Protection From All Respiratory Virus Infections

Host-Directed, Virus-Agnostic Defense at the Airways

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The Problem: no scalable way to block respiratory virus infection & transmission at first contact

500M+

Annual URTI cases

(North America)

4B+

Annual URTI cases

(Global)

$100B+

Annual Burden

(health + productivity)

Current vaccines and antivirals do not stop transmission at first contact

CIHI 2023, WHO 2023, CADTH 2022

No safe, market-ready prophylaxis exists to prevent respiratory virus transmission

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Stop infection where it starts: innate immunity at the point of entry

Upper airways = first line of defense

Host Directed Antiviral Defense
Activates antiviral immune defense through host directed mechanisms. Targets the body's natural ability to fight off diverse viruses.

Stop Infection Where It Starts
The nasal cavity and upper airways are the first line of defense against respiratory viruses; blocking transmission at the point of entry - prevents infection and spread.

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The Solution: virus-agnostic intranasal protection

Immediate, localized, self-administered

N001 is a self-administered nasal spray that activates innate antiviral defenses in upper airway

- **Metered dosing**
- **Drip-free delivery**
- **Prescription-grade**

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Proof of Concept and Clinical Precedent

Broad preclinical antiviral protection

- Preclinical data demonstrate real-time protection against lethal viral infections, e.g., avian H5N1 and pandemic H1N1 influenza strains

Human lung protection signal

- In SARS clinical studies, showed reduced lung disease severity in treated patients compared to controls

Human antiviral defense signals

- In human SARS CoV-2 clinical studies, demonstrated accelerated viral clearance, reduced inflammatory biomarkers, and significantly reduced lung pathology

Transmission reduction signal

- SARS CoV-2 randomized clinical trial, 1,172 participants across 341 households
  - Active treatment group had reduced transmission (-23%) and lower peak and overall viral load in exposed contacts

Why this maps to N001

Demonstrated antiviral defense in the airways = clear biological proof-of-concept and strong translational rationale

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What Distinguishes N001: designed for prevention and early post-exposure use, not treatment

Vaccines require prior knowledge of the virus and time to build immunity

Antivirals act *after* infection and are often pathogen-specific

N001 activates host defenses immediately at the airway- *before infection* – protection

Platform Potentials:
One Platform, Multiple Viruses

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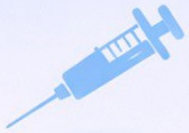
Competitive Landscape: N001 operates upstream of existing approaches

Designed to protect from infection, not post-onset of symptoms

Vaccines	Antivirals	mAb Applications	N001
			
Early + Pathogen-Specific • Requires knowledge of virus • Delayed immunity • Benefits vary with virus and strains	**Late** + Pathogen-Specific • Treats vs protects • Narrow + virus-dependent • Slower to deploy	**Later** + Pathogen-Specific • Virus and strain-specific • Effectiveness diminishes as virus mutates • High cost • Limited supply	**Immediate** + Host-Directed • Protects from infection • broad-spectrum, i.e., virus agnostic • Self-administered nasal spray • deployable

N001 complements vaccines and therapeutics by protecting before infection

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Intellectual Property Strategy: defensible, multi-layered protection

Continuous IP expansion aligned with formulation lock and clinical milestones

- **Method-of-Use Protection**
- Host-directed intranasal antiviral prophylactic
- Pre- and early post-exposure use at point of entry

- **Platform-Level Claims**
- Virus-agnostic mechanism across respiratory viruses
- Preparedness and outbreak-response use cases

- **Formulation & Delivery Strategy**
- Proprietary intranasal formulation optimized for mucosal exposure
- Integrated with metered nasal delivery

- **Staged Filing Strategy**
- Trade-secret protection during formulation optimization
- Targeted patent filings aligned with clinical milestones

First filing timing: [March/2026] | Jurisdictions: [US/EU/CA]

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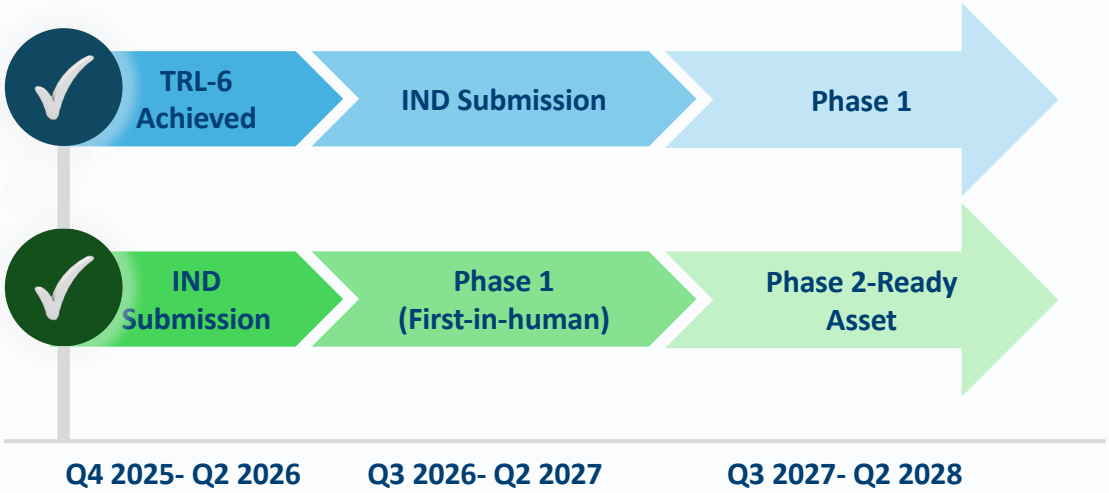
Development Status & Near-Term Milestone: funded by the Government of Canada

TRL-6 Achieved | IND-Ready



Status

- N001 manufactured
- Formulation underway
- Preclinical & tox underway
- Regulatory submission imminent

Near-Term Milestones

- Clinical manufacturing
- Phase 1 (first-in human) initiation and readout
- Phase 2-ready asset

Non-dilutive funding from the Government of Canada supports IND readiness

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Key Risks and Active de-Risking:
focused execution plan addressing clinical, regulatory, and CMC uncertainty

Failure Mode	Risk Description	Potential Impact	Current Controls	Mitigation Actions	Residual Risk
Intranasal tolerability limitation	Nasal mucosal irritation or reduced tolerability with repeated dosing	Dose limitation, adherence risk, Phase 1 delay	Prior human use of related intranasal biologic approaches	Dedicated Phase 1 tolerability endpoints and repeat-dose safety monitoring	Moderate
Prophylactic efficacy variability	Protective effect size varies by virus type and exposure intensity	Lower than expected efficacy signal	Preclinical protection models and human transmission reduction signals	Controlled early clinical study design with defined exposure and virologic endpoints	Moderate
Regulatory classification uncertainty	Product classified differently as prophylactic vs therapeutic	Trial design or endpoint changes	Existing antiviral and biologic regulatory precedents	Early regulator engagement and IND strategy alignment	Low–Moderate
GMP scale and formulation stability	Scale-up or stability limits for intranasal biologic formulation	Manufacturing delay or CMC deficiency	Platform protein produced, formulation program active	Staged CMC development and GMP readiness plan	Moderate

Program risk is execution-driven and experimentally resolvable, not dependent on unproven biology

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Value Inflection & Strategic Outcomes:
advancing N001 to a Phase 1 prophylactic efficacy signal + scalable GMP Path

2026	2026-7	2027	2028
Phase 1 Safety Data	**Phase 1 Efficacy Data**	**Phase 2 Efficacy Data**	**Pivotal Trial Ready**
Preclinical studies to de-risk tolerability for subsequent in human intranasal studies	Human proof-of-concept: preventing viral transmission	Validation for multiple viruses across at-risk groups	Strategic optionality with major pharma interest

Structured development plan creating multiple, viable off-ramps from Phase 1 efficacy onward

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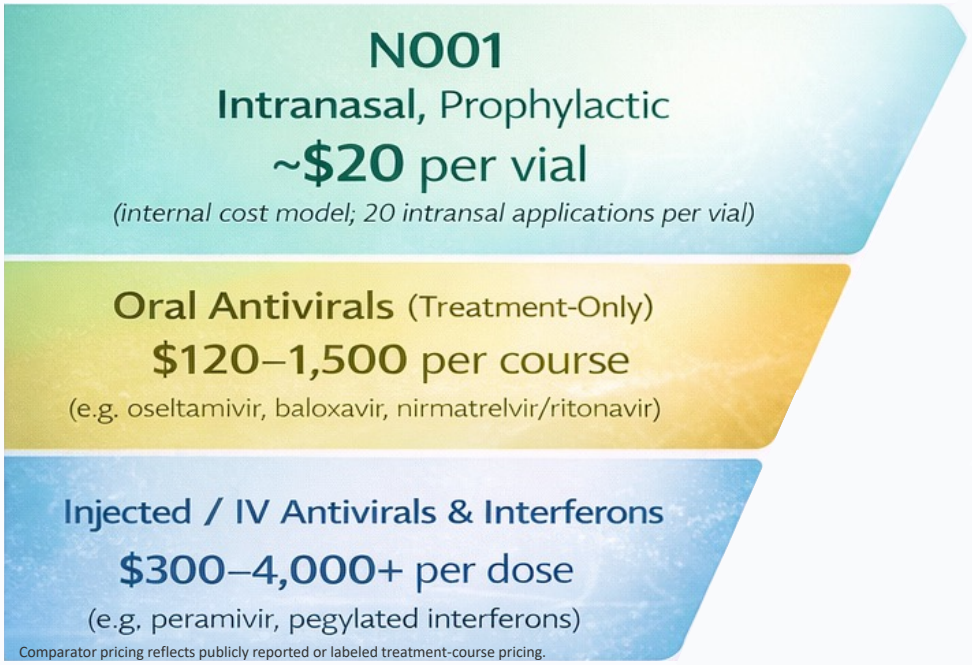
Market Economics & Competitive Positioning: a prophylactic tier that does not exist today

Cost per Treatment Course (Order of Magnitude)



Current Options Are Treatment-Oriented

- Administered after infection
- Pathogen- or strain-specific
- Often systemic, injectable, or high-cost
- Not designed for population-scale prevention

N001 Creates a New Category

- Prophylactic and early post-exposure use
- Intranasal, local action at point of entry
- Self-administered
- Virus-agnostic, host-directed mechanism
- Economically viable for stockpiling and deployment

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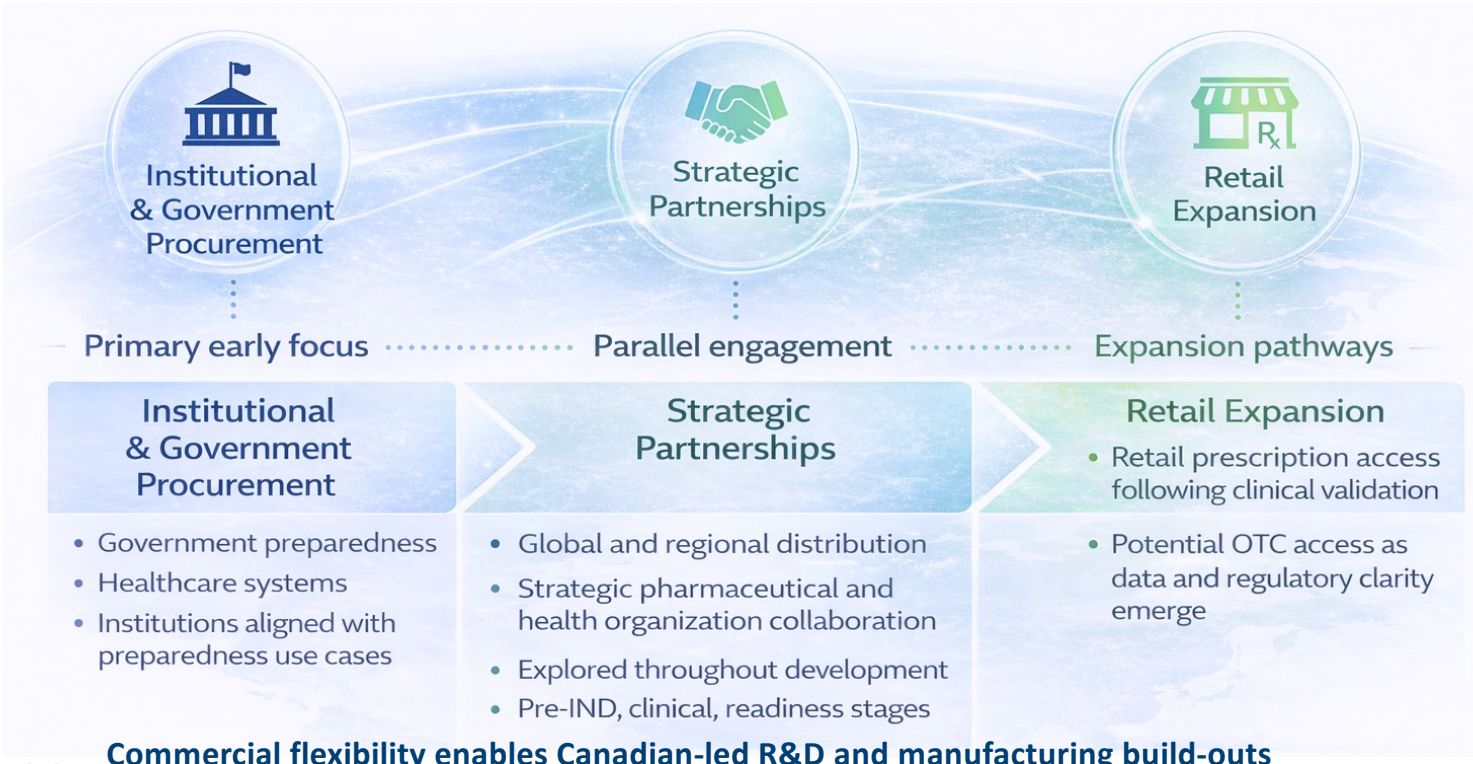
Target price enables stockpiling and repeated seasonal use

Commercial Strategy:
flexible commercialization across government institutions, strategic partners, & retail channels



Commercial flexibility enables Canadian-led R&D and manufacturing build-outs

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The Ask: flexible financing, clear value creation

Multiple Investment Levels | Defined Clinical Outcomes

Option 1: $8–10M
Delivers a Phase 2–Ready Asset

Use of Proceeds
- IND submission & FDA activation
- GMP clinical readiness
- Phase 1 completion
- Clinical safety + PD signal

Outcome: A de-risked, human-validated program ready for Phase 2 funding

OR

Option 2: $30–40M
Maximizes Speed, Control, and Strategic Optionality

Use of Proceeds
- All Phase 1 outcomes completed
- Stronger CMC and manufacturing depth
- Phase 2 initiation readiness (including challenge-study preparation)
- Multiple follow-on funding pathways

Outcome: A partner-ready asset with accelerated path to Phase 2 execution

Regardless of entry point, capital advances N001 to a value-defining milestone

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Team: leadership & execution

Eleanor N. Fish, PhD, CM
Co-founder & President

- Global leader in immunology and interferon biology
- Former member, Government of Canada COVID-19 Therapeutics Task Force
- Provides scientific leadership and translational direction for N001
- Recognized authority in translating innate immunity into antiviral therapeutics

Ramtin Rahbar, PhD
Co-founder & CTO

- Leads CMC, process development, and manufacturing strategy
- Deep experience in bioprocess development and technology transfer
- Directly responsible for IND-enabling manufacturing readiness
- Hands-on execution from lab-scale development through clinical supply preparation

Safa'a Al-Rais, MSc
Strategic Advisor

- Senior biotech executive with multiple CEO and COO roles
- Extensive experience scaling biotech operations and partnerships
- Advises on corporate strategy, partnerships, and execution
- Experienced in guiding companies through value inflection points and strategic transactions

Ali Tehrani, PhD
Strategic Advisor

- Co-founder of Zymeworks and experienced biotech company builder
- Deep expertise in capital strategy, governance, and value creation
- Advises on long-term strategic positioning and financing
- Brings board-level perspective on building durable, investable biotech platforms

Doris Snow, PhD
Strategic Regulatory Advisor

- Senior regulatory affairs leader with global biologics experience
- Former VP and Head of Regulatory Affairs at multiple biotech companies
- Guides IND strategy and regulatory execution for N001
- Deep experience aligning regulatory strategy with accelerated clinical development timelines

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Team: scientific & clinical advisory board

Bryan Williams BSc (Hons), PhD, (Hon) FRSNZ, FAA
Emeritus Director and Distinguished Scientist- Recognized interferon expert.

Monash University Faculty of Medicine, Nursing and Health Sciences
President, Pacifik Biopharma Pty Ltd: Commercialization consulting.

Don Vinh MD, FRCPC, FACP
Infectious disease specialist, medical microbiologist- Recognized as one of North America's leading COVID experts.

McGill University Health Centre, Montreal, Quebec, Canada.

Nancy Reich PhD
Professor, Microbiology & Immunology -Internationally recognized for microbiology & immunology expertise.

Stony Brook University, NY, USA

Samira Mubareka PhD
Associate Professor, Immunology & Pathobiology- Recognized and a leading Canadian expert on respiratory virus infections.

Sunnybrook Health Sciences Centre, Toronto, Canada.

Lawrence M. Blatt PhD
CEO & Director, ALIGOS Therapeutics- Recognized for interferon-based antiviral drug development

San Francisco Bay Area, USA Former CEO of Alios BioPharma Inc. acquired by Johnson & Johnson.

Christopher M. Overall PhD, FCAHS, FRSC
Professor, Centre of Blood Research- Internationally recognized for proteinase proteomics

University of British Columbia, Canada

Paul J. Hertzog PhD
Head, Centre for Innate Immunity & Infectious Diseases- Recognized interferon expert.

Hudson Institute of Medical Research Professor, Melbourne, Australia

Natasa Skoko PhD
Group Leader, Biotechnology Unit- Internationally recognized for process development for production of biopharmaceuticals.

International Centre for Genetic Engineering & Biotechnology, Trieste, Italy.

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Thank You

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