



**aulos**

**UNLOCKING CURATIVE POTENTIAL**

**A New Approach to Harnessing IL-2  
to Fight Cancer**

**Aron Knickerbocker**  
President and CEO

**APRIL 2024**

← **Treg**  
Immune suppression

IL-2 traffic  
**HEAVY**  
toward Tregs



**Effector** →  
Immune activation

ADOPT-A-HIGHWAY  
**aulos**

← **Treg**  
Immune suppression

Use AU-007  
intelligent GPS  
to reroute IL-2  
to the desired  
destination



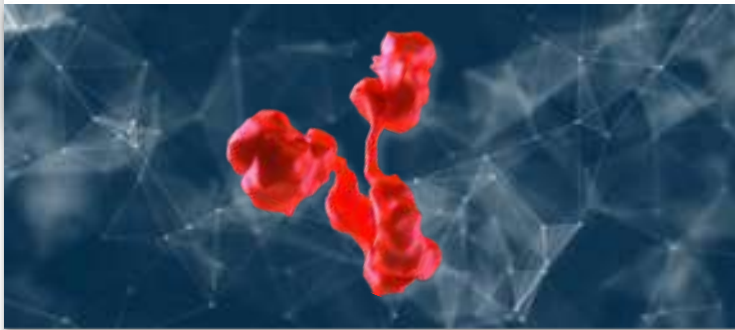
**Effector** →  
Immune activation

ADOPT-A-HIGHWAY  
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# Highly Differentiated Approach for Targeting IL-2 in Immuno-Oncology

## ENABLED BY ARTIFICIAL INTELLIGENCE

- AU-007, a monoclonal antibody created by Biologic Design's innovative artificial intelligence (AI) antibody design platform



## FOCUSED APPROACH

- Addressing high unmet need in solid tumors
- Phase 2 (US and Australia)
- Safe and well tolerated
- Only IL-2 agent to **lower Tregs**
- Evidence of anti-tumor activity



## POSITIONED FOR SUCCESS

- Accomplished and experienced leadership team
- \$60M in Total Series A funding from ATP
- Unique competitive advantages
- Multi-indication potential



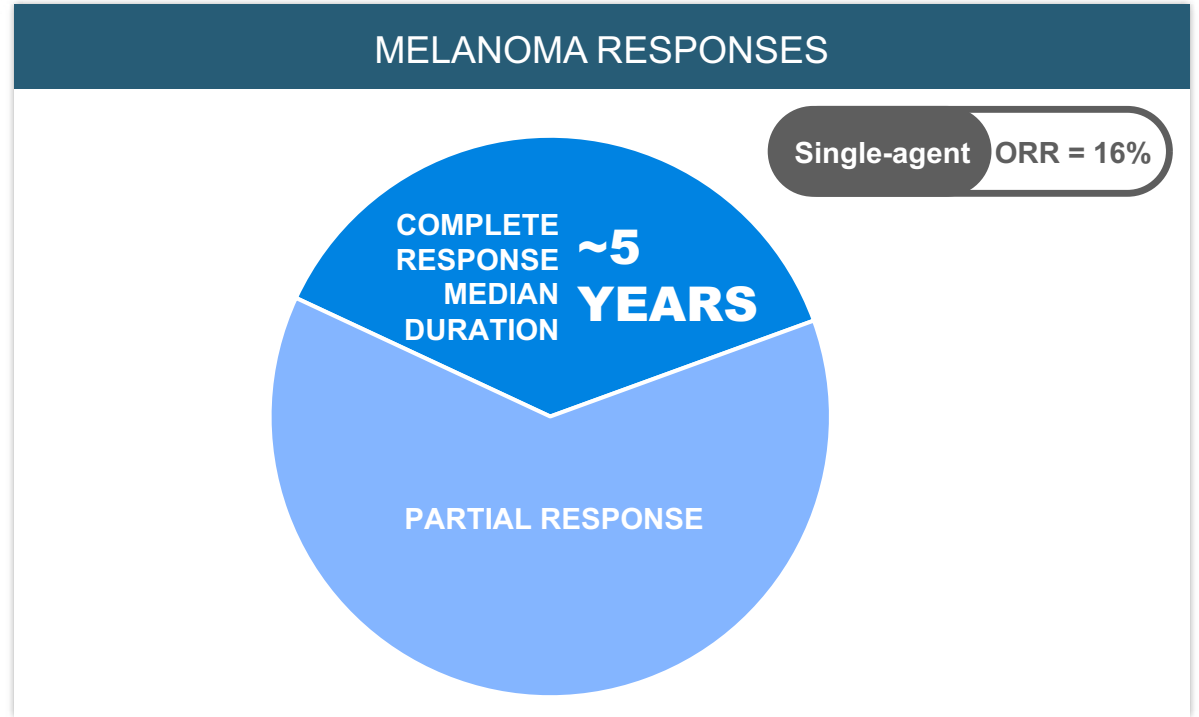
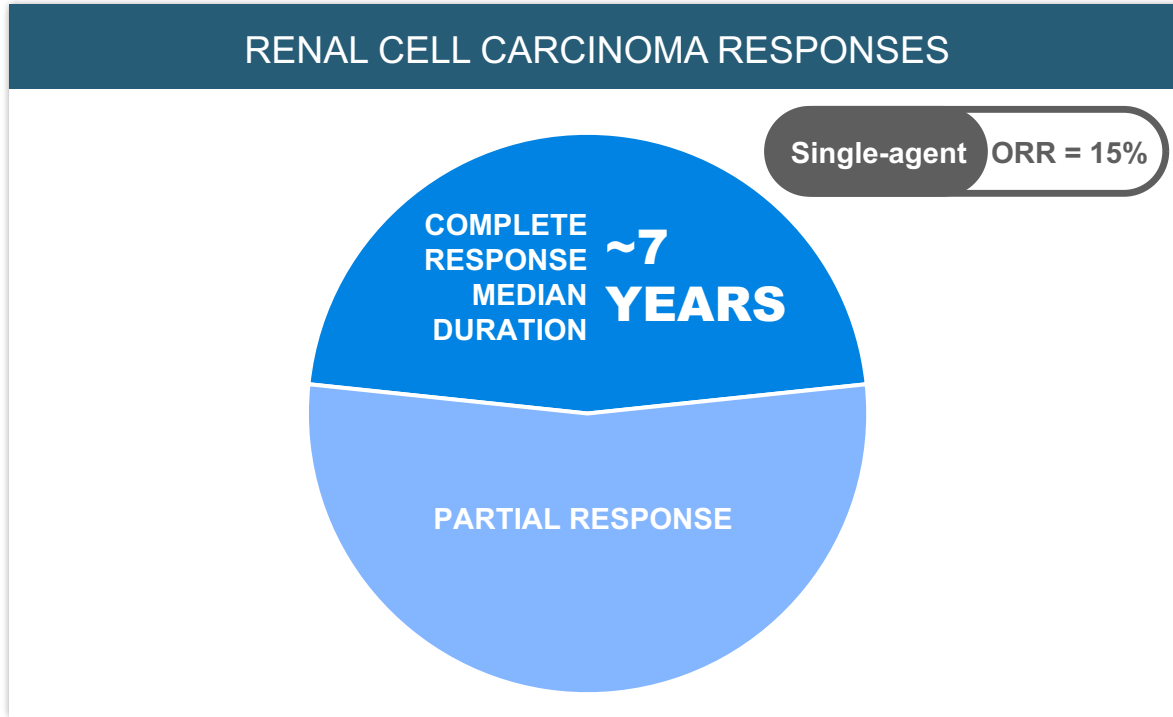


## IL-2: A HISTORICALLY ELUSIVE POWER

Potent Immune Attack and Memory Against Cancers

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# Why Is IL-2 So Compelling? When Proleukin® (Recombinant Human IL-2) Works, It Can Really Work, Leading to Durable, Complete Responses as a Single Agent



IL-2

- Remarkable in its ability as a single agent to initiate an anti-tumor attack and generate **immune memory** of the tumor, sometimes leading to profoundly long-lasting complete responses
- Rarely used due to its significant toxicity that limits how much patients can receive, and likely constrains efficacy
- If IL-2's therapeutic index could be widened, Aulos believes that it has clinical potential akin to the PD-(L)1 checkpoint inhibitors

# IL-2: Current Limitations

- Natural IL-2 is endogenously produced at low concentrations and suppresses, more than activates, the immune system because it binds to and activates regulatory T cells (Tregs), which express high-affinity receptors
- Therefore, effective treatment with IL-2 historically required very high doses to activate effector T cells, leading to an extremely toxic side effect profile, including:
  - Cytokine storms
  - Increased risk of pulmonary edema and blood vessel leakage
- IL-2 mimetics, variants, pegylated and fusion proteins
  - Create a **negative feedback loop**: the IL-2 mimetic triggers the secretion of more endogenous IL-2, tipping the balance and leading to **Treg expansion** and suppression of the very immune response that the treatment was meant to activate
  - Have an increased **risk of immunogenicity** (anti-drug antibodies)

“*IL-2 therapy has a poor safety profile and restricted efficacy in only a fraction of patients.*”

*Klatzmann D et al., 2015*

## IL-2 IS A “DOUBLE-EDGED SWORD”



Both suppressing and activating the immune system with many therapeutic challenges

# Aulos Accurately Predicted the Current Inadequacies of the IL-2 Competitive Landscape

Based on observations of preclinical and clinical data, we predicted in late 2021 that next generation IL-2 agents would have limited efficacy and bempeg would fail broadly.

## Next generation IL-2 agents:

Have only been able to achieve very low IL-2 equivalent blood concentrations

Do not prevent the negative feedback loop to immunosuppressive Tregs, resulting in **Treg expansion**

Have demonstrated no or limited single-agent clinical activity, and weak or worse combination activity

WHY?



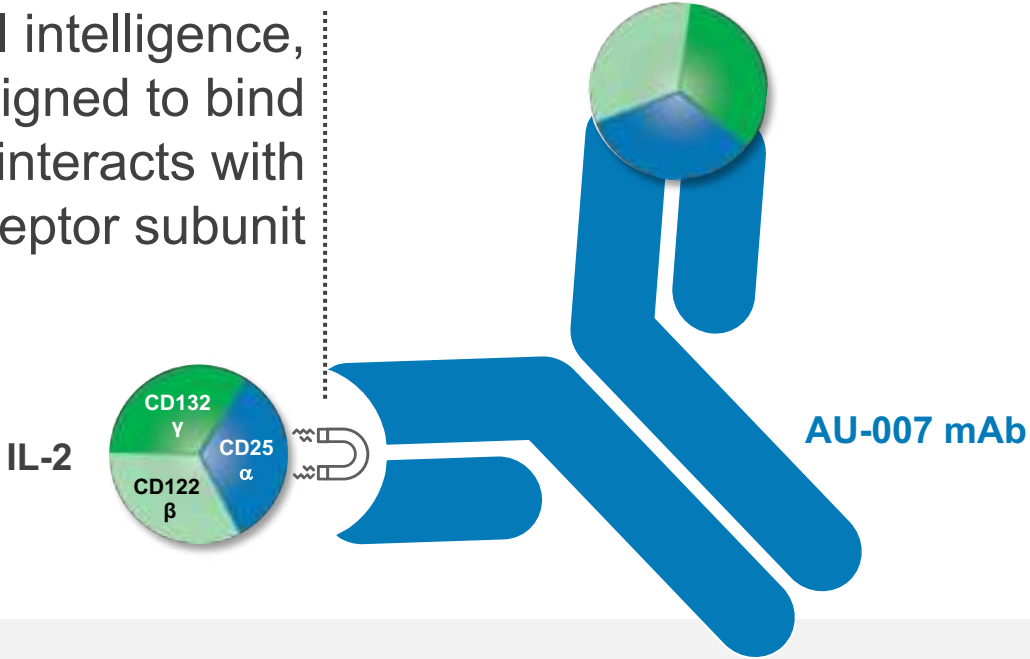


AU-007, Human Monoclonal Antibody That Redirects IL-2  
Best-in-Class Potential for Immune-Sensitive Solid Tumor  
Treatment

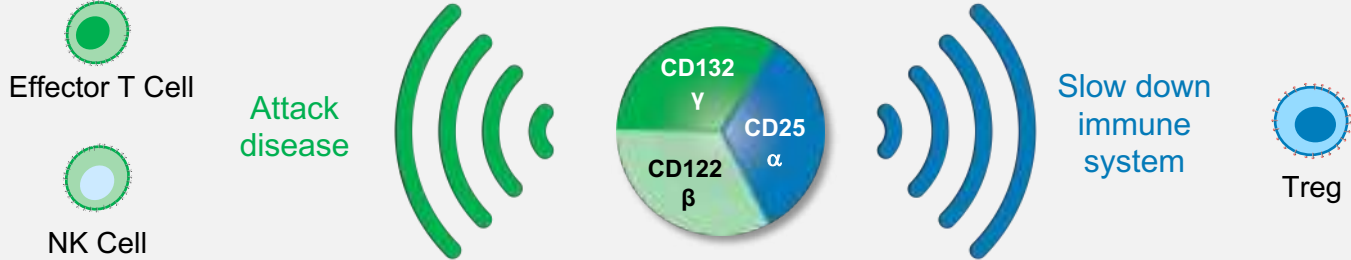
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# AU-007 mAb Mechanism of Action Unlike Any Other IL-2 Therapy in Development

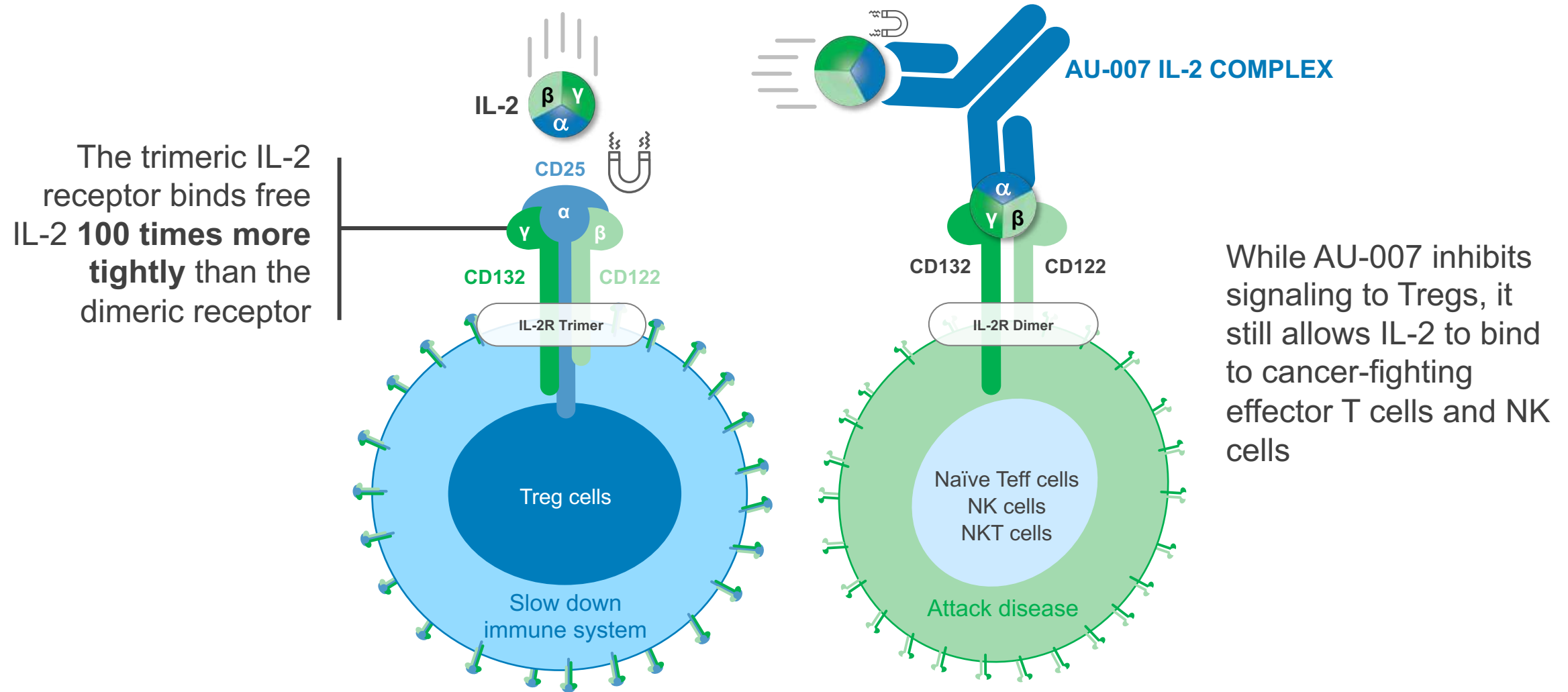
Using artificial intelligence, AU-007 has been designed to bind to the part of IL-2 that interacts with the **alpha (CD25)** receptor subunit



## IL-2 SIGNALS IMMUNE CELLS

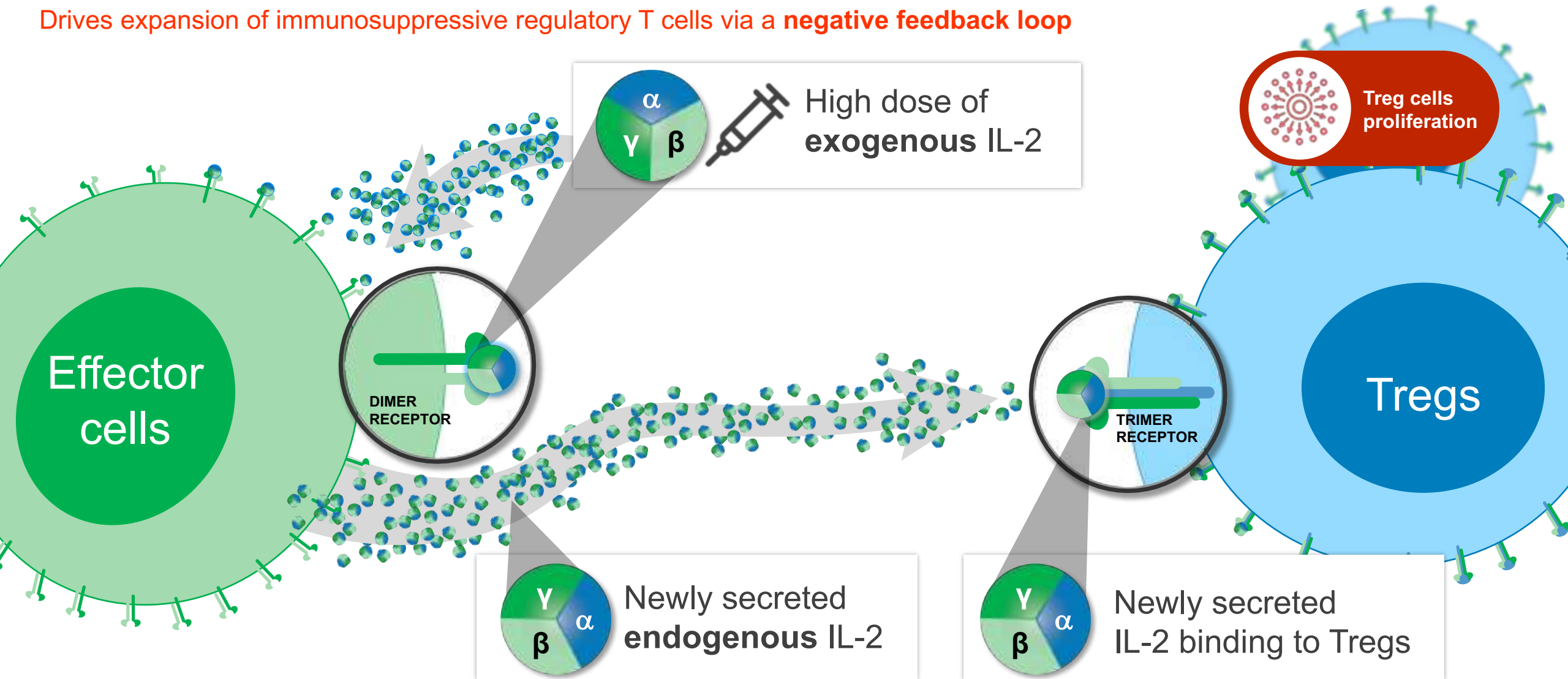


# Closer Look At Why AU-007's MOA Is Unique



# Exogenous IL-2 Therapies, Even “Non-Alpha” Therapies, Lead to Production of Endogenous IL-2 by Activated Effector Cells

Drives expansion of immunosuppressive regulatory T cells via a **negative feedback loop**



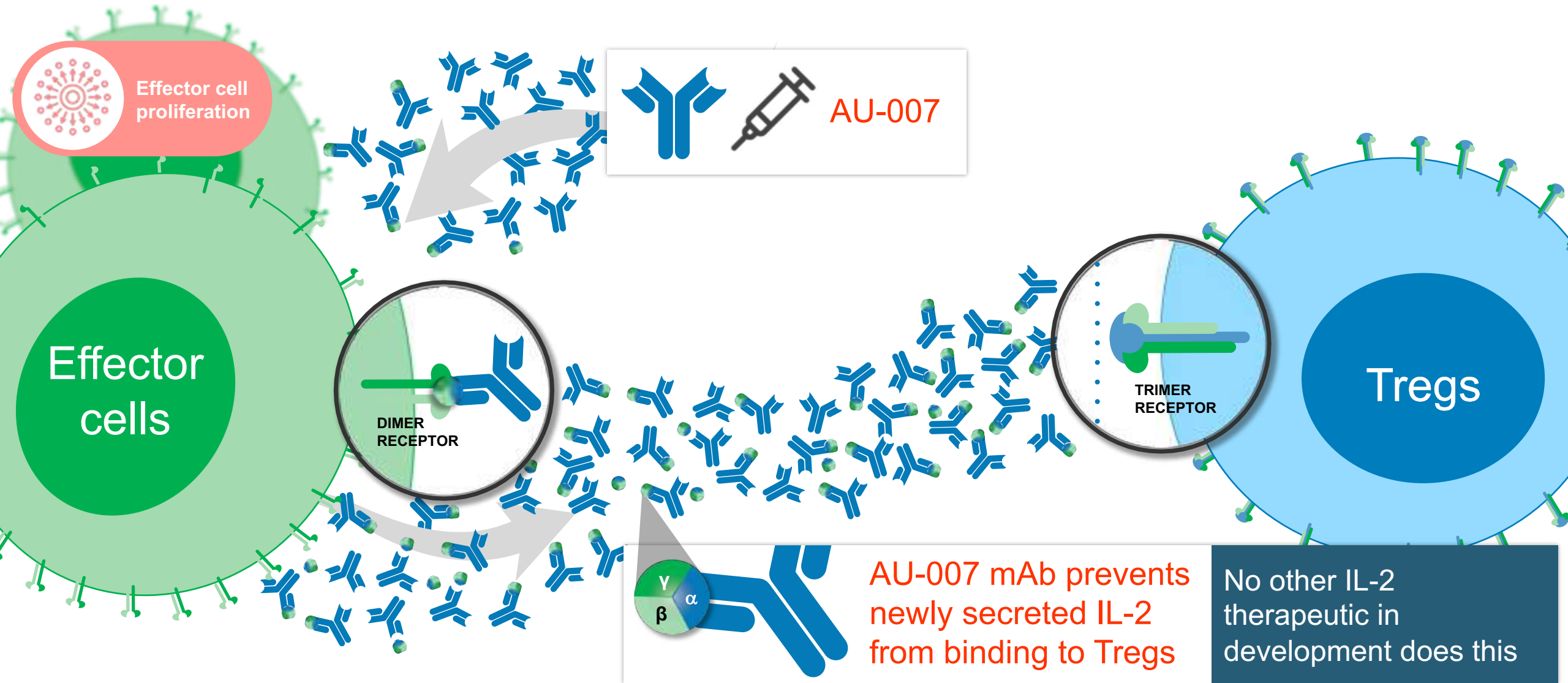
# While AU-007 Reduces Peripheral Tregs ~50-70%, Competing Products All Drive the Expansion of Immunosuppressive Tregs

DRUG/PROGRAM	COMPANY	ISSUE(S)
<b>THOR-707</b> <i>Pegylated IL-2</i>	<i>Sanofi</i>	After first dose: increased peripheral blood Tregs up to 3.5 times <sup>1</sup>
<b>Bempegaldesleukin</b> <i>Pegylated IL-2</i>	<i>Nektar/BMS</i>	27-fold increase in peripheral blood Tregs <sup>2</sup>
<b>ANV419</b> <i>IL-2 fusion to antibody</i>	<i>Anaveon</i>	~2-fold expansion of Tregs <sup>3</sup>
<b>Nemvaleukin alfa</b> <i>IL-2 fusion to CD25</i>	<i>Mural (formerly Alkermes)</i>	~2-fold expansion of Tregs <sup>4</sup>
<b>MDNA11</b> <i>Albuminated IL-2 superkine</i>	<i>Medicenna</i>	8.5-fold increase in peripheral blood Tregs <sup>5</sup>
<b>WTX-124</b> <i>Masked IL-2</i>	<i>Werewolf</i>	Tregs rise, fold change not reported <sup>6</sup>
<b>STK-012</b> <i>Artificial cytokine mutein</i>	<i>SyntheKine</i>	5-fold increase in peripheral blood Tregs <sup>7</sup>

One Treg can inhibit ~10 cancer-fighting effector T cells<sup>8</sup>

Source: 1. AACR 2021 poster 2. ASCO 2017 poster 3. SITC 2022 poster 4. ASCO 2021 poster 5. Medicenna 2024 AACR presentation 6. November 3, 2023, analyst call 7. SyntheKine 2024 AACR presentation 8. Estimate derived from literature

# AU-007 Uniquely Tips Balance Toward Immune Activation, Away From Immune Suppression by Blocking Negative Feedback Loop to Tregs





Rapidly Advancing Clinical Development of AU-007

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# Summary of Clinical Program and Recent Initiation of Phase 2

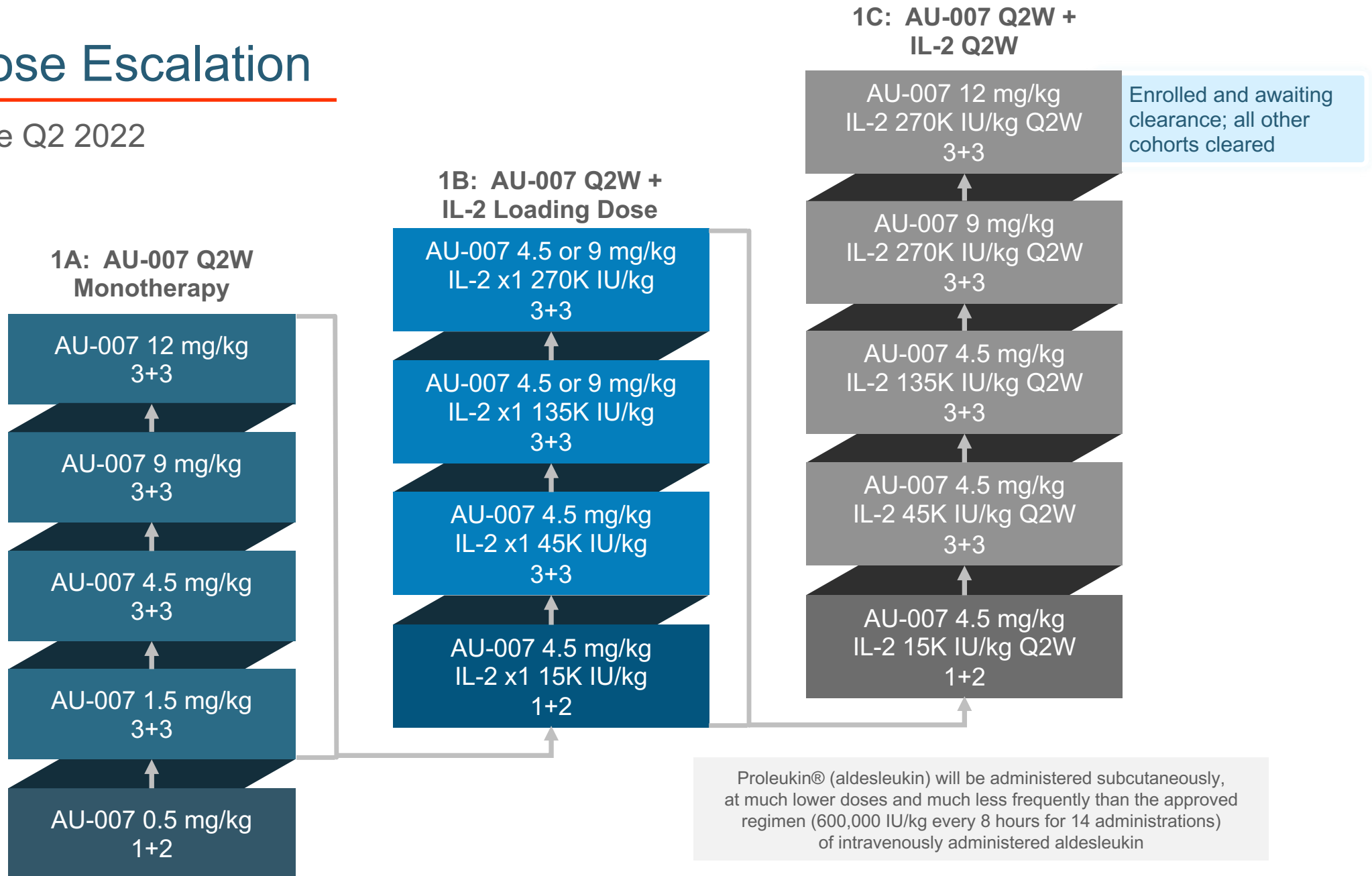
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- **Stable disease/objective response results in Proleukin<sup>®</sup> (aldesleukin)-containing arms (1B and 1C)**
  - Profound tumor shrinkage in patient with metastatic melanoma who had progressed on two checkpoint inhibitor regimens
  - Tumor shrinkages also observed in NSCLC, renal cell carcinoma, bladder, head & neck (nasopharyngeal), colorectal
  - Additional anti-tumor activity seen since SITC Annual Meeting in November 2023
- **Excellent safety profile; mostly low-grade AEs related to IL-2 MOA and evidence of immune activation**
- **Pharmacodynamic data show increased immune activation with addition of low-dose, subcutaneous Proleukin<sup>®</sup>**
- **Current status**
  - Phase 2 cohort opened with single administration low-dose, subcutaneous of Proleukin<sup>®</sup>
    - Second-line melanoma and second-/third-line RCC
    - 9 mg/kg AU-007 plus single dose of Proleukin<sup>®</sup> at 135,000 IU/kg
    - Allows for additional dose(s) of Proleukin<sup>®</sup> upon tumor growth (boost dosing)
  - Phase 2 cohort opened with Q2W low-dose, subcutaneous Proleukin<sup>®</sup> regimen
    - Second-line melanoma and second-/third-line RCC
    - 9 mg/kg AU-007 plus Q2W Proleukin<sup>®</sup> at 135,000 IU/kg
- **High enthusiasm and engagement from sites and investigators**



# Phase 1 Dose Escalation

Dosing began late Q2 2022



# Clinical Development: Speed to Proof of Concept

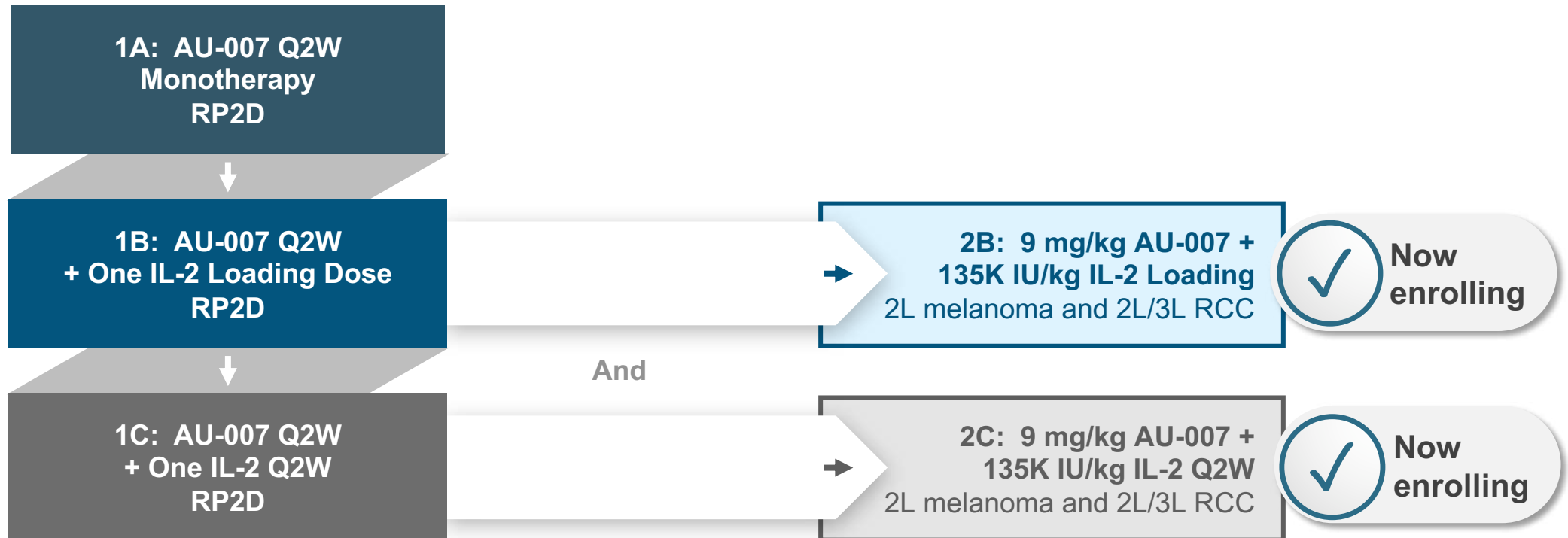
## Now Enrolling in Phase 2 in Melanoma and RCC With Two IL-2 Schedules

### AU-007 Phase 1 Dose Escalation

Australia initially; IND cleared October 2022

### Phase 2 Expansion Cohorts

Australia & US



# Phase 1 Dose Escalation Data Presented at SITC 2023: Safety by Type of Adverse Event

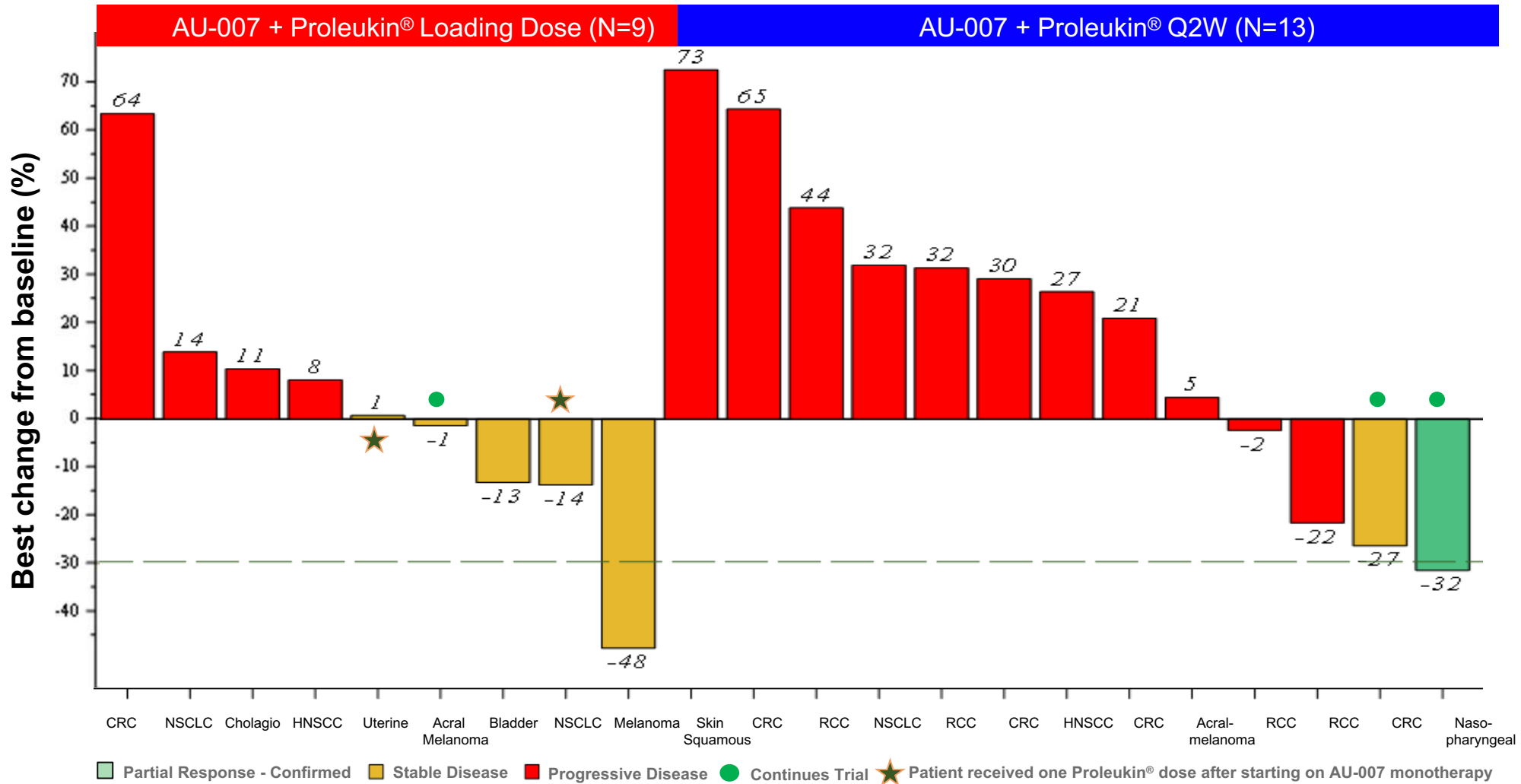
Drug-related AEs in > 5% of patients n=42		
Adverse Event	Grade 1 or 2 n (%)	Grade 3 or 4 n (%)
Fatigue	7 (17)	0
Nausea	6 (14)	0
Pyrexia	5 (12)	0
Chills	4 (10)	0
Vomiting	3 (7)	0
Lymphopenia	0	3 (7)

- 1 patient with Grade 3 lymphopenia, 2 with Grade 4 – all transient (3-7 days)
- No DLTs; 1 Related SAE – Grade 2 cytokine release syndrome (CRS) in Arm 1C Cohort 3

All drug-related AEs were Grade 1 or 2 except for 3 patients receiving AU-007 + aldesleukin with transient (3-7 day) Grade 3 or 4 lymphopenia that were not associated with adverse outcomes. Transient lymphopenia is a known effect of IL-2 treatment as lymphocytes traffic out of blood and into tissue. No patients discontinued for a drug related adverse event; no DLTs observed.

# Phase 1 Dose Escalation: AU-007 + Proleukin®: Best Response in Immune-Sensitive Tumors

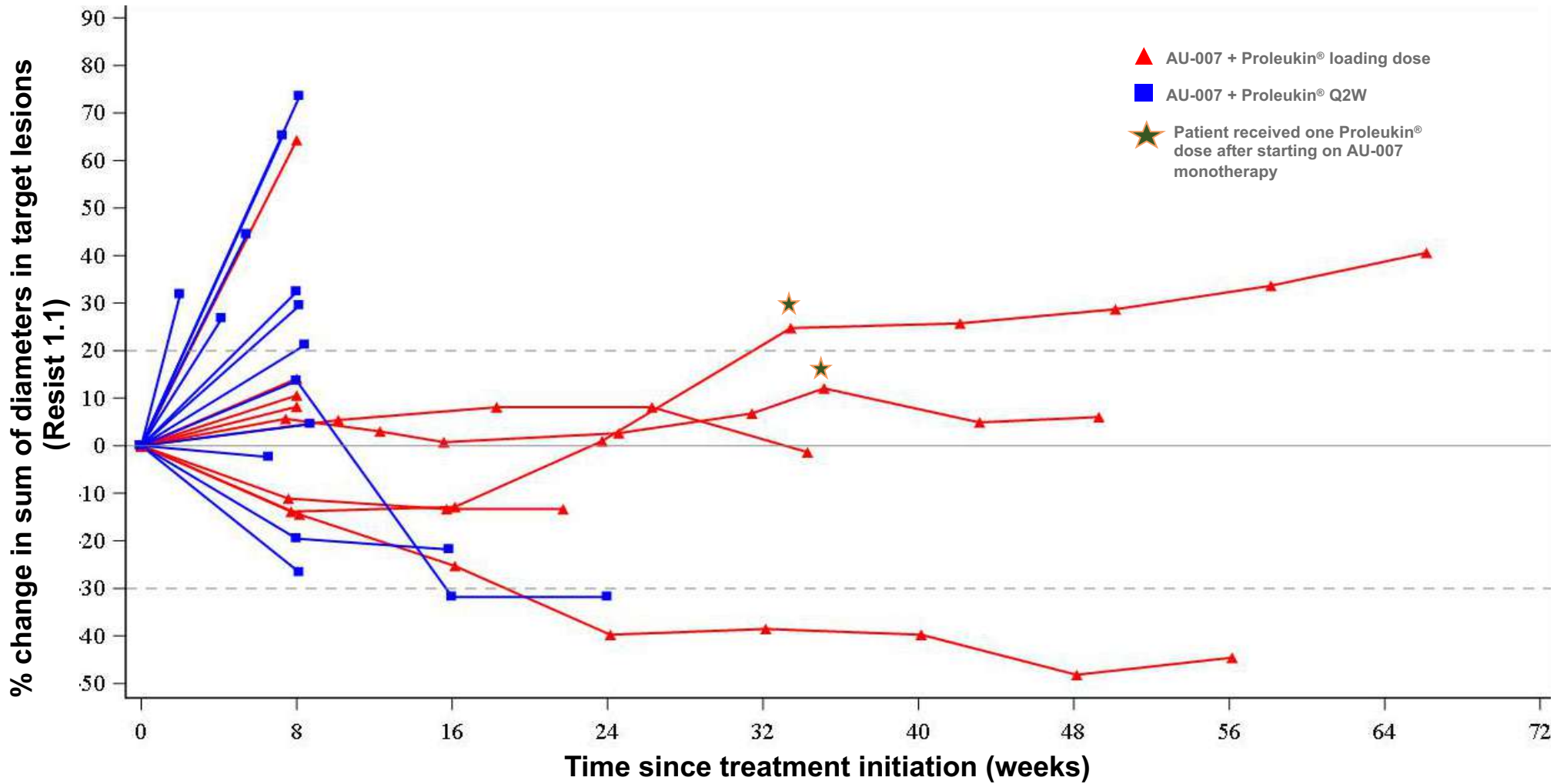
ALL RESPONSE EVALUABLE PATIENTS EXCLUDING PANCREATIC CANCER WHO RECEIVED AU-007 + PROLEUKIN®



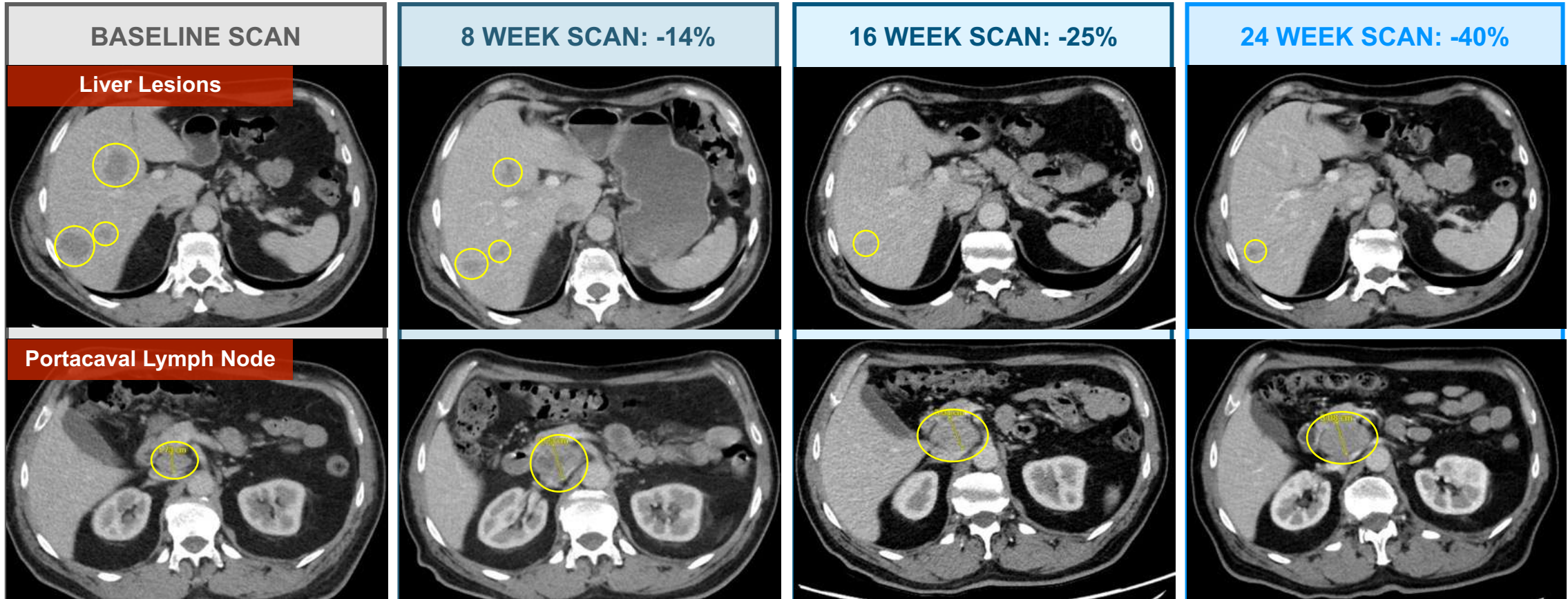
Not shown on graph: Patient with bladder cancer with non-measurable disease (non-target lesions only) whose cancer-thickened bladder wall has thinned substantially. Patient is in 1B cohort that received 4.5 mg/kg AU-007 + one dose of 45K IU/kg IL-2 and remains on study.

# AU-007 + Proleukin®: Percentage Change vs. Baseline Over Time

ALL RESPONSE EVALUABLE PATIENTS EXCLUDING PANCREATIC CANCER WHO RECEIVED AU-007 + PROLEUKIN®

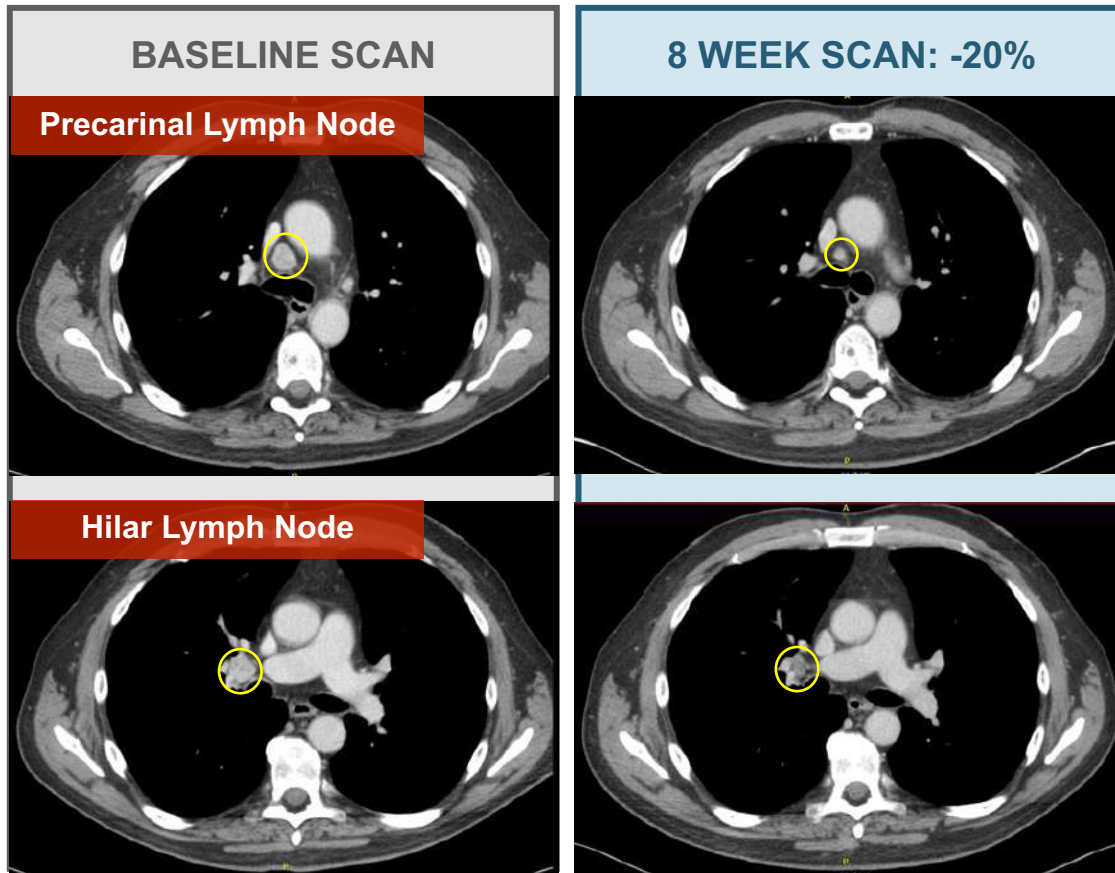


# SITC 2023: 40% Tumor Shrinkage in the Target Lesions of a Patient Whose Melanoma Progressed Through Prior Anti-PD-1 + CTLA4 Therapy



- 62-year-old man with progression in the liver, December 2022
- February 2023, initial Q2W AU-007 (4.5 mg/kg) dose + one (and only) 15K IU/kg Proleukin® dose administered
- Initial portacaval LN growth with necrotic center followed by stabilization may represent pseudoprogression

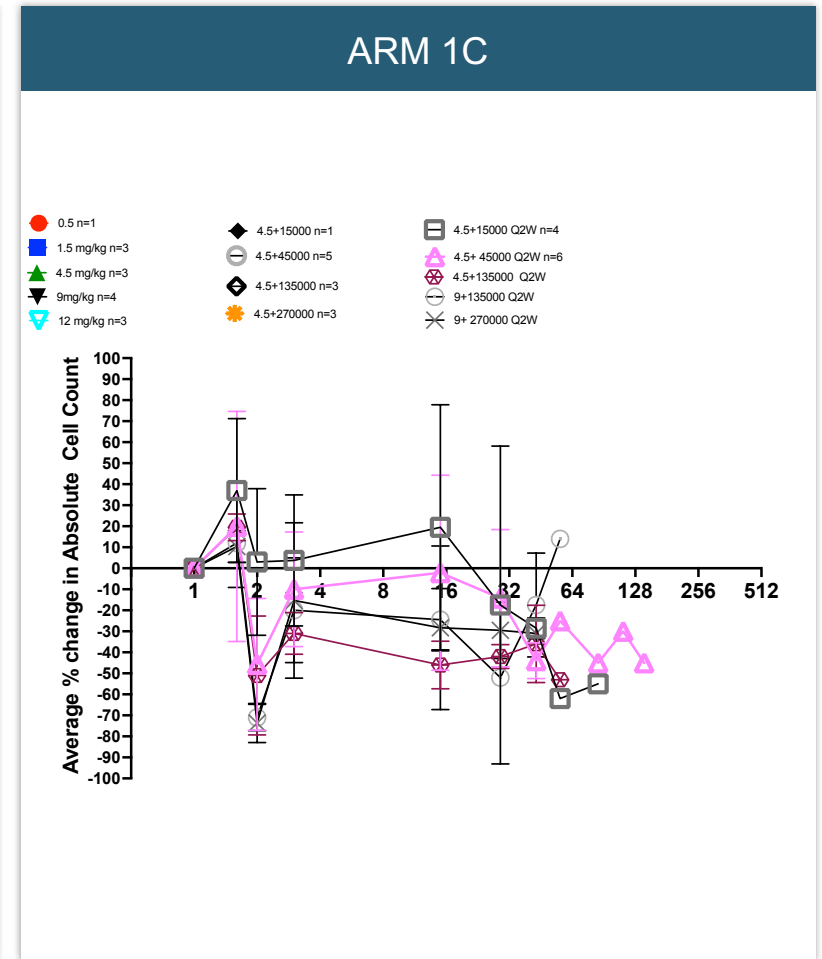
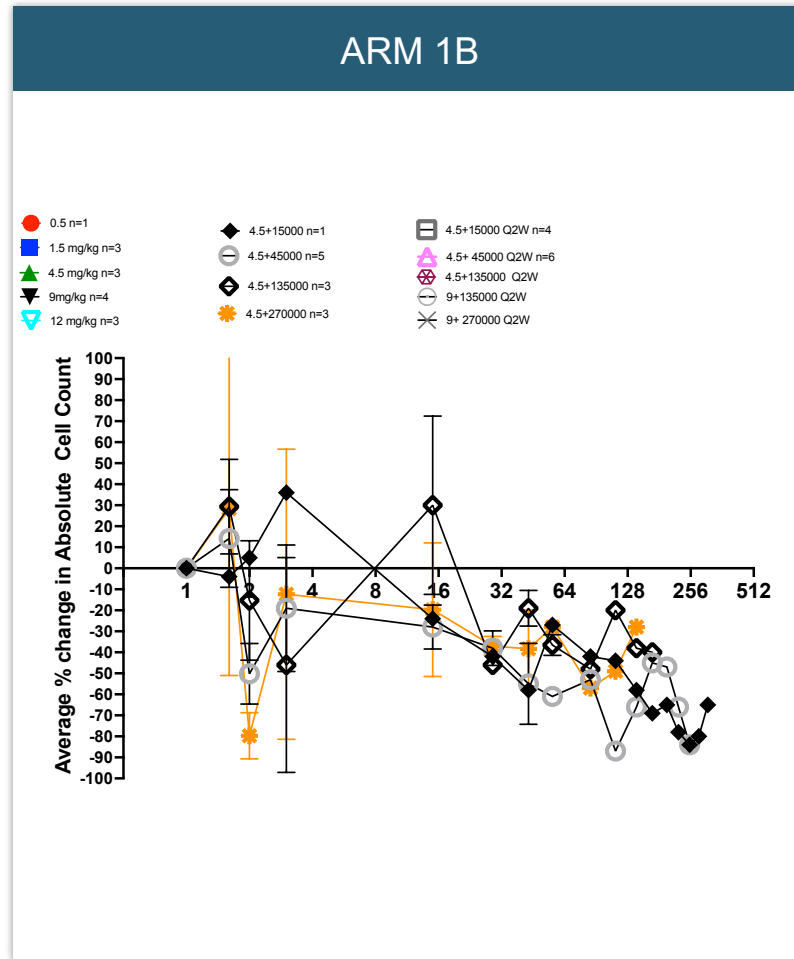
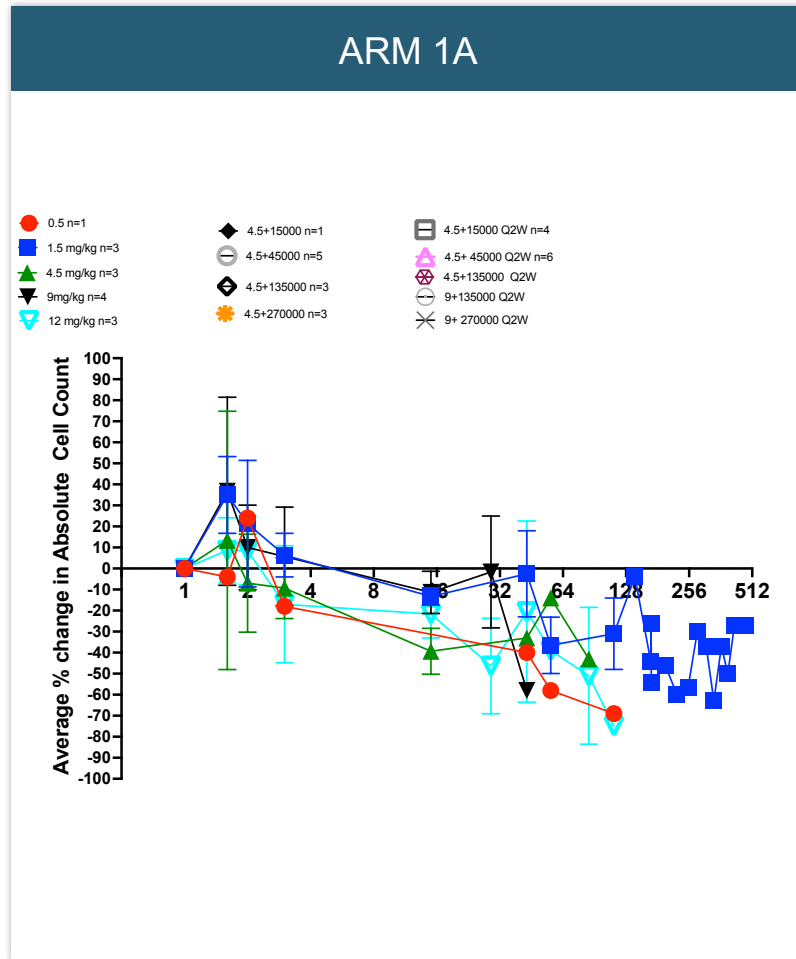
# SITC 2023: 20% Tumor Shrinkage in First 8 Weeks in the Target Lesions of a Patient Whose RCC Progressed Through Prior Anti-PD-1 Therapy



- 68-year-old man progressed on anti-PD-1 treatment June 2022
- July 2023, initial AU-007 (4.5 mg/kg) + 15K IU/kg Q2W Proleukin®
- The primary renal cancer remains *in situ* and was stable

# Pharmacodynamics: AU-007 Continues to Demonstrate Decrease in Tregs at Any Proleukin® IL-2 Dose Level

Completely unique profile in the IL-2 therapeutic class

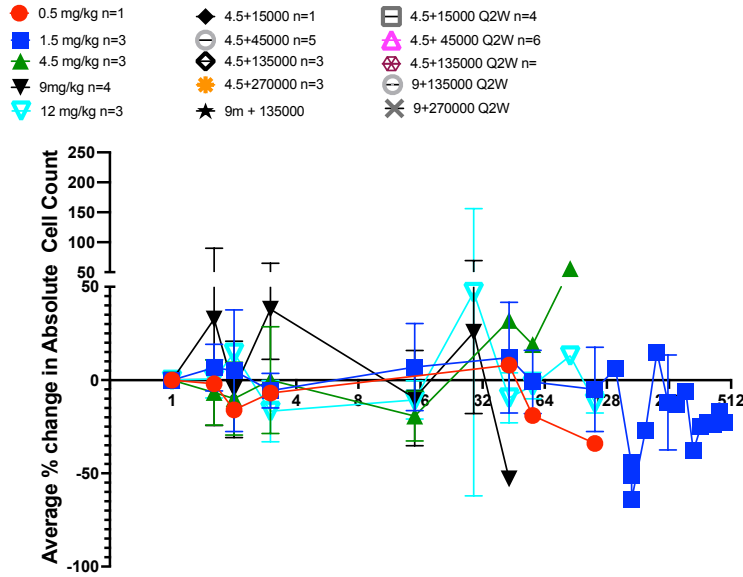


X axis = Days

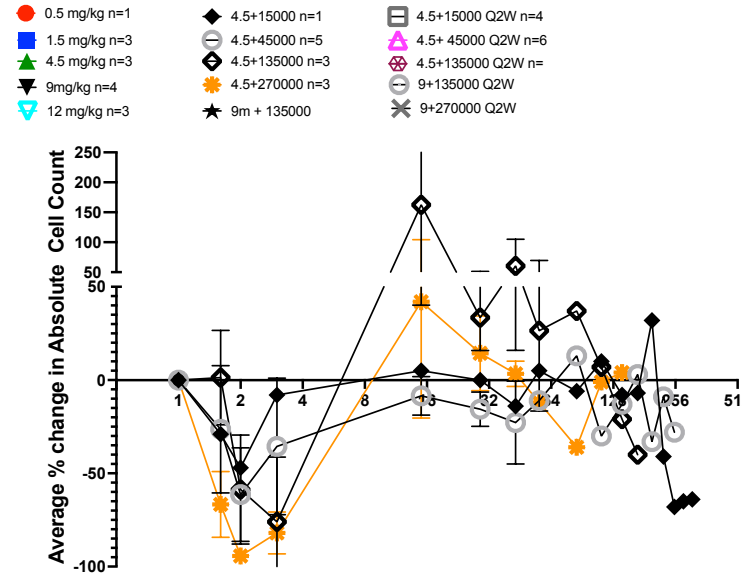


# AU-007 Dose Escalation: Peripheral CD8 Cell Increases by Study Arm

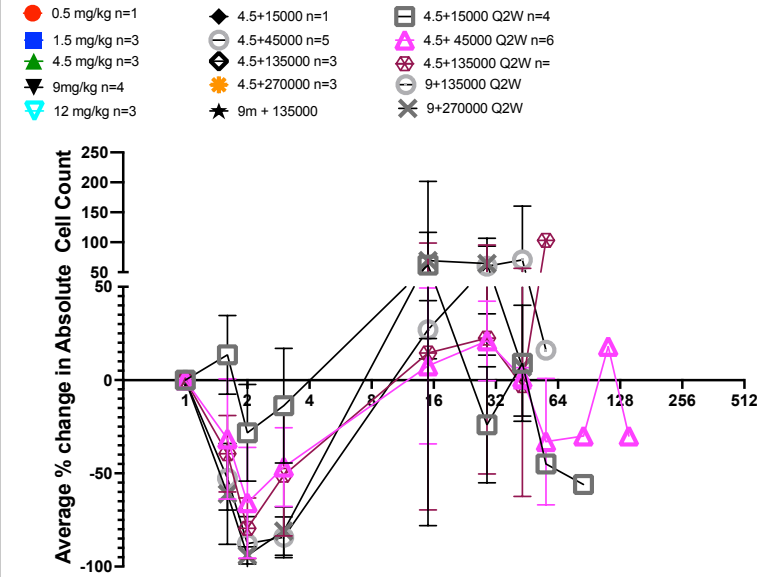
ARM 1A



ARM 1B



ARM 1C

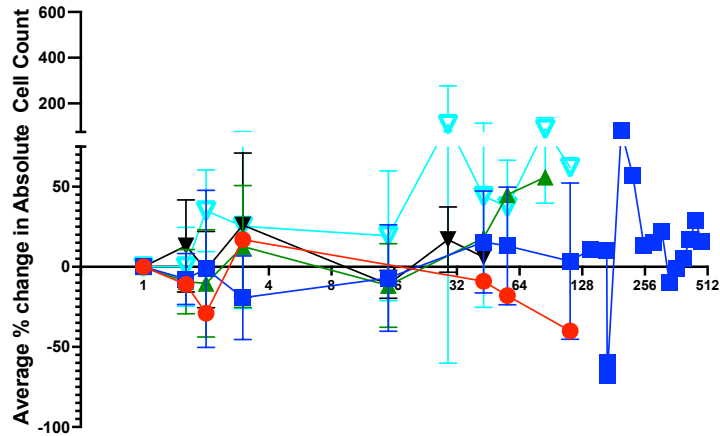


X axis = Days

# AU-007 Dose Escalation: Peripheral NK Cell Increases by Study Arm

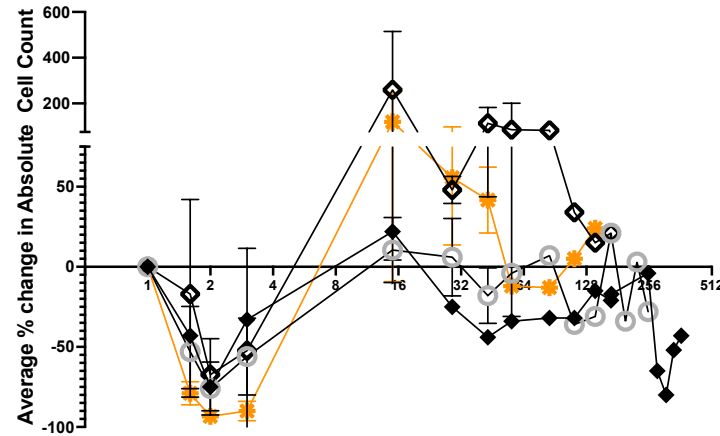
ARM 1A

- 0.5 mg/kg n=1
- 1.5 mg/kg n=3
- ▲ 4.5 mg/kg n=3
- ▼ 9mg/kg n=4
- ▽ 12mg/kg n=3
- ◆ 4.5+15000 n=1
- ⊖ 4.5+45000 n=5
- ◇ 4.5+135000 n=3
- ⊕ 4.5+270000 n=3
- ★ 9+ 1350000
- ◻ 4.5+15000 Q2W n=3
- △ 4.5+ 45000 Q2W n=6
- ⊗ 4.5+135000 Q2W
- ⊙ 9+135000 Q2W
- ✱ 9 mg+270000 Q2W



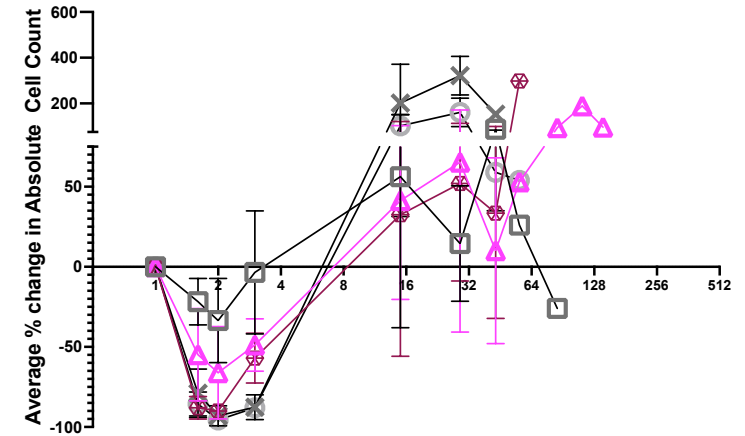
ARM 1B

- 0.5 mg/kg n=1
- 1.5 mg/kg n=3
- ▲ 4.5 mg/kg n=3
- ▼ 9mg/kg n=4
- ▽ 12mg/kg n=3
- ◆ 4.5+15000 n=1
- ⊖ 4.5+45000 n=5
- ◇ 4.5+135000 n=3
- ⊕ 4.5+270000 n=3
- ★ 9+ 1350000
- ◻ 4.5+15000 Q2W n=3
- △ 4.5+ 45000 Q2W n=6
- ⊗ 4.5+135000 Q2W
- ⊙ 9+135000 Q2W
- ✱ 9 mg+270000 Q2W



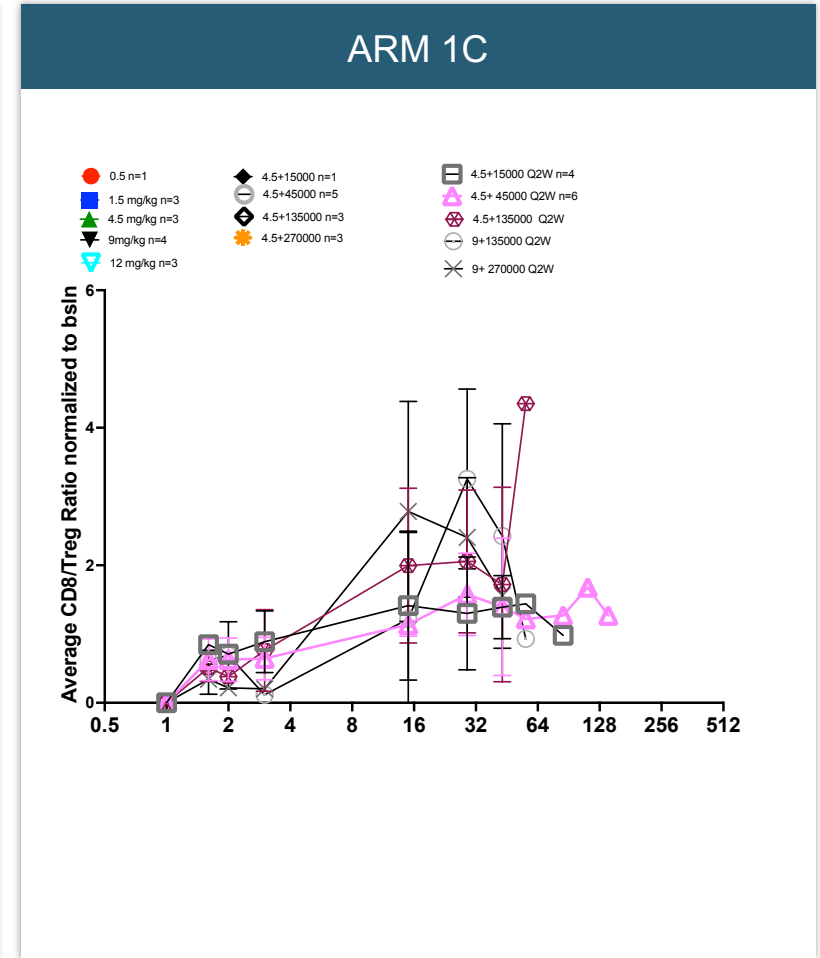
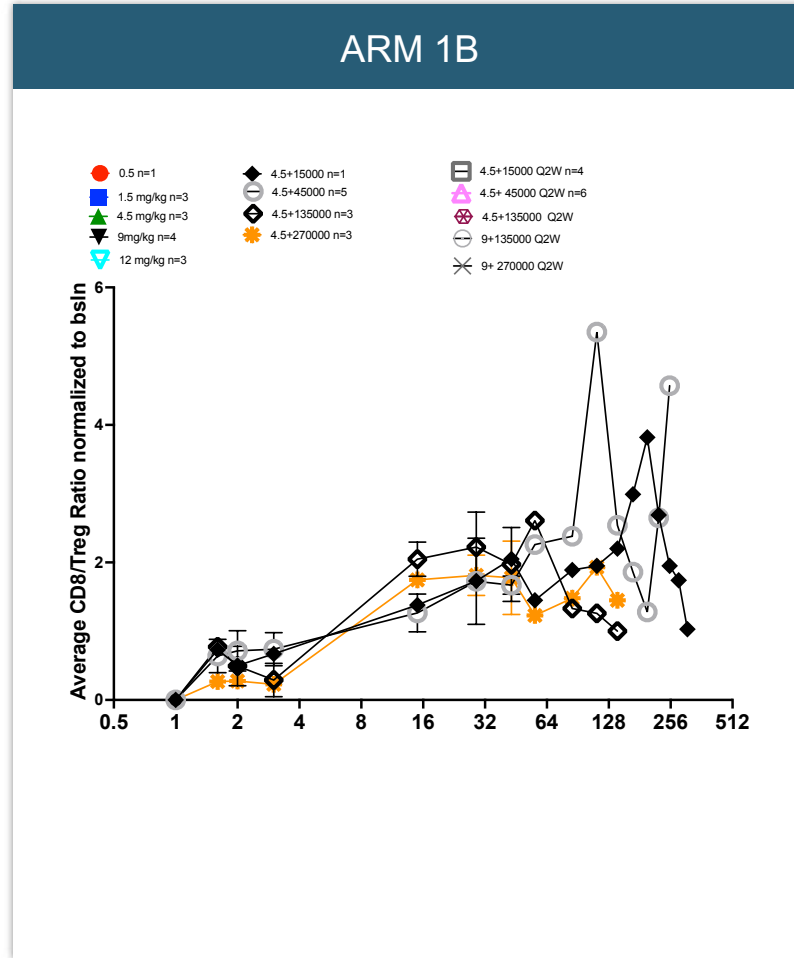
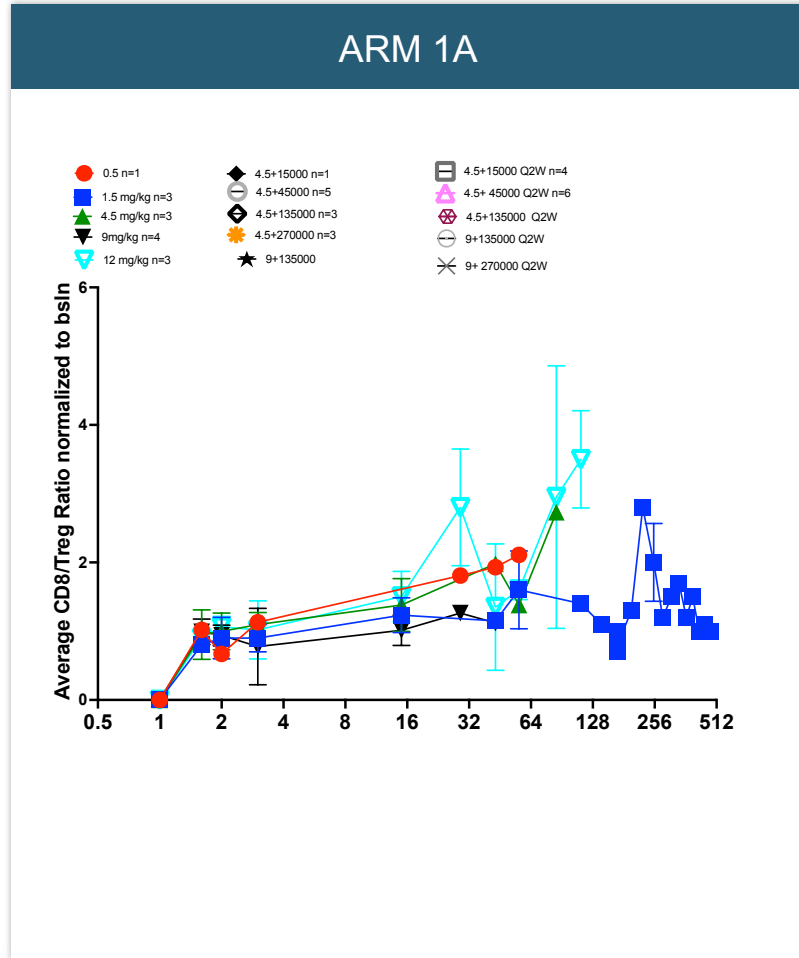
ARM 1C

- 0.5 mg/kg n=1
- 1.5 mg/kg n=3
- ▲ 4.5 mg/kg n=3
- ▼ 9mg/kg n=4
- ▽ 12mg/kg n=3
- ◆ 4.5+15000 n=1
- ⊖ 4.5+45000 n=5
- ◇ 4.5+135000 n=3
- ⊕ 4.5+270000 n=3
- ★ 9+ 1350000
- ◻ 4.5+15000 Q2W n=3
- △ 4.5+ 45000 Q2W n=6
- ⊗ 4.5+135000 Q2W
- ⊙ 9+135000 Q2W
- ✱ 9 mg+270000 Q2W



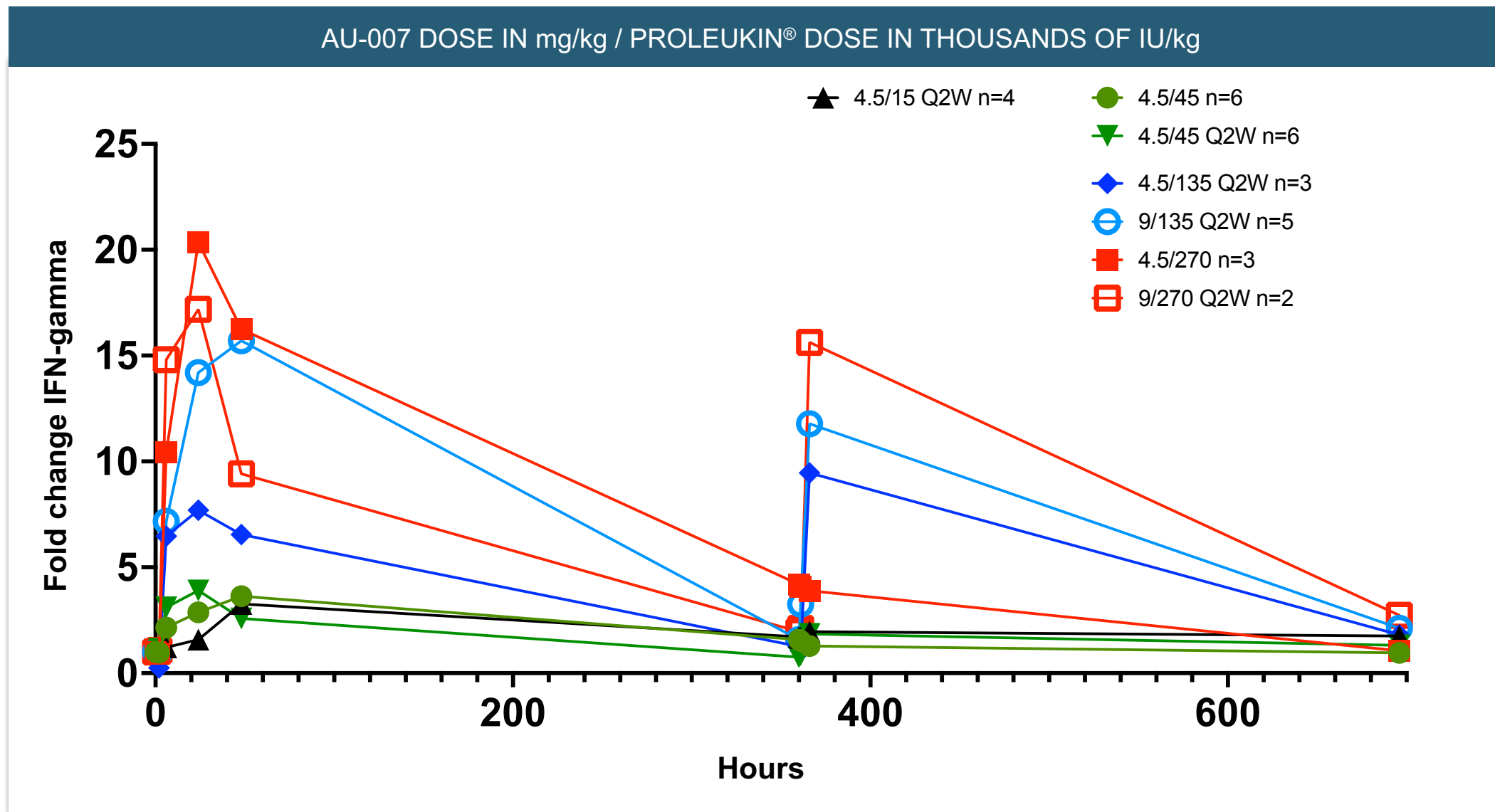
X axis = Days

# AU-007 Dose Escalation: Strong Increase in CD8+/Treg Ratios, Distinct in the IL-2 Class



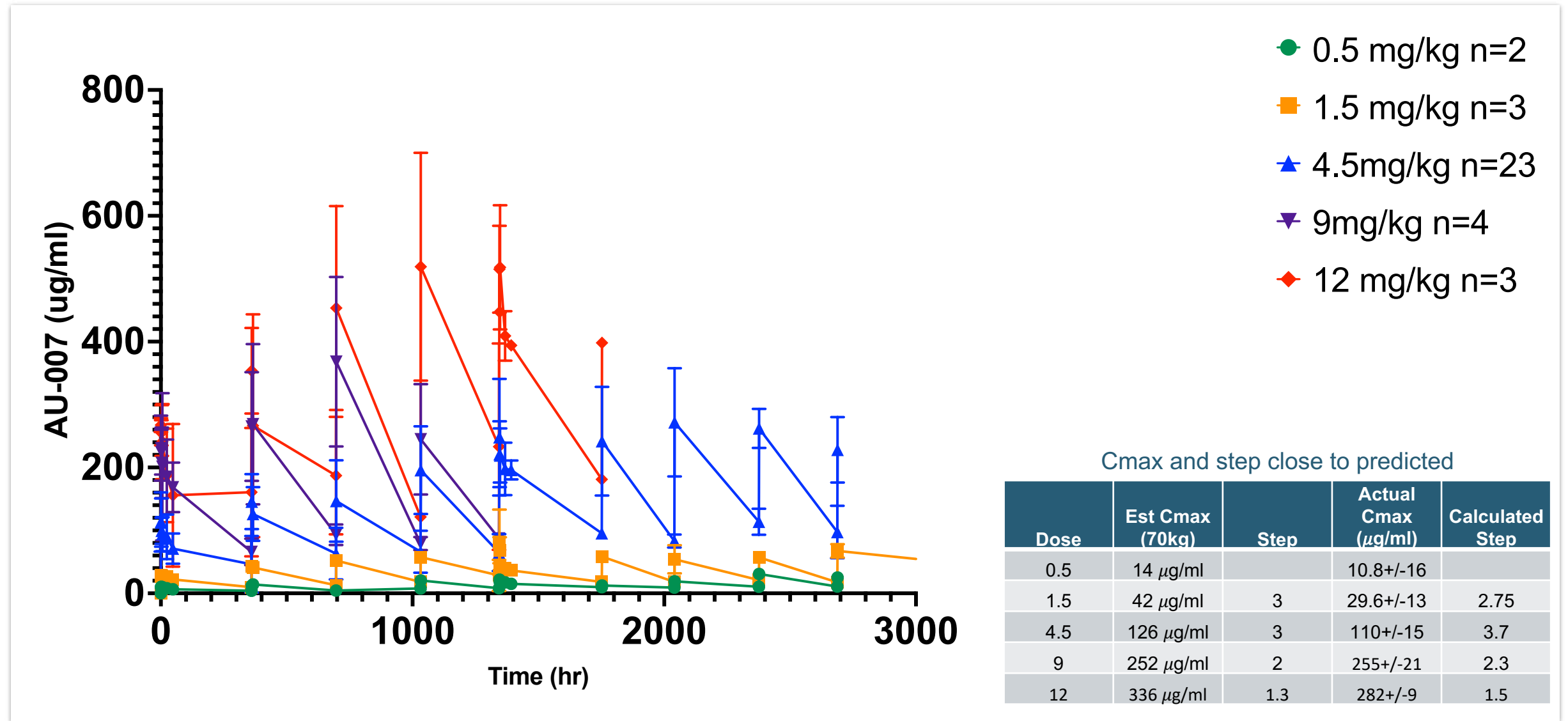
X axis = Days

# Average Fold Change in IFN- $\gamma$ From Dose Escalation Cohorts With 1B (Single) or 1C (Every Two Weeks) Dose Schedule of Proleukin<sup>®</sup>



# AU-007 PK Data Demonstrates IgG1 Therapeutic Characteristics

PK data continues to demonstrate dose proportionality and accumulation; half-life > 14 days



# AU-007 PK and IL-2 Coverage (For Binding and Redirecting IL-2 to Dimeric Receptors on Effector Cells)

AU-007 Dose mg/kg	Time Point	Serum AU-007 ug/ml	Serum IL-2 Coverage pM	Coverage of Phase 2 IL-2 Dose (Proleukin® 135K IU/kg)
0.5	Initial Peak	11	150685	754 x
	Initial Trough	4.3	58904	294 x
	Steady State Average	12	164384	822 x
1.5	Initial Peak	30	410959	2054 x
	Initial Trough	9.8	134247	672 x
	Steady State Average	32	438356	2192 x
4.5	Initial Peak	110	1506849	7534 x
	50 Hours	85	1164384	5822 x
	Steady State Average	94	1287671	6438 x
9	Initial Peak	255	3493151	17466 x
	50 Hours	169	2315068	11576 x
	Steady State Average	192	2630137	13150 x
12	Initial Peak	282	3863014	19316 x
	50 Hours	184	2520548	12602 x
	Steady State Average	256	3506849	17534 x

# AU-007 Has Unique Potential to Solve the Challenges of IL-2 by Acting as a Router for IL-2, Redirecting It Toward Effector Cells

Computationally designed, epitope-specific monoclonal antibody therapeutics directing native IL-2 cytokine to specific target cells (drives expansion of effector T cells and downregulation of Tregs)



Potential for higher efficacy, based on unique MOA  
Only agent in class that **lowers** Tregs



Potential for lower toxicity —  
by blocking IL-2's binding to vascular endothelium



Unique antibody computationally designed by world-class machine learning



Known modality; a well-behaved antibody format with drug-like properties



AULOS

Positioning for Success

**aulos**



**At Aulos,  
our mission is  
to extend and improve  
the lives of patients  
through innovative,  
safe and effective  
cancer immunotherapy**

## Our Values

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### **INGENUITY**

We bring a spirit of ingenuity to what we do.



### **BALANCE**

We are a balanced organization that pursues the best idea.



### **GROWTH**

We are committed to grow individually and as a team.



### **HOPE**

We aspire to provide hope to patients and their loved ones with novel therapy.



### **SUPPORT**

We support each other and collaborate efficiently.

# Accomplished, Experienced Leadership Team



**Aron Knickerbocker**  
President and Chief Executive Officer



**Yanay Ofra**  
Chief Scientific Officer



**Jim Vasselli, M.D.**  
Chief Medical Officer



**Micah Pearlman**  
Chief Operating Officer



**Leo Redmond**  
Chief Financial Officer



**Tim Wyant**  
SVP and Head of Early Development



**Jenny Tang**  
Head of Clinical Operations



# Distinguished Board of Directors

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**Aron  
Knickerbocker,  
CEO**

Chief Executive  
Officer



# AU-007 Value-Driven Milestones

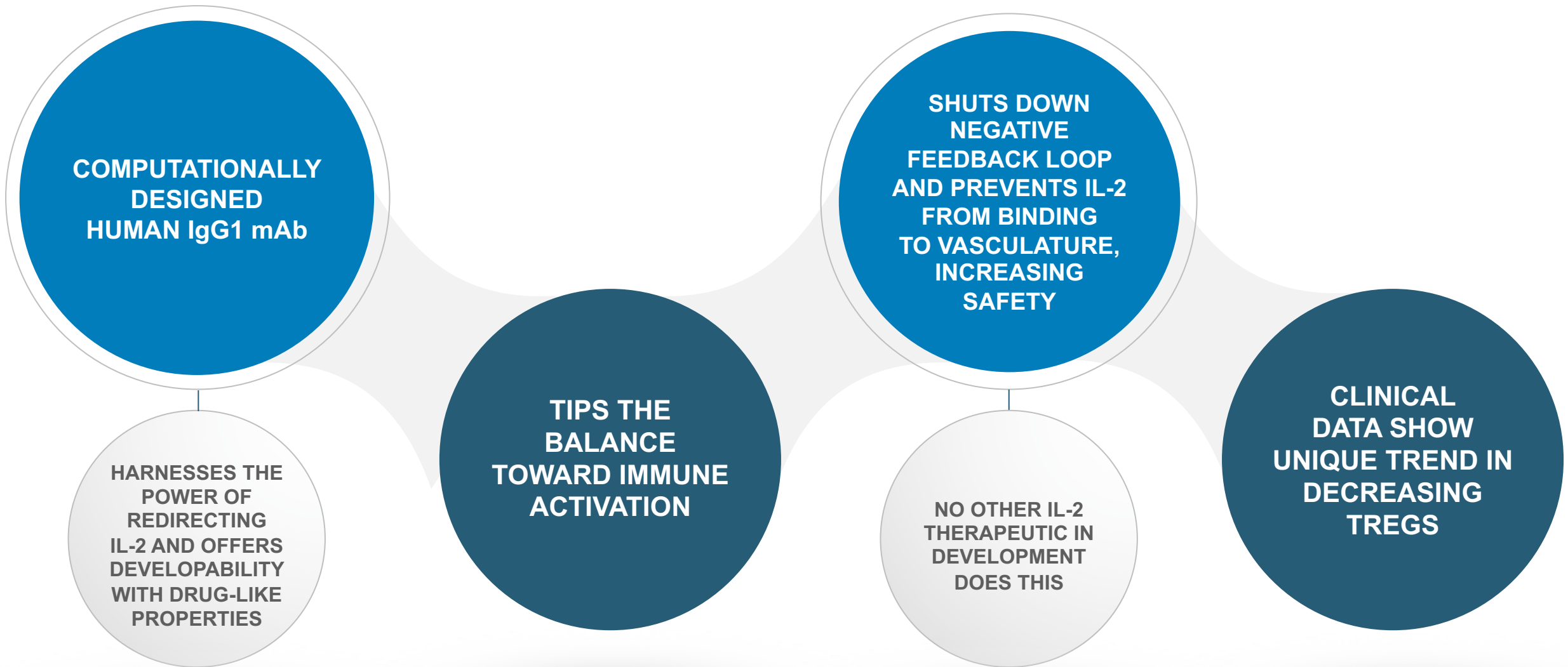
✓ Initiated Dosing in Phase 1 in Australia	2Q 2022
✓ Received FDA Clearance of IND Application	4Q 2022
✓ Began Dosing Patients at US Clinical Sites	1Q 2023
✓ Began Phase 2 Dosing in Expansion Cohorts in Melanoma and Renal Cell Carcinoma	1H 2024
Begin Phase 2 dosing in expansion cohorts in non-small cell lung cancer	2H 2024
Establish Phase 2 clinical proof of concept in melanoma and renal cell carcinoma	2H 2024
Establish Phase 2 clinical proof of concept in non-small cell lung cancer	1H 2025
Seek Breakthrough Designation, begin pivotal trial(s) in melanoma, RCC and/or NSCLC	2025
Initiate Phase 2 trials in additional indications, as warranted	2025
Submit marketing approval applications globally	2027-2028
First commercial sales	2027-2029



A safe and broadly applicable IL-2 regimen has been a “holy grail” of cancer immunotherapy.

If achieved, AU-007 would likely represent the next multi-indication blockbuster cancer immunotherapy – a pipeline in a product.

# AU-007: A Compelling New Approach for Harnessing IL-2 to Fight Cancer



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**THANK YOU**

[www.aulosbio.com](http://www.aulosbio.com)





APPENDIX

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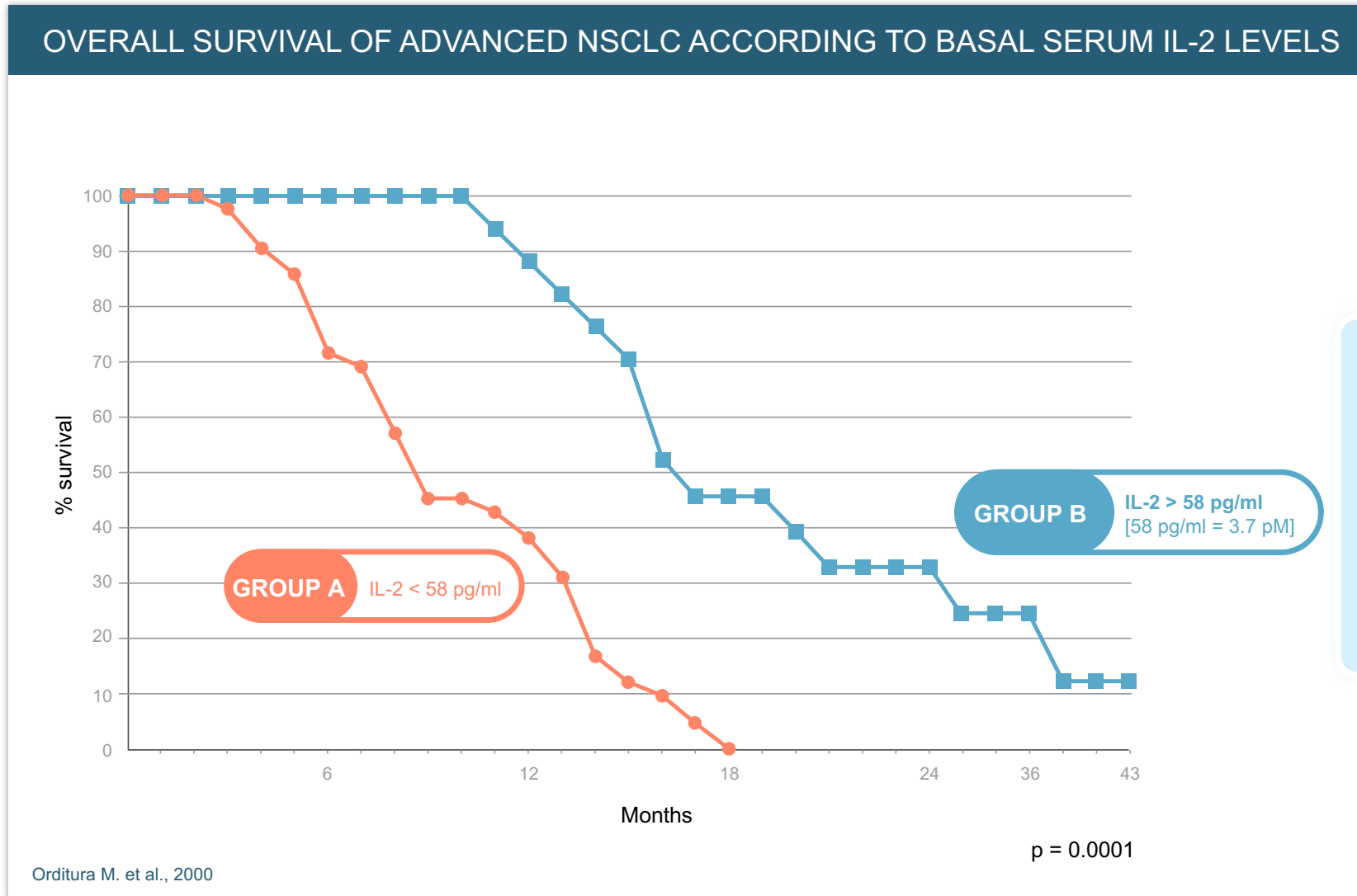


# Competitive Differentiation

	Full blockage of IL-2 binding to CD25	Prevent Treg expansion and binding to vascular endothelium	Avoid negative feedback from endogenous IL-2	Human IgG1 mAb: Good PK, low potential for immunogenicity
<b>aulos</b>	✓	✓	✓	✓
High dose IL-2	X	X	X	X
Modified IL-2	X / ✓	X / ✓	X	X
Fusion proteins (incl. mAbs)	X / ✓	X / ✓	X	X / ✓

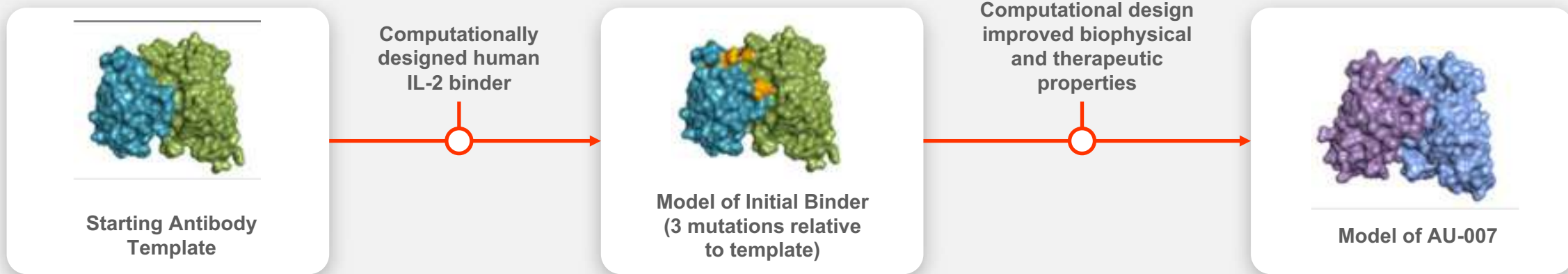
Aulos' approach to IL-2 modulation addresses challenges

# Why Is IL-2 So Compelling? Higher Endogenous IL-2 Levels in Cancer Patients Correlate With Improved Survival

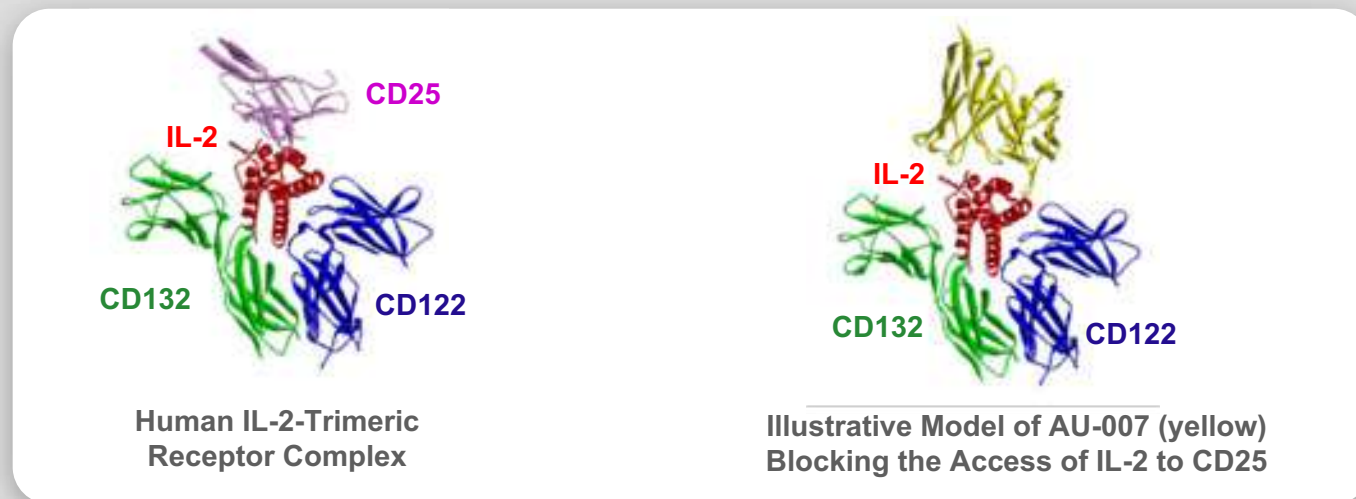


# Computational Design for Precise Blocking of IL-2's Binding to Alpha (CD25) Receptor Subunit Contained in Trimeric Receptors on Tregs, Vasculature and Eosinophils

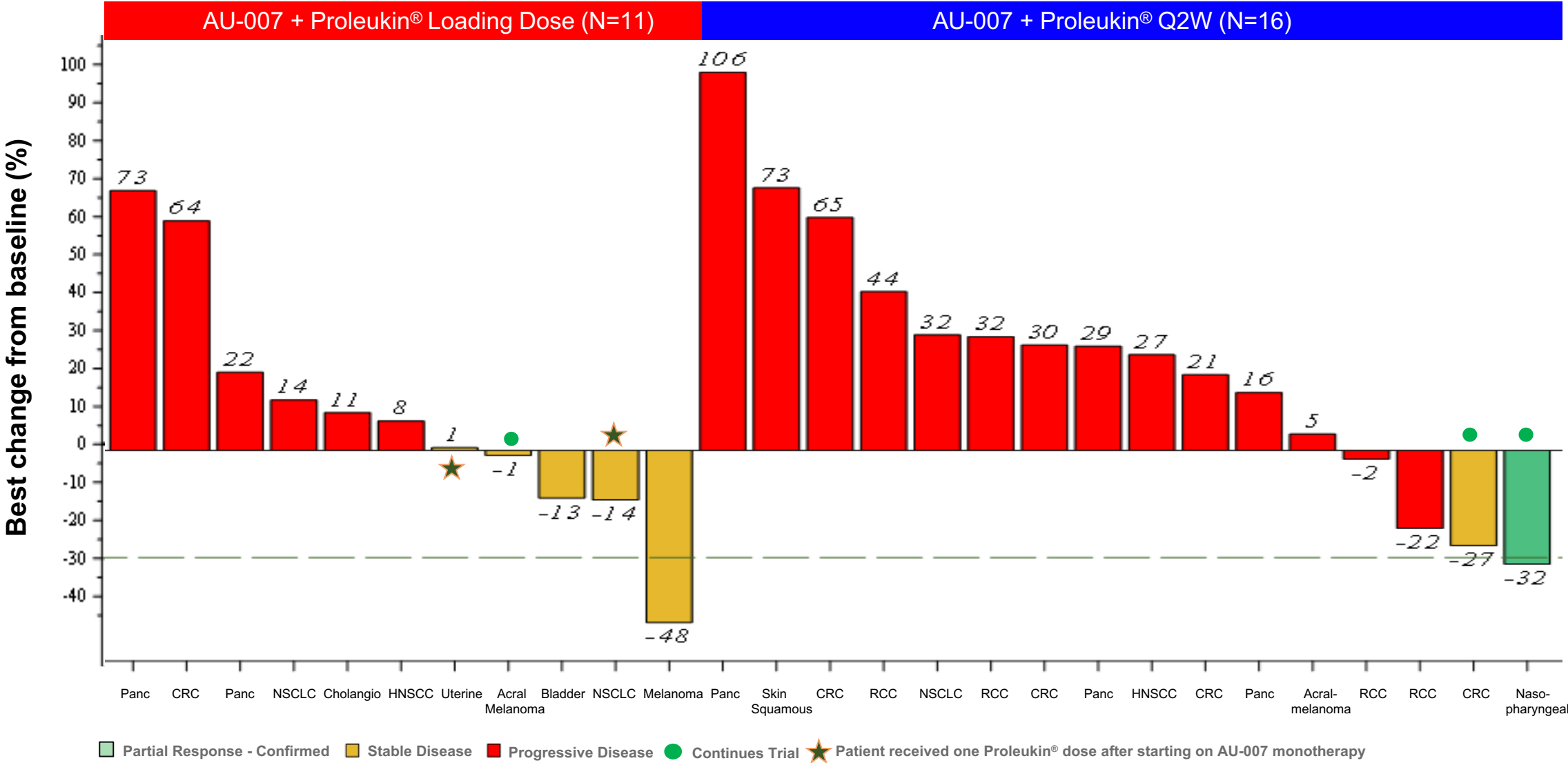
## AU-007 Design



## AU-007 Function

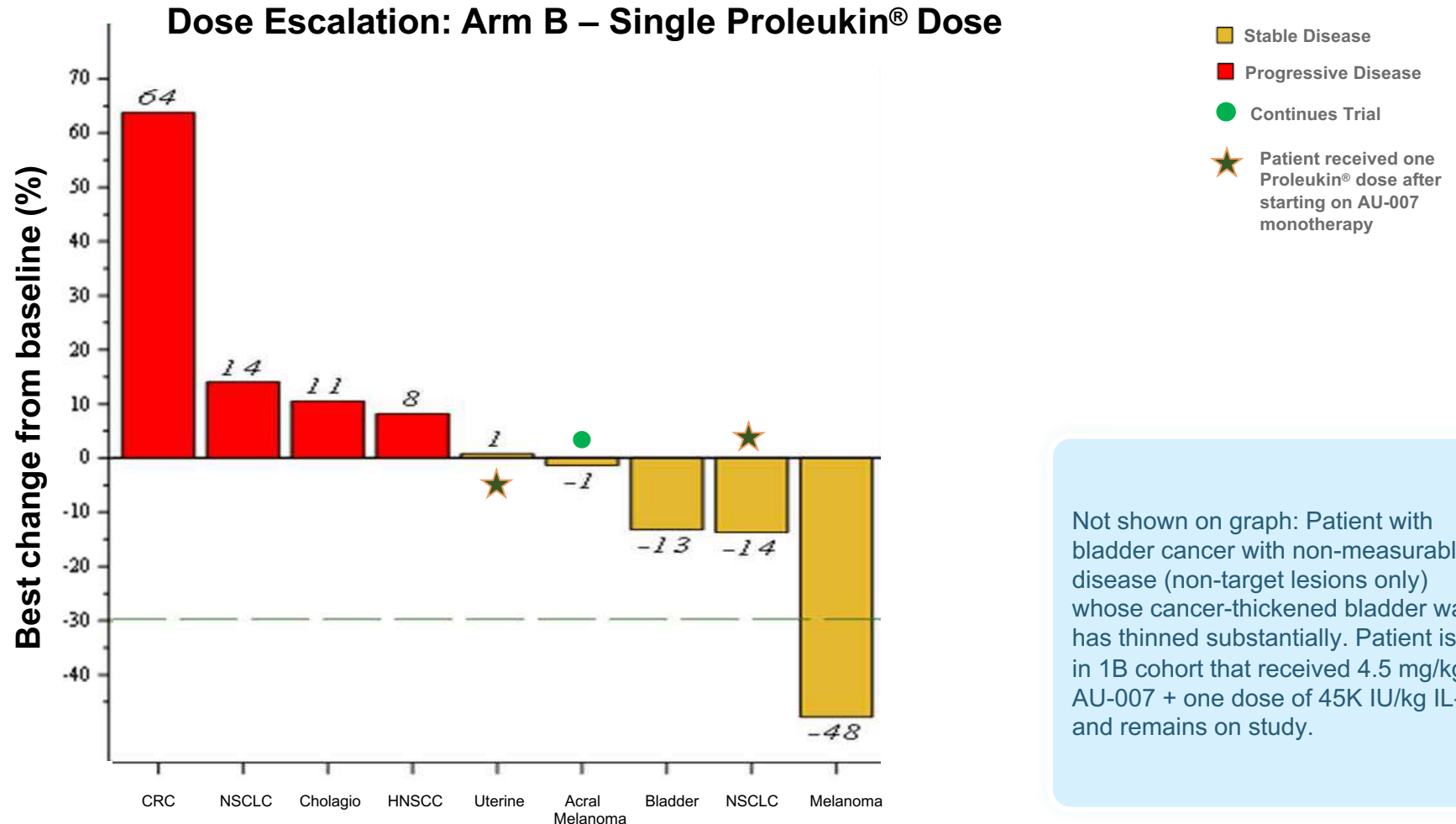


# Phase 1 Dose Escalation: AU-007 + Proleukin®: Best Response vs. Baseline



# Phase 1 Dose Escalation: AU-007 + Proleukin<sup>®</sup>: Best Response in Immune-Sensitive Tumors

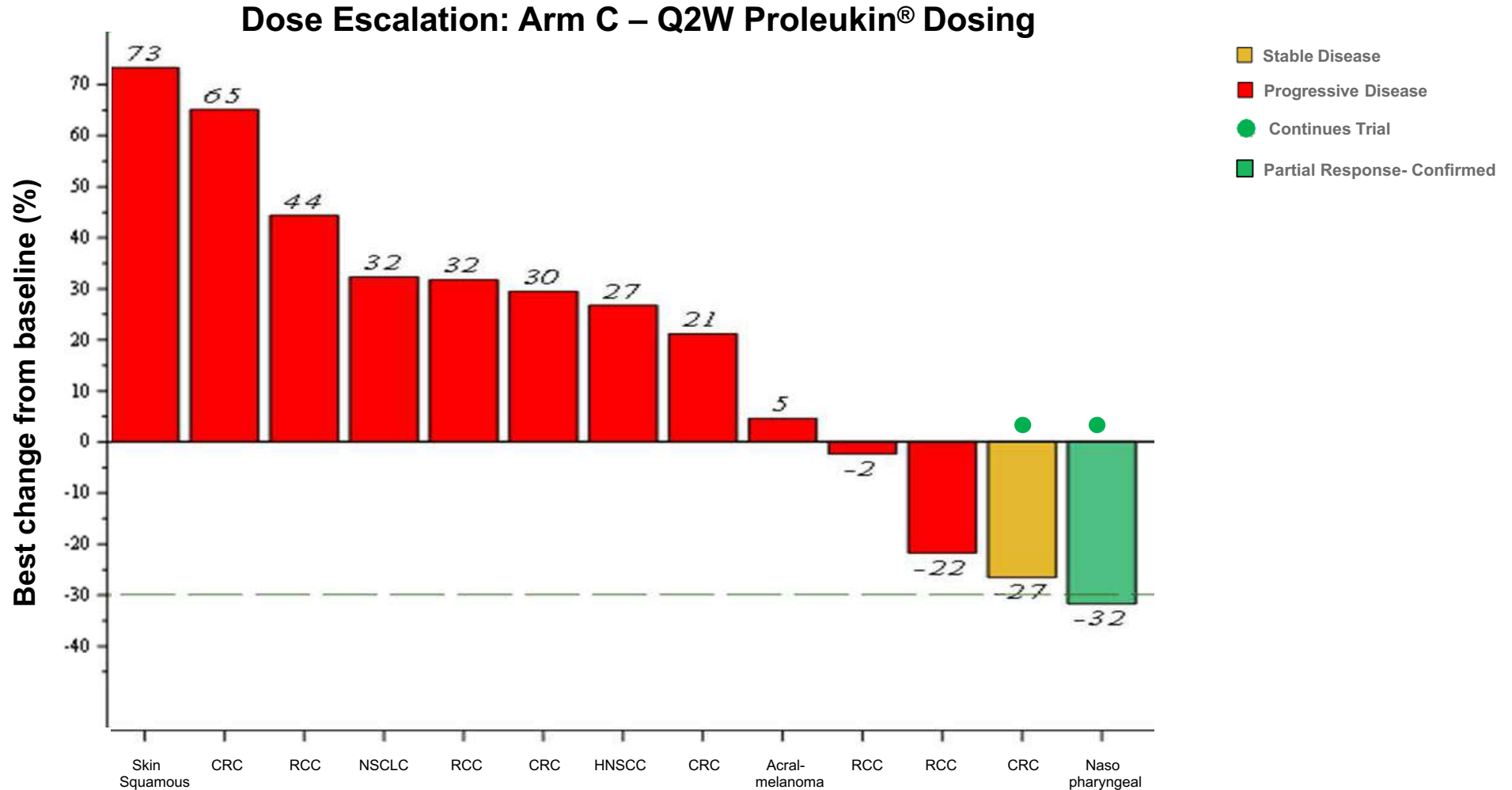
ALL RESPONSE EVALUABLE PATIENTS EXCLUDING PANCREATIC CANCER WHO RECEIVED AU-007 + PROLEUKIN<sup>®</sup>



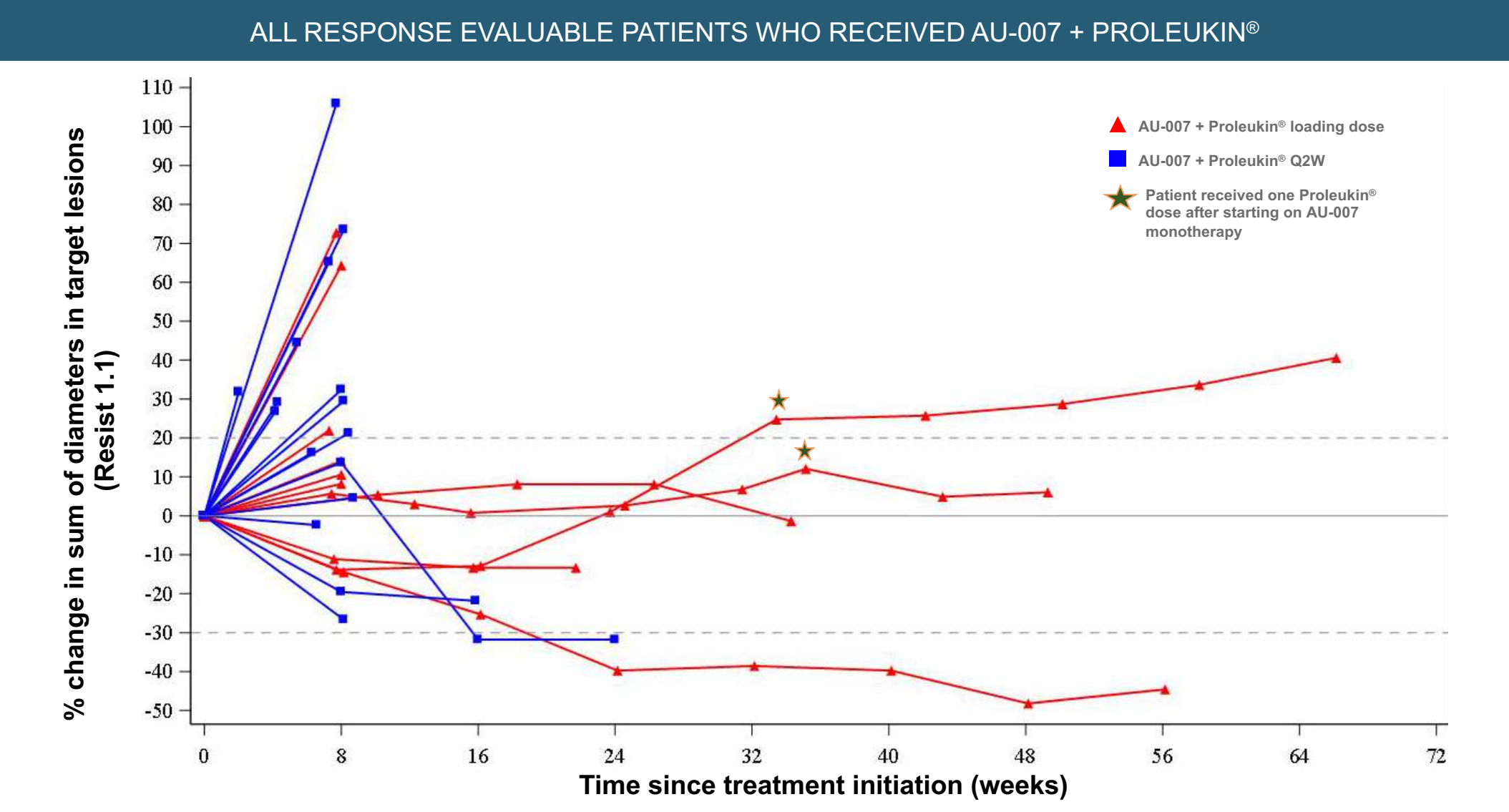
Not shown on graph: Patient with bladder cancer with non-measurable disease (non-target lesions only) whose cancer-thickened bladder wall has thinned substantially. Patient is in 1B cohort that received 4.5 mg/kg AU-007 + one dose of 45K IU/kg IL-2 and remains on study.

# Phase 1 Dose Escalation: AU-007 + Proleukin®: Best Response in Immune-Sensitive Tumors

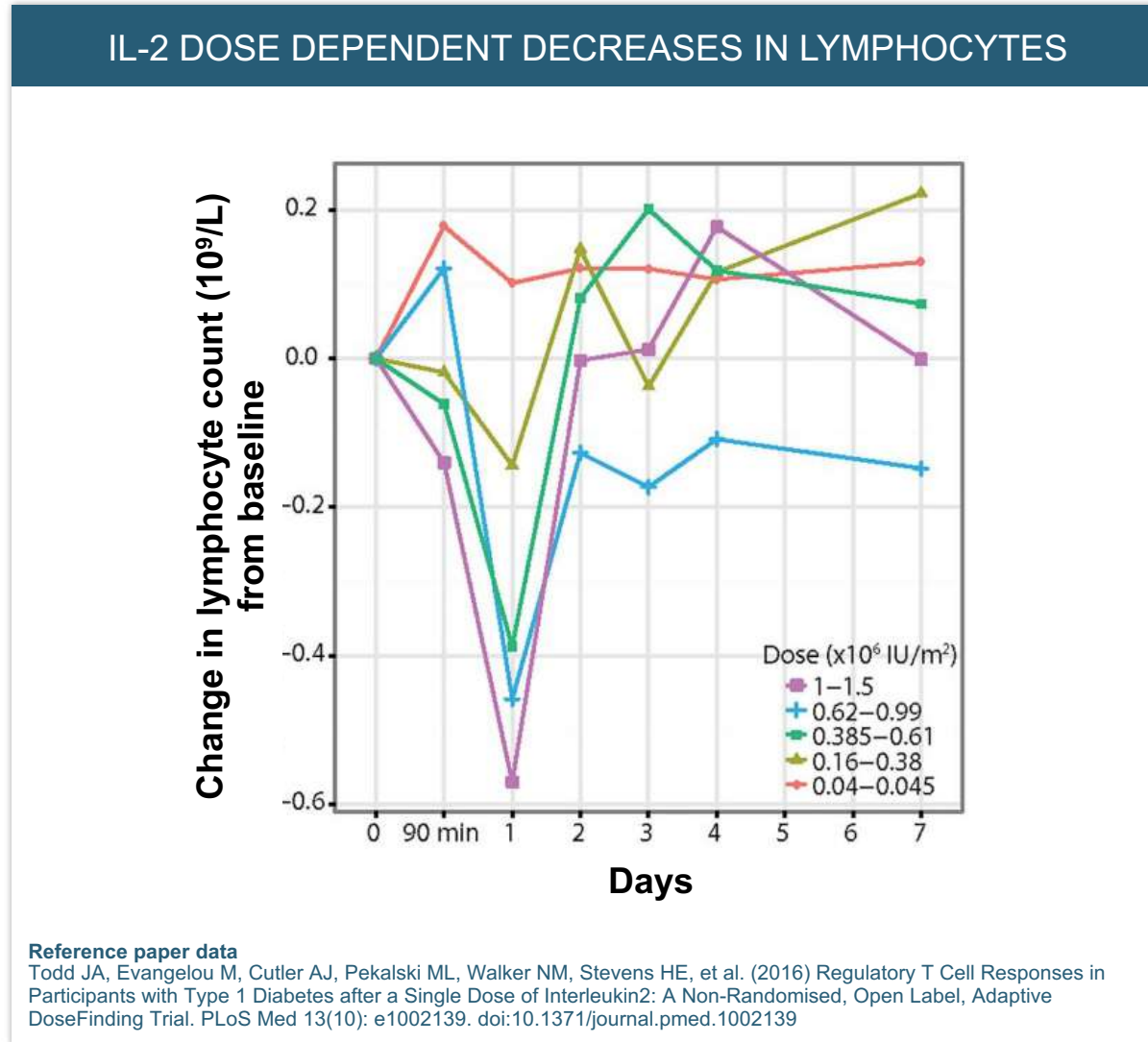
ALL RESPONSE EVALUABLE PATIENTS EXCLUDING PANCREATIC CANCER WHO RECEIVED AU-007 + PROLEUKIN®



# AU-007 + Proleukin®: Percentage Change vs. Baseline Over Time



# Transient Lymphopenia Is a Known Phenomenon for Patients Receiving Proleukin<sup>®</sup>, and Likely Represents Trafficking of Lymphocytes From Vasculature Into Tissue





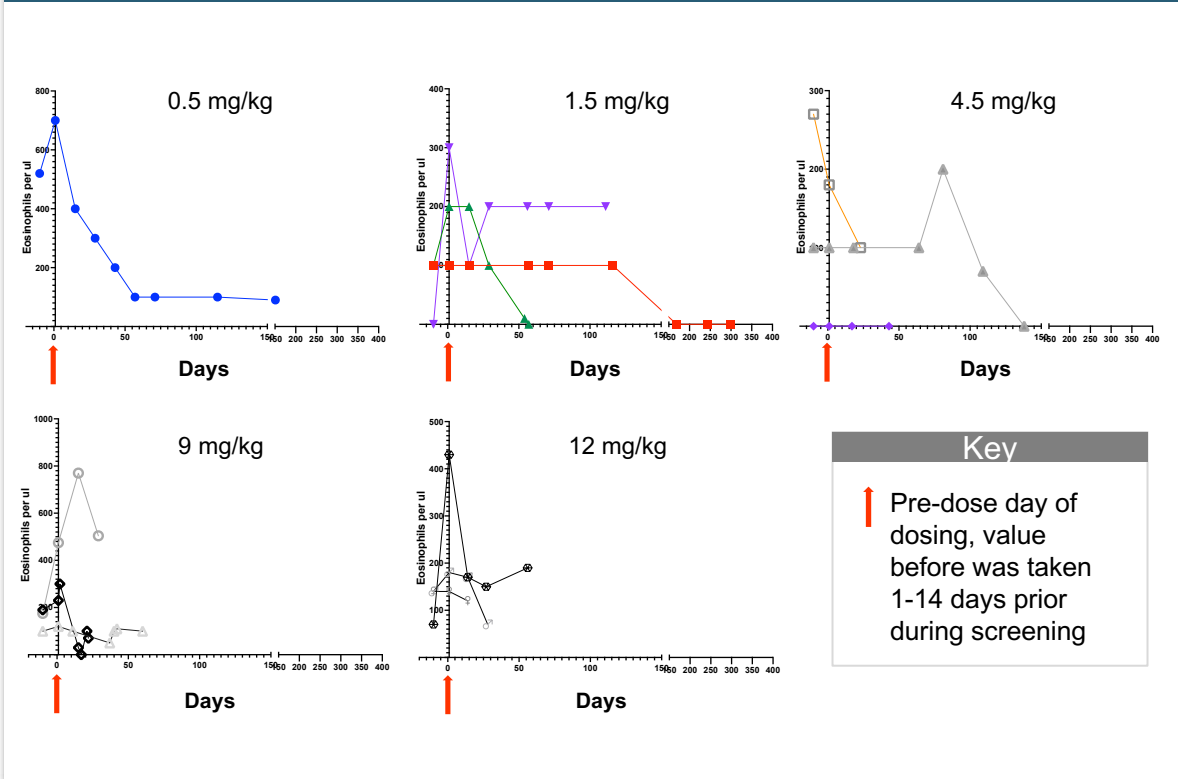
# AU-007 Dose Escalation: Fold Change in the Expression of IFN- $\gamma$ Seen With 1B (Single) or 1C (Every Two Weeks) Dose Schedule of Proleukin<sup>®</sup>

	1.2-1.9				2-4.9		5-9.9		10-19.9		20-29.9		>=30	
ARM 1B COHORTS					ARM 1C COHORTS									
	n=1	n=6	n=1	n=3	n=4	n=7	n=3	n=6				n=2		
	4.5+15 B	4.5+45 B	4.5+135 B	4.5+270 B	4.5+15 C	4.5+45 C	4.5+135 C	9+135 C	4.5+270 C	9+ 270 C				
Cycle 01 D01 pre	0	0	0	0	0	0	0	0				0		
Cycle 01 D01 2	1.00	0.98759941	0.85	0.8924958	0.95724503	1.17910239	1.00631852	0.97537849				1.05385159		
Cycle 01 D01 6	1.81	2.04704305	0.73	13.3529622	1.23242873	2.72299319	9.00061479	16.9887697				15.0883358		
Cycle 01 D02	2.02	2.92940407	0.62	17.5130242	1.66302951	3.64632084	11.457194	21.9618471				23.8193461		
Cycle 01 D03	1.00	5.89333482	13.70	15.1453405	3.556146	3.33699867	7.80647061	23.26				15.6319394		
Cycle 01 D15 pre	15.12	1.66718541	0.88	4.15219117	1.82456768	0.54924948	1.4667106	1.76543792				3.42362614		
Cycle 01 D15 EOI	15.41	1.64872266	1.06	4.09501055	1.73066408	0.59197037	1.30745646	3.65307287				3.80382744		
Cycle 01 D15 6	1.35	2.23719313	1.27	3.99271078	2.022752	1.07169544	10.2062331	32.07722				25.6204331		
Cycle 01 D29 pre	9.85	1.11074958	0.60	1.14956565	1.86819275	1.19588267	1.66456925	1.4474057				4.84636234		
Cycle 01 D29 EOI	6.41	1.08402435	0.48	0.93530442	1.69443551	0.93774652	1.59492073	1.50223337				3.81382846		
Cycle 01 D43 pre	18.51	1.28777381	0.44	1.25239518	3.18015095	2.65207568	1.76904202	1.50483142				7.38370078		
Cycle 01 D43 EOI	19.75	1.20474384	0.46	1.14495605	2.80098741	3.90477915	1.72423734	2.01622352				6.45842997		
Cycle 02 D01 pre	10.77	0.98407841	0.42	2.84352208	1.31927694									
Cycle 02 D01 EOI	10.49	0.81894179	0.35	2.75916103	1.26925917									
Cycle 02 D015 pre	15.15	1.47826372		11.4714008	0.90904367									
Cycle 02 D015 EOI	13.55	1.30800544		10.3230562	0.78734925									
Cycle 02 D43 pre	1.62	1.01555418			1.87510597									
Cycle 02 D43 EOI	1.57	1.09895619			2.02969891									
Cycle 03 D01 pre	1.34	27.4402898												
Cycle 03 D01 EOI	1.10	26.6645722												
Cycle 4 D01 pre	0.83	0.85444994												
Cycle 4 D01 EOI	0.71	0.97301195												

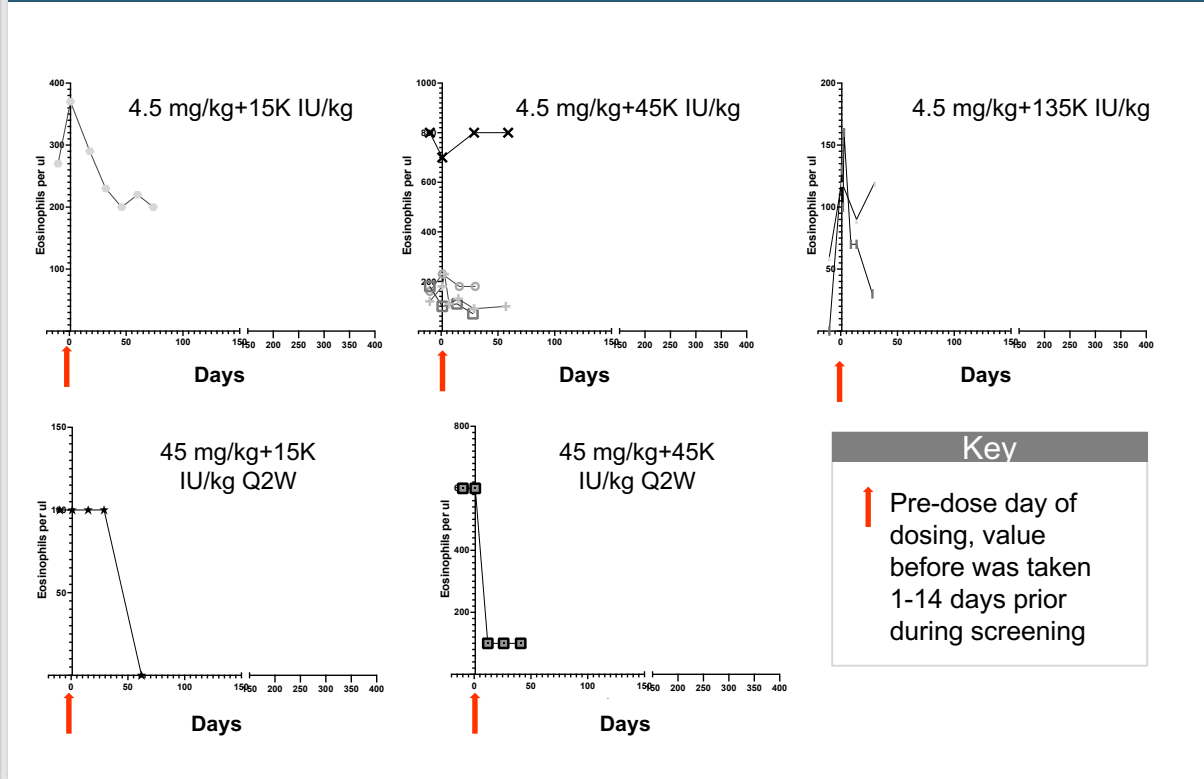
A heat map of the change from baseline in the circulating levels of IFN- $\gamma$ . Light green represents a 0.2- to 1.9-fold change, mid-green a 2- to 4.9-fold change, dark green a 5- to 9.9-fold change, light red a 10- to 19.9-fold change, mid-red a 20- to 29.9-fold change and dark red a  $\geq 30$ -fold change. These preliminary results demonstrate that the longer a patient receives AU-007, the more likely the patient is to have increases in circulating IFN- $\gamma$ . This is consistent with the observations in circulating cell populations, particularly Treg and NK cells. The addition of Proleukin<sup>®</sup> in the presence of AU-007 consistently increases IFN- $\gamma$  in the peripheral circulation.

# AU-007 Dose Escalation Study: Change in Eosinophils (Cells That Also Express the Trimeric IL-2 Receptor That Contains CD25)

## INDIVIDUAL PERIPHERAL BLOOD EOSINOPHIL COUNTS IN AU-007-ONLY COHORTS

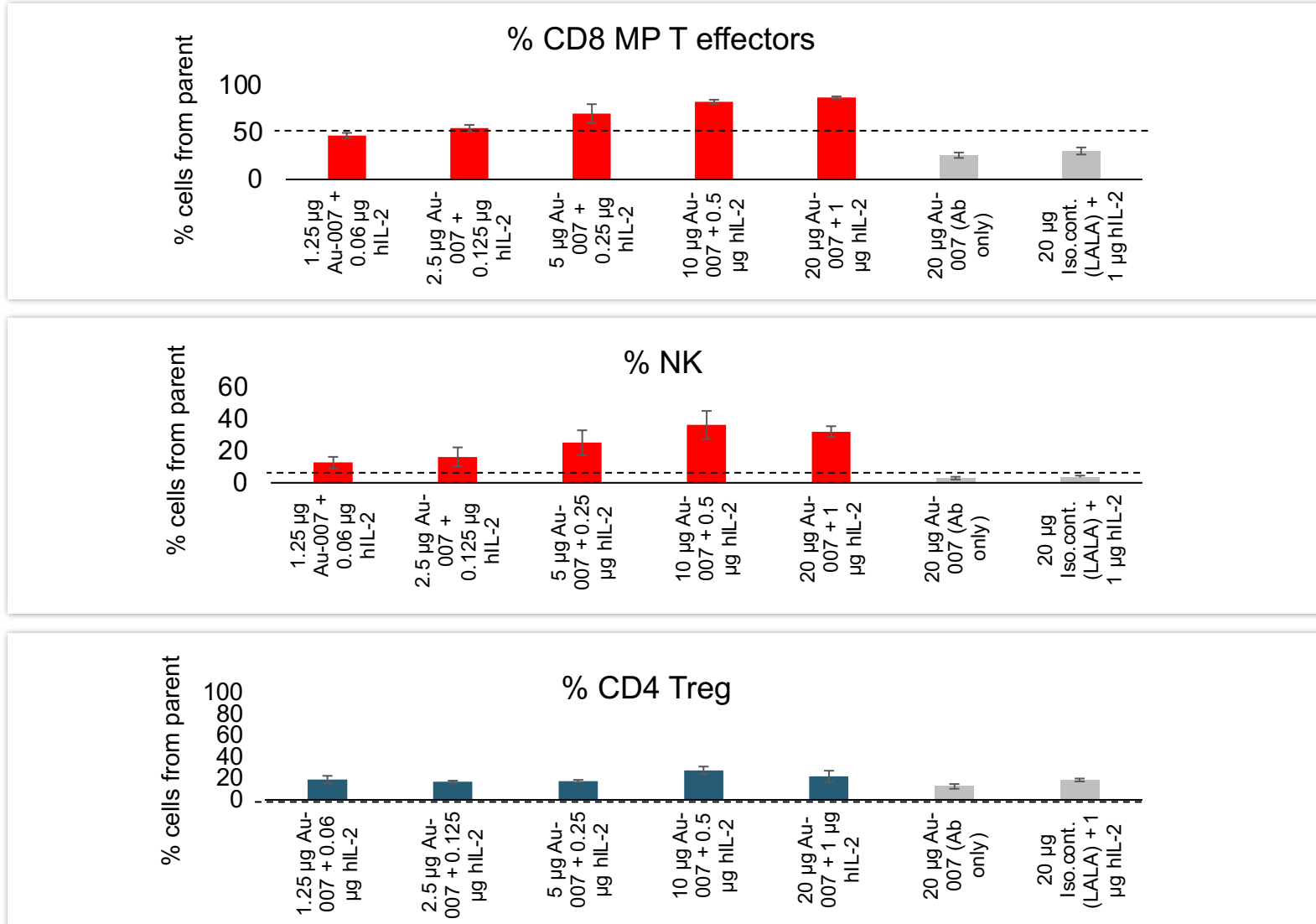


## INDIVIDUAL PERIPHERAL BLOOD EOSINOPHIL COUNTS IN AU-007+PROLEUKIN® COHORTS



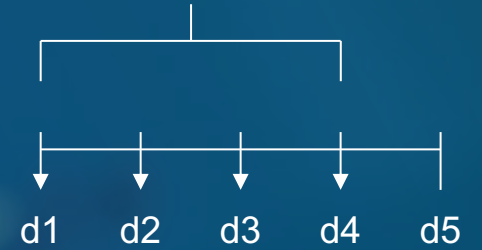
Changes over time in the circulating number of eosinophils. Panel A are the cohorts receiving only AU-007 monotherapy and panel B are cohorts receiving AU-007 with at least 1 dose of Proleukin®. All but one patient in the AU-007 monotherapy and AU-007 with Proleukin® arms demonstrated a decrease or no change in the circulating levels of eosinophils. A patient in the 9 mg/kg cohort had severe seasonal allergies requiring treatment during time on AU-007 treatment and is consistent with a history of being treated for seasonal allergies. The rise in eosinophils was attributed to the allergy reaction. All patients given AU-007 with Proleukin® showed stable or a decrease in circulating eosinophils. This is consistent with the mechanism of action of AU-007 preventing IL-2 from interacting with the IL-2 trimeric receptor on eosinophils.

# In Mice, AU-007 Promotes Dose-Dependent Expansion and Activation of Effector T and NK but Not Treg Cells *In Vivo*



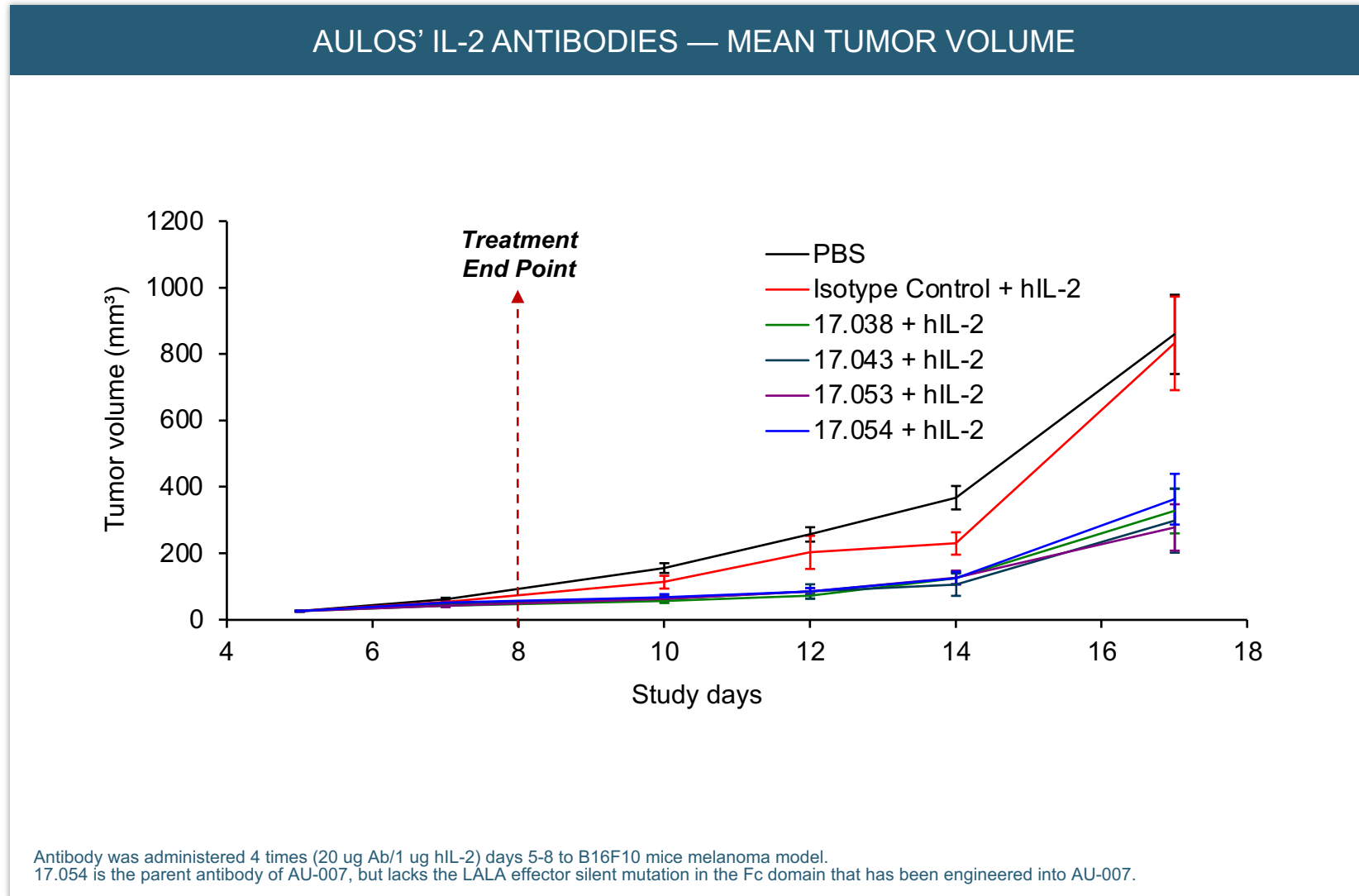
AU-007/hIL-2,  
Single injection/day, IP

C57BL/6  
mice



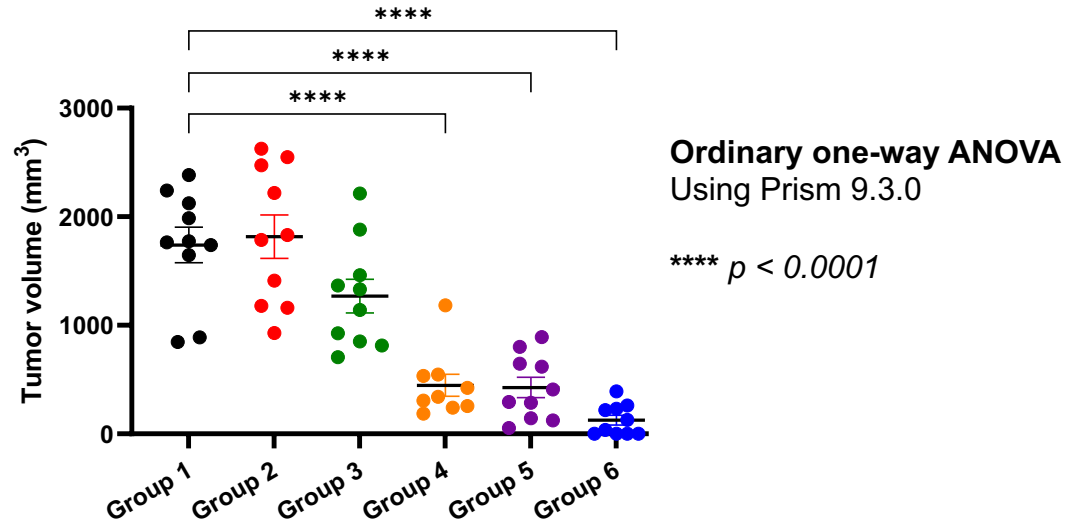
- Splenocytes isolation
- Flow cytometry

# Aulos' IL-2 mAbs Show Inhibition of Tumor Growth in Mouse Syngeneic Tumor Model Resistant to Checkpoint Inhibitors (B16F10 Melanoma)



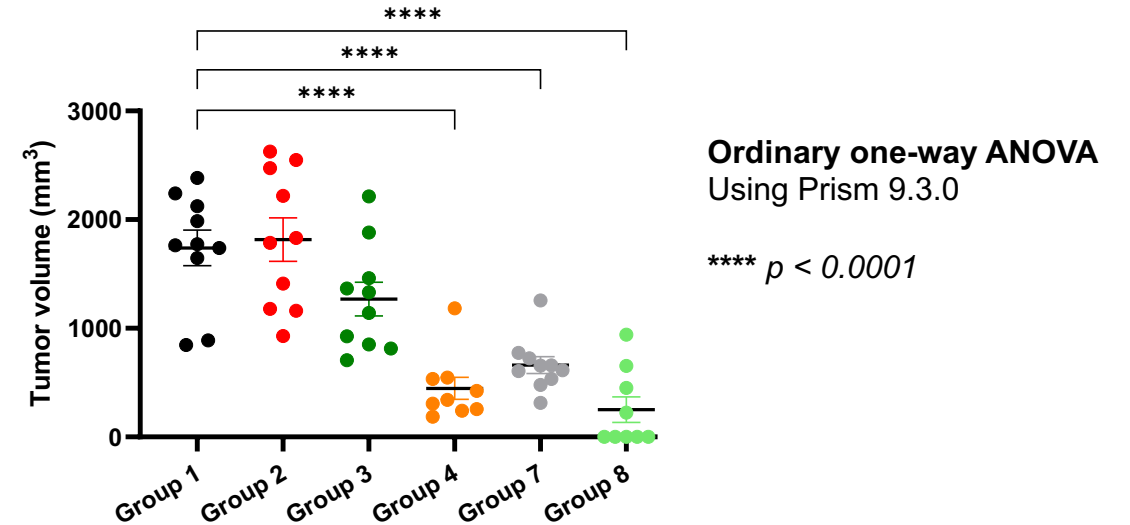
# AU-007 Induces Regressions and Some Tumor Eradications in MC38 Colon Cancer Model in Wild-Type Mice When Combined With Anti-PD-(L)1

## ANTI-PD-1 GROUPS



- Group 01, PBS
- Group 02, AU-007 20mg/Kg (every 3D: D0, D3 etc.)
- Group 03, hIL-2 10ug/mouse I.P (D1)
- Group 04, AU-007 20mg/Kg (every 3D: D0, D3 etc.) + hIL-2 10ug/mouse I.P (D1)
- Group 05, anti-PD-1 200ug/mouse (every 3D: D0, D3 etc.)
- Group 06, AU-007 20mg/Kg (every 3D: D0, D3 etc.) + hIL-2 10ug/mouse I.P (D1) + anti-PD-1 200ug/mouse (every 3D: D0, D3 etc.)

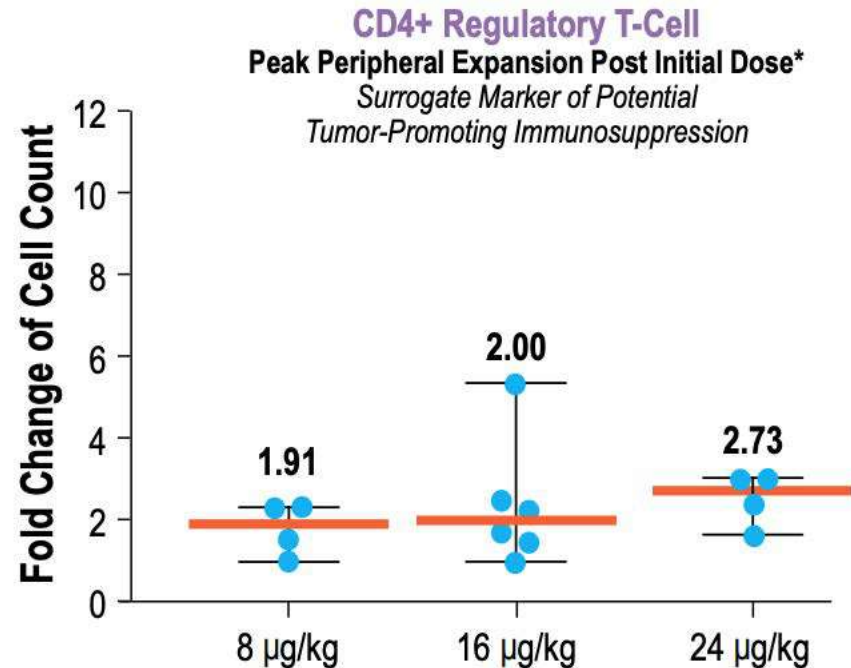
## ANTI-PD-L1 GROUPS



- Group 01, PBS
- Group 02, AU-007 20mg/Kg (every 3D: D0, D3 etc.)
- Group 03, hIL-2 10ug/mouse I.P (D1)
- Group 04, AU-007 20mg/Kg (every 3D: D0, D3 etc.) + hIL-2 10ug/mouse I.P (D1)
- Group 07, anti-PD-L1 200ug/mouse (every 3D: D0, D3 etc.)
- Group 08, AU-007 20mg/Kg (every 3D: D0, D3 etc.) + hIL-2 10ug/mouse I.P (D1) + anti-PD-L1 200ug/mouse (every 3D: D0, D3 etc.)

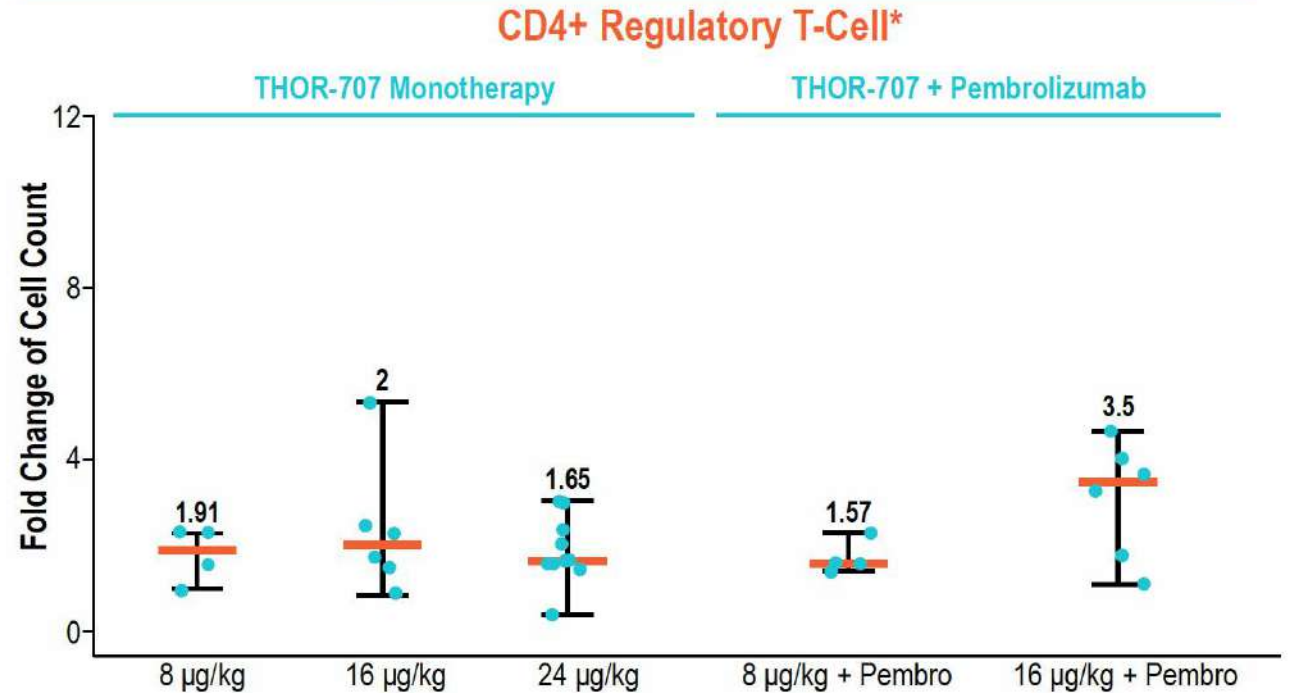
# Clinical Evidence of the Negative Feedback Loop in Action: THOR-707 Increases Peripheral Blood Tregs ~2-3x After First Dose

ENA Symposium 2020,  
Phase 1/2 Dose Escalation



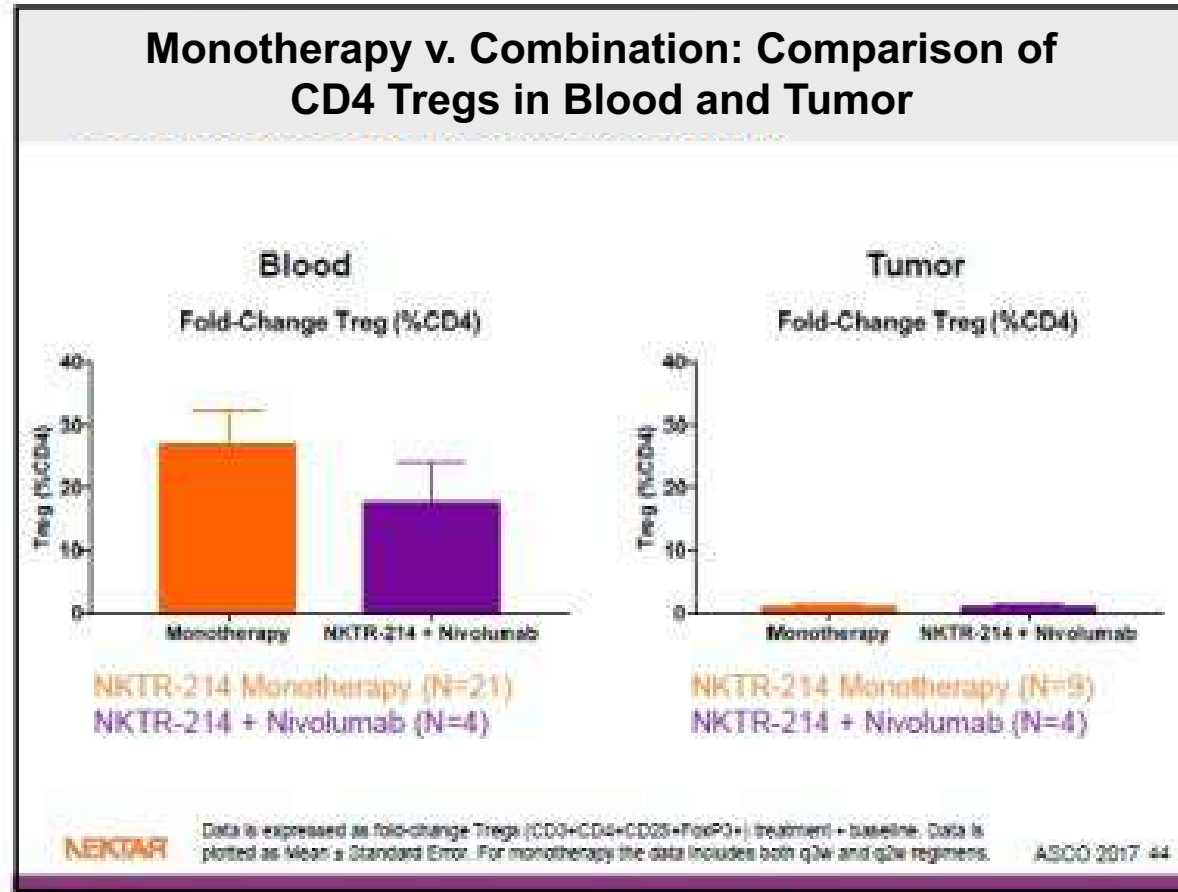
AACR 2021, Phase 1/2

## Pharmacodynamic Markers of Not-Alpha Selectivity



# Second *In Vivo* Proof of Negative Feedback Loop in Action: Bempegaldesleukin

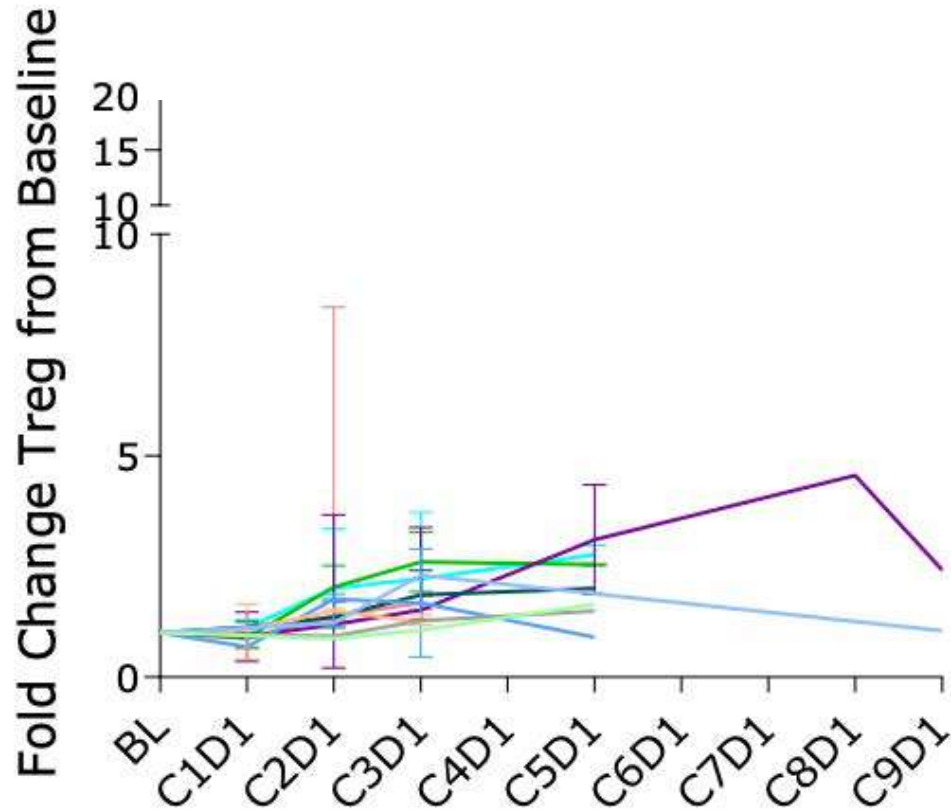
27-fold increase in peripheral Tregs with Bempeg



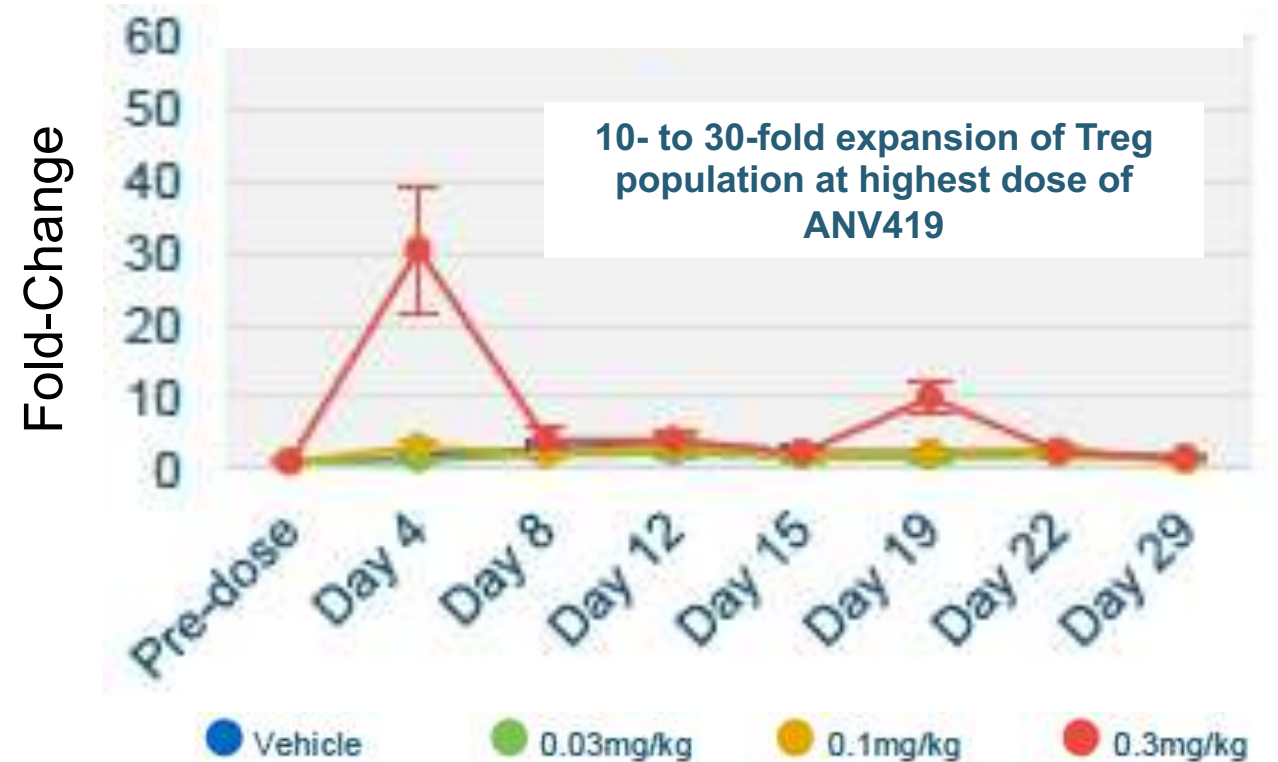
Substantial expansion of Tregs and low delivered doses of IL-2 likely accounts for poor clinical data observed to date with pegylated IL-2 constructs, and the failure in multiple Phase 3 trials

# Third *In Vivo* Proof of Negative Feedback Loop in Action: Anaveon's ANV419

Treg fold change at each cycle in patients from Phase 1 clinical trial



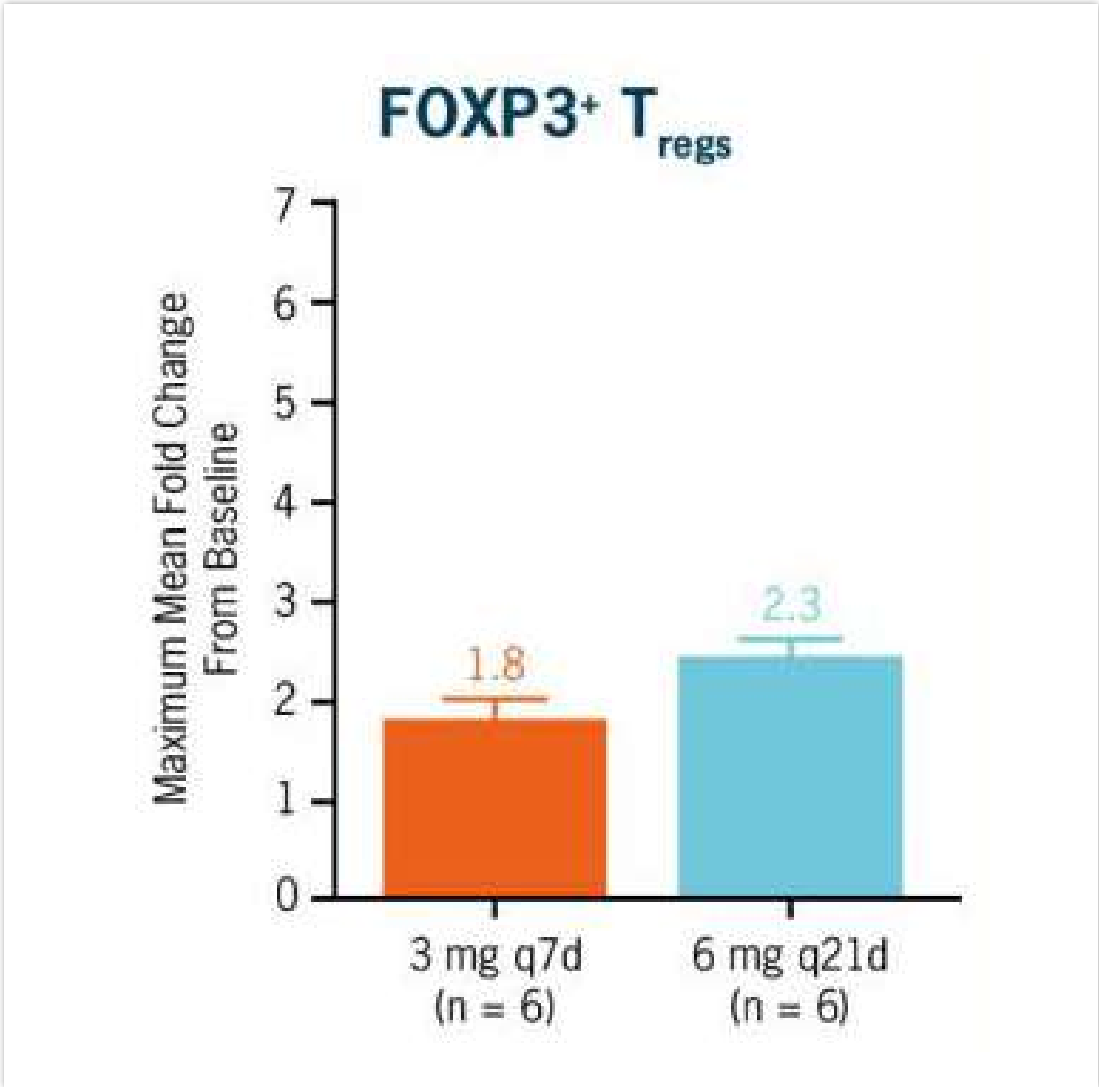
Treg population fold change following dosing on Days 1 and 15 in cynomolgus monkeys



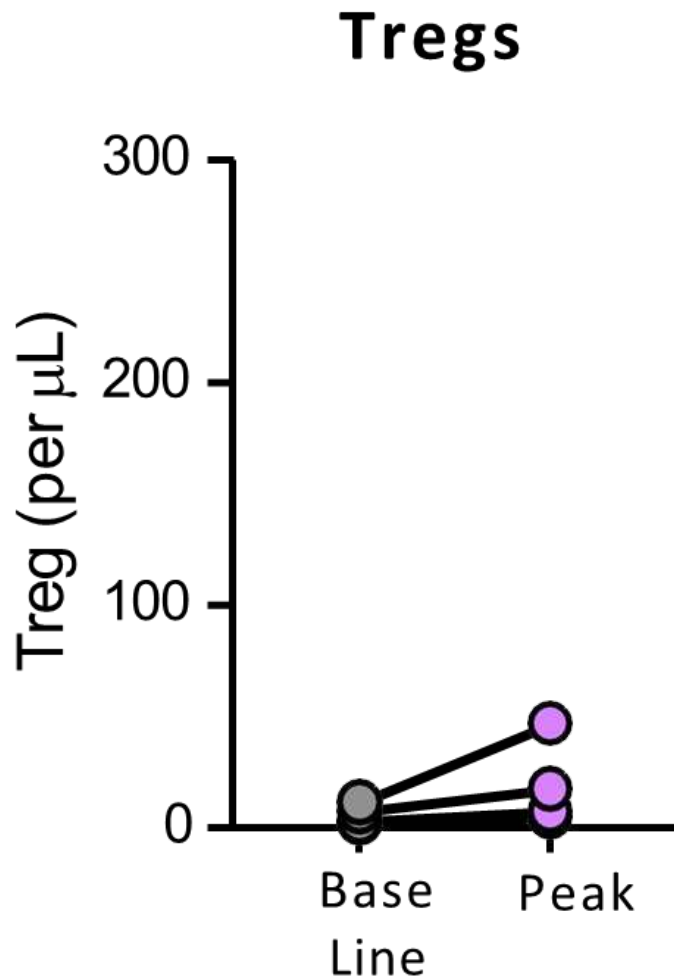
Half-life of ANV419 in cynomolgus monkeys is ~24 hours  
Half-life of AU-007 in cynomolgus monkeys is ~15 days



# Fourth *In Vivo* Proof of Negative Feedback Loop in Action: Alkermes' Nemvaleukin Alfa

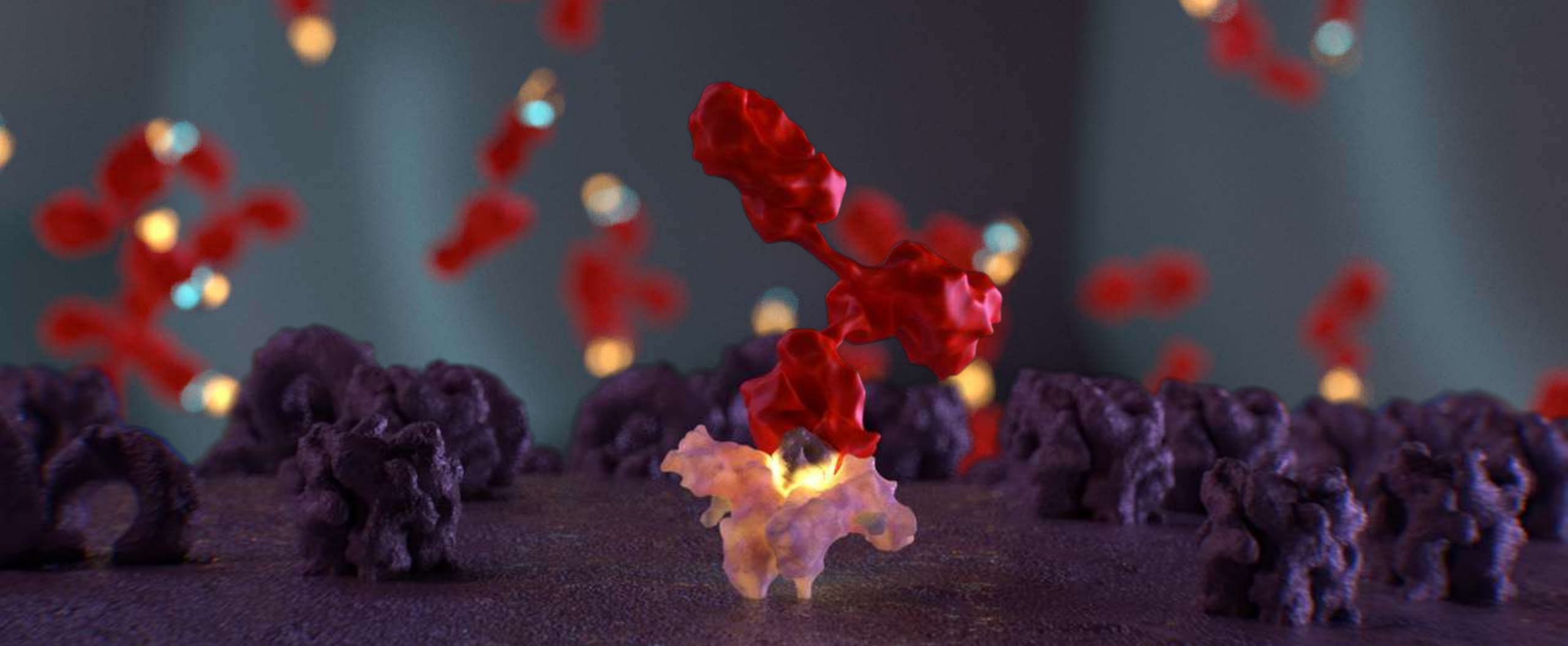


# Fifth *In Vivo* Proof of Negative Feedback Loop in Action: Medicenna's MDNA11



Following the very first dose of MDNA11, Tregs begin to rise

Y-axis scaling obscures the significant fold increase in Tregs elicited by MDNA11

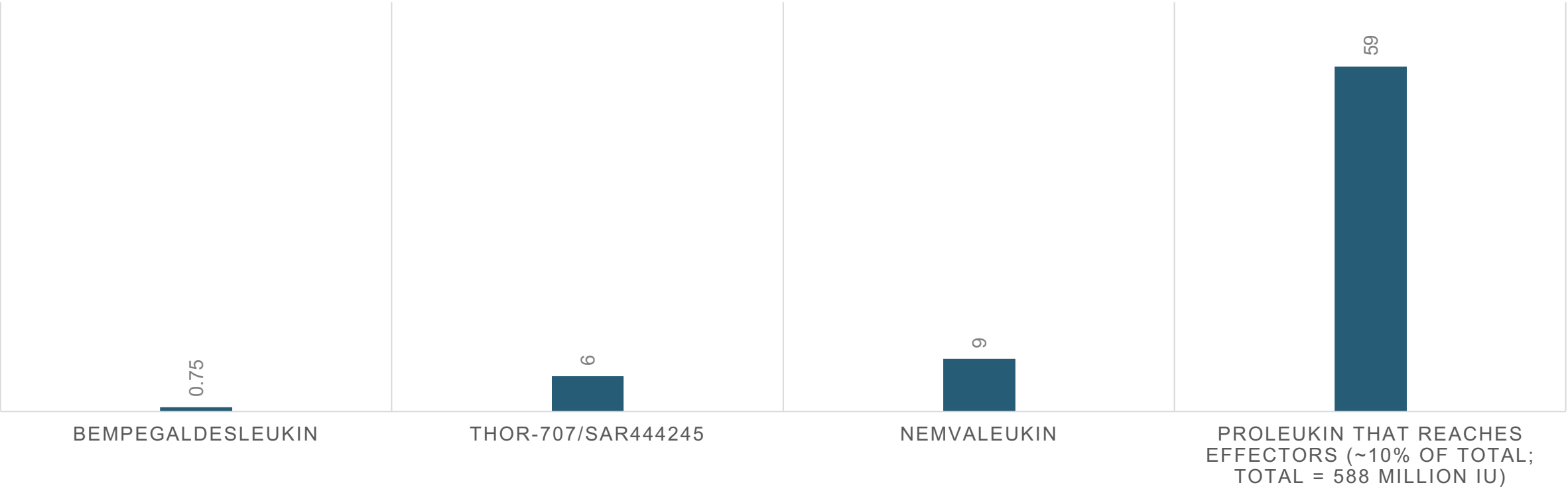


IL-2 equivalent amounts delivered by second generation  
("non-alpha") agents is very low

**aulos**

# IL-2 Equivalent Amounts Delivered by Second Generation, “Non-Alpha” Agents Is Actually Very Low, and Correlates With Clinical Efficacy

MILLIONS OF INTERNATIONAL UNITS (IU) DELIVERED PER 2- OR 3-WEEK CYCLE



Modeling suggests that AU-007 will deliver as much or more IL-2 to effector T cells and NK cells as Proleukin®, while redirecting IL-2 away from Tregs, pulmonary endothelium, vasculature and eosinophils