Second Quarter 2026

Financial Results

August 2026

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 & Head of Development
Steve Egge, MBA, Chief Commercial Officer

Pipeline Update
Jacqueline Shea, PhD, President & Chief Executive 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.

You should not place undue reliance on these forward-looking statements. Forward-looking statements include, but are not limited to, statements about: the timing and success of preclinical studies and clinical trials; the ability to obtain and maintain regulatory approval of our product candidates, including our belief that INO-3107 fulfills the criteria for accelerated approval and our belief regarding its competitive advantages relative to existing treatments; the FDA's acceptance of our BLA for INO-3107 with a PDUFA target action date set for October 30, 2026; FDA feedback on our confirmatory trial; the anticipated timing of label negotiations; our belief that INO-3107 has the potential to become the preferred treatment and new standard of care for patients with RRP, if approved; the scope, progress, expansion and costs of developing and commercializing our product candidates; our expectations regarding competition; the size and growth of the potential markets for our product candidates and the ability to serve those markets; the rate and degree of market acceptance of any of our product candidates; our anticipated growth strategies; the anticipated trends and challenges in our business and the market in which we operate; our ability to establish and maintain development partnerships and our ability to receive potential regulatory and sales-based milestone payments under such partnerships; the sufficiency of our cash resources to fund our operations, including our cash runway projections and estimated operational net cash burn; our expectations regarding federal, state and foreign regulatory requirements; regulatory developments in the United States and foreign countries and other factors that are described in the "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of our Quarterly Report on Form 10-Q for the quarter ended June 30, 2026, which has been filed with the Securities and Exchange Commission (SEC) and are available on the SEC's website at www.sec.gov.

In addition, the forward-looking statements included in this presentation represent INOVIO's views as of the date hereof. INOVIO anticipates that subsequent events and developments may cause its views to change. However, while INOVIO may elect to update these forward-looking statements at some point in the future, the company specifically disclaims any obligation to do so, except as may be required by law. These forward-looking statements should not be relied upon as representing INOVIO's views as of any date subsequent to the date of this presentation.

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2Q26 Corporate Update

BLA for INO-3107 Advancing

- Late-cycle review meeting completed
- Informal clinical meeting held
- All scheduled inspections conducted
- PDUFA target date of October 30, 2026

Commercialization Preparations

- Advancing essential launch preparations with the goal of establishing INO-3107 as the new standard of care for RRP

Pipeline Progress

- Positive data readout for VGX-3100 from Phase 3 study for HPV 16/18+ cervical dysplasia in China conducted by partner, ApolloBio
- Presented promising data from our next-gen DMAb™ and DPROT programs at several scientific conferences

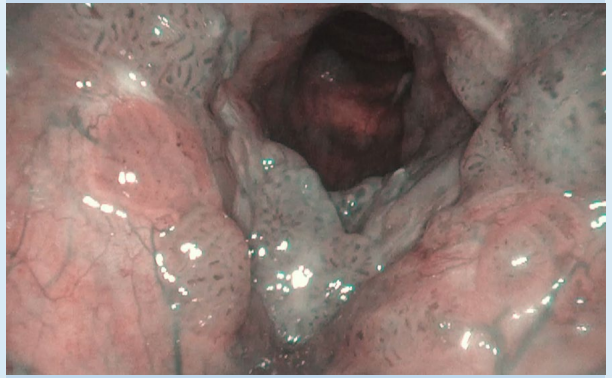
BLA Review for INO-3107

On Track for Oct. 30 Target PDUFA

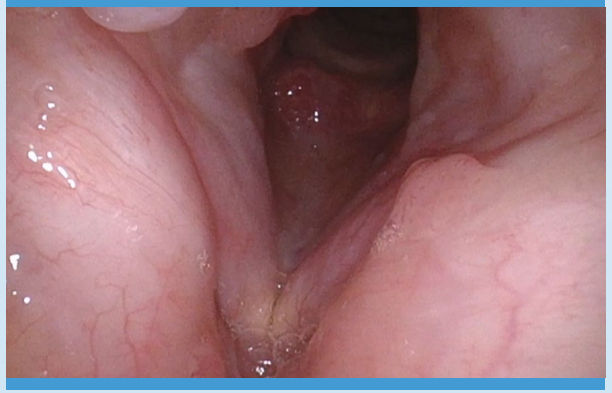
- Completed late-cycle review meeting and all scheduled FDA inspections
- Clinical informal meeting conducted in July following change in CBER & OTP leadership
  - Presented totality of data supporting INO-3107's safety and efficacy and highly differentiated approach in treating RRP, and rationale for accelerated approval eligibility
  - Discussed current SOC and ongoing need for additional therapies
  - FDA did not discuss its preliminary comment in file acceptance letter regarding accelerated approval eligibility
  - FDA indicated their feedback on design of confirmatory trial would be forthcoming
- Label negotiations anticipated in September 2026

INO-3107 Targets the Cause of RRP

PRIOR TO INO-3107



1 YEAR FOLLOWING INO-3107



Images courtesy of A Friedman. RRP is a highly individualized disease and results of treatment with INO-3107 may vary

Accelerated Approval: We Believe INO-3107 Meets FDA Criteria[1]

Meaningful therapeutic benefit over existing treatments[2]

EFFICACY

- **50% - 100% reduction in surgeries:**
  - 72% in YR 1
  - 86% in YR 2
- No surgeries (Complete Response):
  - 28% in YR 1
  - 50% in YR 2

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

SAFETY

- **No required minimal residual disease (MRD) surgery during dosing window**
- PAPZIMEOS™: 83% of trial participants had MRD surgery in dosing window[3]
- Surgery remains SoC, ~200 pts treated with PAPZIMEOS™ as of 2Q26

Potential to meet remaining critical unmet need

DIFFERENTIATED MOA

- **Potential ability to treat patients not served by existing therapy**
- No impact from pre-existing neutralizing antibodies or immunosuppressive factors within papilloma microenvironment

1 Guidance for Industry on Expedited Programs for Serious Conditions-Drugs and Biologics - May 2014; Expedited Program for Serious Conditions — Accelerated Approval of Drugs and Biologics Guidance for Industry DRAFT GUIDANCE -December 2024

2 Existing treatments refers to both surgery and PAPZIMEOS™

3 Data from PAPZIMEOS™ and INO-3107 are derived from different clinical trials at different points in time. No head-to-head trials have been conducted. As a result, cross-trial comparisons cannot be made. The data for PAPZIMEOS™ is calculated based on data reported in Norberg S. et. al. Lancet Resp Med 2025; 13;318-26.

“The need for therapeutic alternatives to surgery in our RRP community remains immense. Every surgery matters, every patient matters, and every patient deserves a treatment that works for them.”

Kim McClellan
President, RRP Foundation

INO-3107 Designed to Deliver What Patients & HCPs Want Most

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

TOLERABILTY

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

- Designed with no requirement for scoping/surgeries during dosing window
- CELLECTRA® device designed for easy use by HCPs
- No ultra cold storage requirement, which allows flexibility on site of administration.

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

INO-3107 Offers Competitive Advantages to Current Treatment Options

	INO-3107	PAPZIMEOS™	STANDARD OF CARE: SURGERY
Reduces number of surgeries post treatment	✓	✓	
No scoping/surgery required during treatment window to maintain minimal residual disease	✓		
No potential impact on clinical benefit from pre-existing neutralizing antibodies	✓		✓
No potential impact on clinical benefit from immunosuppressive papilloma microenvironment	✓		✓
Minimizes recovery days needed during treatment	✓		
Does not require specialized ultra-cold chain	✓		✓

Opportunity to Establish INO-3107 as the New Standard of Care in RRP*

Leverage experienced field teams, targeted marketing and patient support services to:

- Drive HCP and patient preference for INO-3107 based on unique and differentiated product profile
- Establish broad access among Payers and Hospital Systems
- Grow the market by educating patients and caregivers

PATIENTS

Educate and activate patients, across the full spectrum of disease severity, and drive preference for INO-3107

PROVIDERS

Establish INO-3107 as the preferred treatment for patients with RRP- in both community clinic and hospital-system care settings

PAYERS

Demonstrate INO-3107 value proposition to establish broad access for all RRP patients who can benefit from treatment

*If approved

INOVIO Development Pipeline

Recent progress on late-stage candidates

Advancing a Diversified Clinical Pipeline

PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	REGISTRATION
DMAbs Various Targets	INO-5401 BRCA 1/2 Mutation	VGX-3100 Anal Dysplasia		INO-3107 * RRP
DPROTs Various targets	INO-4201 Ebola Booster	INO-3112 Head & Neck Cancer		
DLNPs Various targets	INO-6172 HIV	INO-5412 + cadonilimab for Glioblastoma		
	INO-6160 HIV	INO-5401 + cemiplimab for Glioblastoma		
	DMAbs COVID-19			

OUT-LICENSED

			VGX-3100 ** Cervical Dysplasia (HSIL)	

HPV-RELATED DISEASES IMMUNO-ONCOLOGY INFECTIOUS DISEASES VARIOUS DISEASE TARGETS

*BLA accepted for review under accelerated approval program in Dec 2025 with a target PDUFA date of Oct 2026 **VGX-3100 to Apollo Bio for China

Positive Topline Results from ApolloBio's Phase 3 Trial of VGX-3100 in Cervical Dysplasia Patients

- VGX-3100: INOVIO's investigational DNA immunotherapy licensed to ApolloBio
  - ApolloBio plans to use results to support future regulatory submission of VGX-3100 in China
- Trial successfully met predefined primary efficacy endpoint, demonstrated overall favorable safety and tolerability profile
  - Endpoint: composite response rate at Week 36, defined as histopathologic regression of cervical disease to low-grade lesion or normal histology, together with clearance of HPV-16 and/or HPV-18 infection
  - Results highlight potential of INOVIO's DNA medicine platform to treat HPV-related diseases, eliminating/reducing need for surgical interventions
- Potential for regulatory and sales-based milestone payments

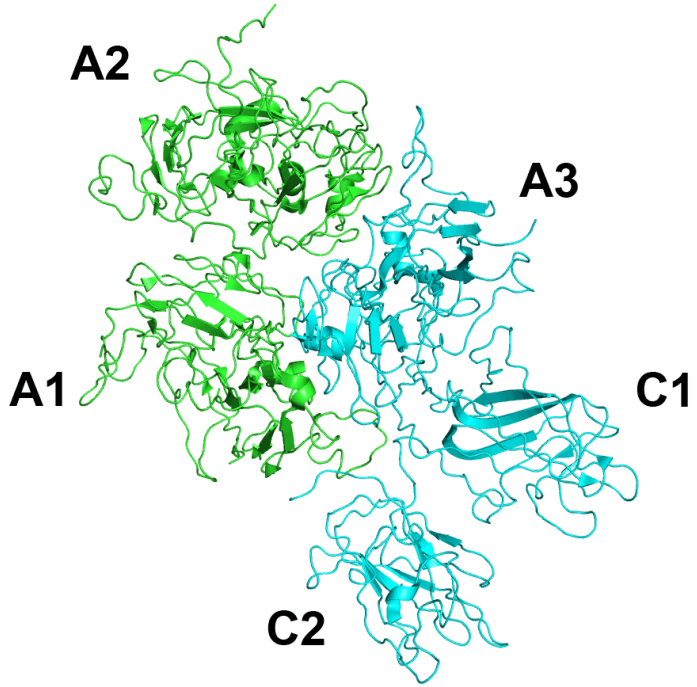
ApolloBio

DNA-Encoded Proteins (DPROT)

Potential as a New Treatment Paradigm in Rare Diseases

- **Builds on DMAb™ technology**
  - Targets long-term protein expression, with ability to re-dose due to lack of anti-vector immunity
- **Aims to address shortcomings of conventional therapeutic protein/enzyme replacement**
- **Promising preclinical data on DPROTs targeting Hemophilia A**
  - Expression of FVIII achieved in skeletal muscle cells with activity reaching 50%
  - Confirms complex proteins such as FVIII can be effectively produced, assembled in myocytes and secreted into circulation
  - Treated mice showed significantly reduced bleeding time and blood loss compared to control
  - Recently presented at ASGCT, World Orphan Drug Congress
- **Seeking partnerships to advance technology in Fabry Disease, Hypophosphatasia (HPP) and other rare disease targets**

FACTOR VIII PROTEIN STRUCTURE



First Quarter 2026 Financial Update

Making Progress on Strategic Goals While Reducing Costs

	THREE MONTHS ENDED JUNE 30, 2026 (UNAUDITED)			SIX MONTHS ENDED JUNE 30, 2026 (UNAUDITED)		
	2026	2025	% CHANGE	2026	2025	% CHANGE
Operating expenses	$18.6	$23.1	(19%)	$40.6	$48.2	(16%)
Net loss	($6.0)	($23.5)	(74%)	($25.7)	($43.2)	(41%)
Net loss per share	($0.07)	($0.61)	(89%)	($0.34)	($1.12)	(70%)

- $36.7M in cash, cash equivalents and short-term investments as of June 30, 2026 (excluding net proceeds of ~$18.3M from July 2026 public offering)
- No debt
- Cash runway projected into late 1Q27 and through potential launch of INO-3107

Select Financial Results. Amounts presented in millions ($US) except per share amounts. Cash runway projection includes net proceeds from July 2026 offering

Q&A

Progressing Strategy to Unlock the Promise of DNA Medicine

NEAR TERM

Working to Deliver INO-3107 to Patients

MID TERM

Advancing Diversified Clinical Pipeline

NEXT GEN

Innovating NextGen DNA Medicines

Thank you

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