX-106 + Pembrolizumab) vs. 6.31 months (Pembrolizumab).

** Systemic therapy received in the curative setting



Overall safety — HexAgon-HN vs published KEYNOTE-048 pembrolizumab-monotherapy arm**

Patients with ≥1, n (%) (safety population)*	INBRX-106 + Pembro N=31	Pembro (HexAgon) N=34	KN-048 Pembro mono N=300
TEAE, any grade	31 (100)	29 (85.3)	290 (96.7)
SAE, any grade	12 (38.7)	12 (35.3)	123 (41.0)
Grade ≥3 AE, any/related	18 (58.1) / 15 (48.4)	16 (47.1) / 4 (11.8)	164 (55)
Grade 5 AE	0	2 (5.9)	25 (8)
Tx discontinuation	11 (35.5)	5 (14.7)	15 (5.0)

Most common TRAEs in HexAgon-HN ≥20%

Most common TRAEs	106+Pembro All	106+Pembro ≥G3	Pembro All	Pembro ≥G3
Rash maculo-papular	10 (32.3)	3 (9.7)	4 (11.8)	0
Rash	10 (32.3)	1 (3.2)	0	0
Fatigue	9 (29.0)	1 (3.2)	4 (11.8)	1 (2.9)
Diarrhea	9 (29.0)	3 (9.7)	2 (5.9)	0
ALT increased	8 (25.8)	2 (6.5)	3 (8.8)	1 (2.9)
AST increased	7 (22.6)	1 (3.2)	3 (8.8)	1 (2.9)
Infusion related reactions	7 (22.6)	1 (3.2)	0	0

The most frequent related adverse events are rash, fatigue, and diarrhea which were mostly grade 1 and 2

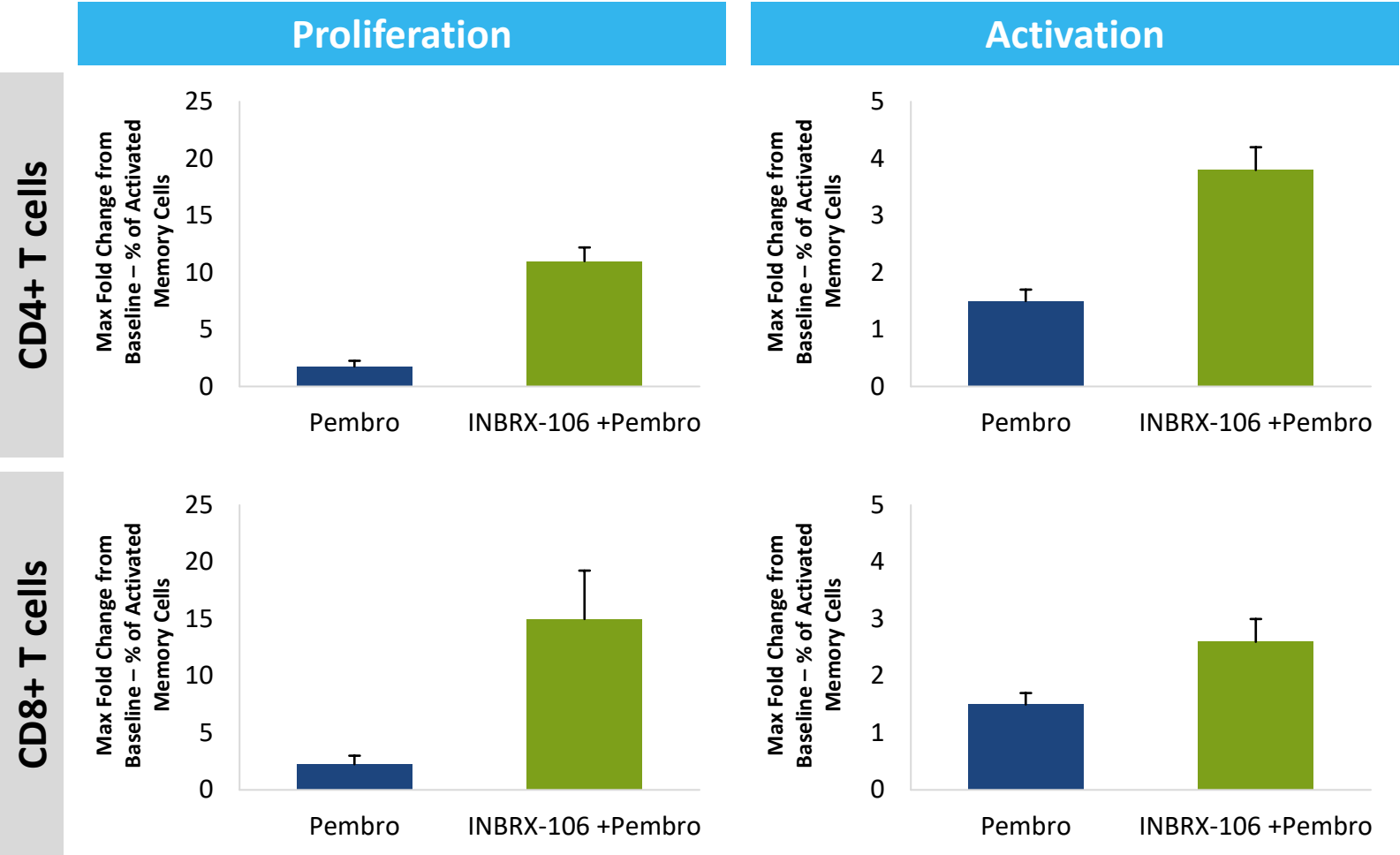
*Safety population = patients who at least received one dose of study treatment

**Data comparison of HexAgon to KN-048 is not from head-to-head study; cross-trial comparisons are limited by differences in study designs, populations, regimens and follow-up

INBRX-106+pembro drives up to 15-fold change in proliferation and up to 4-fold change in activation of T-cells vs. pembro mono



Hexagon Phase 2 – 1L HNSCC



- INBRX-106 is the key driver of T-cell activity in the combination group
- INBRX-106 drives up to 15-fold change increase in proliferation and up to 4-fold change increase in activation of T-cells
- Clear validation of INBRX-106 as a potent T-cell co-activator

Data cutoff date: April 2, 2026. RP2D (recommended phase 2 dose) for combination is 0.1 mpk of INBRX-106. Data is representative of Hexagon U.S. cohorts only (9 Pembro and 13 Combo patients). Data represented as Mean $\pm$ SEM.

Primary endpoint: Addition of INBRX-106 to pembro improves cORR

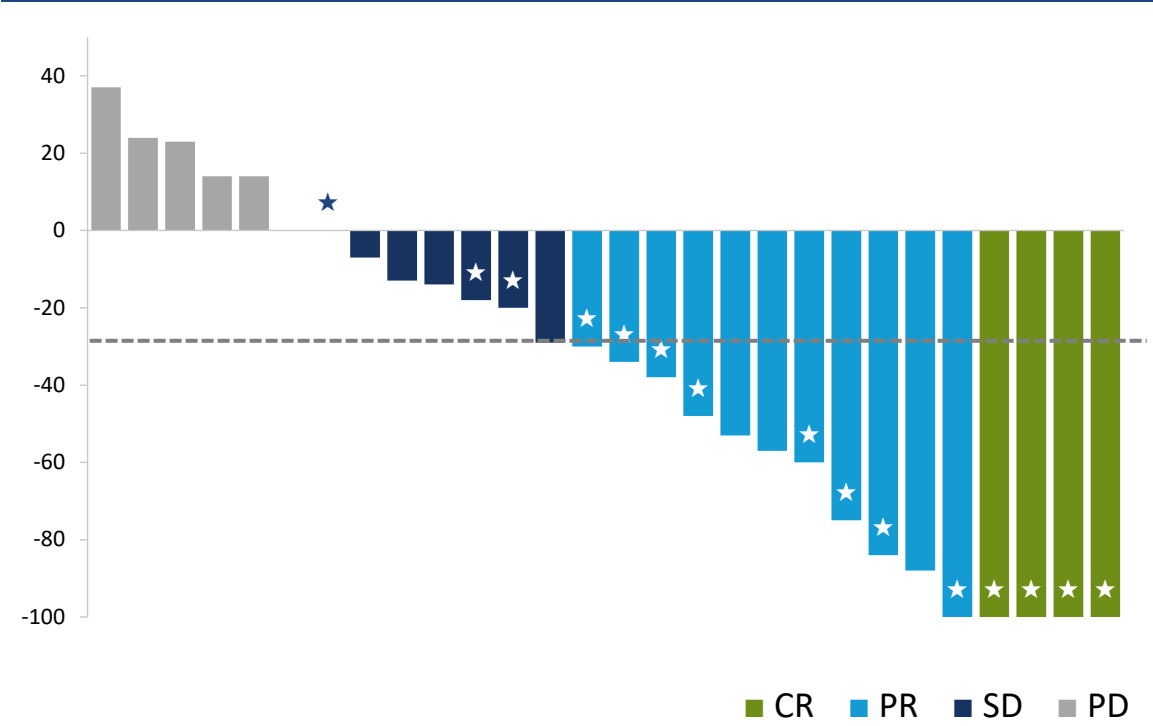


48.3%
cORR — INBRX-106 + Pembro (n=29*)
95% CI 29.4–67.5

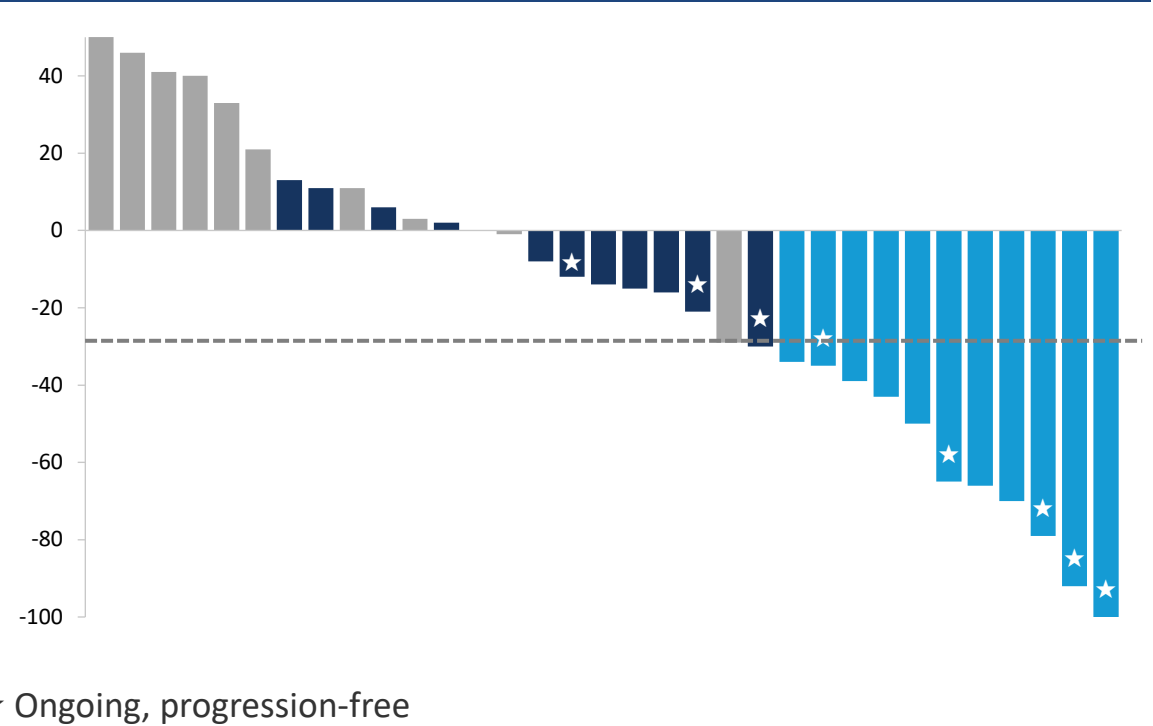
26.5%
cORR — Pembro (n=34*)
95% CI 12.9–44.4

Δ +21.8 points
Difference in cORR
favoring INBRX-106 + Pembro

INBRX-106 + Pembrolizumab



Pembrolizumab



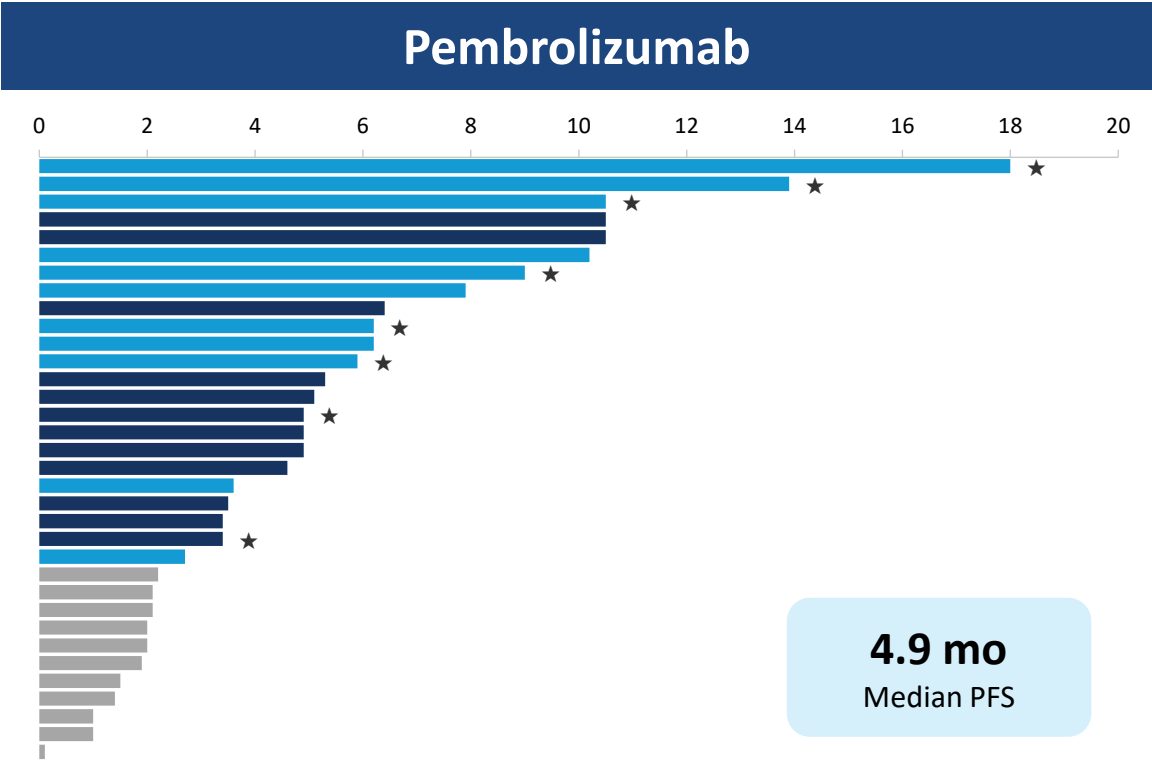
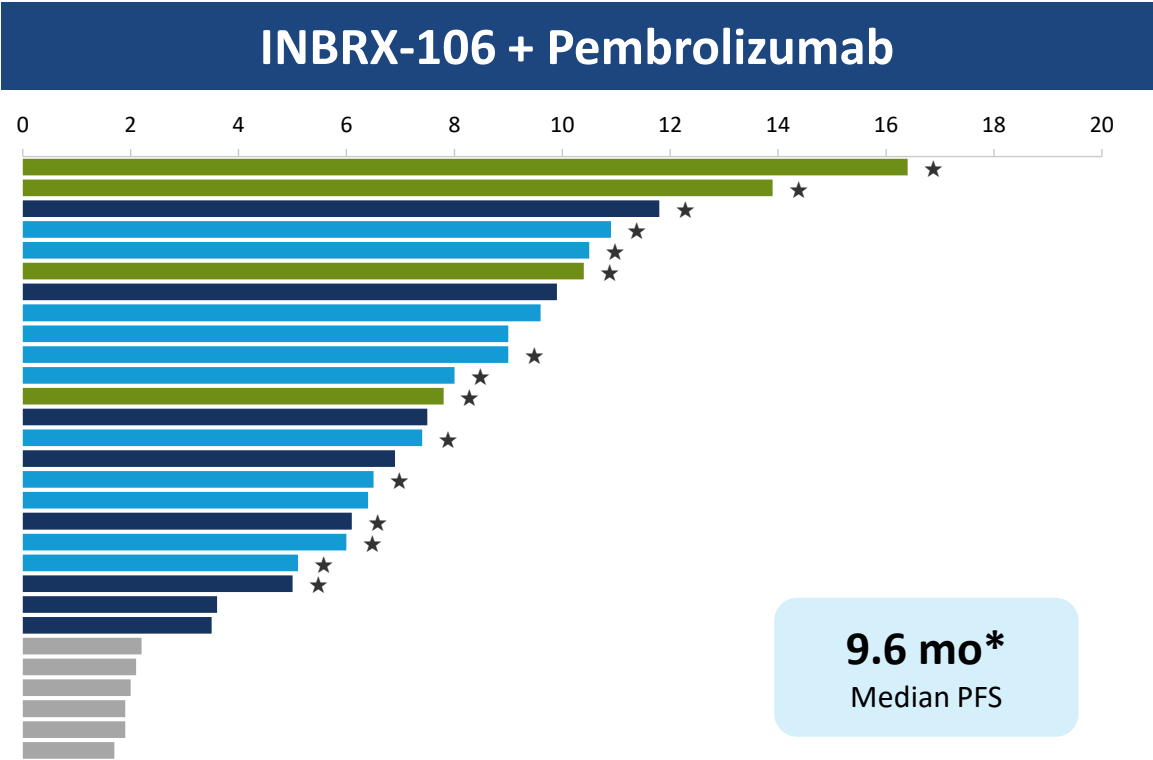
Best % change in target lesion sum of diameters from baseline, RECIST v1.1. cORR = confirmed CR/PR on 2 consecutive occasions ≥4 weeks apart. Data from ongoing DB - CCOD 19 Aug 2026
* Evaluable population = Patients who have at least one post-baseline scan or have died or progressed

INBRX-106 improves overall durability & PFS across all patients



72.4%
PFS at 6 months — INBRX-106 + Pembro

42.8%
PFS at 6 months — Pembrolizumab



■ CR ■ PR ■ SD ■ PD ★ Ongoing, progression-free

**Median PFS still maturing; CCOD 19 Aug 2026
Bars show months of PFS follow-up, ranked longest to shortest, colored by best overall response. Data from ongoing DB - CCOD 19 Aug 2026.
Note: Survival estimates are calculated using the Kaplan-Meier method.*

Improved response & duration observed in HPV-negative patients

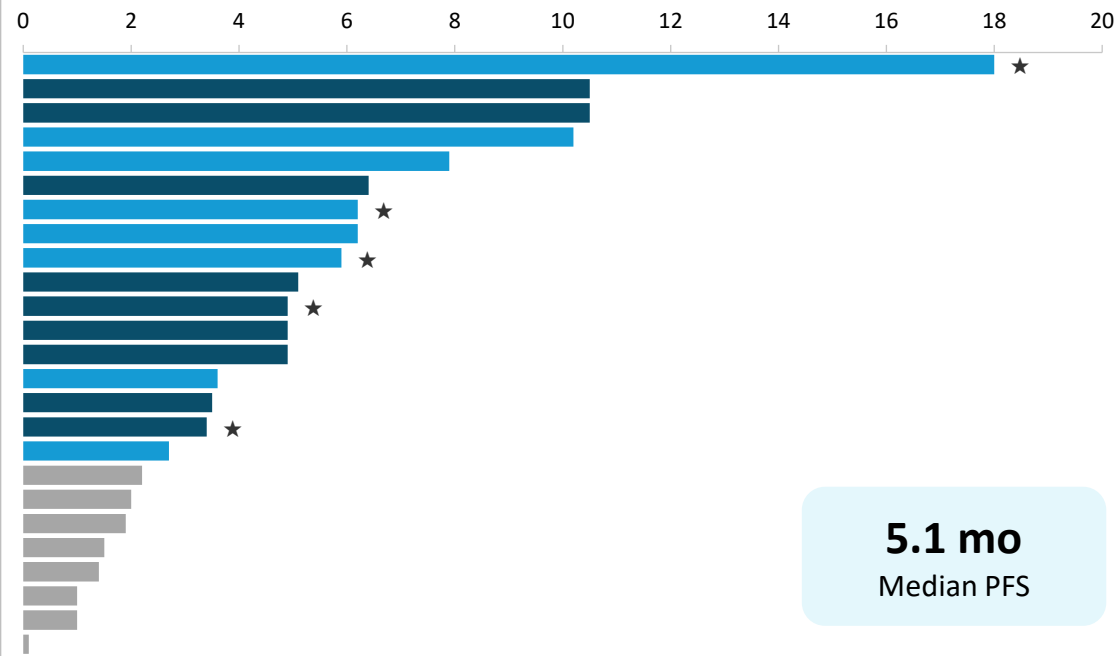
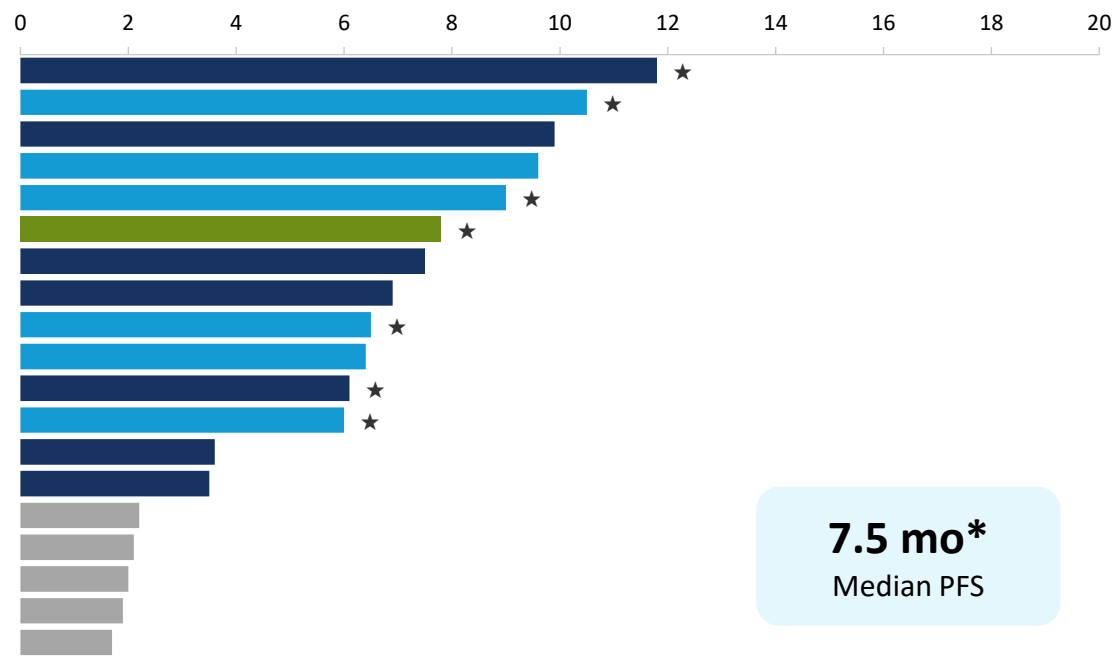


63.2% PFS at 6 months, HPV-negative
31.6% cORR, HPV-negative (n=19)

46.8% PFS at 6 months, HPV-negative
24.0% cORR, HPV-negative (n=25)

INBRX-106 + Pembrolizumab, HPV-negative

Pembrolizumab, HPV-negative



■ CR ■ PR ■ SD ■ PD ★ Ongoing, progression-free

*Median PFS still maturing; CCOD 19 Aug 2026.
Note: Survival estimates are calculated using the Kaplan-Meier method.

Increased benefit was observed in HPV+ patients



80.0%

cORR, HPV+
INBRX-106 + pembro (n=10)
95% CI 44.4–97.5

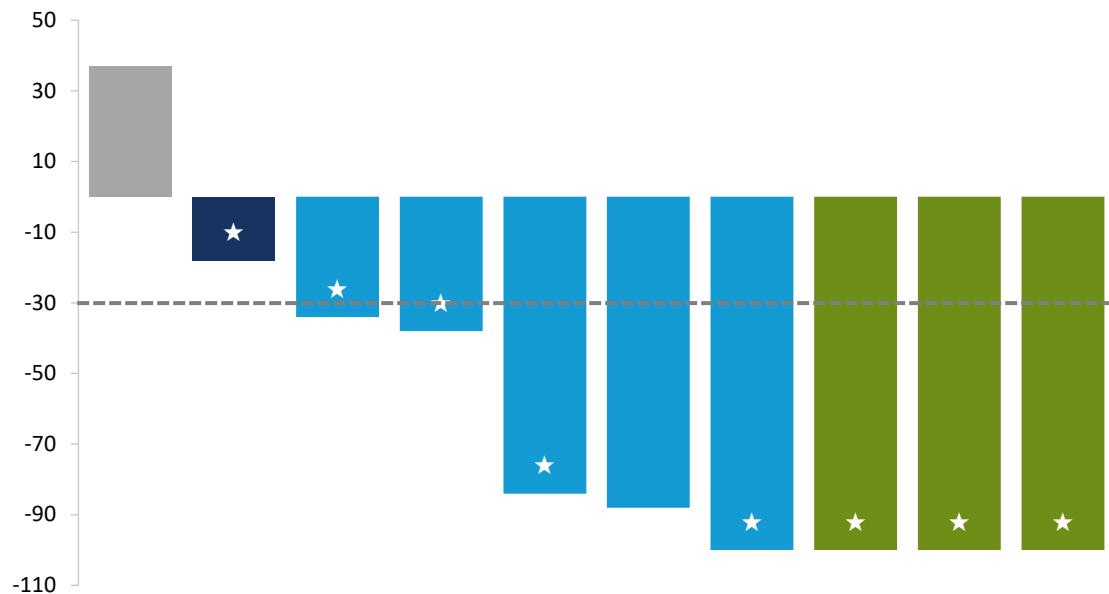
33.3%

cORR, HPV+
Pembrolizumab (n=9)
95% CI 7.5–70.1

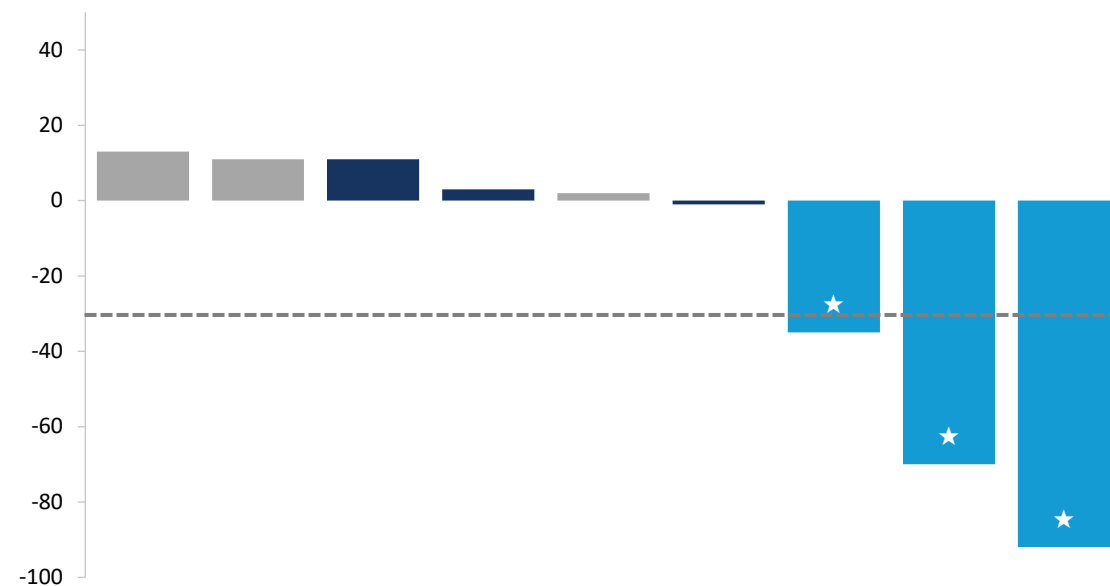
Δ +46.7 points

Difference in cORR, HPV+
INBRX-106+pembro vs. pembro mono
95% CI –2.7, 80.3

INBRX-106 + Pembrolizumab, HPV+



Pembrolizumab, HPV+



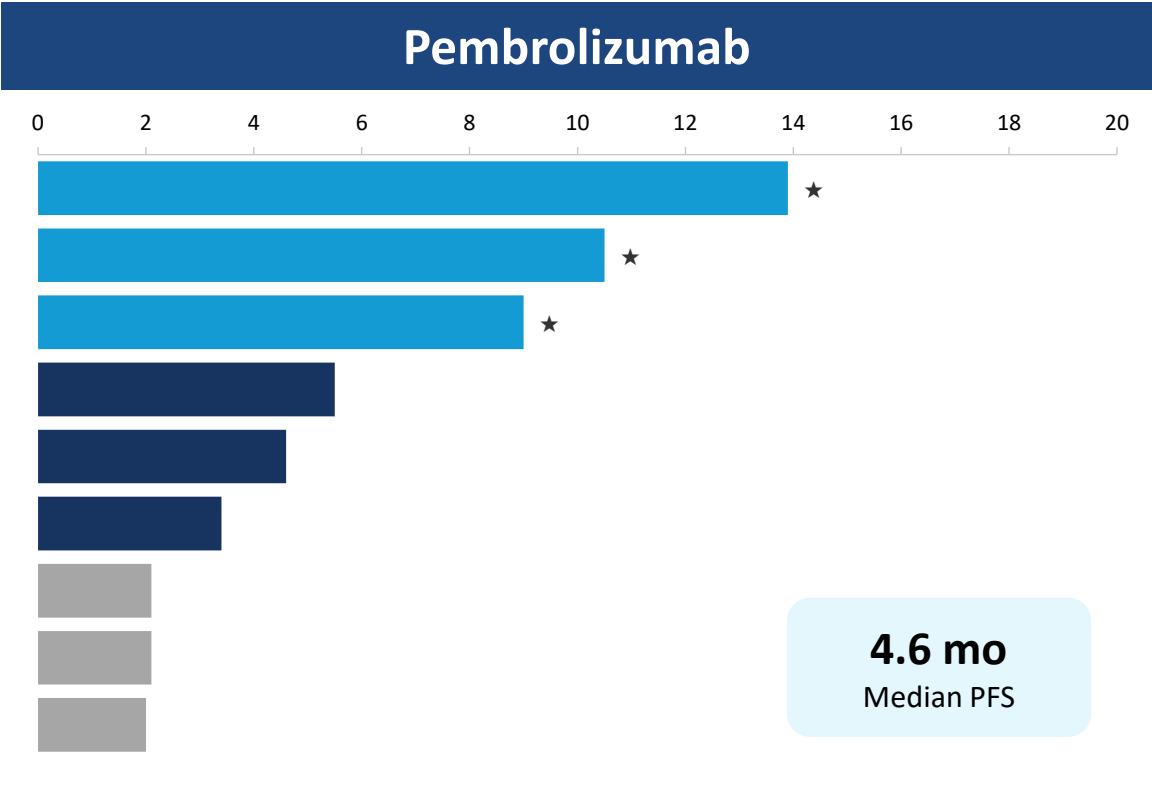
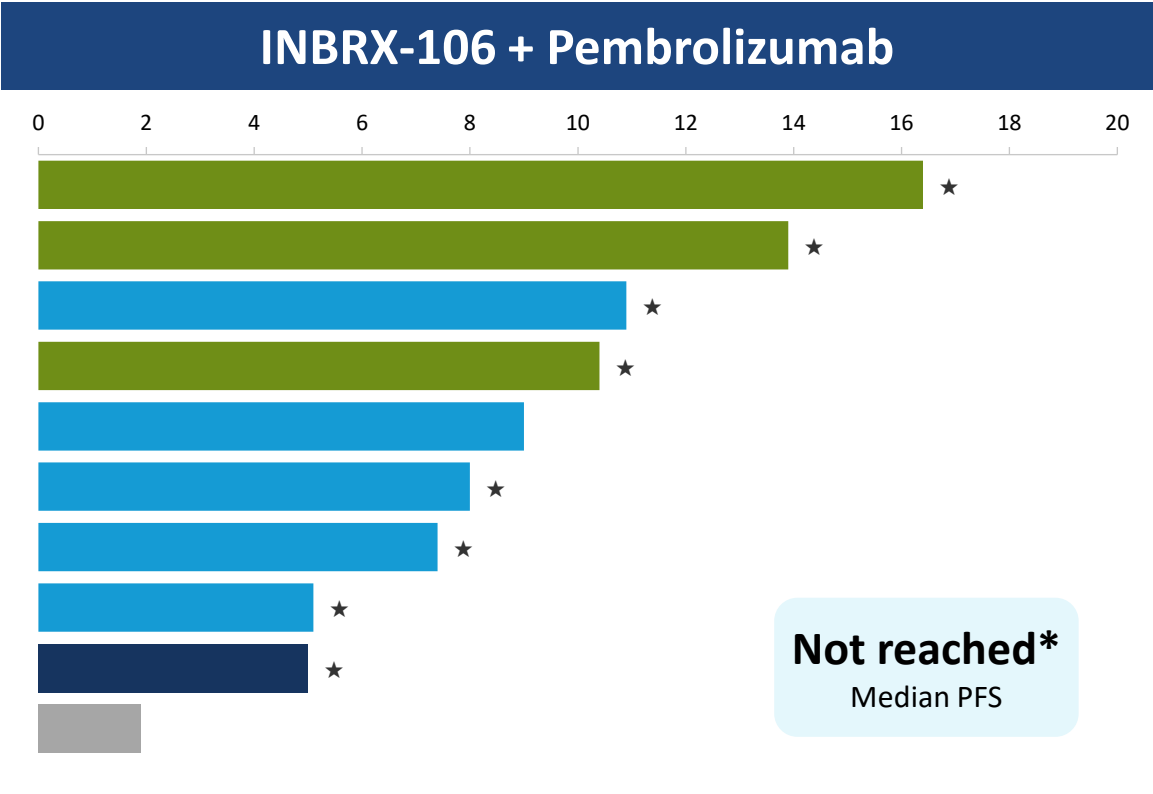
■ CR ■ PR ■ SD ■ PD ★ Ongoing, progression-free

Enhanced durability & PFS observed in HPV+ patients



90%
PFS at 6 months, HPV+
INBRX-106 + Pembro

33%
PFS at 6 months, HPV+
Pembrolizumab



■ CR ■ PR ■ SD ■ PD ★ Ongoing, progression-free

**Median PFS still maturing; CCOD 19 Aug 2026.
Bars show months of PFS follow-up, ranked longest to shortest, colored by best overall response. Data from ongoing DB - CCOD 19 Aug 2026.
Note: Survival estimates are calculated using the Kaplan-Meier method.*

The HPV+ signal is what the INBRX-106 mechanism predicts

INBRX-106



Compelling Clinical Activity

80% vs 33%

cORR, HPV+
(106+Pembro vs
Pembro)

90% vs 33%

PFS6, HPV+
(106+Pembro vs
Pembro)

Up to a 15-fold increase in peripheral CD8⁺/CD4⁺ T-cell proliferation and up to a 4-fold increase in activation (HexAgon-HN, interim Ph2) over ~2-fold pembrolizumab alone.

- HPV-driven tumors express viral E6/E7 neoantigens; these are foreign, high-quality targets that OX40 co-stimulation (INBRX-106's MoA) amplifies.
- The enhanced results observed in HPV+ HNSCC are consistent with the expected underlying biology.



Sound, mechanistic rationale

Foreign viral antigen (E6/E7) driving a strong Signal 1, activated by OX40 co-stimulation on antigen-experienced T-cells



High unmet need

Attractive commercial opportunity: Potentially first dedicated HPV+ approval, differentiated from EGFR bispecifics (active mainly in HPV negative)



Potential for fast revenue realization

Profound response-rate difference supports a potentially accelerated path to market

Opportunity to own HPV+ market

Expansion of Phase 2 HexAgon-HN with potential for an accelerated path to market in HPV+

INBRX-106



The new study amendment adds an additional 50 HPV+ patients to the existing HexAgon design

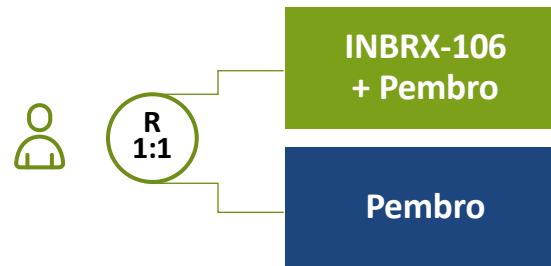
Phase 2 (additional 50 HPV+) Open label

Key inclusion criteria:

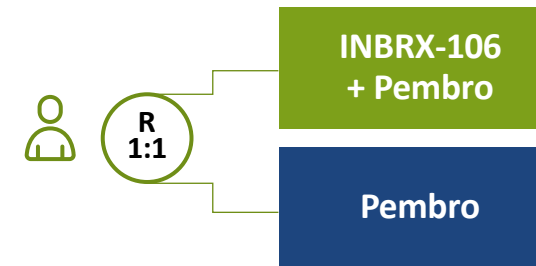
R/M HNSCC

HPV+ OPSCC

PD-L1 CPS $\geq$ 1



Phase 3 (n=TBD) Double blind, seamless



Opens the door to possibilities for accelerated development



Potential for breakthrough therapy designation

Potential, based on preliminary signal magnitude in a serious, unmet-need indication



Potential for accelerated approval

Potential accelerated path by end of 2028/early 2029 based on ORR as a surrogate likely to predict long-term clinical benefit (PFS & OS), and established precedent with petosemtamab and ficerafusp alfa



Phase 3: confirmatory

Already part of the seamless design: serves as the confirmatory study for full approval

Set to pursue a breakthrough pathway in 1L R/M HPV+ CPS ≥1 HNSCC

~\$4B+ U.S. market opportunity including stage I-III setting

INBRX-106



US Epidemiology Estimates

Valuation Drivers

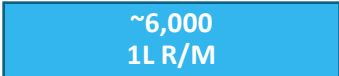
High morbidities in current therapies

High share; higher systemic usage

Premium pricing

Long duration

US Sales Potential



Clinicians actively seeking de-escalation therapy in HPV+. Significant radiation- and surgery-related morbidities — e.g., impaired speech, feeding tube

Significant unmet need for a therapy specifically studied in the HPV+ population; where current EGFR bi-specifics do not perform well

Ground-breaking results and limited patient population would provide opportunity for premium pricing. Premium priced therapies currently on guidelines

High response rate, and deep and durable responses on INBRX-106 point to longer duration on therapy

~\$1B

~\$2B

~\$1B

INBRX-106: multiple attractive expansion opportunities



Increased opportunity for OX40 agonism due to increased ongoing antigen-driven T-Cell stimulation

	 Highly Immunogenic Tumors	 Virally Antigen-Driven	 Individualized Neoantigen Cancer Vaccines
	• NSCLC • Melanoma • Renal Cell Carcinoma • TNBC • Bladder • MSI-H / dMMR • TMB-High	• HPV+ H&N • HPV+ beyond H&N (e.g., Anus/ Rectum, Cervix, Vagina, Vulva, Penis) • Non-HPV, commonly reported virally-linked cancers: EBV, HBV, HCB, HTL1-1, HHV-8	Major Ph 2/3 programs: • Moderna/Merck: (V940): Melanoma, NMIBC, NSCLC • BioNTech/Genentech (Autogene Cevumeran): CRC, PDAC
WW Market Opportunity:	\$50 B+ ¹	\$15 B+ ²	\$50 B+ ³
Ongoing studies & development plan	Ongoing clinical trial in peri-operative NSCLC and IST in peri-operative TNBC serves as fast proof of concept for broad expandability to other immunogenic tumors	Expand Phase 2 portion of HexAgon-HN trial to increase HPV+ patients for potential accelerated approval	Seek potential combinations with individualized neoantigen cancer vaccines

Highest impact expected in early stage disease

Source: 1. Evaluate estimates for PD-1s projected to 2031 based on 2025-2027 growth rates (market size independent of biosimilar entry). 2. Virally antigen estimated based at 3x HPV based on topline epidemiology from CDC or IARC (de Martel) projected WW. 3. Company estimate, full impact of V940 data release 8/19/26 not yet propagated through reports.

Highly immunogenic tumors, peri-operative NSCLC expansion: pCR is a fast, validated readout of long-term benefit

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- Pathologic complete response (pCR) at surgery:
 - Available in months, not years
 - Highly correlated with improved survival and can generate a second, independent proof-of-activity signal well ahead of any survival endpoint
- pCR in peri-operative NSCLC opens a multibillion-dollar market opportunity and will serve as proof of concept for expandability to other highly immunogenic tumors, broadening the platform thesis beyond HNSCC

KEYNOTE-671

0.58

Event-free survival HR
(95% CI 0.46–0.72)¹

18.1%

Pathologic complete response
Pembro+chemo

Neoadjuvant study – Ongoing Ph1/2 study expected to read-out by mid-2027



Participants (N~40)

Stage II–IIIB NSCLC,
ECOG 0–1,
surgical candidates



**Neoadjuvant
(4 cycles)**

Platin doublet
+ pembro
+ INBRX-106



Surgery



**Adjuvant
(13 cycles)**

Pembro
+ INBRX-106



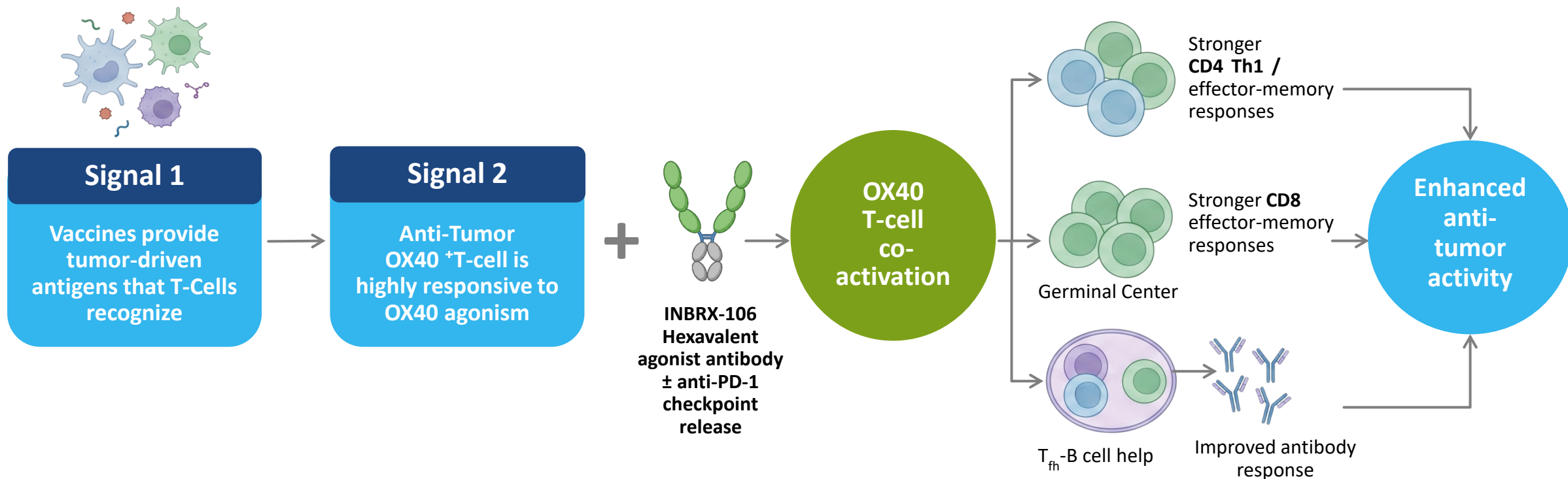
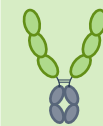
**Primary
endpoints**

+ pCR
+ Safety

1. Wakelee et al., KEYNOTE-671, N Engl J Med 2023

INBRX-106 HPV+ ORR data and 20+ years of academic research¹ support synergy of OX40 agonism and potential vaccine effectiveness

INBRX-106



- Extensive preclinical evidence: OX40 agonism enhances vaccine efficacy/anti-tumor activity
- INBRX-106 HPV⁺ **HNSCC** high ORR validates that OX40 co-stimulation amplifies immunity response to APC-presented antigen
- **mRNA vaccine recreates HPV+ like tumor antigenicity by design**

Combinability may enable INBRX-106 to capitalize on recent breakthrough of individualized neoantigen cancer vaccines

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IPV* Clinical validation

Moderna's V940 (intismeran autogene) + pembrolizumab has established clinical validation in adjuvant melanoma

Phase 2

0.51

RFS hazard ratio

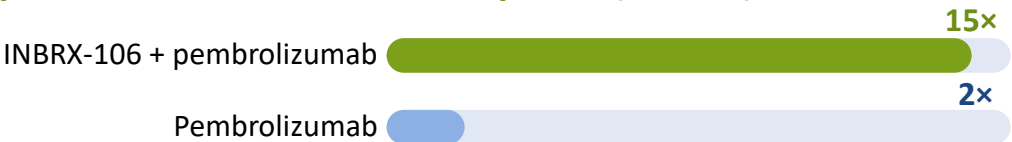
0.38

DMFS hazard ratio

- Favorable exploratory OS trend
- Phase 3 positive top-line readout created \$25B+ market value overnight

INBRX-106 POC validation

In-patient T-cell Co-stim: CD8+ prolifer. (fold ↑)



Clinical PoC: HPV+ OPC — ORR



- Chronic MHC-presented HPV antigen sustains an OX40+ T-cell phenotype a personalized vaccine can recreate
- Strong Preclinical Evidence: OX40 agonism-vaccine synergy. Antigen specific T-cell expansion, survival, memory, humoral response

Individualized vaccine

Primes neoantigen-specific T cells

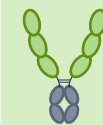
Strategic opportunity

Inhibrx-106 OX40 agonism

Amplifies T-cell antigenic response expansion and durability

Potential best-in-class outcomes

*IPV-Individualized Patient Vaccine



INBRX-106 is the first clinically active OX40 agonist and T-cell costimulatory therapy



Combination with pembro demonstrates superiority to pembro mono in 1LR/M HNSCC

- ORR: 48.3% vs 26.5%
- Depth of Response
- CR Rate: 13.8% vs 0%
- PFS: 9.6 months vs 4.9 months
- PFS6 Improvement: (72.4% vs. 42.8%)
- These data are supported by superior t-cell proliferation (up to 15-fold increase) and activation (up to 4-fold increase) vs pembrolizumab alone



Potentially practice-changing efficacy profile in HPV+ patients

- ORR: 80% vs 33%
- CR Rate: 30% vs 0%
- PFS Data: NR vs 4.6 months
- PFS6 Rate: 90% vs 33%
- Expansion of Phase 2 to include 50 additional HPV+ patients may serve as potential path to accelerated approval by end of '28/early '29. HPV+ HNSCC is an open \$4B+ market



Large expansion opportunity in highly immunogenic tumors

- Bladder, NSCLC, Melanoma, MSI High/TMB High, TNBC present \$50B+ commercial opportunity
- Ongoing neoadjuvant lung cancer study serves as proof of concept for broad expandability with pembrolizumab across highly immunogenic tumors



Potential for new paradigm of treatment with cancer vaccines

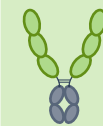
- Potential \$50B+ market
- HPV+ HNSCC data and over 20 years of academic research support the strong mechanistic rationale of INBRX-106 +cancer vaccines (OX40 agonism potency when foreign antigen is presented)

Appendix

INHIBR_X

OX40 agonism enhances vaccine efficacy: broadly supported in scientific literature for 20+ years

INBRX-106



18 selected preclinical studies spanning protein, DNA/viral-vector, whole-cell and RNA vaccine platforms, plus first-in-human proof of biology

Foundational mechanism & platforms

- ① **Gramaglia 2001 · J Immunol · PMID 11739496**
Soluble antigen vaccine: ~10× antibody titers and durable CD4 memory.
- ② **Laderach 2004 · Immunology · PMID 15270726**
DNA prime / poxvirus boost: higher CD4 responses; +4-1BB further raises CD8.
- ③ **Ruby 2007 · Eur J Immunol · PMID 17183611**
Greater CD8 memory survival and recall — durability, not just expansion.
- ④ **Redmond 2007 · J Immunol · PMID 18025166**
Restores CD8 effector function and granzyme B after antigen priming.
- ⑤ **Sanchez 2012 · PMID 22186790**
Adenovirus vaccine + OX40: improved protection against viral challenge.
- ⑥ **Welten 2017 · PMID 28265272**
Peptide booster vs MCMV: stronger CD4/CD8 responses; lower viral titers.

Therapeutic cancer vaccines

- ⑦ **Murata 2006 · J Immunol · PMID 16393983**
GM-CSF whole-cell vaccine: overcomes CD8 tolerance to endogenous tumor antigen.
- ⑧ **Murphy 2012 · Clin Cancer Res · PMID 22781551**
Glioma lysate + Fc-OX40L: ~50–100% cures with rechallenge protection.
- ⑨ **Murphy / Fecci 2013 · PMID 24293627**
Same regimen; regression dependent on CD4 T, NK and B cells.
- ⑩ **Linch 2016 · PMID 26729864**
HER2 DC-targeted vaccine + αOX40/αCTLA-4: reverses anergy, improves survival.
- ⑪ **Jahan 2018 · Neuro-Oncology · PMID 29016879**
GVAX + αOX40 in glioma: median survival 22 → 36 days; better CD8:Treg balance.
- ⑫ **Jahan 2019 · PMID 31069135**
GVAX + αPD-1 + αOX40: long-term survival in all treated mice.

Cancer (cont.) & RNA-era platforms

- ⑬ **Peng 2019 · Clin Cancer Res · PMID 31371342**
gp100 peptide / DC vaccination: greater antigen-specific CD8 expansion and memory.
- ⑭ **Du 2022 · J Cancer Res Clin Oncol · PMID 35748951**
Whole-cell vaccine + CpG/αOX40/cGAMP: slower growth, more intratumoral T cells.
- ⑮ **Sun 2023 · J Transl Med · PMID 37700338**
In-situ vaccine (radiation + CpG + OX40): local and abscopal tumor control.
- ⑯ **Li 2020 · Vaccines · PMID 32210183**
Rabies vector expressing OX40L: more Tfh and germinal-center B cells.
- ⑰ **Duhen 2022 · Front Immunol · PMID 36238275**
SARS-CoV-2 protein and saRNA vaccines: higher, longer-lasting antibody and CD4/CD8 responses.
- ⑱ **Lu 2025 · JCI Insight · PMID 40178907**
Zika saRNA + OX40/4-1BB: immunity extended to day 84; lower viral load on delayed challenge.

- ⑲ **HUMAN PROOF OF BIOLOGY** Curti / Weinberg 2013, Cancer Research (first-in-human OX40 agonist study): patients receiving reporter-antigen immunizations showed increased T-cell and B-cell responses to the vaccine antigens — direct clinical evidence that pharmacologic OX40 agonism augments vaccine responses.