Developing medicines harnessing the capability of DNA to power body's immune system

MedInvest Biotech and Pharma Investor Conference

April 1, 2026

Nasdaq: IMNN

Safe Harbor Statement

Disclosures

For the purposes of this notice, the "presentation" that follows shall mean and include the slides that follow, the oral presentation of the slides by members of management of Imunon, Inc. ("IMUNON" or the "Company") or any person on their behalf, any question-and-answer session that follows such oral presentation, hard copies of this document and any materials distributed at, or in connection with, such oral presentation. The information contained in this presentation is for informational purposes only.

This presentation shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of these securities in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or other jurisdiction.

Forward-Looking Statements

IMUNON wishes to inform readers that forward-looking statements in this presentation are made pursuant to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, including, but not limited to, statements regarding the timing of enrollment of the Company's clinical trials, statements regarding the potential of any therapies developed by the Company to fulfill unmet medical needs, the market potential for the Company's products, if approved, the potential efficacy and safety profile of our product candidates, and the Company's plans and expectations with respect to its development programs more generally, are forward-looking statements. We generally identify forward-looking statements by using words such as "may," "will," "expect," "plan," "anticipate," "estimate," "intend" and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances). Readers are cautioned that such forward-looking statements involve risks and uncertainties. These risks and uncertainties, based upon Imunon's current expectations and beliefs including those related to the future financial position and business strategy of the Company, are detailed in in IMUNON's filings with the Securities and Exchange Commission. IMUNON assumes no obligation, except to the extent required by law, to update or supplement forward-looking statements that become untrue because of subsequent events, new information or otherwise.

This presentation discusses product candidates that are under clinical study and which have not yet been approved for marketing by the U.S. Food and Drug Administration. No representation is made as to the safety or effectiveness of these product candidates for the therapeutic use for which such product candidates are being studied.

Product Pipeline of DNA-based Transformative Medicines

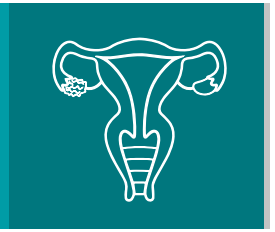
Platform	Delivery	Program	Indication(s)	Discovery	IND enabling	Phase 1	Phase 2	Phase 3	Partner
TheraPlas **IL-12 Plasmid Immunotherapy**	**IP**	**IL-12 (OVATION 2)**	Newly Diagnosed Adv. Ovarian Cancer	IMNN-001		Q1'26 completed			BREAK THROUGH CANCER #RadicalCollaboration
		IL-12 (OVATION 3)	Newly Diagnosed Adv. Ovarian Cancer	IMNN-001			enrolling		
		IL-12 IP in combination with **Avastin***	Newly Diagnosed Adv. Ovarian Cancer	IMNN-001			enrolling		
		IL-12 in combination with **Immune checkpoint Inhibitors**	Newly Diagnosed Adv. Ovarian Cancer	IMNN-001					
		IL-12	Colorectal Cancer	IMNN-001					
		IL-12	Pancreatic Cancer	IMNN-001					
	Intra-tumoral	**IL-12**	Glioblastoma	IMNN-001					
PlaCCine	**IM**	**SARS-CoV-2** Clinical Proof-of-Concept	Infectious Disease	IMNN-101		complete			

* Avastin or a biosimilar

Great Unmet Need: Patient Outcomes and Frontline Standard of Care Unchanged for 30 years

Recurrence Rates are High and Survival Rates are Low

Epithelial ovarian cancer (EOC) is insidious and usually diagnosed at an advanced stage. Though EOC initially responds to treatment, the recurrence rate is high. Recent treatments delay progression but overall survival has not improved. Hence there is a need for effective therapy for patients with EOC.



20,000 new cases diagnosed each year in US, **13,000** deaths

300,000 new cases diagnosed worldwide

80% diagnosed in late stage (III/IV)

70% recurrence rate within 2-5 years after initial treatment

>60% will die within 5 years of diagnosis

IMNN-001, Imunon's novel IL-12 immunotherapy, has the potential to be first-in-class IL-12 Immunotherapy and provide a break-through in today's frontline standard of care

Sources: Cancer Statistics, American Cancer Society; Globocan; SEER database. CDC

IMNN-001: A Potential Breakthrough in Newly Diagnosed Ovarian Cancer

No other frontline ovarian cancer trial has shown an OS improvement; IMNN-001 has a highly favorable benefit/risk profile

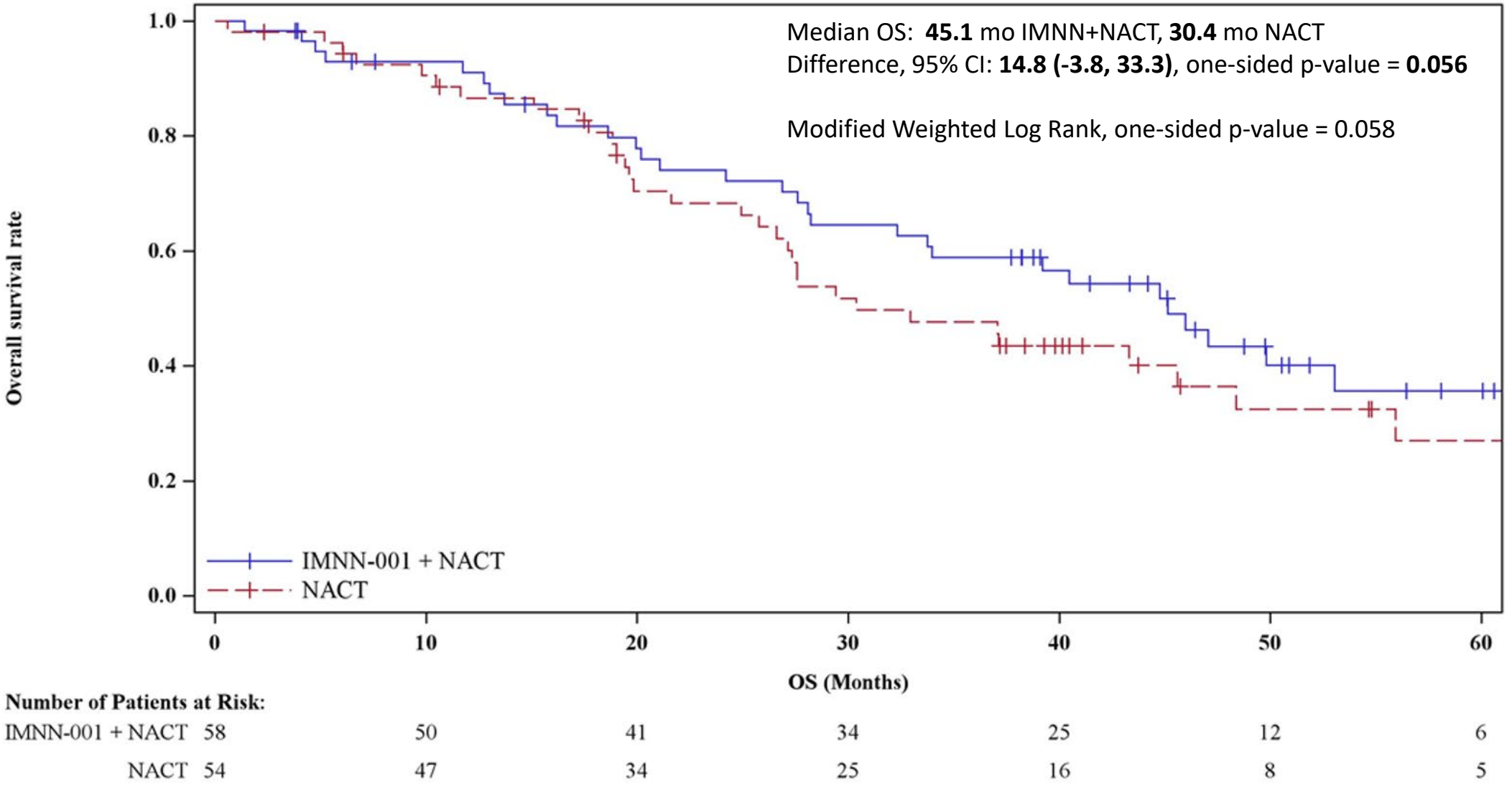
IMNN-001 may be the 1st immuno-therapy for ovarian cancer, with the potential to transform the standard of care and deliver substantial return on investment

Large randomized Phase 2 OVATION-2: 15-month OS improvement by IMNN-001 over standard of care, 95%CI (-3.8, 33.3), 24-month OS improvement in patients treated with PARPi

Phase 3 OVATION-3 Study: FDA-approved registrational trial enrolling, treatment with IMUNON-manufactured API

K-M Plot of Overall Survival, ITT population, OVATION-2 final analysis

July 2024 Δmedians 11.1 months → Final Analysis: Δmedians 14.7 months

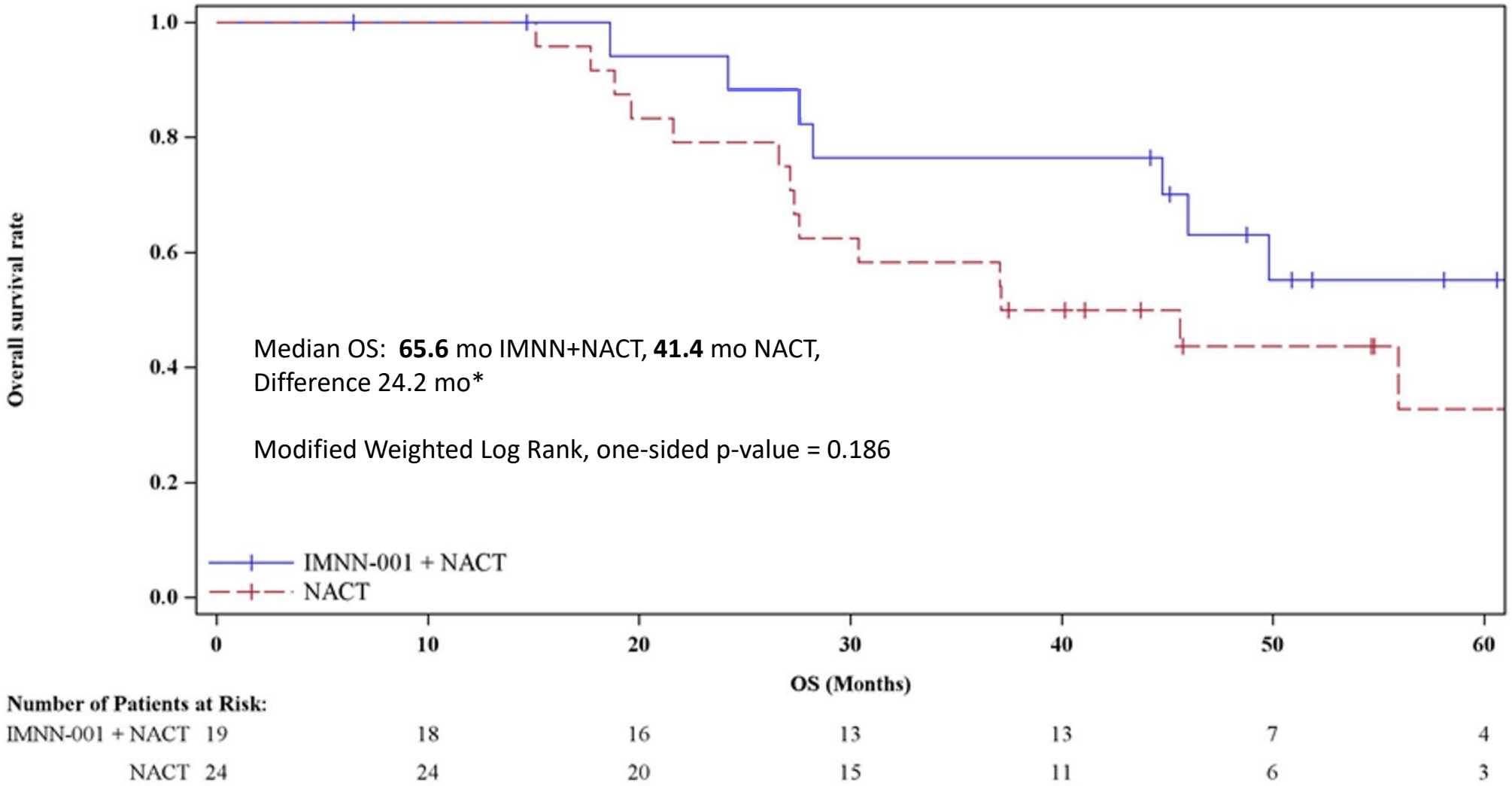


Number of Patients at Risk:

IMNN-001 + NACT	58	50	41	34	25	12	6
NACT	54	47	34	25	16	8	5

K-M Plot of Overall Survival, PARPi treated pts, OVATION-2 final analysis

July 2024 Δmedians not evaluable → Final Analysis: Δmedians 24.2 months



*Due to the small event rate, CI for the difference in medians can't be estimate

Our Phase 3 Clinical Research is of Great Importance to the Medical Community

- Our Landmark Phase 2 Study was Showcased at ASCO with a Platform Presentation
- Published in Gynecologic Oncology, Premier Medical Outlets

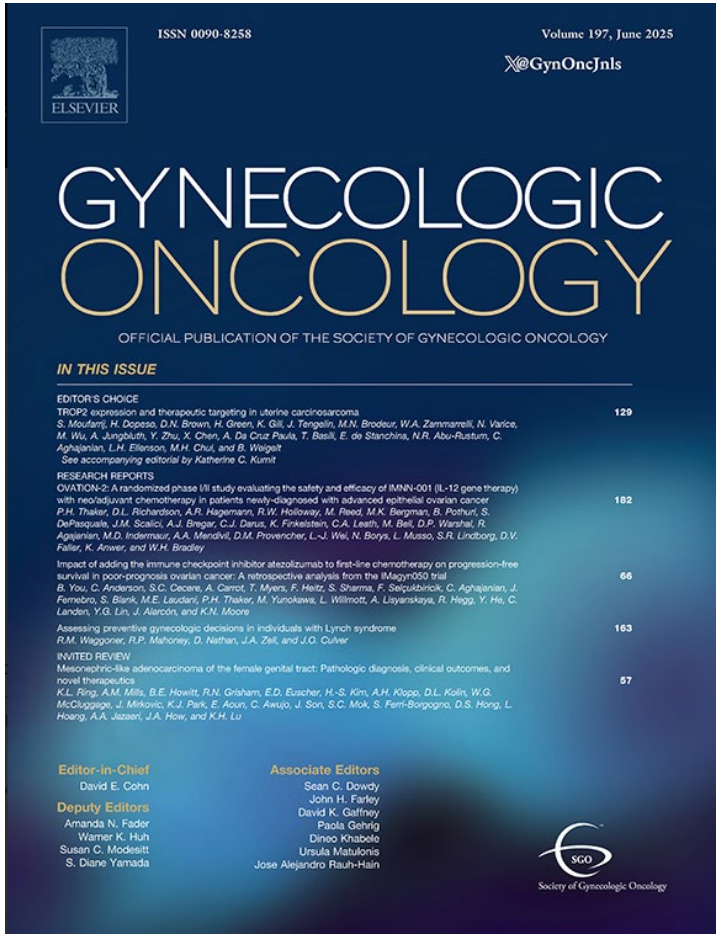
2025 ASCO ANNUAL MEETING

A Phase I/II study of the Safety and Efficacy of IP IMNN-001 in combination with N/ACT in patients newly-diagnosed with advanced EOC:

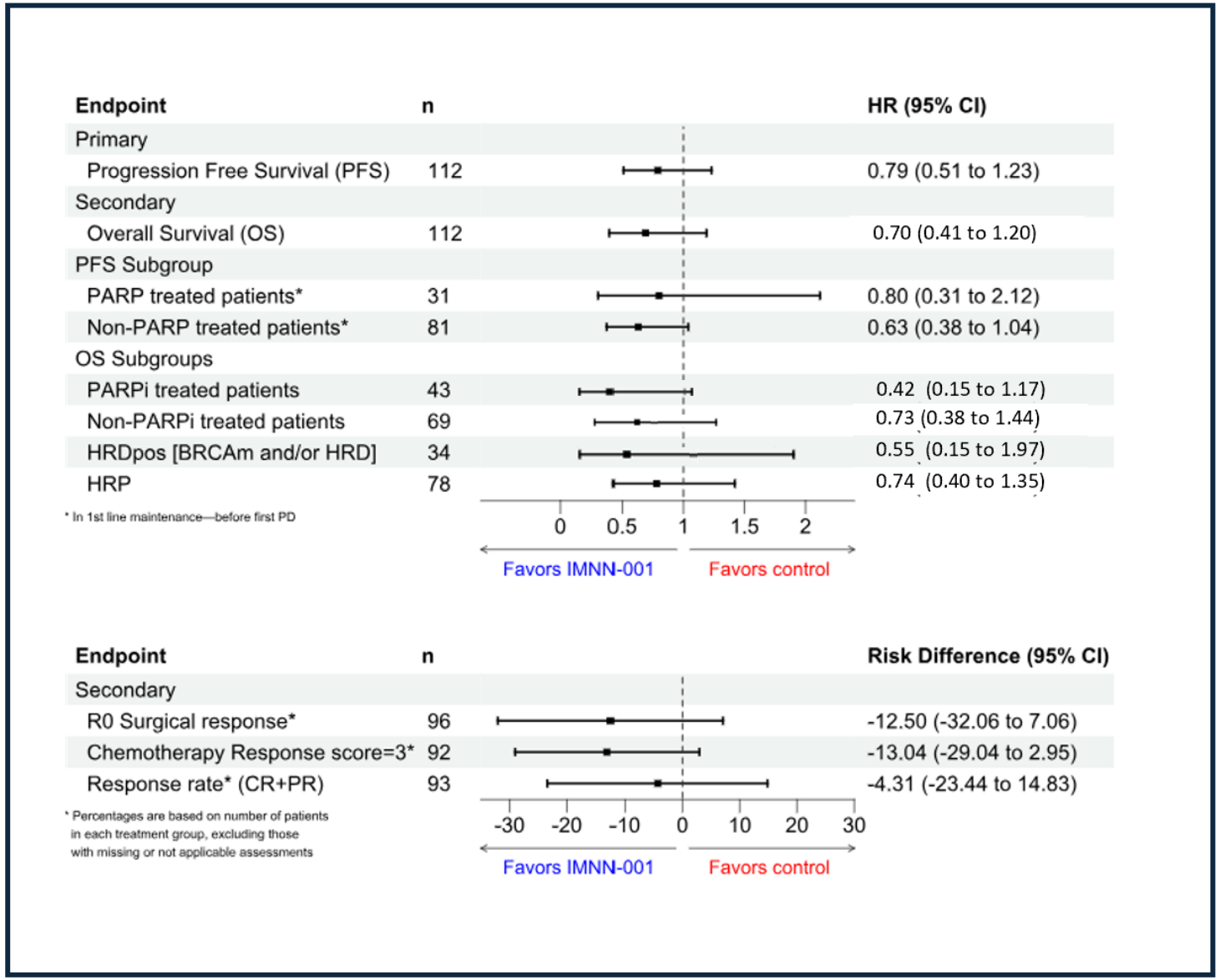
Updated Survival Analysis from OVATION-2 Trial

P. Thaker, D. Richardson, A. Hagemann, R. Holloway, M. Reed, M. Bergman, B. Pothuri, S. DePasquale, J. Scalici, A. Begar, C. Darus, K. Finkelstein, C. Leath III, M. Bell, D. Warshal, R. Agajanian, M. Indermaur, A. Mendivil, D. Provencher, LJ Wei, L. Musso, S. Lindborg, D. Faller, K. Anwer, W. Bradley.

Premal H. Thaker, MD
David & Lynn Mutch Distinguished Professor of Obstetrics & Gynecology
Chief of Gynecologic Oncology, Interim. Director of Gynecologic Oncology Clinical Research. Professor in Gynecologic Oncology.
Washington University School of Medicine



OVATION 2 Treatment Effect Consistently Favors IMNN-001 Across All Trial Endpoints and Pre-specified Subgroups

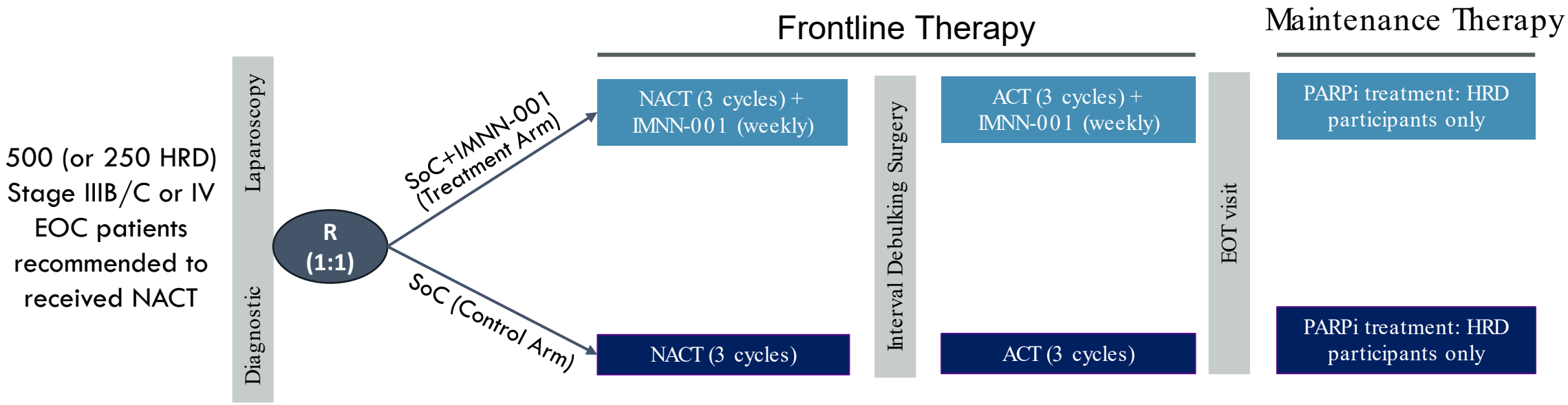


Consistent treatment effect in ongoing Phase 2 MRD Trial*:

- Lower MRD-positivity rate
- Lower % of positive biopsies
- Higher Progression Free Survival
- Higher CRS at cytoreduction

*MRD: minimal residual disease
Data from IMUNON 2025 R&D Day

OVATION 3: Purposeful Protocol Design & Rigorous Methodology



- Well controlled study with treatment and control arms, and protocol-specified maintenance
- Stratification for added confidence in balance across treatment arms (HRR Biomarker & tumor stage)
- Clinically meaningful Primary Endpoint Overall Survival
- Trial targeting the most responsive subgroup (HRD) for accelerated readout, allowing all comers' population more time
- Secondary endpoints that further evidence efficacy, safety and patient perspectives/QoL
- Event driven statistical methodology with interim analyses designed for early submission for full approval in the HRD+ Group

IMUNON in Phase 3, Well Positioned with Early Stopping Potential

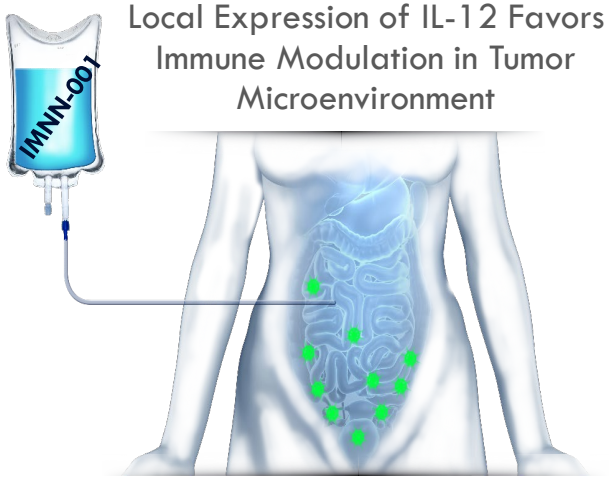
Executing against the plan as promised…

- **Robust Data from 112 patient OVATION-2 (Phase 2) demonstrating IMNN-001 improvement over SoC**
  - Confidence in Phase 3 trial based on consistency of clinical data across all endpoints and subgroups
  - Data continue to improve the longer we monitor patients
- **Successful meetings with FDA and full alignment**
  - Protocol, statistical analysis plan, cGMP plan for Phase 3 and commercial product
- **Innovative statistical design with planned interim analysis for early stopping for success and BLA filing to support FDA approval:**
  - Enhancements added to Phase 3: OS is the primary endpoint, Stratification and population balance for interpretability, QoL scales added for pricing and reimbursement
  - Broad indication of women newly diagnosed with ovarian cancer who are eligible for NACT
- **IMUNON team is well-positioned to execute on Phase 3 clinical trial**
  - Great collective depth and breath; strong track record of delivery while managing expenses and bringing in money to drive the business forward
- **OVATION-3 (Phase 3) clinical trial ongoing, FPV June 2025**
  - Site activation in progress, patient enrollment remains ahead of forecast
  - Full Enrollment projected 2029

IMNN-001 Targets the Micro-Environment of Ovarian Cancer

Local production of safe and durable levels of a powerful anti-cancer immune agent, IL-12

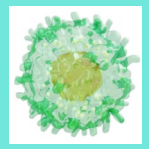
Safe administration weekly, demonstrated over a 6-month period



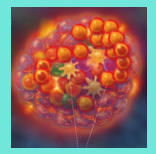
Local Expression of IL-12 Favors Immune Modulation in Tumor Microenvironment

- Intracavity infusion of IMNN-001 has demonstrated durable and local expression of IL-12 in the peritoneum
- No supraphysiological increases in IL-12 commonly associated with bolus rIL-12 delivery minimizes excessive systemic exposure to IL-12, thereby giving a favorable safety profile to IMNN-001

Interleukin 12 Induces Strong Anti-cancer Immunity Through Multiple Mechanisms

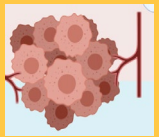


Stimulates the proliferation of CD-8 positive T-cells and natural killer (NK) cells and their cytotoxic activity against the tumor

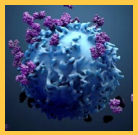


Shifts the differentiation of naive CD-4 positive T-cells toward a TH-1 phenotype, further enhancing the immune response

Turns cold tumors into hot tumors



Promotes cellular production of the potent immune mediator IFN-γ and TNF-α. IFN-γ promotes the expression of anti-angiogenic molecules, halting the growth of new blood vessels that supply oxygen to the tumor

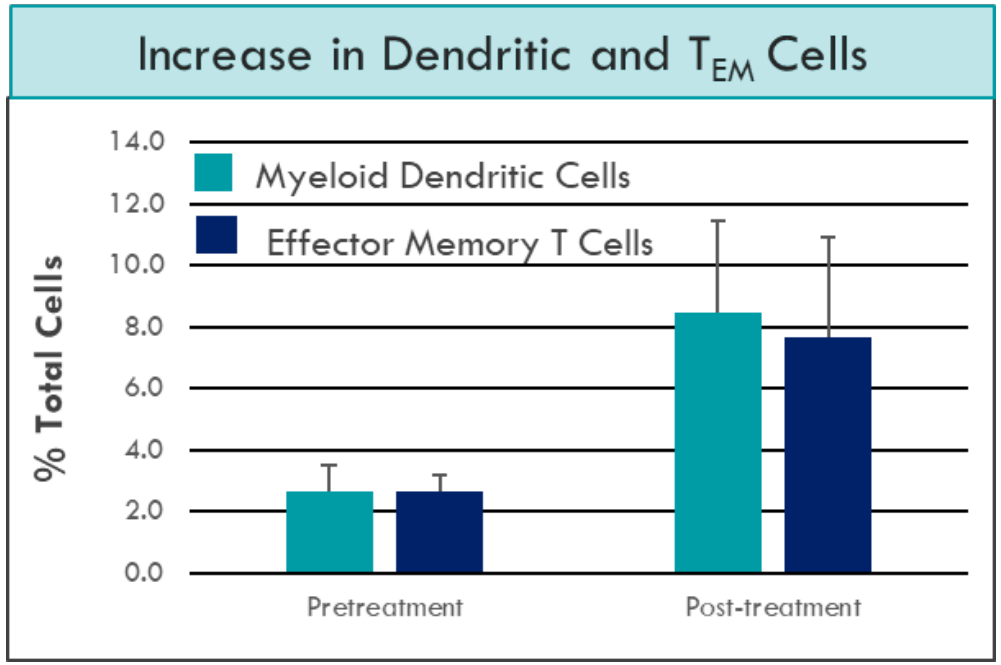


IL-12 may inhibit regulatory T-cells that suppress immune responses by “hiding” the tumor from the body’s immune system

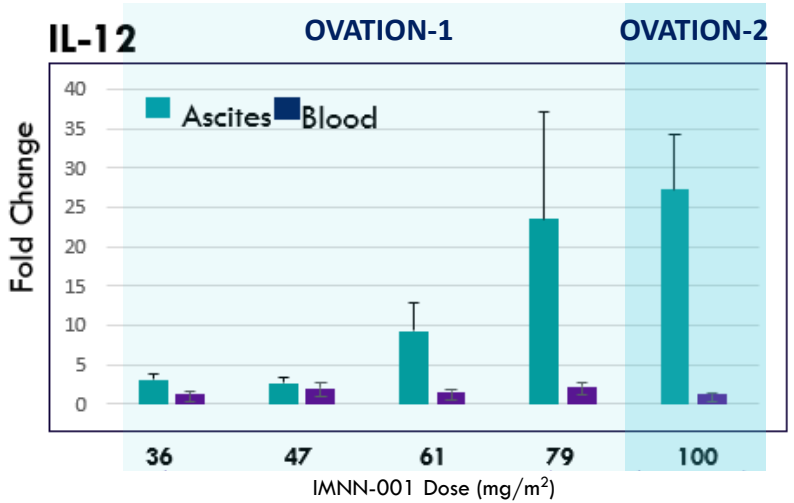
IMNN-001 Has a Broad Impact, Fundamentally Alters Tumor Microenvironment

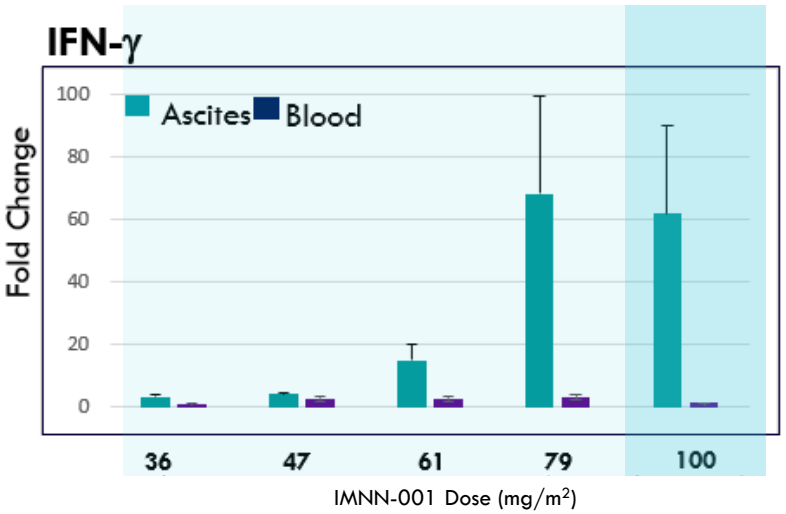
Translational Data Sampling Confirms 100 mg/m² as the Phase 3 dose

- Increases in cytokine levels at tumor site show IMNN-001 targeted local activity
- Low cytokine blood levels underpin IMNN-001 safety profile
- Increase in anti-cancer dendritic cells & effector memory T-cells demonstrate activation of the cellular immune system



IMNN-001 dose-dependent and local selective expression of IL-12 and IFN-γ levels in patients' samples





Additional translational data

IMNN-001 has a Highly Favorable Benefit/Risk Profile Through Phase 2

OVATION 2 Phase 2 Key safety observations:

- No systemic dose limiting toxicities associated with IV administration of IL-12 were observed
- Cytokine release syndrome (CRS) did not occur with IMNN-001 treatment
- No elevation of immune related A/E
- Most common treatment-emergent adverse events:
  - ✓ Abdominal pain, nausea, vomiting
  - ✓ Significant improvement in control of abdominal pain when an analgesic regimen was instituted

MRD trial safety observations:

- Favorable benefit/risk profile further strengthened by MRD trial
- Patients successfully treated with IMNN-001 maintenance therapy, and patients were safely treated with IMNN-001 in combination with Bevacizumab

Investment Thesis

Funding IMNN-001 IL-12 Registrational Study for 1st line Ovarian Cancer

- **Unprecedented data in a randomized, well controlled Phase 2 with compelling OS efficacy in newly diagnosed OV population**
- **Data driven Registrational study design based on strong evidence, leveraging established genetic biomarker**
- **Ovarian cancer represents a multi billion-dollar unmet medical need**
  - IMNN-001 has been granted Fast Track by the FDA
  - Orphan status has been established in the U.S. and EU
- **Imunon has established a cGMP-compliant capability to manufacture investigative product for the registrational study. Eventually, a footprint for commercial launch.**
  - Costs are an "order of magnitude" lower than if 3rd party-sourced, supporting impressive gross margins
  - FDA alignment for CMC strategy, including potency assay
- **Registrational study initiated Q1 2025**
  - Newly diagnosed, advanced Ovarian Cancer, eligible to neoadjuvant treatment, n=500 patient trial
  - Definitive primary endpoint is overall survival
  - Design includes planned interim analyses for early stopping for success, BLA filing for full approval
- **Investment Goals:** $55M all in trial cost, long minded investors
  - Tranche structure alternative to full financing to minimize investor risk
  - Data analysis from phase 3 Secondary endpoints to inform subsequent tranches

Corporate Information

Headquarters
Princeton, NJ

Research Facility
Huntsville, AL

IMUNON
997 Lenox Drive
Suite 100
Lawrenceville, NJ 08648

P: 609-896-9100
F: 609-896-2200

www.imunon.com
Nasdaq: IMNN