

## Summary

NanoViricides, Inc. is a clinical stage global leader in the development of nanomedicine drugs against viruses. **Our unique nanoviricide® platform technology defines a novel mechanism enabling first-in class drugs against viruses. Our technology is enabling potential cures against non-latency viruses.**

NanoViricides has a broad and growing pipeline of drug candidates that uniquely fill unmet medical needs. Our focus is on NV-CoV-2 for treating potentially all coronavirus infections including COVID and certain cases of long COVID for practically any patient that is in clinical trials. NV-HHV-1 Skin Cream for treatment of Shingles has completed pre-IND studies. We are also developing NV-CoV-2-R, which could be a potential cure for many viruses. We are working on expanding the applications of NV-387, the API of NV-CoV-2 to additional virus families. We are developing drugs based on NV-HHV-1 for the treatment of HSV-1 (“Cold Sores”), HSV-2 (“Genital Herpes”), and other herpesviruses. We also have drugs in development for many other viruses, including HIV, Influenza, Dengue Viruses, Ebola/Marburg viruses, among others.

A nanoviricide is designed to specifically attack enveloped virus particles, on the same sites that they use to bind to cells, and dismantle them, blocking reinfection cycle, going beyond what antibodies and immuno-therapeutics do. A nanoviricide can also be designed to deliver anti-viral payload into infected cells *sparing uninfected cells* to block replication cycle without toxicity. **Our unique biomimetic approach enables creation of drugs that a virus would be highly unlikely to escape due to mutations.**

NanoViricides is one of the few biopharma companies with its own multi-kilogram-scale c-GMP capable manufacturing facility for the drug substance as well as drug product, in Shelton, CT. This facility is fully owned by the Company with no mortgage and is a major asset. This flexible, multi-product pilot plant is supplying drug products for all of our programs through human clinical trials. **Our cGMP manufacturing ability enables substantial time and cost savings in our drug development programs. Further, it is capable of production for initial marketing, enabling early revenues upon drug approval.**

### Broad-Spectrum COVID Drug Addresses Unmet Medical Needs - Clinical Stage

NanoViricides is focused on bringing its first drug candidate, NV-CoV-2, for the treatment of COVID and certain cases of long COVID. **NV-CoV-2 is a broad-spectrum, pan-coronavirus treatment** of the coronavirus infection. NV-CoV-2 is designed to attack the virus particles acting as mimics of their first landing sites, namely, sulfated proteoglycans. **It is highly unlikely that variants can effectively escape NV-CoV-2.** It works not just against SARS-CoV-2, but also seasonal coronaviruses. It is expected to work against SARS-CoV-2, MERS, and other deadly coronaviruses as well.

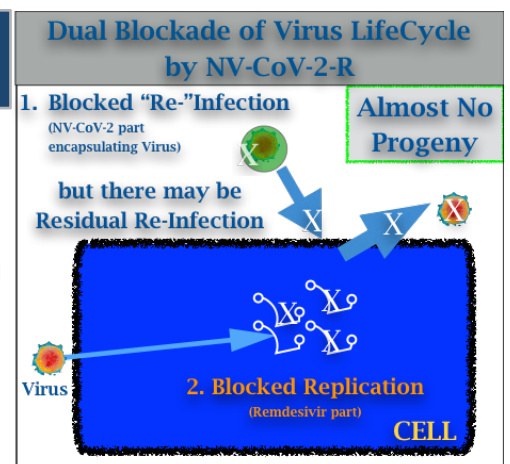
**Oral Formulations of NV-CoV-2 are in Phase 1a/1b clinical trials.** These are targeted to all types of patients, from children to otherwise healthy persons to older persons with or without co-morbidities. No available drugs cover all classes of patients or severities of pathology. **Additionally, Injectable Formulations of NV-CoV-2 (Solution for Injection, Infusion, and Inhalation have been developed for the treatment of hospitalized patients.**

**NV-387, the active pharmaceutical ingredient (API) of NV-CoV-2, is expected to be active against many other viruses as well.** A very large percentage of human pathogenic viruses are known to use sulfated proteoglycans as the first landing sites. Expansion of NV-387 indications to additional viruses if successful in pre-clinical studies is expected to the drug being eligible for Phase II/III clinical trials directly, making it a less expensive process. **It would also result in significant improvement in Return on Investment.** We have undertaken work against RSV and certain other viruses for this purpose.

### Potential Cures of Non-Latency Viruses - THE Unmet Medical Need

We are also developing NV-CoV-2-R, which comprises the API NV-387-R. NV-387-R is made by encapsulating Remdesivir (RDV) within the nano micelles of NV-387. The resulting drug improves the Pharmacokinetics and Pharmacodynamics of Remdesivir, by protecting it from bodily metabolism. Additionally, the resulting drug acts to **Block the Complete Lifecycle of the Virus, with NV-387 blocking the Re-Infection Cycle, and RDV blocking the Replication Cycle. This should be potentially a cure for the non-latency viruses against which NV-387 and RDV are active.**

Retroviruses and certain DNA viruses produce latent infections. Nevertheless, in some cases, such a dual-acting drug would reduce the latent virus extent at each reactivation episode and may eventually cure the virus infection.



## cGMP Production in Multi-Kilogram Scale in Our Own Facility

We have completed production of the drug in multi-Kg quantities for the GLP portion of the IND enabling Safety/Toxicology studies. This production was performed under cGMP-compliant conditions in our **State of the Art cGMP-capable Manufacturing Facility for Clinical Drug Production** in Shelton, CT. We have engaged in the production of the cGMP manufactured drug product for the upcoming human clinical trials at this plant. cGMP Manufacturing capability is a major risk for new pharma companies, especially in nanomedicines. We are happy to report that we are tackling this risk head on, by building our own capability. **We believe we have thus minimized the manufacturing risk for our entire platform technology.**

The NanoViricides facility in Shelton, CT, contains customizable multi-product cGMP manufacturing capability, as well as advanced nanomedicines characterization and R&D laboratory, to support clinical drug manufacture of any of our drug candidates, enabling cost-effective, speedy entry to clinic. Moreover, its Manufacturing Scale is more than sufficient to **support initial marketing needs, enabling early revenues upon drug approval.**



## Global, Strong, Pioneering, Intellectual Property with Runway Beyond 2040

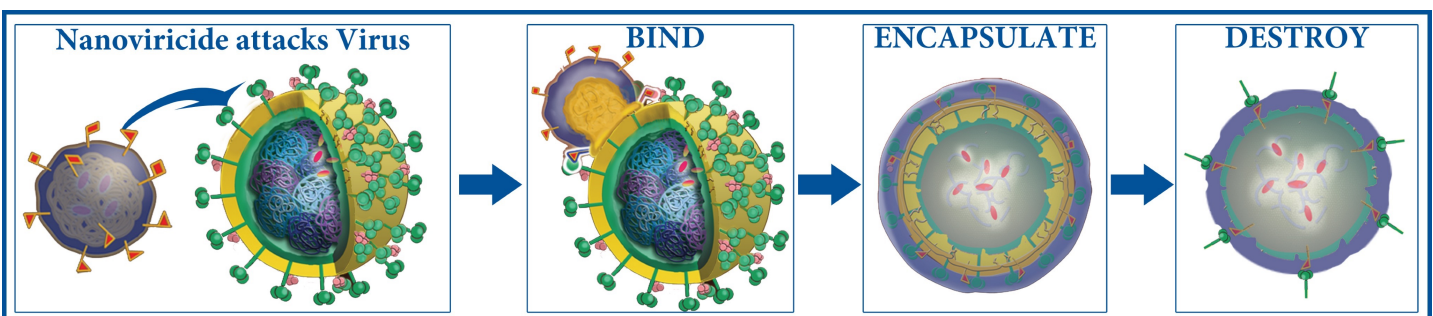
### Strong Global Intellectual Property Position with Drug Patents to Expire Beyond 2040

All of our drug candidates are based on broad & exclusive world-wide licenses in perpetuity from TheraCour Pharma, Inc. The licensed fields include human diseases of COVID, VZV, HSV-1, HSV-2, all Influenza viruses including H5N1 and pandemic H1N1, HIV, Dengue, Ebola, Marburg, Rabies, etc. These licenses are extremely broad and cover development of drugs attacking the stated virus in pathological indication benefitting from viral load reduction. NanoViricides intends to own the regulatory drug licensure (use of entity for indication), and may commercialize the same on its own or further sublicense to other Pharma companies.

NanoViricides has exclusive worldwide licenses from TheraCour Pharma, Inc., to field-defining, pioneering, proprietary intellectual property and global patent applications, that have already issued into 61 patents in countries including the U.S., Australia, Japan, China, Canada, and all of Africa. Issued patents are “first-in-class” with no prior art, showcasing the Company’s leadership position in this field. The patents cover broad compositions of matter, methods of making, and uses. The first of the fundamental patents has expiration date in 2026. We have begun to patent IP estate around each of our drug candidates separately. Two international PCT patent applications have been made for the COVID space; resulting patents would expire in 2040. Additional applications are expected soon. This provides substantial runway for commercial realization.

## Unique, Novel, Post-ImmunoTherapeutic “Bind-Encapsulate-Destroy” Mechanism Enables First-In-Class Products

**Beyond Antibodies and Vaccines:** Antibodies have been developed as drugs against viruses. However, each antibody only binds by two points to the virus, and destruction of the complex requires effective immune function, which is not the case in sickness. Vaccines only train the body into producing antibodies against the virus in the vaccine. Antibodies and vaccines are easily overcome by viruses by mutating in the field as is now well known from COVID.



**A Nanoviricide is A Nanomachine that Completes the Task of Destroying Virus without Help from the Patient’s Immune System  
Key Issue of Drug Resistance from Viral Mutations is Unlikely with Nanoviricides Drugs due to Unique Biomimetic Technology**

In contrast, a nanoviricide should work against all strains of the virus because they still bind the same way to the same host cell receptor. The nanoviricide® technology platform mimics the host cell. We design and develop a virus-binding ligand that mimics the site on the host cell receptor to which the virus binds. This ligand is then chemically attached to a special polymer to make a nanoviricide®. The virus is expected to be fooled into binding to the nanoviricide, like a venus-fly-trap. The nanoviricide is then expected to engulf the virus and possibly destroy it. A nanoviricide attacks the virus with hundreds of virus-binding sites on its surface. The nanoviricide is capable of dismantling the virus, and the resulting complexes are fully biodegradable in the body.

**Not shown here, is a nanoviricide’s ability to encapsulate drugs inside it, protect them from bodily environments, and deliver them as per design. This ability can be harnessed to develop cures for many viruses.**

## Large Markets Could Explode with Transformative, First Indication Treatments

**Our Programs Address Large Markets, \$40-70 Billion estimated (pre-pandemic). COVID Drugs, Additional Indications to Other Viruses, HerpesVirus Multiple Drugs Franchise and FluCide Multiple Drugs Franchise Could Result in Treatment-Transformations and Market Size Explosions**

Using the nanoviricid<sup>®</sup> platform technology, the Company has developed drug candidates targeting some of the world's most pervasive viruses.

Whenever an effective drug is developed addressing an unmet need, large new markets appear (ex.: Lipitor, Sovaldi). We anticipate such market explosion due to transformative treatment could happen for some drugs in our anti-Herpes drugs franchise, in our FluCide franchise, and possibly other drugs in our pipeline.

Disease/Virus	\$Billions
HIV/AIDS	\$ 25 B
Influenzas	\$ 10 B
Eye Drops Antiviral	\$ 1~5 B
Herpes Viruses	\$ 3~10 B
Hepatitis C	\$ 5~10 B
Dengue, Rabies, other NTD's	\$ 1~5 B
Ebola/Marburg/VHF	\$ 1 B

## Financial Position - Low Burn Rate, Strong Long Term Assets

As of March 31, 2023, the Company had approximately \$9.9 Million cash & cash-equivalents. In addition, we reported approximately \$8.6 Million in Intangible Assets and Property and Equipment (P&E) assets, net of depreciation and amortization from \$14.7 Million in P&E assets before depreciation, for our cGMP-compliant Manufacturing and R&D Facility assets. The Company currently spends about \$1.5 million per quarter. The Company has no debt.

## Bright Future with Broad and Deep Pipeline Enabled by Nanoviricid<sup>®</sup> Platform Technology

- Broad-Spectrum, Pan-Coronavirus Drug NV-CoV-2 (API NV-387) for COVID, certain cases of long COVID, Seasonal Coronaviruses, MERS is in Clinical Trials.** Two formulations are in clinical trials at present: **Oral Syrup** which can be titrated for body weight and is therefore preferable in pediatric setting, and **Oral Gummies**, a fixed strength dosage form generally preferable for adults. We believe they would be highly effective for mild-to-moderate (non-hospitalized) cases of COVID. Additionally, **NV-CoV-2 Solution for Injection, Infusion, and Inhalation** is developed for hospitalized COVID patients with severe disease; direct lung inhalation should provide significantly superior benefits by providing high pulmonary local concentration of the drug. NV-CoV-2 (NV-387) was found to have strong effectiveness in multiple coronaviruses in vitro, and also strong effectiveness even when compared to remdesivir in animal studies of lethal lung infection. We believe the human clinical trial results should be consistent with these pre-clinical studies, and if so, would establish NV-CoV-2 as perhaps the most effective COVID treatment. There is no safe and effective COVID drug that covers all the patient populations and disease severities at present, indicating **significant unmet medical needs**.
- NV-387 Expanded Indications Program.** We are elucidating the breadth of the antiviral spectrum of NV-387 at present. NV-387 is based on mimicking sulfated proteoglycans to attack the virus particle. A large number of viruses bind to such structures before gaining cell entry, including RSV, human MetaPneumoVirus (hMPV), certain Adenoviruses, other respiratory pathogens, as well as a number of systemic viruses such as Dengue viruses, Chickengunya, among others. Successful additional indications against any such viruses, if any, would significantly **improve the return on investment, while fulfilling unmet medical needs**.
- Such additional indications would be eligible for Phase II/III studies with NV-387 having completed Phase I studies already.
- Additionally, NV-387-R Could Result in Potential Cure Against a Number of Non-Latency Viruses.**
- HerpeCide™ Program.** Variants of NV-HHV-101 are expected to become clinical drug candidates for topical treatment of HSV-2 “genital ulcers”, and HSV-1 “cold sores” soon after NV-HHV-101 goes into clinical studies. NV-HHV-101 is anticipated to further expand into additional indications against chickenpox - a possibly orphan drug in the USA - and PHN (a morbidity of shingles persistent pain that may last for six months or longer, after the rash resolves).
- We are also developing drugs against HIV.
- NanoViricid<sup>®</sup>, Inc. is possibly the first in the world to have developed an orally effective nanomedicine.

### FY 2022 GOALS ACCOMPLISHED

- + Completed CMC Development of NV-CoV-2
- + Developed Clinical Trial Plan including Protocols
- + Completed Investigator's Brochure
- + Completed Clinical Trial Application
- + cGMP Manufacture of NV-387 API, NV-CoV-2 Oral Syrup, and NV-CoV-2 Oral Gummies Clinical Supply

### NEAR FUTURE GOALS ANTICIPATED

- NV-CoV-2 Phase 1a/1b Clinical Trials, and assuming success, Phase II/III clinical trials.
- NV-387 indications expansion
- NV-387 clinical trials for another virus indication.
- Depending upon resources, IND preparation for NV-HHV-1 to initiate Clinical Trials.

## Highly Effective Management Team

**Anil R. Diwan, PhD, President and Executive Chairman** – Invented & developed novel nanomedicine technologies. In three patent families, over 60 patents. Cofounded NanoViricides in 2005. Led up-listing to NYSE-Amer. in 2013. Raised over \$100MM in equity financing. PhD, Rice University; B.Tech, IIT Bombay. 30+ years entrepreneurial experience in biotech and pharma.

**Meeta R. Vyas, SB, MBA, CFO** – Former CEO of Signature Brands, a public company she turned around, was acquired by Sunbeam Corp; ex GM of GE Appliances Range products with sales over \$1 Billion, she doubled operating income; ex-Principal with Gores Operations Group, a PE firm based in Los Angeles.

**Randall W. Barton, PhD, Chief Scientific Officer** – Ex-Director of In-Vivo Cardiovascular Research at Boehringer-Ingelheim. An expert in receptor-based drug design. More than 60 scientific publications, 5 patents and 3 patent applications.

**Jayant Tatake, PhD, Vice President of R&D** – Co-inventor of the Company's nanomedicine technologies. Over 30 years experience with production of pharmaceuticals from lab scale through cGMP manufacture. Experience running cGLP QA/QC Labs at a Pharma Company and at a CRO. PhD from UICT-Bombay.

## Contact

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## Strong Independent Board of Directors

**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.

**Hon'ble Theodore "Todd" Rokita, JD** - Presently Attorney General, State of Indiana. Former US Rep. from Indiana (4 terms since 2010). Served on several House Committees. 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.

**Brian M. Zucker, CPA** - 30+ years of experience as a CPA specializing in the securities industry. A Partner at CFO Financial Partners, LLC (<https://www.cfopartners.com/>). Also serves as the CFO and Financial Operations Principal for numerous broker dealers and hedge funds. Partner at RRBB Accountants & Advisors. CFO of EIG Energy Partners Capital Markets, LLC. Ex-Senior Consultant at Deloitte Haskins & Sells and at Price Waterhouse. Mr. Zucker holds several FINRA licenses.

**Anil Diwan, PhD, President**, is an elected Board member and serves as (non-independent) Executive Chairman of the Board.

## Disclosure Statement

NanoViricides, Inc. ("the Company") is a publicly traded company (stock symbol: NNVC, NYSE-Amer.). 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](http://www.nanoviricides.com)) is a clinical stage company that is creating special purpose nanomaterials for anti-viral therapeutics. The Company's novel nanoviricide® class of drug candidates are designed to specifically attack enveloped virus particles and to dismantle them.

NV-CoV-2 is our nanoviricide drug candidate for COVID. NV-CoV-2-R is our other drug candidate for COVID that is made up of NV-CoV-2 with remdesivir encapsulated within its polymeric micelles. The Company believes that since remdesivir is already US FDA approved, our drug candidate encapsulating remdesivir is likely to be an approvable drug. Remdesivir is developed by Gilead. The Company has developed all of its drug candidates independently.

NV-HHV-1 Skin Cream for the treatment of Shingles is another drug candidate that we believe has completed IND-enabling studies and is ready for clinical trials. The Company is also developing drugs against a number of viral diseases including oral and genital Herpes, viral diseases of the eye including EKC and herpes keratitis, H1N1 swine flu, H5N1 bird flu, seasonal Influenza, HIV, Hepatitis C, Rabies, Dengue fever, and Ebola virus, among others. NanoViricides' platform technology and programs are based on the TheraCour® nanomedicine technology of TheraCour, which TheraCour licenses from AllExel. NanoViricides holds a worldwide exclusive perpetual license to this technology for several drugs with specific targeting mechanisms in perpetuity for the treatment of the following human viral diseases: Human Immunodeficiency Virus (HIV/AIDS), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Rabies, Herpes Simplex Virus (HSV-1 and HSV-2), Varicella-Zoster Virus (VZV), Influenza and Asian Bird Flu Virus, Dengue viruses, Japanese Encephalitis virus, West Nile Virus, Ebola/Marburg viruses, and certain Coronaviruses. The Company intends to obtain a license for poxviruses and/or enteroviruses if the initial research is successful. 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.

Activities described have a strong dependence on factors outside Company's control. Actual costs may be substantially greater than our projections, requiring the Company to adjust its priorities resulting in delays in accomplishments.

This document contains forward-looking statements that reflect the current expectation of 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 that are, in some cases, beyond the Company's control and that would materially affect actual 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, 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, factors that are disclosed under the heading "Risk Factors" and elsewhere in documents filed by the Company from time to time with the U.S. 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 preclinical studies and clinical trials that a nanoviricide is safe and effective; successful development of our product candidates; our ability to raise additional financing when needed; our ability to seek & obtain regulatory approvals, including with respect to the indications we are seeking; the successful commercialization and market acceptance of our products.