INOVIO

Second Quarter 2025 **Financial Results**

August 2025

Agenda

Introduction
Jennie Willson, Director, Communications

CEO Perspective & Corporate Progress
Jacqueline Shea, PhD, President & Chief Executive Officer

INO-3107 Update
Michael Sumner, MBBS, MBA, Chief Medical Officer
Steve Egge, MBA, Chief Commercial Officer

Financial Results
Peter Kies, Chief Financial Officer

Forward-Looking Statements

This presentation includes statements that are, or may be deemed, “forward-looking statements,” within the meaning of Section 27A of the Securities Act of 1933, as amended. All statements, other than statements of historical facts, included in this presentation regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans and objectives of management are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “might,” “will,” “objective,” “intend,” “should,” “could,” “can,” “would,” “expect,” “believe,” “anticipate,” “project,” “target,” “design,” “estimate,” “predict,” “opportunity,” “proposition,” “strategy,” “potential,” “plan” or the negative of these terms and similar expressions intended to identify forward-looking statements.

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Recent Progress on 2025 Strategic Priorities

Submit BLA for INO-3107

- On track to submit BLA in second half of 2025
  - Completed device design verification (DV) testing required for IND update and BLA submission
  - Requested rolling submission from FDA in July 2025
  - Long-term efficacy data published in *The Laryngoscope*
  - Goal: receive acceptance from FDA by EOY; plan to request priority review

Advance Commercialization Preparations

- Ongoing market research with physicians, patients and payors
- Refining go to market plans

Advance Pipeline

- Anticipate results from ongoing proof-of-concept Phase 1 trial with next gen DMAb technology to be published in peer-reviewed journal 2H25

LEAD CANDIDATE:

INO-3107 for Recurrent Respiratory Papillomatosis (RRP)

Potentially transformational therapy under accelerated approval pathway

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2025 Progress Toward BLA Goal

Regulatory Timelines on Track

- Completed DV testing for device
- Requested rolling submission of BLA in July 2025
- Submit BLA in 2H25
- Goal: receive acceptance of file for review by FDA by year-end

Confirmatory Trial Preparations Underway

- Updating active IND for trial initiation
- Targeting 20+ sites at major US medical centers

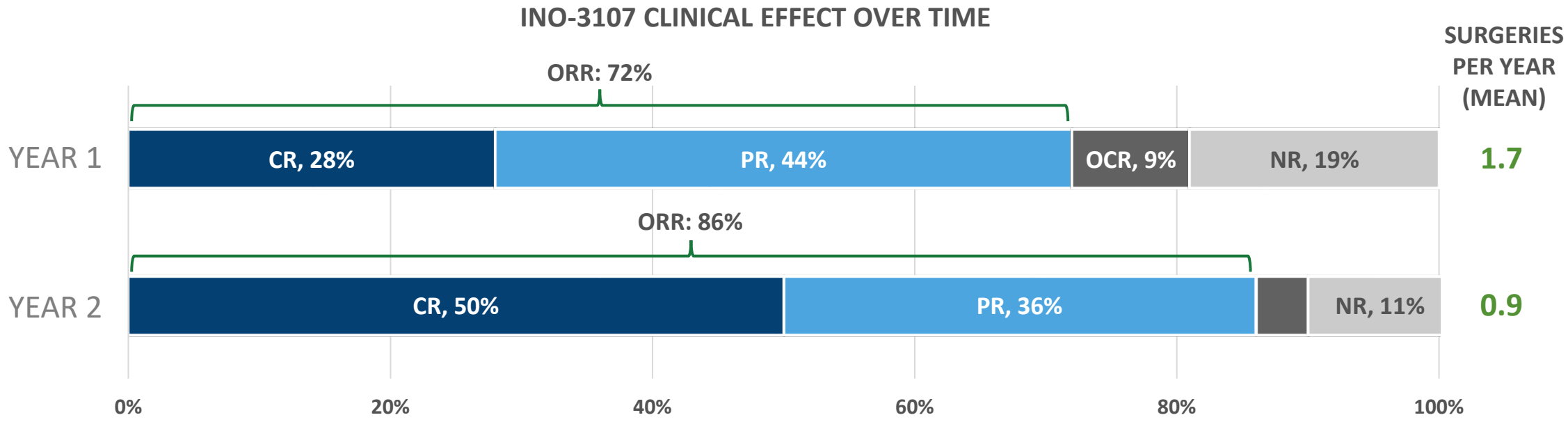
Clinical, Durability and Immunology Data Presented & Published in Peer-Reviewed Journals

- Clinical and safety data from Ph1/2 trial (RRP-001) published in *Nature Communications* in February 2025
- Durability data from retrospective trial (RRP-002) published in *The Laryngoscope* in August 2025
- Presented data at several scientific conferences in 1H25; more planned for 2H25

Reduction in Surgeries Continued to Improve After Year 1

ORR was 72% at Week 52, improving to 86% by Week 104 for second twelve-month period

The pre-treatment mean for surgeries in the year prior to start of INO-3107 was 4.1 (range 2-8)



PARAMETERS

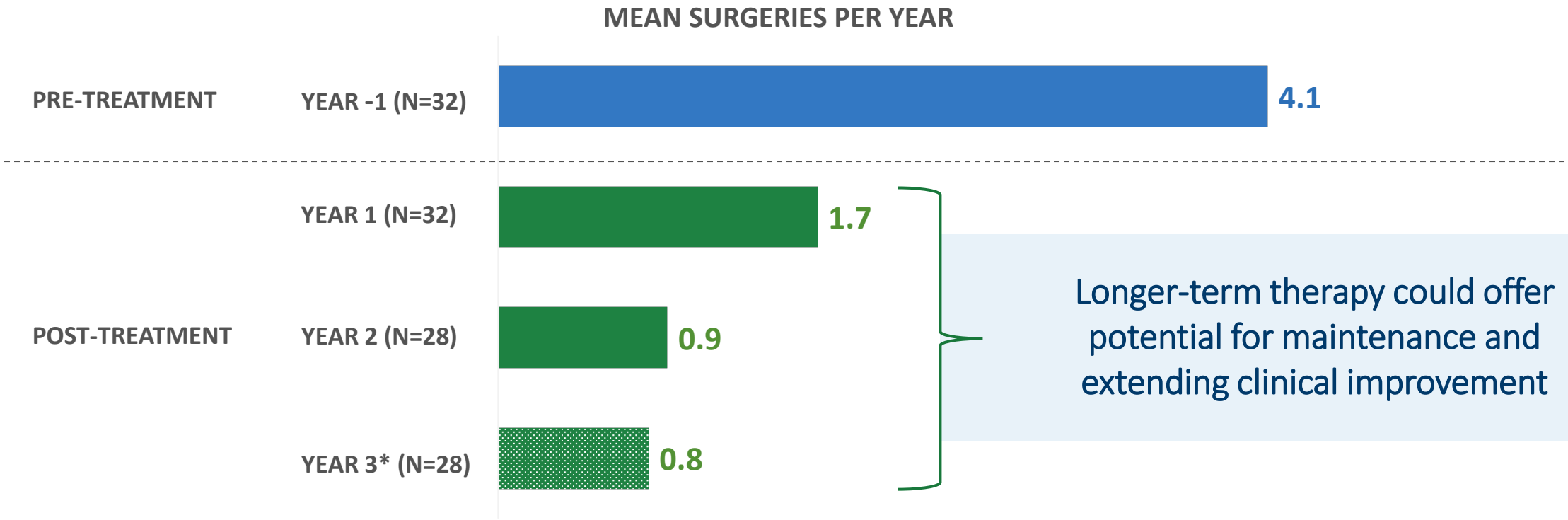
CR **Complete Response:** no surgeries during a 52-week treatment phase

PR **Partial Response:** a ≥ 50% reduction and less than 100% in surgeries compared to previous year

OCR **Overall Clinical Response:** reduction of ≥ 1 surgery compared to previous year

NR **Non-Responders:** No reduction in surgeries vs. baseline

Over 75% Fewer Surgeries 2 Years After Initial Treatment Regimen



*Median follow up Year 3: 0.8 years

Foundational Strengths of RRP Program

Designed with every surgery—and every patient—in mind

Unmet Medical Need	• Debilitating rare disease caused primarily by HPV-6 & HPV-11, characterized by small, wart-like growths in respiratory tract • Current standard of care (repeat surgeries) does not address underlying disease
Mechanism of Action	• Designed to elicit an antigen-specific T cell response against HPV-6 & HPV-11 • Targeted T cells seek out and kill infected cells, preventing or slowing growth of new papilloma
Phase 1/2 Trial (RRP-001)	• Majority of patients saw a 50-100% reduction in surgery • Well tolerated with minimal adverse events • INO-3017 elicited antigen-specific T cell response correlated to clinical benefit (reduction in surgery)
Retrospective Trial (RRP-002)	• Clinical outcomes maintained or improved upon through year 2 and into year 3 with no additional dosing
Confirmatory Trial	• Randomized, placebo-controlled; 100 patients to be enrolled at 20+ sites • Suitable to support global registration

RRP Represents a Significant Market Opportunity

Disease-modifying therapeutic option

14,000 patients in the U.S., 1.8 per 100,000 new cases annually; similar estimates in Europe

HPV vaccination unlikely to have significant impact on RRP prevalence in near term

Payor research supports potential for rare disease pricing*

No regulatory-approved therapeutic currently available

Surgical standard of care has potential to cause irreparable harm; does not impact underlying disease

Potential to develop continuation of therapy regimen - opportunity to maintain/extend outcomes

*Potential analog for INO-3107 is Ogsiveo®, a recently approved first-in-class product that treats desmoid tumors, which are also life-altering benign growths that had previously been treated by repetitive surgeries

Sources: Pingali C et al. National Vaccination Coverage Among Adolescents Aged 13–17 Years — National Immunization Survey-Teen, US, 2023. MMWR 2024;73:708–714. http://dx.doi.org/10.15585/mmwr.mm7333a1. Lewis RM et al. Estimated Prevalence and Incidence of Disease-Associated Human Papillomavirus Types Among 15- to 59-Year-Olds in the US. *Sex Transm Dis*. 2021 Apr 1;48(4):273-277. doi: 10.1097/OLQ.0000000000001356. PMID: 33492097; PMCID: PMC10037549. Shapiro GK. HPV Vaccination: An Underused Strategy for the Prevention of Cancer. *Current Oncology*. 2022; 29(5):3780-3792. https://doi.org/10.3390/curroncol29050303. Zhang Y, Fakhry C, D'Souza G. Projected Association of Human Papillomavirus Vaccination With Oropharynx Cancer Incidence in the US, 2020-2045. *JAMA Oncol.* 2021;7(10):e212907. doi:10.1001/jamaoncol.2021.2907. Cancer Trends Progress Report National Cancer Institute, March 2024, https://progressreport.cancer.gov.

Market Research Continues to Support Preferred Product Profile

EFFICACY

Improving response over time

- Overall Response Rate (50% to 100% reduction in surgeries): 72% in year 1; 86% in year 2*
- Complete response (no surgeries): 28% in year 1; 50% in year 2

"The complete response rate of 50% is good... but a 50-100% reduction in surgeries in ~8 out if 10 patients, that's the most compelling. The vast majority see significant benefit from treatment."

– Laryngologist, manages ~50 RRP patients

*YR 1 = first 12-month treatment period,
YR 2 = second 12-month treatment period

TOLERABILITY

Well tolerated

- 41% (13/32) reported treatment-related AEs grade 2 or lower
- Most common AEs: transient injection site pain (31%) and fatigue (9%)
- No discontinuations

"The tolerability profile looks good – 31% with pain, fatigue 9%. This suggests patients can go back to work... this is important, especially when patients receive multiple doses over a relatively short timeframe."

– Laryngologist, manages ~15 RRP patients

SIMPLICITY

Patient-centric treatment

- Office-based administration that leaves doctor in control
- CELLECTRA device easy to use by HCPs
- No requirement for scoping/surgeries during dosing window

"Sending my patients on a referral is not always the best thing. You're defeating yourself by handing off care. I prefer to treat patients in my clinic, so I can maintain control."

– Laryngologist, manages ~30 RRP patients

Advancing Launch Preparations

- Developed distribution/channel strategy and identified channel partners (3PL, specialty pharmacy, specialty distributor)
- Identified a HUB (patient services) partner
- Developed initial pricing strategy
- Completed targeting, segmentation and product positioning work - supporting positive differentiation
- Finalizing GTM model and planning further build-out of commercial organization
  - Small/efficient field force footprint

300-400

laryngologists treat the majority of RRP patients

2Q25 Financial Update

Making Progress on Strategic Goals While Reducing Costs

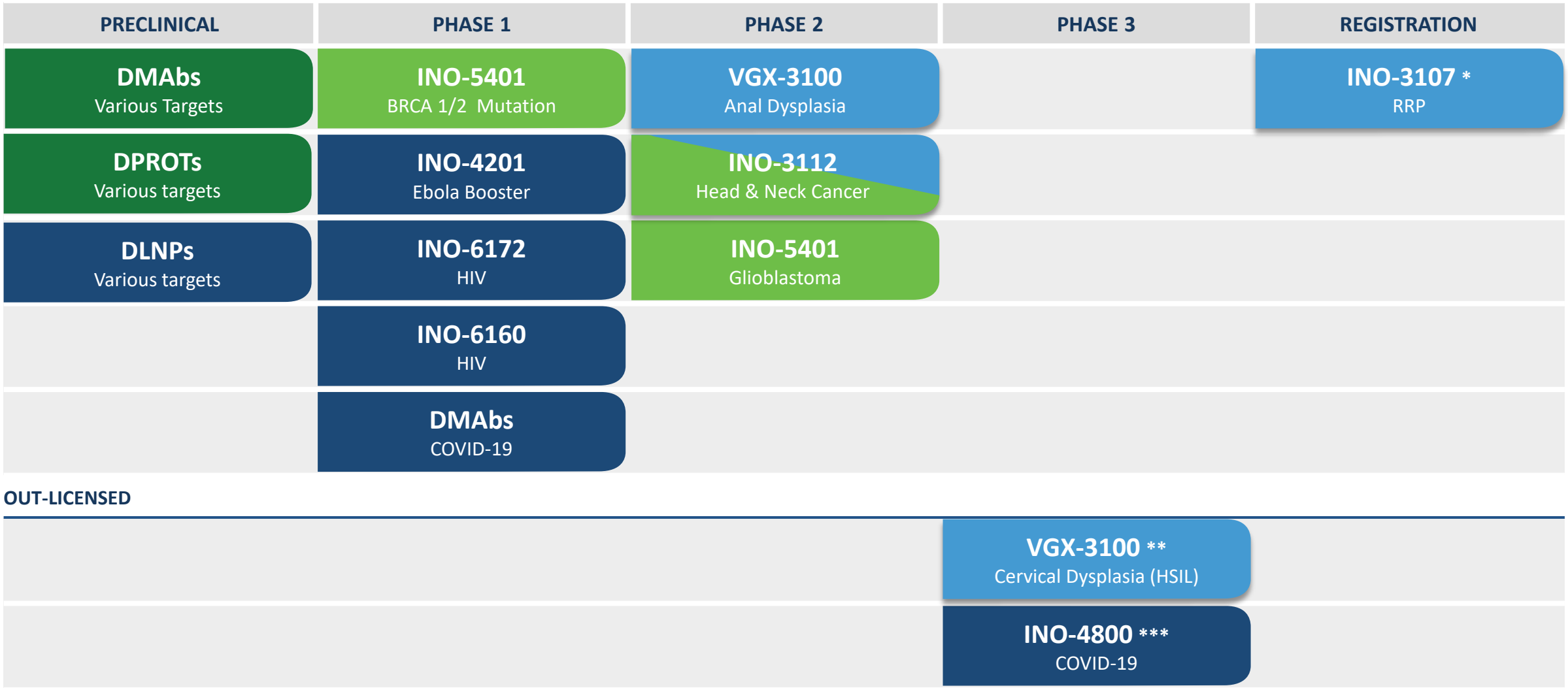
	THREE MONTHS ENDED JUNE 30, 2025 (UNAUDITED)			SIX MONTHS ENDED JUNE 30, 2024 (UNAUDITED)		
	2025	2024	% CHANGE	2025	2024	% CHANGE
Operating expenses	$23.1	$33.3	(31%)	$48.2	$64.8	(26%)
Net loss	($23.5)	($32.2)	(27%)	($43.2)	($62.7)	(31%)
Net loss per share	($0.61)	($1.19)	(49%)	($1.12)	($2.48)	(55%)

- $47.5M in cash, cash equivalents and short-term investments at June 30, 2025
- $22.5M in net proceeds from July 2025 offering
- No debt
- Cash runway projected into 2Q 2026

Select Financial Results. Amounts presented in millions ($US) except per share amounts. Cash runway projection includes net proceeds from July 2025 offering

Pipeline Update

INOVIO Pipeline



* Preparing BLA submission under accelerated approval program ** VGX-3100 to ApolloBio for China *** INO-4800 to Advaccine for China

Q&A

Anticipated Outreach at Key Scientific Conferences in 2H25

- **American Academy of Otolaryngology** OCTOBER 10-13
- **World Vaccine Congress Europe** OCTOBER 13-16
- **European Society for Medical Oncology** OCTOBER 17-21
- **37th International Papillomavirus Society Conference** OCTOBER 23-26
- **World Orphan Drug Congress** OCTOBER 27-29
- **ISV Congress** OCTOBER 28-30

Upcoming Key Catalysts

Submit BLA for INO-3107

- Begin submitting modules on a rolling basis in 2H25
- Submit revised IND for confirmatory trial
- Submit longer-term therapy trial design for sBLA to FDA after BLA submission
- Continue to present/ publish data

Commercialization Preparations

- Be ready to launch quickly and efficiently if approved
- Continue to build on market research
- Finalize planning for go-to-market strategy
- Complete plans for commercial organization

Progress Pipeline

DMAb

- Complete Phase 1 trial
- Present/publish data

INO-3112 for OPSCC

- Finalize protocol for Phase 3
- Complete manufacture of drug supply for trial

INO-5401 for GBM

- Finalize protocol for Phase 2
- Complete manufacture of drug supply for trial

Why each day—and each surgery—matters to RRP patients:

> “RRP patients will tell you that even one reduction in the number of disruptive, invasive surgeries they face would be life-changing.”

Kim McClellan
President, RRP Foundation

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