Pan-coronavirus Broad-spectrum Nanomedicines NV-CoV-2 and NV-CoV-2-R to Attack the SARS-CoV-2 Virus and its Variants in the Global Pandemic

Corporate Presentation

October 5, 2021

Presented by:
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President & Exec. Chairman
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NanoViricides, Inc. is a NYSE-American listed publicly traded company (stock symbol: NNVC). This is not an offering memorandum and should not be construed as such. It is provided as a non-confidential document for informational purposes only.

NanoViricides, Inc. (www.nanoviricides.com) is a development stage company that is creating special purpose nanomaterials as therapeutics against a number of different viruses. The Company’s novel nanoviricide® class of drug candidates are designed to specifically attack enveloped virus particles and to dismantle them. All of our drug candidates are based on broad and exclusive worldwide licenses in perpetuity from TheraCour Pharma, Inc. for the development of drugs to combat viral infections of Human Coronaviruses, Human Immunodeficiency Virus (HIV/AIDS), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Herpes Simplex Viruses (HSV-1 and HSV-2), Varicella-Zoster Virus (VZV), Influenza and Asian Bird Flu viruses, Dengue viruses, Ebola/Marburg viruses, Japanese Encephalitis virus, viruses causing viral Conjunctivitis (a disease of the eye). The Company’s technology is based on broad, exclusive, sub-licensable, field licenses to drugs developed in these areas from TheraCour Pharma, Inc. The Company’s business model is based on licensing technology from TheraCour Pharma Inc. for specific application verticals of specific viruses, as established at its foundation in 2005.

This document contains forward-looking statements that reflect the current expectation of NanoViricides, Inc. (the “Company”) regarding future events. Actual events could differ materially and substantially from those projected herein and depend on a number of factors. Certain statements are “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. You should not place undue reliance on forward-looking statements since they involve known and unknown risks, uncertainties and other factors which are, in some cases, beyond the Company’s control and which could, and likely will, materially affect actual results, levels of activity, performance or achievements.

The Company assumes no obligation to publicly update or revise these forward-looking statements for any reason, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future. Important factors that could cause actual results to differ materially from the company's expectations include, but are not limited to, those factors that are disclosed under the heading "Risk Factors" and elsewhere in documents filed by the company from time to time with the United States Securities and Exchange Commission and other regulatory authorities.

Although it is not possible to predict or identify all such factors, they may include the following: demonstration and proof of principle in pre-clinical trials that a nanoviricide is safe and effective; successful development of our product candidates; our ability to seek and obtain regulatory approvals, including with respect to the indications we are seeking; the successful commercialization of our product candidates; and market acceptance of our products.
SARS-CoV-2 Therapeutics Development Strategy and Status

Lead Drug Candidates Against SARS-CoV-2

Developing Drugs that Virus May Not Escape due to Mutations

Industry-Leading Platform Technology Exclusively Licensed from TheraCour Pharma, Inc.

Our Own cGMP-Capable Manufacturing, R&D, and Nanomedicine Characterization Facility Enables Rapid Development and Potential for Early Commercialization Revenues On Our Own

NV-HHV-101 for Shingles Rash Indication - IND prioritized after SARS-CoV-2

Broad Pipeline with Multi-Billion Dollar Markets

Current Focus on CoronaVirus Program (COVID-19)

HerpeCide™ Program with a Franchise of Drugs

NV-HHV-101 - Shingles Rash - Drug Candidate

Team
SARS-CoV-2 NanoVicride Drug Development Using Biomimetic Technology

SARS-CoV-2 has caused the COVID-19 global pandemic which is costing economies several trillions of dollars and several millions of lives already.

Variants Fuel New Waves

We have developed TWO Drug Candidates: NV-CoV-2 and NV-CoV-2-R.

Both are ready to enter into human clinical trials.

Variants carrying Multiple Mutations in SARS-CoV-2 are already known.

Vaccines and Antibody Drugs Resistance is Increasing.

Variants expected to eventually Escape Vaccines and Antibody Drugs.

Variants WOULD NOT BE ABLE TO ESCAPE OUR DRUGS.

We Have cGMP Manufacturing Capability to Produce Several Hundreds to Thousands of Treatments per Batch.
What is NV-CoV-2?

A Nanomachine Designed to Attack the Virus Particle
1. Bind the Virus Particle
2. Engulf the Virus Particle
3. Render the Virus Particle Incapable of Infecting Cell
Using Shape-Shifting TheraCour® Polymeric Micelle-based Technologies
What is NV-CoV-2-R? A Potential Cure

NV-CoV-2-R is Designed to Block the SARS-CoV-2 Virus Lifecycle Completely:
- DUAL MODE ATTACK - Possibly the Only Drug in Development to do this!
- Its NV-CoV-2 Component Nanomachine Shell Blocks the Virus Re-infection Cycle
- Block Virus Attack from Virus Particles in Fluids Outside of Cells
- Its Encapsulated Remdesivir Component Blocks the Virus Replication Cycle
- Blocks Production of New Virus Particles Inside Cells

**Virus Lifecycle - No Drug**

- Virus Particle
- "Re-"Infection
- Replication
- Abundant Progeny

**Dual Blockade of Virus Lifecycle by NV-CoV-2-R**

1. Blocked "Re-"Infection
   - NV-CoV-2-R Attacked Virus Particle
   - Almost No Progeny

2. Blocked Replication (Remdesivir)
   - Residual "Re-"Infection
   - CELL
Both NV-CoV-2 and NV-CoV-2-R Are Broad-Spectrum Anti-Coronavirus Agents

- Highly Effective in Cell Culture Studies
- Substantially Less Cellular Toxicity Compared to Remdesivir
- Effective Against Unrelated Coronaviruses
- Tested Against hCoV-229E (Common Cold Virus)
- Also Tested Against hCoV-NL63
  - hCoV-NL63 Uses ACE2 Receptor, Same As with SARS-CoV-2
  - Causes Lung Pathology in Humans Similar to SARS-CoV-2 but Less Severe
  - Widely adopted as a Surrogate Model for SARS-CoV-2
Both NV-CoV-2 and NV-CoV-2-R Are Substantially Superior to Remdesivir in Coronavirus Infection Animal Studies

Strong effect of NV-CoV-2-R Indicative of Protection of Remdesivir from Metabolism by Encapsulation

NV-CoV-2 Alone is A Clinical Drug Candidate

<table>
<thead>
<tr>
<th>Agent</th>
<th>Survival, Days</th>
<th>Body Weight Loss (Less is Better), Day</th>
<th>Lung Histopathology at Day 5</th>
<th>General Organ Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>UnInfected or Vehicle Control</td>
<td>5</td>
<td>deceased at 5 days</td>
<td>Characteristic Plaques abundant</td>
<td>Yes</td>
</tr>
<tr>
<td>Remdesivir (RDV)</td>
<td>7.5</td>
<td>~15%</td>
<td>Characteristic Plaques moderate</td>
<td>Yes</td>
</tr>
<tr>
<td>NV-CoV-2 High Dose</td>
<td>14</td>
<td>~10%</td>
<td>Almost Normal</td>
<td>No</td>
</tr>
<tr>
<td>NV-CoV-2-R Medium Dose</td>
<td>16</td>
<td>~8%</td>
<td>Almost Normal</td>
<td>Some</td>
</tr>
</tbody>
</table>

Lethal infection with $10^4$ particles of hCoV-NL63 delivered directly into lungs of Sprague-Dawley Rats
GLP Safety Toxicology Studies of NV-CoV-2 Completed

No Evidence of Adverse Effects

GLP neuro-pulmonary safety pharmacology study in rats concluded:

- The intravenous administration of NV-CoV-2 at doses of 25, 50 and 100 mg/kg did not affect respiratory function in rats

GLP cardiovascular function study in the NHP cynomolgus monkeys concluded:

- Intravenous infusion of NV-CoV-2 at 25, 37.5, and 50 mg/kg did not have any toxicologic effects on cardiac rhythm or ECG morphology
- No significant effects on blood pressure and heart rate
Non-GLP Safety Toxicology Studies of Both NV-CoV-2 and NV-CoV-2-R Completed
Strong Safety at Very High Dosage Levels

Rats dosed at up to 562 mg/kg body weight by tail vein intravenous injection on Days 0, 1, 3, 5, 7, 9 for a total of 3,375 mg/kg dose of NV-CoV-2 showed no side effects.

Rats dosed at up to 309 mg/kg body weight by tail vein intravenous injection on Days 0, 1, 3, 5, 7, 9 for a total of 1,855 mg/kg dose of NV-CoV-2-R showed no side effects.

No evidence of any severe adverse reactions was observed during the administration or during the study period and at postmortem examination.

NV-CoV-2, NV-CoV-2-R and Vehicle groups tolerated the compounds similarly.

The body fluids and fecal analysis showed no significant difference between the groups.

Histopathological examination showed no changes either in the areas of small intestine or large intestine.

No changes in organ weight or histology were observed in all dose groups.
Novel Platform Technology: A nanoviricide® is a Cell Mimic

Viral Resistance to the Nanoviricide Drug is Unlikely because Even as the Virus Mutates, It Still Binds to the Same Cell Surface Receptor(s), in the Same Fashion

A nanoviricide “Looks Like” a Human Cell to the Virus

A nanoviricide is large enough for a virus particle to latch onto it. Yet small enough to circulate readily in the body.

Rather than the virus particle entering into a nanoviricide, a nanoviricide wraps around the virus particle and encapsulates it, by using the virus particle’s very same ability to enter a cell.
SARS-CoV-2 NanoViricide Drug Mechanism is Orthogonal to Most Other Drug Candidates

- Putative Mechanism of Action of a NanoViricides Drug Candidate is by Direct and Targeted Attack on the Virus Particle
- Blocks Virus Reinfection Cycle
- Combining This Action (as in NV-CoV-2) with that of Replication Cycle Inhibitors Should Provide Complete Control of the Virus Infection (as in NV-CoV-2-R)
- Further, NanoViricide Drug Itself Can Act as Delivery and Protector Vehicle for Such Small Chemical Drugs
- Encapsulation Into NanoViricide - Next Generation of NanoViricides Drugs
- Remdesivir (RDV) Is the Only Drug with Full Approval Against SARS-CoV-2
- RDV Works Great in Cell Culture Studies, But Clinical Results are Poor, Because of Rapid Metabolism
- NV-CoV-2-R Developed to Overcome This Metabolism Issue by Virtue of Encapsulation of RDV into NV-CoV-2
Healthy Financial Position

Approximately $20.5 Million (M) Cash at end of June 30, 2021 Year (Unaudited)

Cash Expenditure Rate is About $2.2 Million per Quarter

Have Sufficient Funds to Support Anticipated Clinical Trials of At Least One Drug Through Phase1/2a

Market Cap Was Hit Badly in 2017 through 2019 (due to declining cash reserves; led to Management changes; a reverse split followed) - Currently ~$55M

Comparables are at several hundreds to few billions of dollars in market cap
All Required IND-Enabling Studies are Completed

cGMP Manufacture for GLP Safety/Toxicology Studies Completed

Almost All Reports are In Hand

Clinical Trials Sites in Talks to Establish Agreements

Focus on SARS-CoV-2 COVID-19 Global Pandemic Response Program; Shingles Drug Program Was Set Aside for Now

Plan to Re-engage After COVID-19 Clinical Trials Progress Further
Nanoviricides Dismantling MCMV Virus Particle

<table>
<thead>
<tr>
<th>Control</th>
<th>Treated</th>
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</thead>
<tbody>
<tr>
<td>![Control Image]</td>
<td>![Treated Image]</td>
</tr>
</tbody>
</table>

**MCMV Virus Particle Containing Multiple Capsids**

- Virus Dismantled; Capsids Spilling Out
- A: intermediate state; C: total dismantling
**Investment Thesis:**

**NanoViricides Platform Technology and Facility**

- **Platform Technology** - A “Venus-Fly-Trap” for Viruses - “Bind-Encapsulate-Destroy” - Drugs that Viruses Cannot Escape by Mutations

- **Only Technology to Completely Control Total LifeCycle of Non-Persistent Viruses, to Produce Potential Cures** (Example: NV-CoV-2-R)

- **Multiple Drug Programs** with Many Candidates having demonstrated Successful Animal Model Effectiveness and Safety: COVID-19, VZV, HSV, HIV

- **Enable Continuing Future Growth**

- **Own cGMP Manufacturing Facility** Supplying Clinical Product Needs
  - Saves Money, Time, and Minimizes IP Exposure
  - May Enable Production for Early Commercial Market Entry

- **IND-Enabling Safety and Effectiveness** of Three Drug Candidates Demonstrated

- **Validate Platform Substantially** as First Drug Goes Through Clinical Trials
Investment Thesis: NanoViricides Valuation

- Company Founded and taken public (reverse shell merger) in 2005 - Platform Technologies Licensed from TheraCour Pharma, Inc.
- Market Cap Historically Around $100~150M
- Uplisted to NYSE-American in September 2013
- Moved to Integrated cGMP Manufacturing & R&D Facility in 2015
- Fully Owned Facility Asset Value ~$10M Net-of-Depreciation
- Focused on Regulatory Development of COVID Program
- "Valley of Death" Phenomenon
- Valuation May be Anticipated to Go Substantially Higher with First Drug Entering Clinical Trials
- Large Market Sizes Enable Strong Future Potential
NanoViricides is a Unique Drug Developer Company with Its Own cGMP-Capable Manufacturing Capability

- **Clinical Product Supply Capability for Mostly All of Our Nanoviricides**
- **Significant Time and Cost Savings**
- **Potential for Manufacturing Commercial Product - Market Entry & Early Revenues**

- Nanomedicines Characterization Facility
- Virology BSL-2 Certified Lab
- Protect Proprietary Technology & Intellectual Property
- Rapid Transfer from Lab Bench to cGMP Manufacture
- Highly Customizable and Flexible Pharma Manufacturing Capability
- Skin Creams, Eye Drops, Gels, Injectables, Oral…
NanoViricides Platform Technology Has Enabled Several Drug Programs for a Broad Drug Pipeline

Pre-Clinical Successes Achieved in Several Programs

<table>
<thead>
<tr>
<th>FluCide™ Injectable</th>
<th>FluCide™ Oral</th>
<th>HIVCide™</th>
<th>DengueCide™</th>
<th>Other Programs: Platform Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potentially One Drug for All Influenzas</td>
<td>Potentially One Drug for All Influenzas</td>
<td>Potentially “Functional Cure?”</td>
<td>Avoid ADE Effect</td>
<td>Select Ligand for Different Virus</td>
</tr>
<tr>
<td>Injectable for High Potency</td>
<td>Oral for Ease of Use by Out-Patients</td>
<td>Possibly the Only Technology Platform that Can Enable Total Cure of HIV by Hunting Out Latent Infection</td>
<td>NanoViricides has Orphan Drug Benefits in US &amp; EU</td>
<td>Select Polymer Backbone for Desired Route of Administration</td>
</tr>
</tbody>
</table>

Many More Possibilities for the Platform

The overall anti-viral market addressed by our programs was estimated to be $40 billion in 2018 and $65.5 billion in 2023\(^a\)

\(^a\) Jain Pharma Biotech - Antivirals Report, 2014

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Our Current Focus is on the HerpeCide™ Program Regulatory Development

NanoViricides Leveraging HerpeCide Program Developments into Multiple Drugs Franchise

<table>
<thead>
<tr>
<th>VZV</th>
<th>HSV-2</th>
<th>HSV-1</th>
<th>Herpes Keratitis</th>
<th>“ARN” Acute Retinal Necrosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shingles Rash Treatment</td>
<td>Genital Ulcers Treatment</td>
<td>Cold Sores Treatment</td>
<td>Herpes Keratitis Treatment</td>
<td>Acute Retinal Necrosis Treatment</td>
</tr>
<tr>
<td>IND-Enabling Studies; Pre-Clinical Optimization</td>
<td>Pre-Clinical Optimization</td>
<td>Pre-Clinical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal Topical Skin Cream</td>
<td>Dermal Topical Skin Cream</td>
<td>Dermal Topical Skin Cream</td>
<td>Eye Drops</td>
<td>Injectable</td>
</tr>
</tbody>
</table>

**Additional Future Indications in HerpeCide Program**

- Chickenpox (Possibly Orphan Drugs)
- PHN (Post-Herpetic Neuralgia)
- Recurrent Herpes Labialis

**Market Size for HerpeCide™ Program Drugs estimated at Over $3-$5 Billion**

**Lead Indication Shingles Rash Market Size estimated at $1 Billion or More**
(takes into account impact of Shingrix and other Vaccines)

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NanoViricides’ Regulatory Strategy

- SARS-CoV-2 Drug Candidates as First Candidates -> Responding to the Global Pandemic
- Dermal Topical Drug as Next Candidate -> Quicker Path
- Multiple Indications with Same Drug Candidate or its Derivatives to Maximize Shareholder Value and ROI

- VZV Shingles
- HSV-2 Genital Herpes
- HSV-1 Herpes Labialis “Cold Sores”
- Herpes Keratitis (HSV-1 >95%) (External Eye)
- Also: Ocular Herpes; Acute Retinal Necrosis; Other Indications

Distribute Development Costs over Multiple Indications

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Unmet Medical Need: Available drugs in use not very effective (vaccines exist)

The chickenpox virus surviving in ganglia causes Shingles in adults

- About 500,000 to 1 Million Cases Per Year in the USA Alone
- Risk Increases with Age

Triggered by Reduced Immune Function

- Stress, Age, Immune Compromised/Suppressed

Severe Stinging Pain & Zosteriform Rash

- Pain May Persist for Months or Years After Resolution of Outbreak - PHN
- Virus Damaged Nerves Continue to Signal Sharp, Debilitating Pain
- Pain Could be Avoided/Minimized if Virus is Controlled

Broad-Spectrum HerpeCide™ Could be a Highly Effective Drug

Potential Billion+ Dollar Market Size projected even after the new vaccine introduction
HerpeCide™ Program Future Expansion

Drug Candidates in Current HerpeCide Program

May Have Applications Against Other HerpesViruses:

Epstein-Barr Virus:
- Mononucleosis
- Monoclonal Gammopathy
- other B-cell diseases, etc.

Cytomegalovirus: Retinitis, Organ Transplant etc.

HHV-6A, HHV-6B, HHV-7
- several diseases are associated
- encephalopathy, epilepsy
- sialoadenopathy, Sicca syndrome
- T-cell diseases
Strong Executive Team

**Anil R. Diwan, PhD**  
President & Exec. Chairman

- Co-Founder  
- Led Uplisting to NYSE-American Exchange in 2013  
- Raised $65M  
- Co-Inventor of Nanoviricides® & of TheraCour®  
- 25+ years Leadership & Entrepreneurial experience  
- Key Patents, Several NIH SBIR Awards  
- PhD (Biochem Eng - Rice), BTech (ChemEng - IITB)

**Randall W. Barton, PhD**  
CSO and Acting CRO

- 30+ Years of Pharmaceutical Industry Experience in Drug Discovery and Pre-clinical Regulatory Development  
- Former Director of In-Vitro Cardiovascular Research at Boehringer Ingelheim  
- Nevirapine (Viramune™) Development  
- Visiting Faculty at the University of Connecticut Medical School, Farmington, CT

**Meeta R. Vyas, MBA**  
CFO

- 30+ years Experience in Corporate Performance Improvement, Finance, M&A, EBITDA Growth...  
- Previously: Principal, The Gores Group; Director, Kamylon Capital; CEO, Signature Brands, Inc. (a public company, known for “Mr. Coffee”); Ran $1B GE Appliances Division; Consultant, McKinsey & Company  
- MBA (Fin.) Columbia, BS (ChemEng) MIT

**Jayant Tatake, PhD**  
VP, R&D

- 30+ Years of Pharmaceutical Industry Experience in Drug Discovery, Manufacturing, QA/QC, CRO  
- Synthesis, Scale-up, Formulations, and Pharmaceutical cGMP Expertise  
- Former Asst. Director, Pharma. Analytics, InterPharm, Inc.  
- Co-Inventor of Nanoviricides® & TheraCour®  
- PhD UICT, Bombay
## Board of Directors

### Anil R. Diwan, PhD
**President & Exec. Chairman**

Co-Founder, Led Uplisting to NYSE-Amer. in 2013, Raised $65M+, Co-Inventor of Nanoviricides® & of TheraCour®

25+ years Leadership & Entrepreneurial experience

**Not an Independent Board Member**

**Director and Chairman Since Founding in 2005**

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### Stanley Glick, CPA ✔
**Chairman, Audit Committee**

Auditing, Accounting, Tax, & Mgmt. Advisory Services

Financial Management Oversight, Civic Leader

**Independent Board Member and Chair of Audit Committee since June 2012**

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### Mak Jawadekar, PhD ✔

35+ Years of Pharmaceutical Industry Experience, Pharma Strategic Consultant. Previously at Pfizer, Inc., as Director, Portfolio Management & Analytics, and as Vice President, Asia Colleague Resource Group, in Pfizer Global R&D.

Business and Research experience in joint ventures, alliance management, contracting, pharma R&D, drug delivery, clinical supply manufacture, etc. Global experience working with United States, Europe, India, Japan, China.

**Independent Board Member since February, 2020**

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### Hon’ble Theodore “Todd” Rokita, JD ✔

Former US Rep. from Indiana (4 terms since 2010). Served on several House Committees. Co-owner, General Counsel and Vice President of External Affairs, Apex Benefits Group, Inc. Extensive executive, team-building, business strategy, and fiscal management expertise in the private sector, alongside his public service leadership experience. Serves or has served as a Member of the Board of Directors of several commercial and charitable institutions.

**Independent Board Member since May, 2020**

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### Brian M. Zucker, CPA ✔


**Independent Board Member since November, 2020**

✔ = Independent Board Member
The End