



October 2022

**CORPORATE PRESENTATION**

NASDAQ: INDP

# FORWARD LOOKING STATEMENTS

This presentation contains forward-looking statements with the meaning of the Private Securities Litigation Reform Act. These include statements regarding management's expectations, beliefs and intentions regarding, among other things, our product development efforts, business, financial condition, results of operations, strategies, plans and prospects. Forward-looking statements can be identified by the use of forward-looking words such as "believe", "expect", "intend", "plan", "may", "should", "could", "might", "seek", "target", "will", "project", "forecast", "continue" or "anticipate" or their negatives or variations of these words or other comparable words or by the fact that these statements do not relate strictly to historical matters. For example, forward-looking statements are used in this presentation when we discuss Indaptus's future plans and expected timeline of its development pipeline.

Forward-looking statements relate to anticipated or expected events, activities, trends or results as of the date they are made. Because forward-looking statements relate to matters that have not yet occurred, these statements are inherently subject to risks and uncertainties that could cause our actual results to differ materially from any future results expressed or implied by the forward-looking statements. Many factors could cause actual activities or results to differ materially from the activities and results anticipated in forward-looking statements, including, but not limited to, the following: our plans to develop and potentially commercialize its technology, the timing and cost of our planned investigational new drug application and any clinical trials, the completion and receiving favorable results in any clinical trials, Indaptus' ability to obtain and maintain regulatory approval of any product candidate, our ability to protect and maintain its intellectual property and licensing arrangements, our ability to develop, manufacture and commercialize its product candidates, the risk of product liability claims, the availability of reimbursement, the influence of extensive and costly government regulation, and our estimates regarding future revenue, expenses capital requirements and the need for additional financing. More detailed information about the risks and uncertainties affecting us is contained under the heading "Risk Factors" included in our most recent Annual Report on Form 10-K filed with the SEC on March 21, 2022, and in other filings that we have made and may make with the Securities and Exchange Commission in the future.

All forward-looking statements speak only as of the date of this presentation and are expressly qualified in their entirety by the cautionary statements included in this presentation. Indaptus does not undertake any obligation to update or revise forward-looking statements to reflect events or circumstances that arise after the date made or to reflect the occurrence of unanticipated events, except as required by applicable law.

The presentation contains information about investigation-stage drug products under development, which have not yet been approved by the FDA for commercial distribution in the United States. All representations in this presentation are based upon investigations in certain clinical and other research, but which accordingly should not be construed as general claims for the safety or efficacy of the products when used by patients.

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# INVESTOR HIGHLIGHTS AND KEY METRICS

- Clinical-stage asset preparing to enroll Phase 1 clinical trial in solid tumors
- Innovative and flexible clinical platform based upon application of proven scientific principals
- Flexible application of technology that has applications across oncology, infectious diseases and other areas of immunology
  - Potential to utilize compounds as single-agent treatment and combination therapy
- Excellent pre-clinical safety profile
- Favorable cash position into Phase 1 trials
- Experienced leadership having led multiple research/clinical programs & FDA approvals

## STOCK SYMBOL: INDP (NASDAQ CM)

Stock Price (10/5/22)	\$2.19
52 Week Range	\$1.89 - \$8.17
Average Daily Volume (6 months)	40.0K
Common Shares Outstanding (10/5/22)	8.26M
Market Capitalization (10/05/22)	\$18.1M
Cash & Equivalents (6/30/22)	\$33.0M
Insider Ownership (%)	30.53%

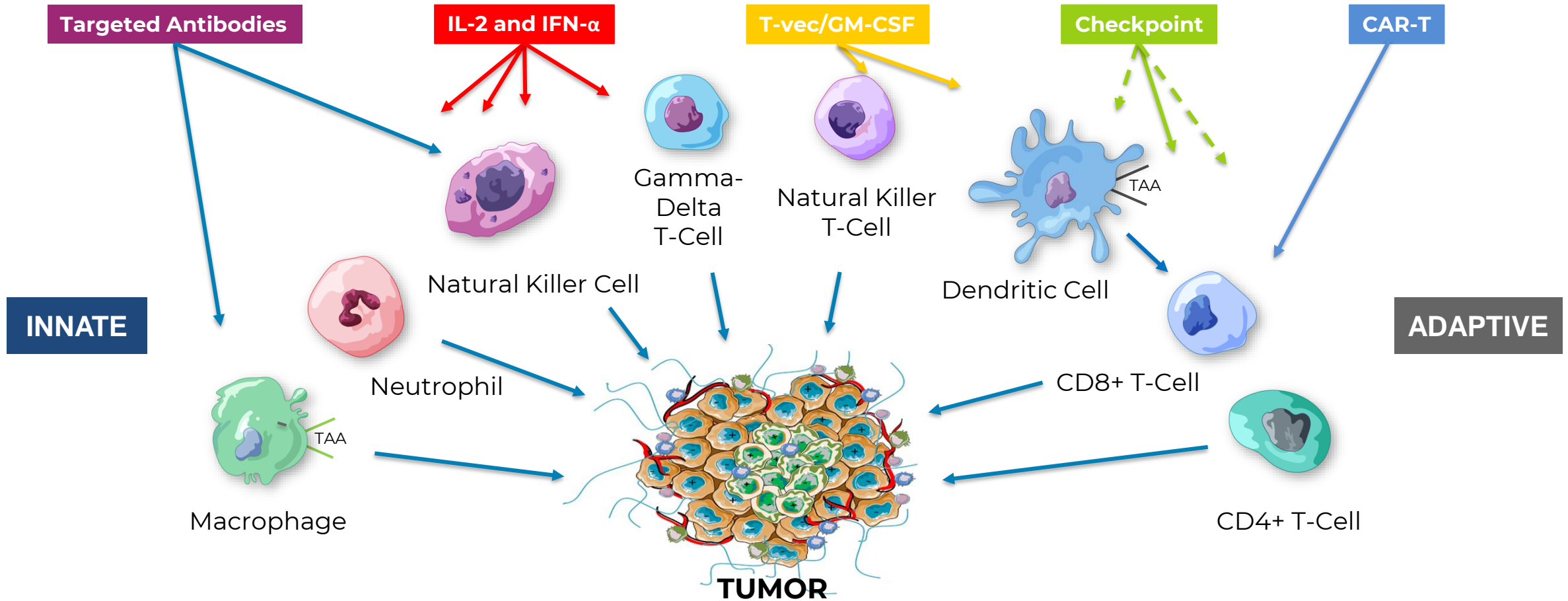


## Decoy therapeutics exhibit many unique properties

- Single agent anti-tumor activity
- Tumor eradicating synergy with several different existing therapies
- Reduced toxicity and broad therapeutic index
- Safe induction of both innate and adaptive immune pathways
- Innate and adaptive immunological memory leading to rejection of tumor re-challenge
- No induction of cytokine release syndrome in IND-enabling toxicology
- Significant single agent activity in pre-clinical models of HBV and HIV



# CURRENT CANCER IMMUNOTHERAPIES ONLY ADDRESS A LIMITED PART OF THE IMMUNE SYSTEM AND THEREFORE HAVE LOW CURE RATES IN ADVANCED CANCERS



## Existing Cancer Immunotherapies

- Don't prime or activate both the innate and adaptive immune pathways
- Require continuous, systemic exposure - producing significant risk of toxicity

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## Nature's Example: A More Optimal Innate and Adaptive Immune Response

- Foreign threat (bacteria) in blood-stream
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  - Is passively targeted to, engulfed and digested by immune cells in liver and spleen
  - Primes entire innate and adaptive immune response, are rapidly eliminated

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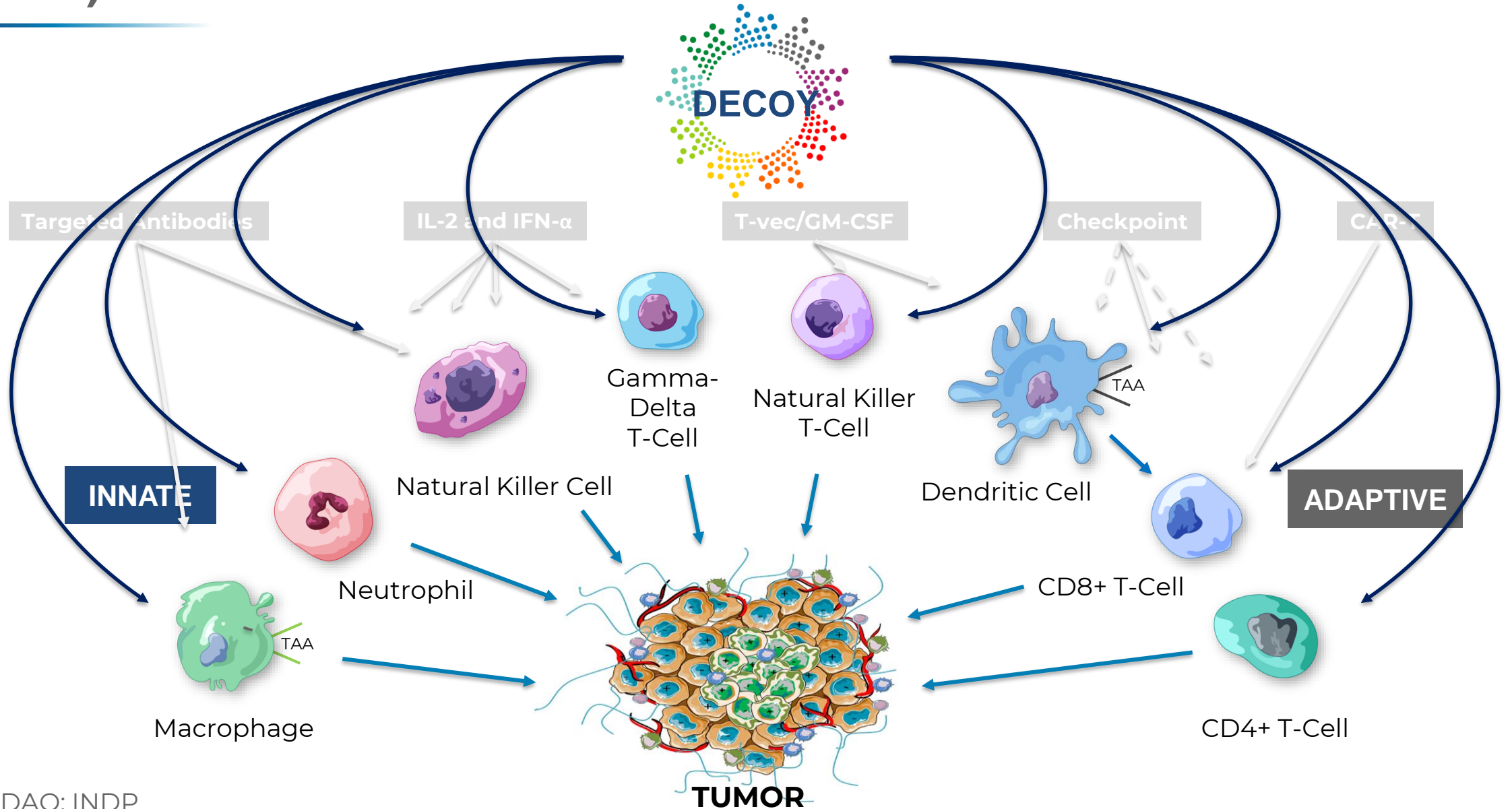
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## Spontaneous Regression of Cancer Observed in Presence of Bacterial Infection

- Bacterial danger signals can prime both innate and adaptive anti-tumor immune responses
- Passive targeting and rapid elimination provides ideal synergy partner for existing therapy
- Basis for the world's first immunotherapy (Coley's Toxins)



# THE WORLD'S FIRST MULTI-TARGETED PULSE PRIMING (MTPP) IMMUNOTHERAPY



# CHALLENGE – IV ADMINISTERED OF GRAM-NEGATIVE BACTERIA ARE TOXIC

## Analyzing this approach with today's information:

- TLR4 agonist LPS-endotoxin constitutes ~75% of the Gram-negative outer cell membrane
- LPS has been shown to be one of the most potent and broadly acting innate and adaptive immune system-activating danger signals, but produces toxicity when **too much** LPS is administered i.v.
- This probably limits the number of other immune-stimulating danger signals that can be safely administered i.v. with LPS

**Indaptus Approach SIGNIFICANTLY REDUCES LPS, but leaves enough to activate innate & adaptive immune responses**

# PRODUCING A MULTI-TARGETED PACKAGE OF IMMUNE SYSTEM ACTIVATING SIGNALS – A RE-INVENTING OF THE APPROACH

## DECOY PRODUCT: A MULTI-TARGETED IMMUNE ACTIVATOR

- Start with a single, pure strain of non-pathogenic, Gram-negative bacteria
- Reduce LPS-endotoxin level by ~90%
- Process mixture to kill the bacteria and stabilize structures so they remain intact after i.v. administration
- Product is a frozen suspension (cell therapy) (containing processed, attenuated and 100% killed bacteria)

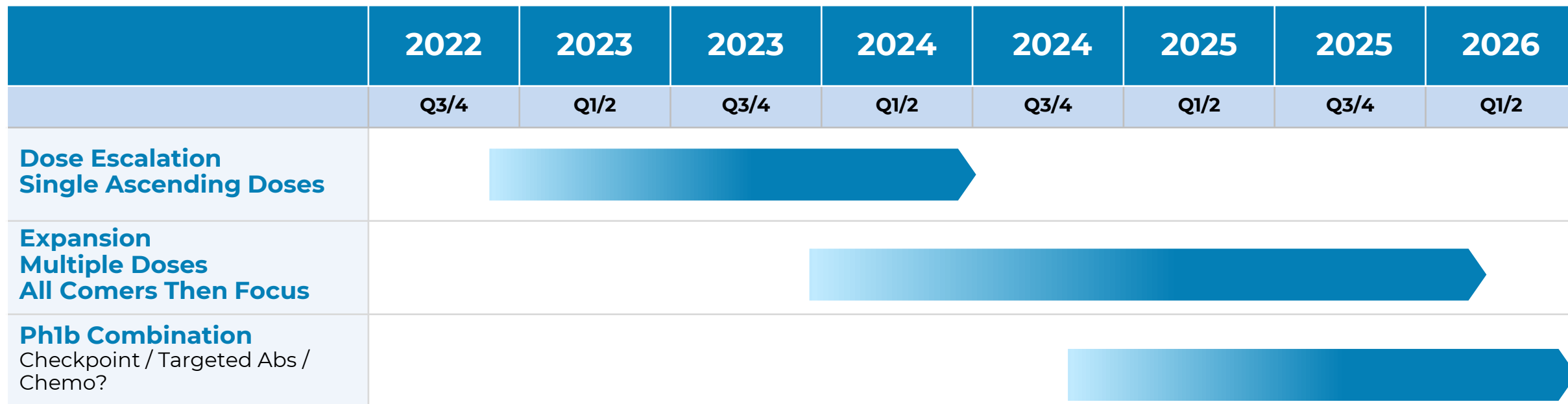
## RESULT AND PREDICTIONS

- Decoy therapeutics contains multiple TLR agonists and is significantly less toxic in vivo than untreated bacteria and several live competitor products
- Predicted Advantages:
  - i.v. product should be passively targeted to liver, spleen and tumors, and cleared rapidly
  - Immune activation better than with i.t. dosing: Critical activation in liver and spleen and can target primary liver cancer and liver metastasis from other tumors
  - Passive targeting and rapid clearance precludes continuous, systemic exposure common to small molecule, antibody and CAR therapies:

**Reduced chance of systemic toxicity**

# INDAPTUS CLINICAL DEVELOPMENT PLAN

## PHASE 1 SOLID TUMOR IND CLEARED BY US FDA



### Key Milestones

- Enrollment of Phase 1 safety trials planned ~Q4 2022
- Single dose safety 2H 2023
- Multi-dose safety 2H 2024
- Proof of Concept late 2025 or early 2026

### Patent Estate Timing

- Broad patent coverage: CoM + Methods
- 5 issued US & 29 issued foreign patents  
Additional world-wide applications
- Nominal expiry – 2 families 2033/2039

# DECOY THERAPY SIGNIFICANTLY REDUCES LPS-ENDOTOXIN ACTIVITY AND IN VIVO PYROGENICITY COMPARED TO LIVE BACTERIA

Decoy therapeutics are also 100- to 2,500-fold less toxic in mice (LD50) than several live, attenuated bacterial products

Treatment	Live Bacteria	LPS Endotoxin Activity (LAL Assay)	Pyrogenicity Threshold (Rabbit Assay)
No Treatment	100%	44.7 Units / $10^6$ Bacteria	$3 \times 10^4$ Bacteria
Decoy	0%	3.6 Units / $10^6$ Bacteria (92% reduction)	$9 \times 10^5$ Bacteria (97% reduction)



# LPS REDUCTION DOES NOT IMPAIR ANTI-TUMOR CYTOKINE/CHEMOKINE INDUCTION

Despite being less toxic, Decoy therapeutics induce similar amounts of anti-tumor cytokines and chemokines, uncoupling toxicity from anti-tumor activity

Secretion by Human PBMCs* <i>In Vitro</i>	Untreated Bacteria	Decoy Therapeutic (Decoy10)	Decoy Therapeutic (Decoy20)
<b>Anti-Tumor Cytokine</b>	<u>pg/mL</u> (mean of triplicate determinations ± %CV at same bacterial dose for each cytokine)		
<b>GM-CSF</b>	1,094 ± 22	1,197 ± 2	1,695 ± 23
<b>IFN<math>\gamma</math></b>	175,866 ± 7	47,488 ± 3	55,321 ± 10
<b>IL-12p70</b>	176 ± 14	528 ± 7	428 ± 37
<b>TNF<math>\alpha</math></b>	49,782 ± 11	77,919 ± 13	99,247 ± 16

\*Peripheral Blood Mononuclear Cells

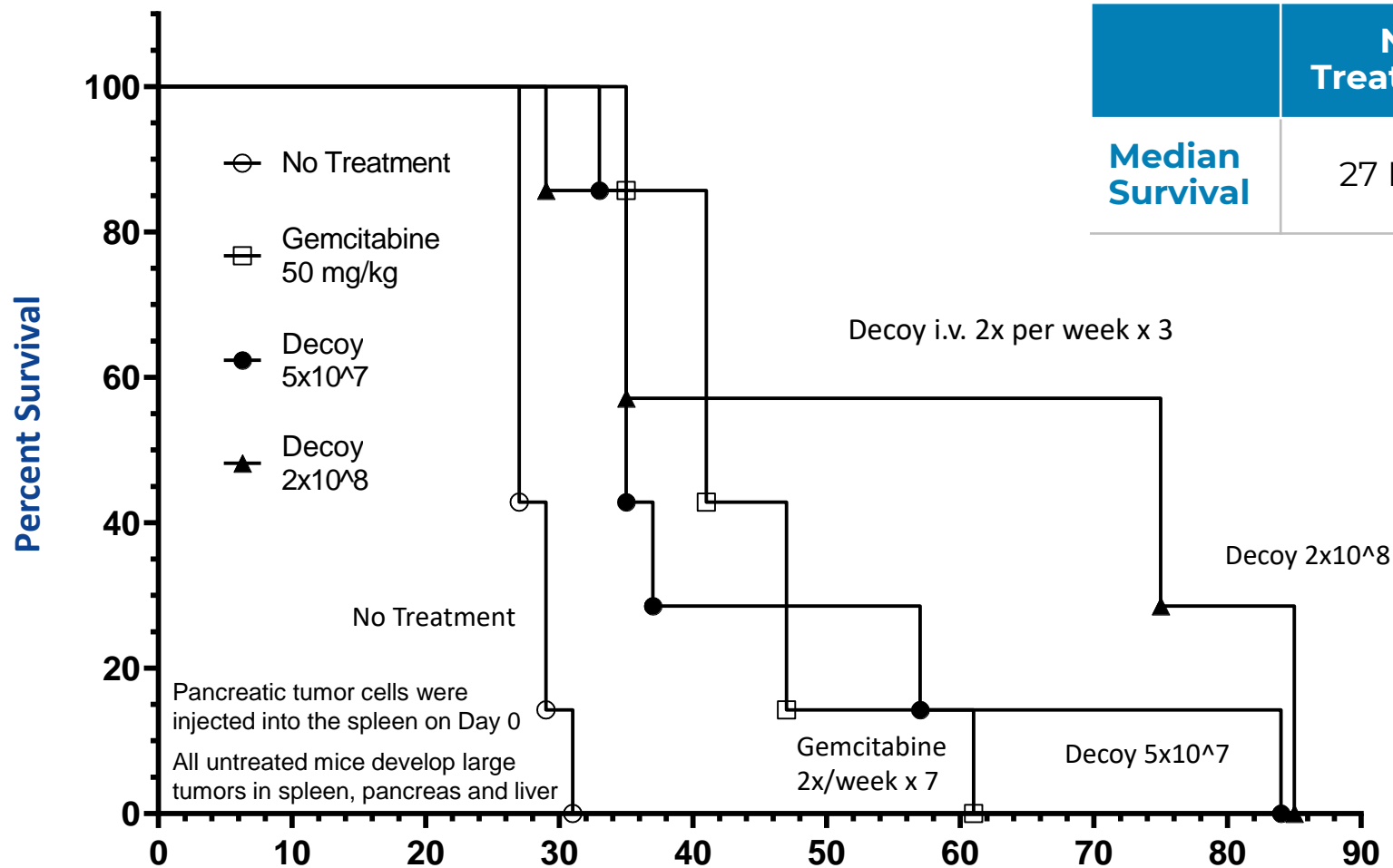
Decoy therapeutics are more broadly active than mono-specific TLR agonists

Secretion by Human PBMCs <i>In Vitro</i>	<u>CpG (TLR9)</u>	<u>Poly(I:C) (TLR3)</u>	<u>R848 (TLR7/8)</u>	<u>LPS (TLR4)</u>	<u>Decoy10* (TLR2,4,5,9)</u>
<b>Anti-Tumor Cytokine</b>	<u>pg/mL</u> (triplicate full titration peak average from two exp)				
<b>GM-CSF</b>	0	2	136	27	1,246
<b>IFN<math>\gamma</math></b>	7	248	61,914	33,293	171,284
<b>IL-12p70</b>	4	15	205	84	375
<b>TNF<math>\alpha</math></b>	65	334	36,663	24,944	73,069
<b>MIP-1<math>\alpha</math>**</b>	0	272	17,866	19,278	29,942

\*Decoy therapy tested at doses therapeutically relevant for *in vivo* models

\*\*From one experiment

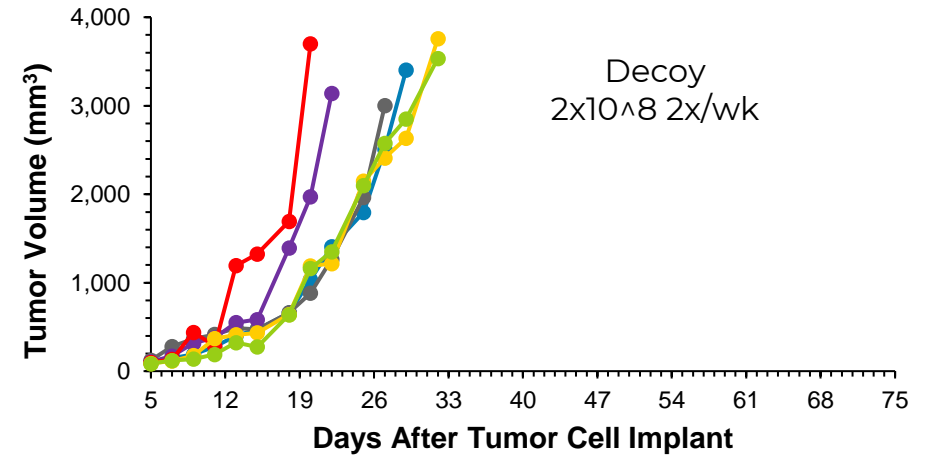
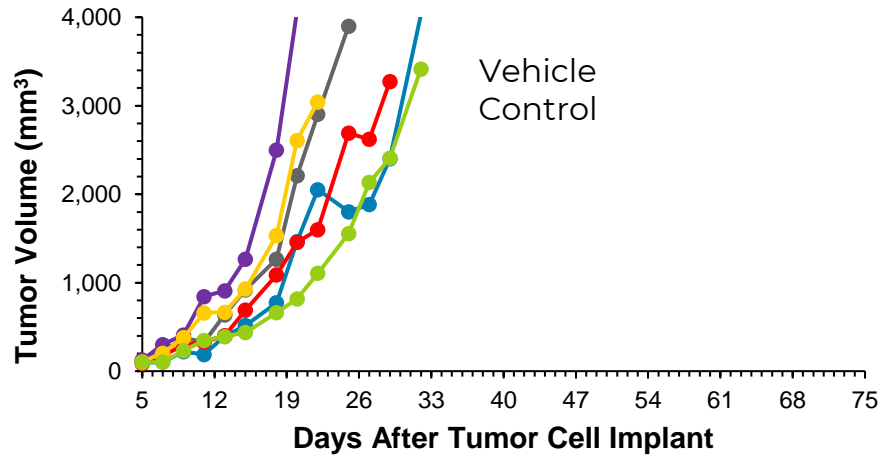
# SINGLE AGENT ACTIVITY - METASTATIC MOUSE PANCREATIC CARCINOMA



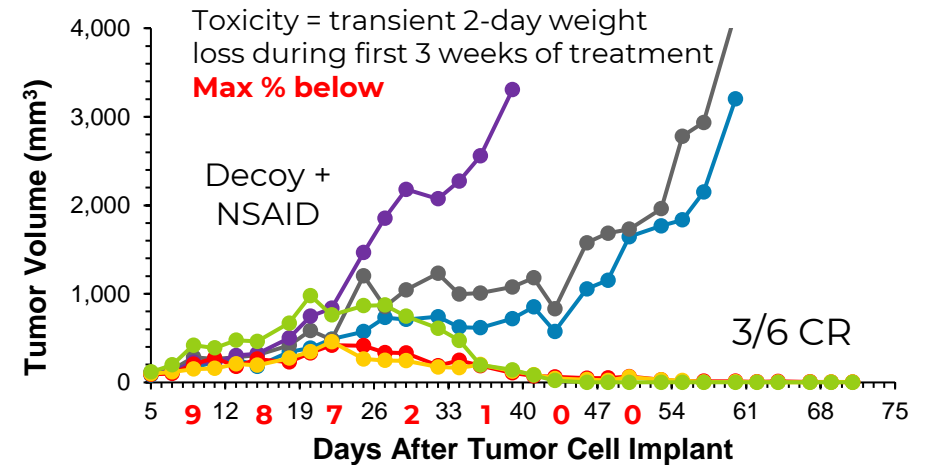
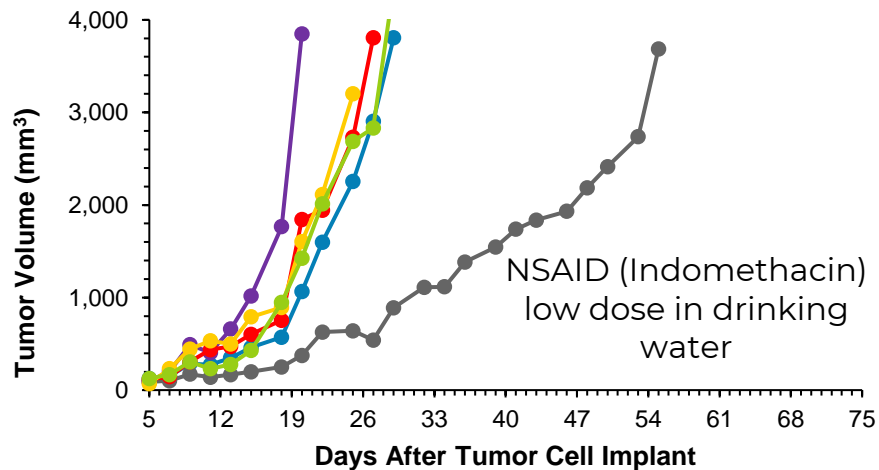
	No Treatment	Decoy $5 \times 10^7$	Gem	Decoy $2 \times 10^8$
<b>Median Survival</b>	27 Days	35 Days P<0.01	41 Days P<0.01	75 Days P<0.01

# DECOY + NON-STEROIDAL ANTI-INFLAMMATORY DRUG (NSAID) SAFELY ERADICATES SUBCUTANEOUS MOUSE HEPATOCELLULAR CARCINOMAS (HCC)

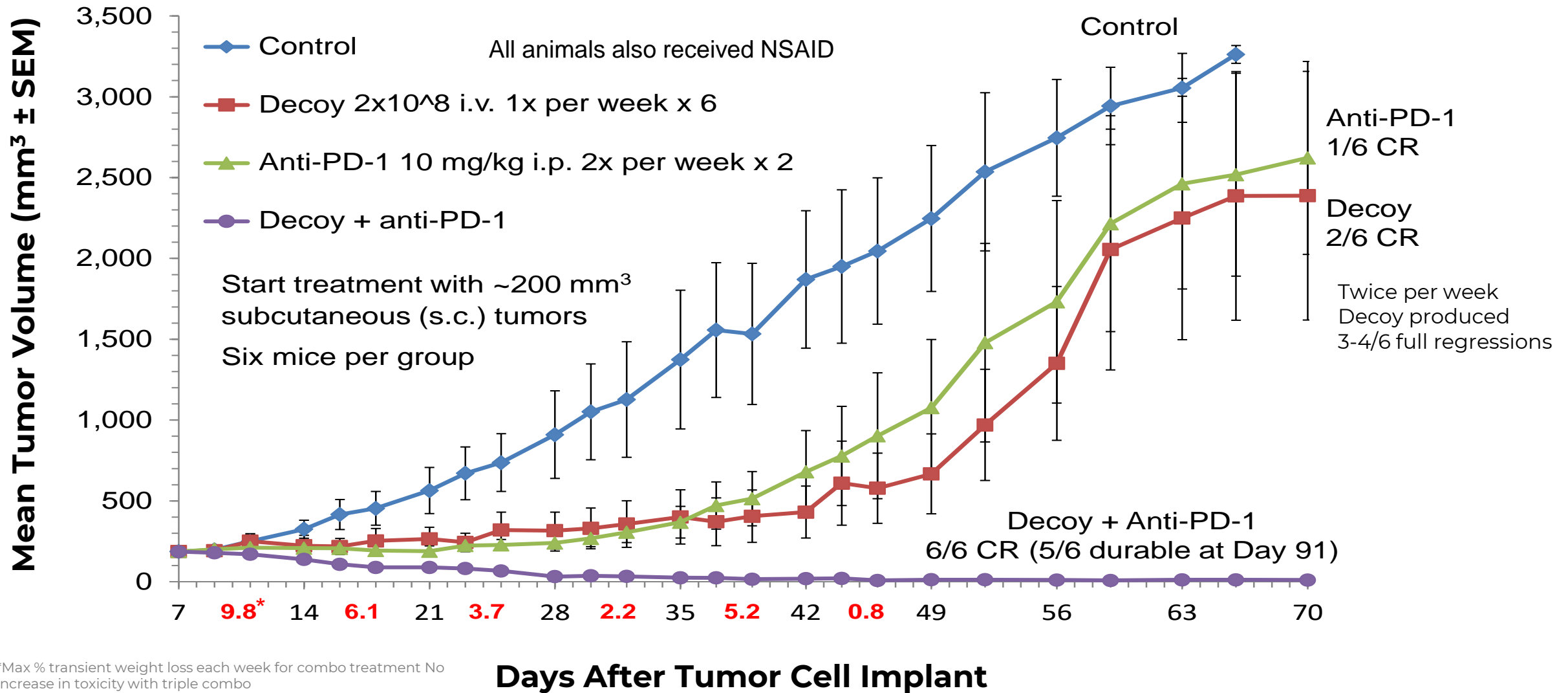
**Treat 6 mice per group with Decoy 2x per week i.v. for 7 weeks / Start treatment at 103 mm<sup>3</sup>**



**NSAIDS reduce myeloid-derived immune suppressive cells**

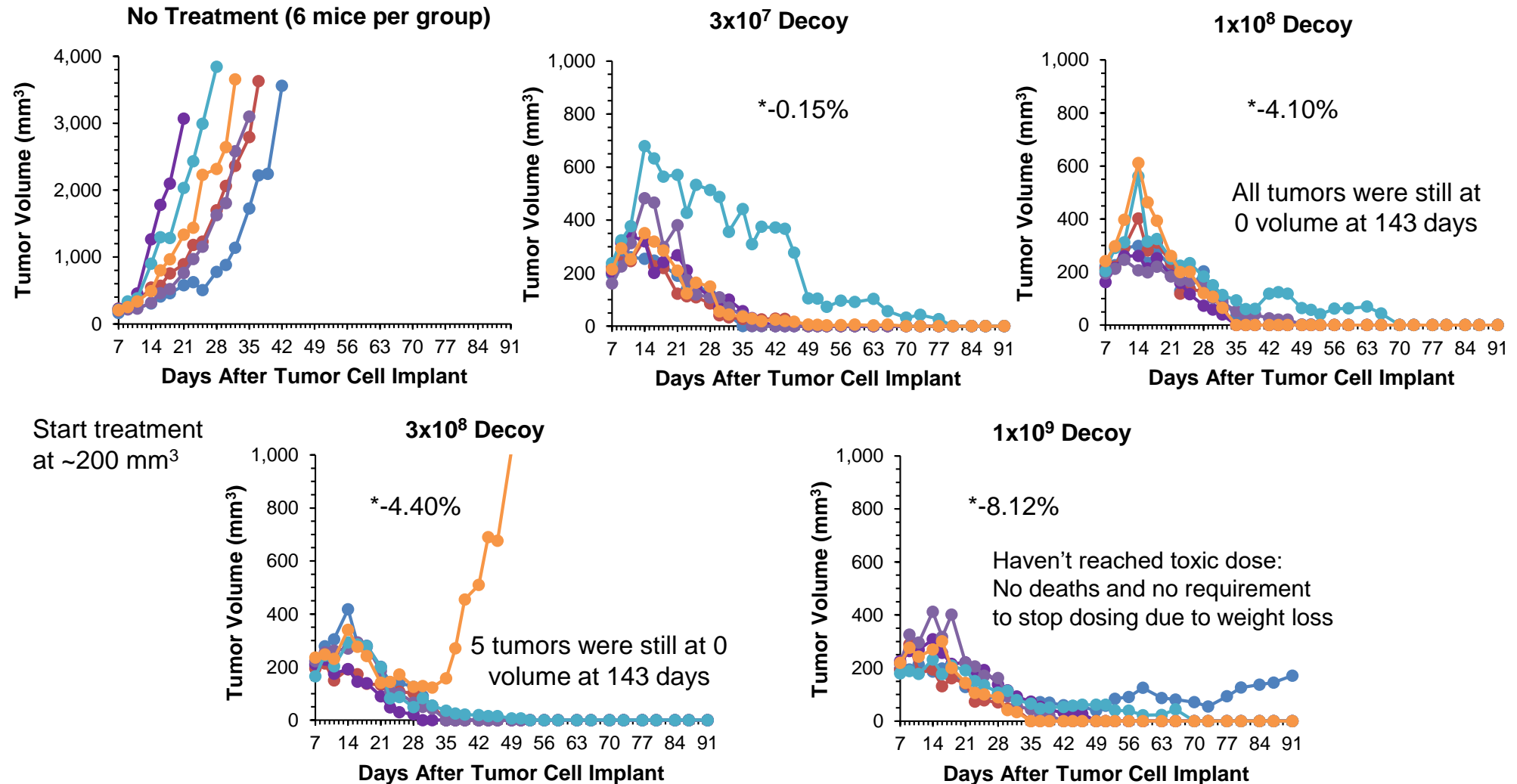


# COMBINATION WITH ANTI-PD-1 CHECKPOINT THERAPY PRODUCES UP TO 100% COMPLETE RESPONSES WITH HCC



\*Max % transient weight loss each week for combo treatment No increase in toxicity with triple combo

# SYNERGISTIC ERADICATION OF MURINE HCC EXHIBITS A VERY WIDE DECOY THERAPEUTIC INDEX ( $\geq 33$ -FOLD)



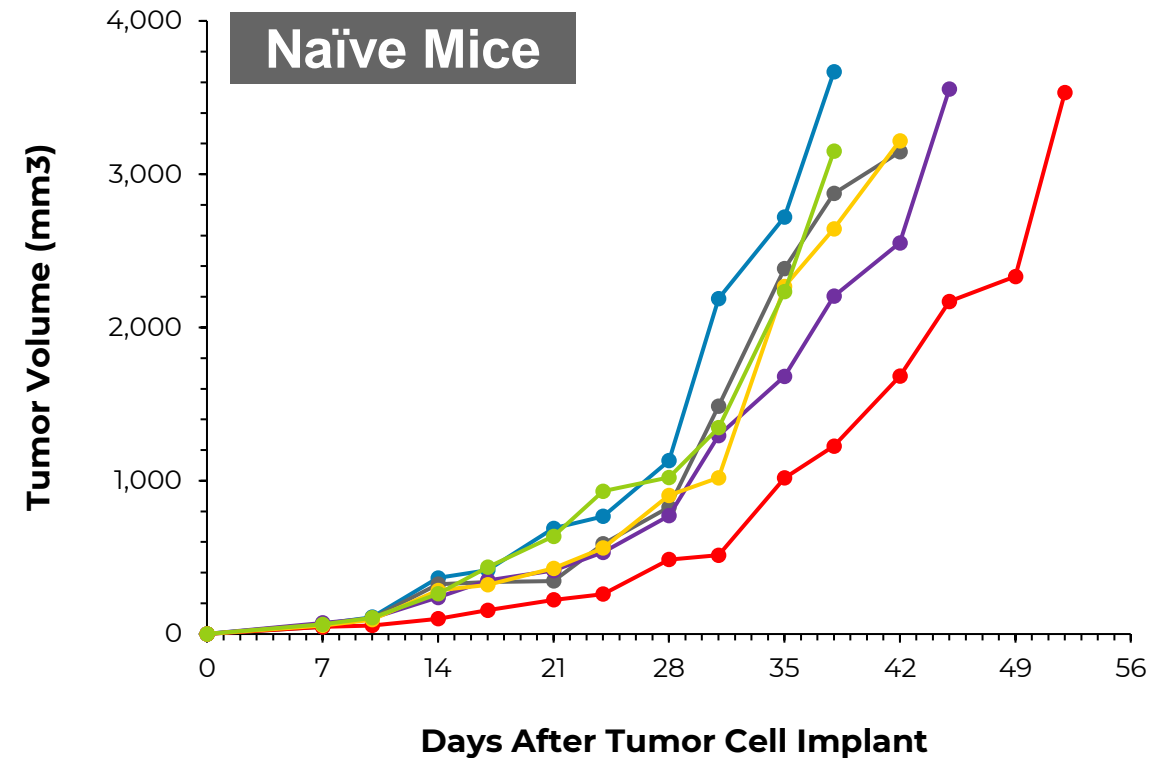
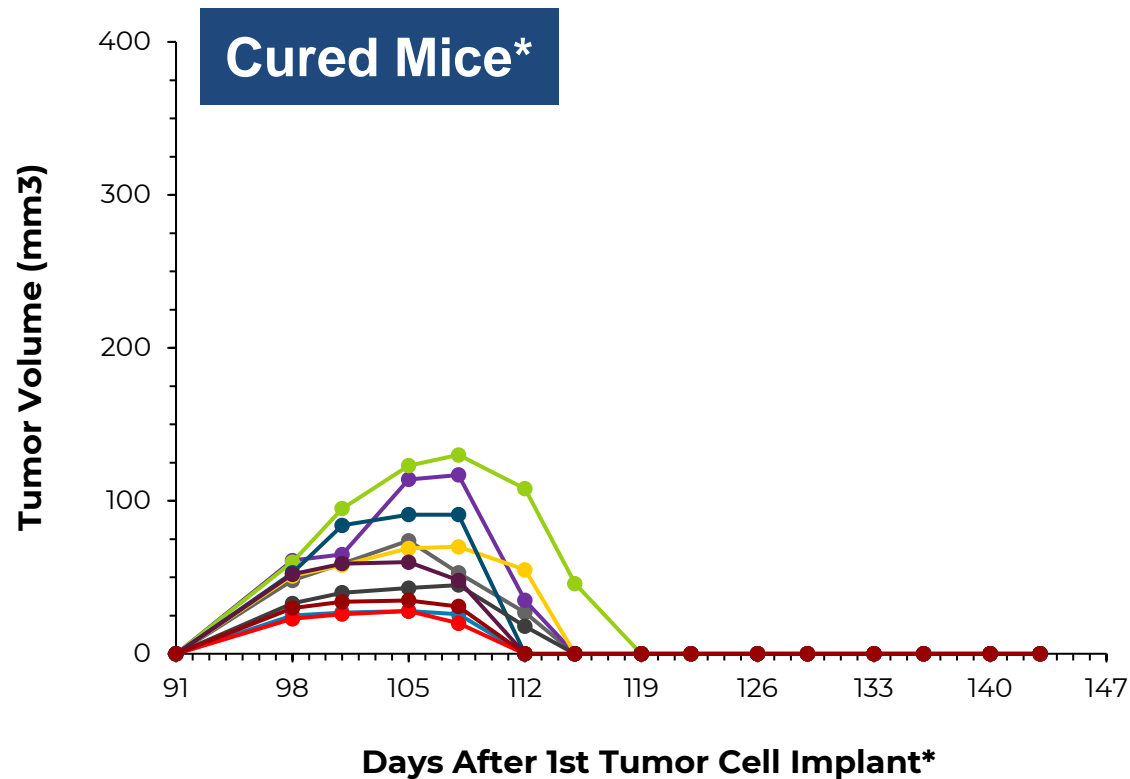
\*Maximum transient body weight loss relative to start of treatment



# MOUSE CURED BY DECOY + NSAID + CHECKPOINT INHIBITOR AND RE-CHALLENGED WITH FRESH HCC TUMOR CELLS REJECT THE TUMORS (IMMUNOLOGICAL MEMORY)

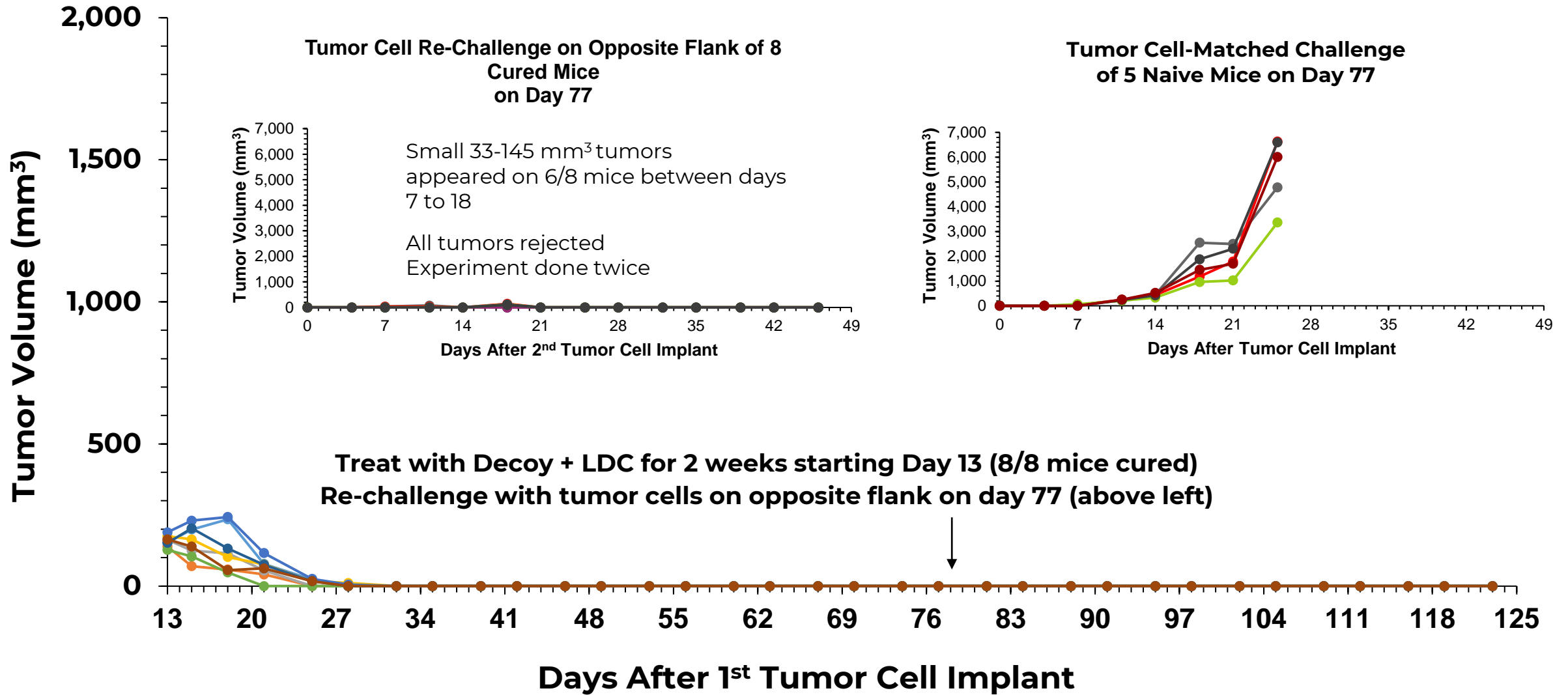
**Eleven Cured Mice were Re-Challenged with Fresh HCC Tumor Cells on Day 91 on the Opposite Flank from the First Challenge**

**Six Naïve Mice were Challenged with the Same Tumor Cells as the Cured Mice on the Same Day**



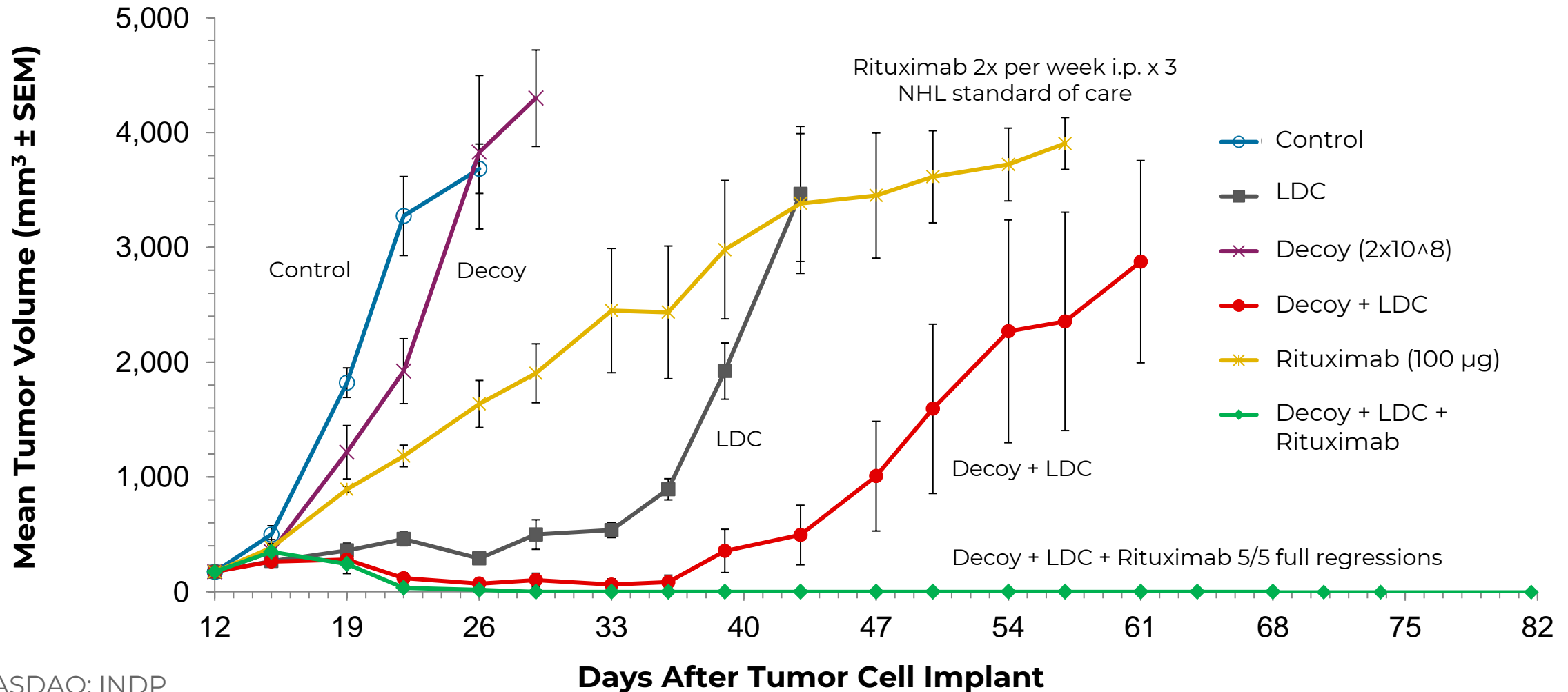
\*All 1<sup>st</sup> challenge tumor sites remained tumor-free

# MOUSE NON-HODGKINS LYMPHOMA (NHL) TUMORS WERE CURED BY DECOY + LOW-DOSE CHEMOTHERAPY AND RE-CHALLENGED WITH FRESH NHL TUMOR CELLS REJECT THE TUMORS (IMMUNOLOGICAL MEMORY)



# DECOY TECHNOLOGY ALSO REGRESSES HUMAN NON-HODGKINS LYMPHOMA TUMOR XENOGRAFTS

Treat 5 mice per group 2x per week for 3 weeks / Start treatment at 173 mm<sup>3</sup>



# POTENTIAL UTILITY AS ANTI-VIRAL THERAPY HEPATITIS B VIRUS (HBV), HIV AND OTHERS

- HBV is a chronic liver infection affecting 257 million people world-wide
  - Only 2% treated with current therapies / Major cause of cirrhosis and HCC / 887,000 deaths per year
- Cytokines have strong anti-viral activity, but single, oral TLR agonists have failed in the clinic
- Multi-TLR agonist Decoy therapy is passively targeted to liver and safely induce cytokines
- Standard pre-clinical AAV-HBV mouse model of chronic HBV carried out twice:

## Decoy Therapeutic Produces Broader Anti-HBV Activity Than Standard of Care Reverse Transcriptase Inhibitor Entecavir

	Inhibition (including for up to 6 months after cessation of treatment)					
	HBV Replication		HBe Antigen		HBs Antigen	cccDNA-Like Molecule
	Plasma	Liver	Plasma	Liver	Plasma*	Liver
Entecavir	✓					
Decoy Therapeutic	✓	✓	✓	✓	✓	✓

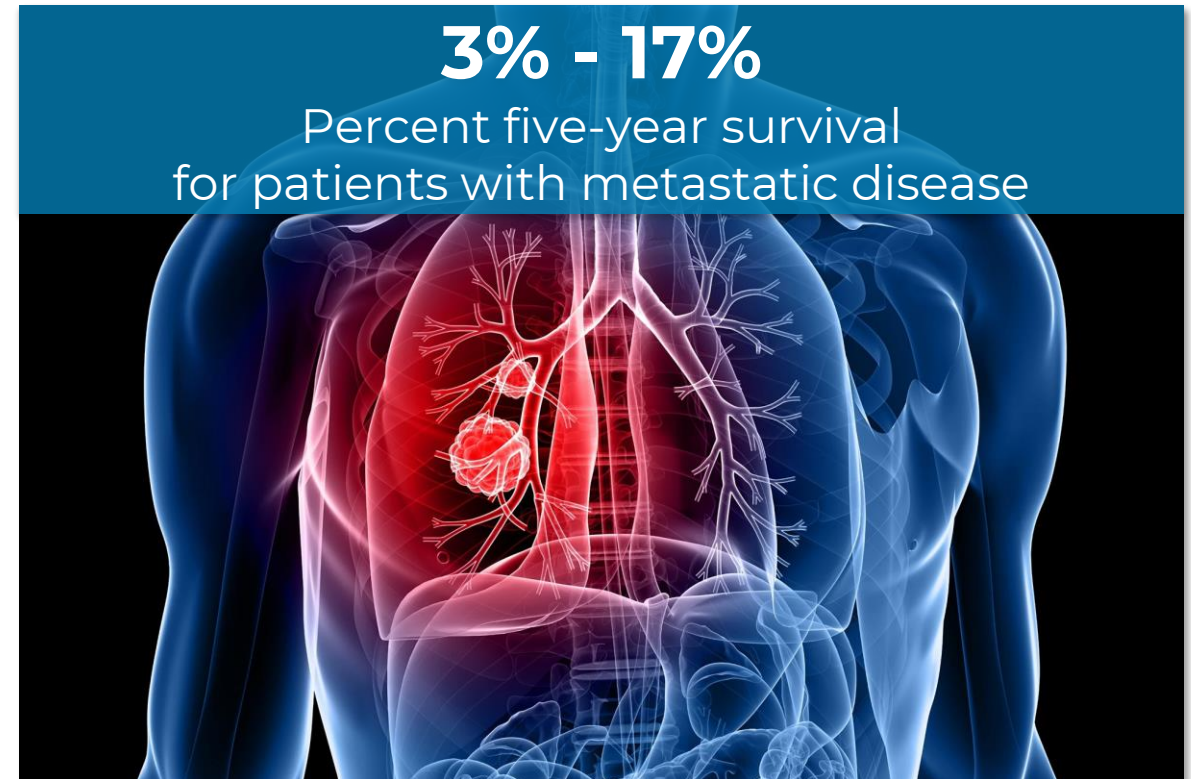
\*Mild reduction by Decoy also in liver

# TARGET INDICATIONS INCLUDE 6 OF THE WORLD'S 12 DEADLIEST CANCERS

## 12 Deadliest Cancers World-Wide (Decoy Targets)

		% of Yearly Deaths	% of Yearly Cases
1	Lung	18.4	11.6
<b>2</b>	<b>Colorectal</b>	<b>9.0</b>	<b>10.0</b>
3	Stomach	8.2	5.7
<b>4</b>	<b>Liver</b>	<b>8.2</b>	<b>4.7</b>
5	Breast	6.6	11.6
6	Esophagus	5.3	3.2
<b>7</b>	<b>Pancreas</b>	<b>4.5</b>	<b>2.5</b>
8	Prostate	3.8	7.1
<b>9</b>	<b>Cervical</b>	<b>3.3</b>	<b>3.2</b>
10	Leukemia	3.2	2.4
<b>11</b>	<b>N-H Lymphoma</b>	<b>2.6</b>	<b>2.8</b>
<b>12</b>	<b>Bladder</b>	<b>2.1</b>	<b>3.0</b>
<b>Decoy Indications % of Total</b>		<b>29.7%</b>	<b>26.2%</b>

## High Unmet Medical Need



Source: American Cancer Society



## Leadership experience in new modalities and early development

### **Jeffrey Meckler** - *Chief Executive Officer*

Jeffrey Meckler currently serves as our Chief Executive Officer, bringing more than 30 years of financial and healthcare leadership experience to the company. Most recently, Jeff was the CEO of Intec Pharma, and prior to that, CEO of Cocrystal Pharma, transforming it from a research company into a clinical and development company. He holds a B.S. in industrial management, an M.S. in industrial administration from the Tepper School of Business at Carnegie Mellon University, and a J.D. from Fordham University's School of Law.

### **Michael J. Newman, Ph.D.** - *Founder and Chief Scientific Officer*

A founder of the company, Dr. Michael Newman currently serves as our Chief Scientific Officer. Most recently, he was Founder and CEO of Decoy Biosystems, where he developed the technology that serves as the foundation of Indaptus. Michael received a Bachelor's degree in biology from the University of California at San Diego, a Ph.D. in cell and developmental biology from Harvard Medical School (National Science Foundation Pre-doctoral Fellow) and carried out post-doctoral research at Cornell University.

### **Walt A. Linscott** - *Chief Business Officer*

Walt Linscott brings three decades of global leadership, entrepreneurial and professional experience with broad business development, operational, regulatory, and transactional experience in the Life Sciences sector to his current role as Chief Business Officer at Indaptus. Most recently, he held a similar role at Intec Pharma. Walt holds a Master of Science in Experimental and Translational Therapeutics with honors from the University of Oxford, a Master's degree in Global Business from the University of Oxford and Master's degree in Entrepreneurship from Cambridge University. He earned his J.D. from the University of Dayton School of Law where he served as Managing Editor of the Law Review.

### **Boyan Litchev, MD** - *Chief Medical Officer*

Boyan Litchev, MD brings to the company more than two decades of global experience in the pharmaceutical and biotechnology industry, with significant experience in the clinical development of in vivo gene therapy, CAR-T and NK cells, oligonucleotides (mRNA), peptides, small molecules, therapies for various diseases and indications. Dr. Litchev joins Indaptus Therapeutics from Shoreline Biosciences, where he was a Senior Vice President, Head of Clinical Development, NK cell therapy for Oncology. Dr. Litchev is a board-certified physician in Obstetrics and Gynecology. Dr. Litchev received his MD degree from Medical University Plovdiv. Prior to joining the pharmaceutical industry, he has treated patients and conducted clinical research in academic settings.

### **Nir Sassi** - *Chief Financial Officer*

Nir Sassi currently serves as our Chief Financial Officer, bringing a broad skillset across management, corporate finance, due diligence, accounting, and financial analysis. Prior to joining Indaptus, Nir spent 11 years at Intec Pharma, starting as Vice President of Finance and ending his tenure there as Chief Financial Officer. He is a certified public accountant in Israel and holds a Bachelor's degree in economics and accounting from Ben Gurion University in Beer Sheva, Israel.

# EXPERIENCED BOARD OF DIRECTORS

## Leadership experience in new modalities and early development

### Roger J. Pomerantz, M.D. - *Chairman*



### Anthony J. Maddaluna - *Director*



### W. Brad Hayes - *Director*



### Mark Gilbert - *Director*



### Hila Karah - *Director*



### Brian O'Callaghan - *Director*



### Michael Newman - *Founder, CSO, Director*



### Jeffrey Meckler - *CEO, Director*





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