



NanoViricides

Incorporated

Platform for rapid development of anti-viral drugs

NYSE MKT: NNVC

December 3, 2013

Eugene Seymour, MD, MPH
Chief Executive Officer

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Disclosure- Forward-Looking Statements

NanoViricides, Inc. is a publicly traded company (stock symbol: NNVC, NYSE MKT). 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 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. The Company is developing drugs against a number of viral diseases including all forms of influenza A (pandemic, epidemic, seasonal Influenza, bird flu; H1N1 "swine flu", H3N2, H7N9, H5N1 bird flu, etc.), HIV, EKC, Herpes "cold sores" and genital Herpes, Hepatitis C, Rabies, Dengue fever, and Ebola virus, among others.

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 that are, in some cases, beyond the Company's control and that could, and likely will, materially affect actual results, levels of activity, performance or achievements.

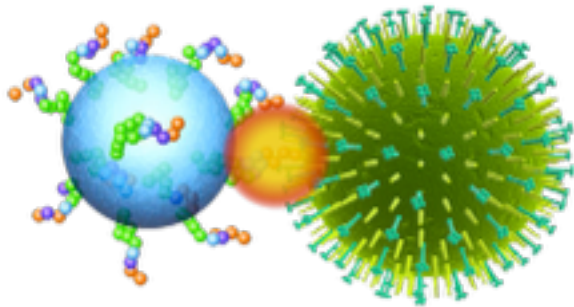
The Company assumes no obligation to publicly update or revise these forward-looking statements for any reason, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future. Important 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 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 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 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.

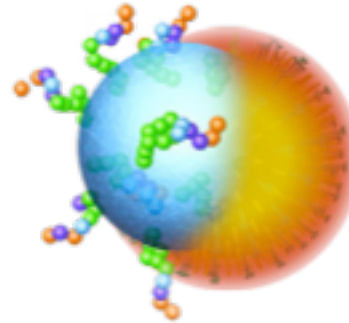


A nanoviricide[®] in action at-a-glance

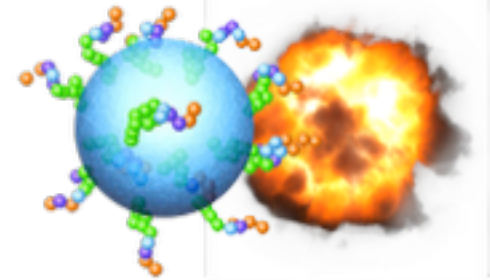
Attach



Encapsulate



Destroy



#1 A nanoviricide binds to a virus particle.

#2 Bound nanoviricide continuing encapsulation of virus particle

#3 A virus particle being completely encapsulated by a nanoviricide prior to complete destruction of the envelope resulting in harmless release of the capsid containing the genomic material

- A single nanoviricide may be capable of completely engulfing a virus particle
- Nanomicelles self-assemble during production
- A single chain micelle shown for convenience

(illustration not to scale)



Investment Highlights

- **Leveraging patented biomimetic technology to rapidly create powerful new anti-viral drugs**
 - **Directly attack virus particles in circulation, independent of host**
 - **Broad-spectrum agents that are expected to continue to be effective in spite of changes in virus genome (mutations, assortments, etc.)**
- **Preclinical stage products addressing very large markets (>\$40B)**
 - **Influenza, all Influenza A including pandemic, seasonal, bird flu; H1N1, H5N1 H7N9...**
 - **Dengue fever/dengue hemorrhagic fever/dengue shock syndrome**
 - **HIV**
 - **Herpes, genital and oral**
 - **Eye Viral diseases (EKC - Epidemic Adenoviral Conjunctivitis, HK - Herpes Keratitis)**
- **cGMP pilot manufacturing facility nearing completion**
- **FDA and EMA have granted orphan drug designation for DengueCide™**
- **Sufficient cash to support initial clinical trials for FluCide™ and DengueCide™**



Financial Overview

- 🕒 Quarterly operating expenses: \$1.75 million (from recent 10Q)
- 🕒 ~\$22 million in cash and equivalents as of Sept 30, 2013
- 🕒 Avg. trading volume: >200,000 shares per day
- 🕒 Market capitalization: ~\$250 million
- 🕒 Shares outstanding: ~50 million

Foundation for Breakthrough Technology

- All nanoviricides consist of 2 unique features
 - Nanomicelle...made of biodegradable polymers
 - Ligand...small molecular “mimic” of receptor on target cell
- Nanomicelle: base used in all nanoviricides®
- Ligand: virus-specific small molecule that “mimics” the receptor protein normally found on the target cell of the virus
- Chemical attachment of the ligand to the nanomicelle forms the nanoviricide
- Patented and Proprietary Technologies: attachment of the ligand to the nanomicelle to lure a particular virus or class of viruses; structure and composition of nanoviricides, structure and composition of nanomicelles, structure and composition of ligands.

Technology Platform (continued)

- **A nanoviricide is expected to be effective against the virus in spite of mutations and other changes in the virus because the receptor site that the virus binds to does not change**

The most important problem for antivirals - vaccines, antibodies, small chemicals - is that the virus mutates in the body and then the drug fails.

- **Time to create a new drug can be quite short if ligand is in our library**

Example: It took less than three weeks to create a drug candidate against MERS Corona virus (currently circulating in the Middle East with a case fatality rate of 60%), that looks very promising in molecular modeling studies. It is waiting for in vitro testing, anticipated to be performed at PHE-UK.

Nanoviricides based on ligands that we have designed previously using molecular modeling have been highly effective both in cell cultures as well as in animal models.

- **A nanoviricide only attacks a virus; it is agnostic to its human or animal host** - Success in animal studies should be indicative of human clinical success

Historical Precedents

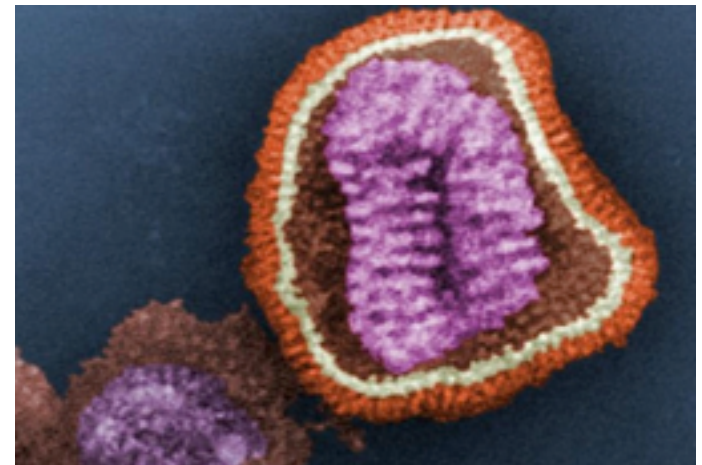
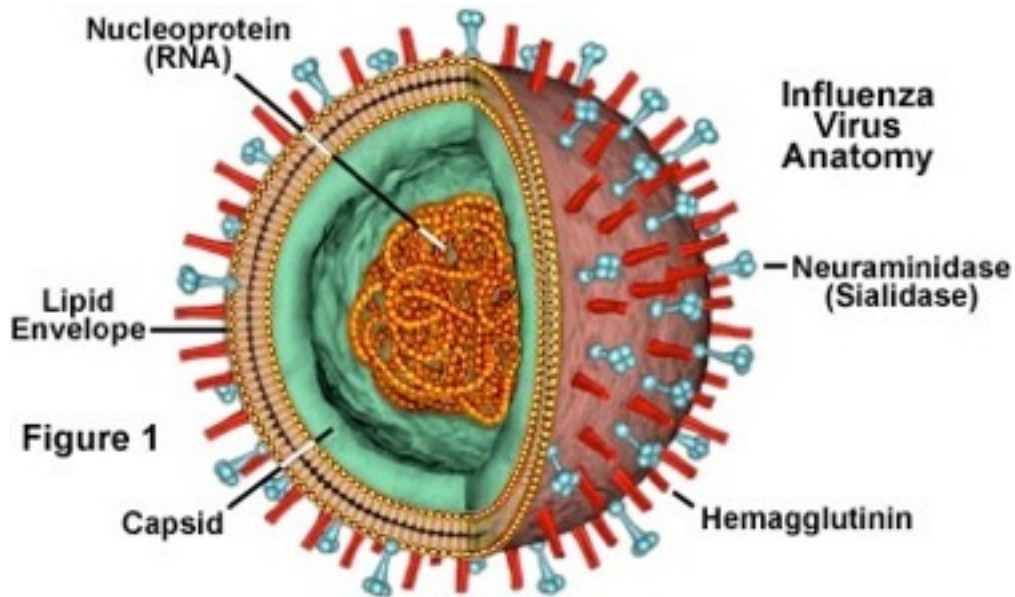
Revolutionary advances in prevention and treatment of infectious diseases over the past 200 years

- 🕒 Edward Jenner and smallpox vaccination 18th Century
- 🕒 Joseph Lister and the concept of antisepsis 19th Century
- 🕒 Alexander Fleming et al, discovery of penicillin 20th Century
- 🕒 NanoViricides' invention of virus-destroying drug creation platform 21st Century

*Before penicillin we only had sulfa,
which merely suppressed
but didn't destroy the bacteria*

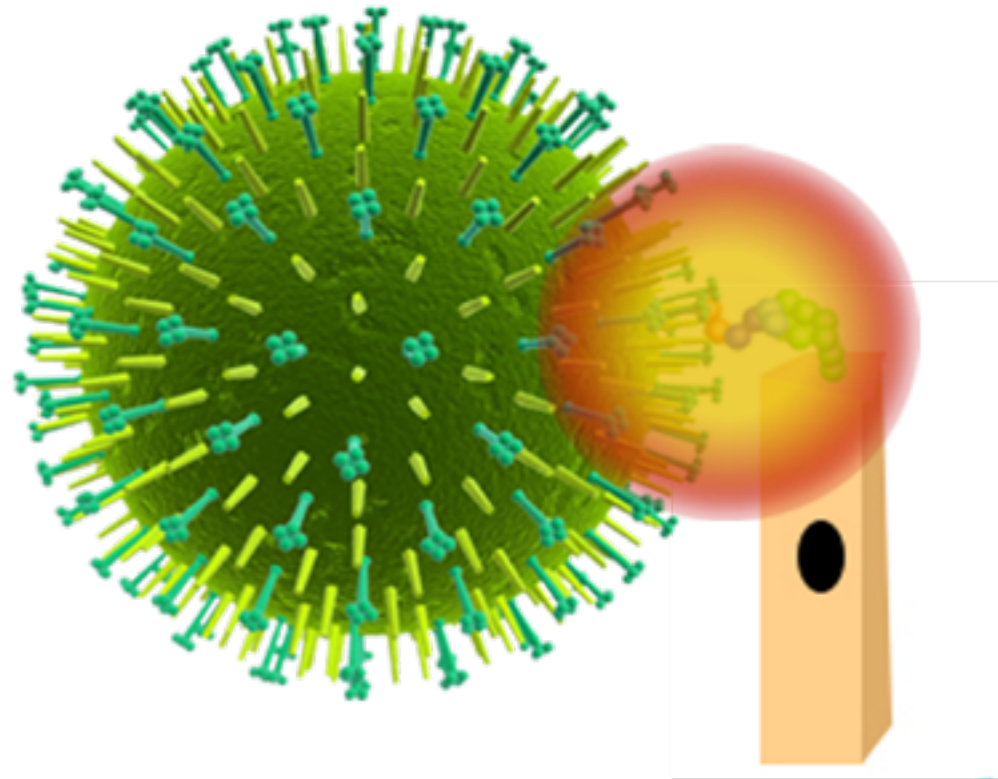
*Before nanoviricides we only had drugs like Tamiflu and AIDS cocktails,
which merely suppressed
but didn't destroy the virus*

An Influenza Virus



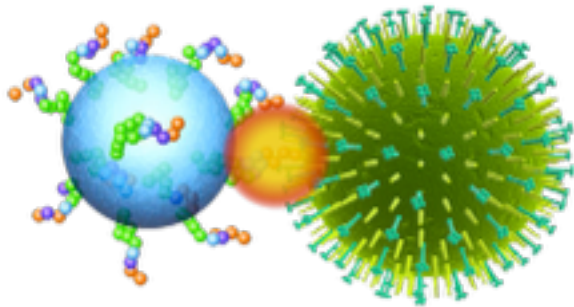
Virus Infects Cell After Attaching to Receptor Proteins on Surface of Target Cell

Normal attachment of virus to host (target) cell

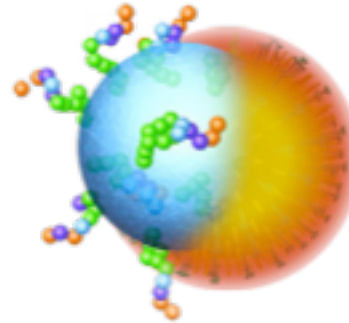


A nanoviricide[®] in action at-a-glance

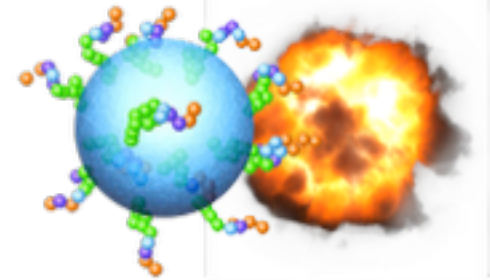
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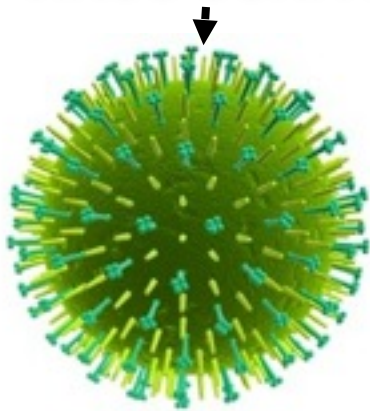
- 🕒 A single nanoviricide may be capable of completely engulfing a virus particle
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(illustration not to scale)



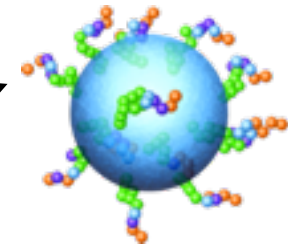
nanoviricide mimicking target cell of virus

ATTACHMENT
PROTEINS ON
VIRUS SURFACE



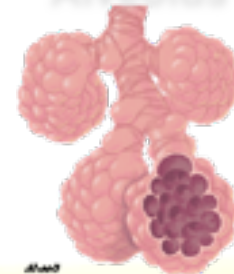
RECEPTOR
PROTEINS

NANOVIRICIDE

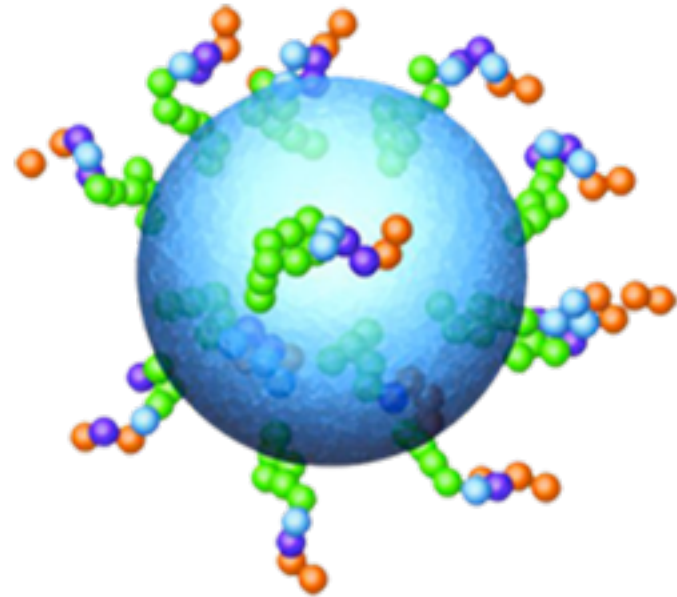
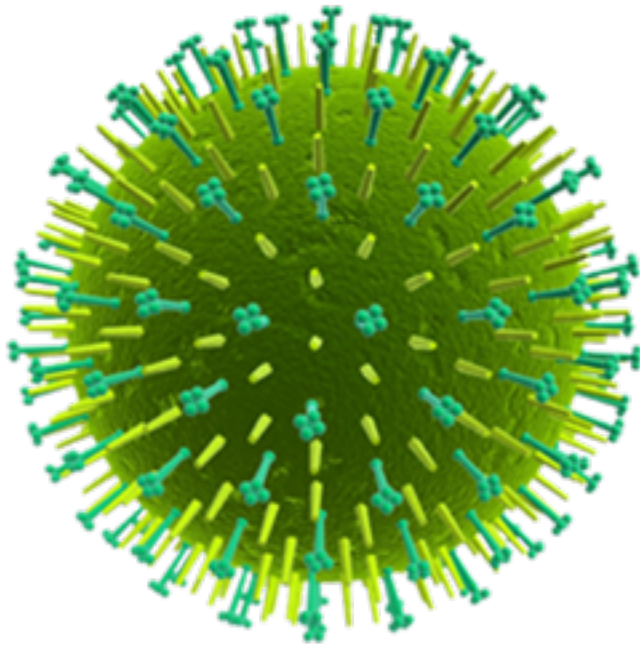


TARGET CELL

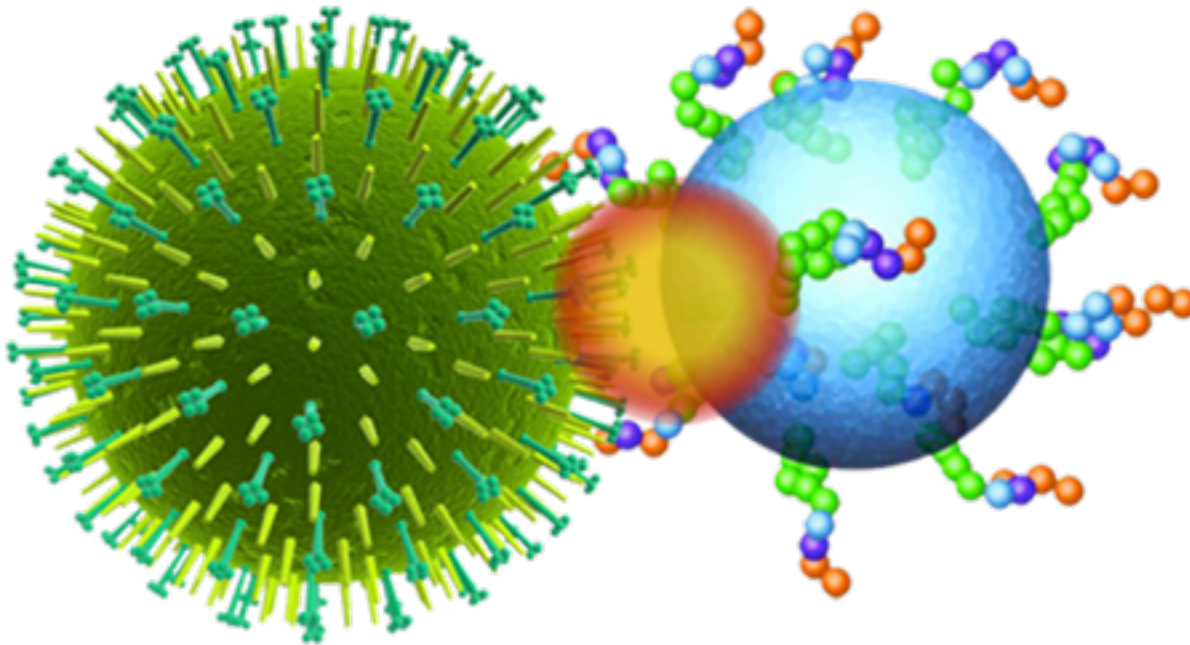
Alveolus



Ligand on nanoviricide mimics receptor on surface of target cell

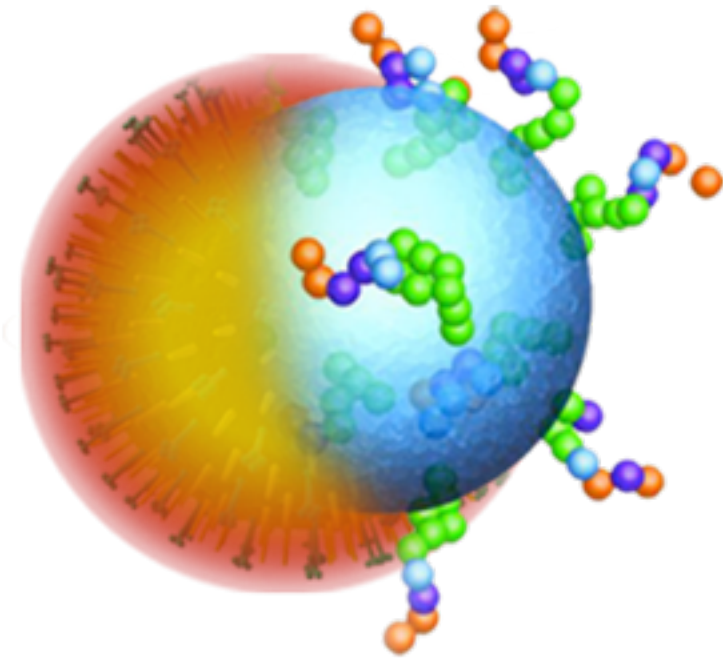


Virus attaches to “mimic” on surface of nanoviricide

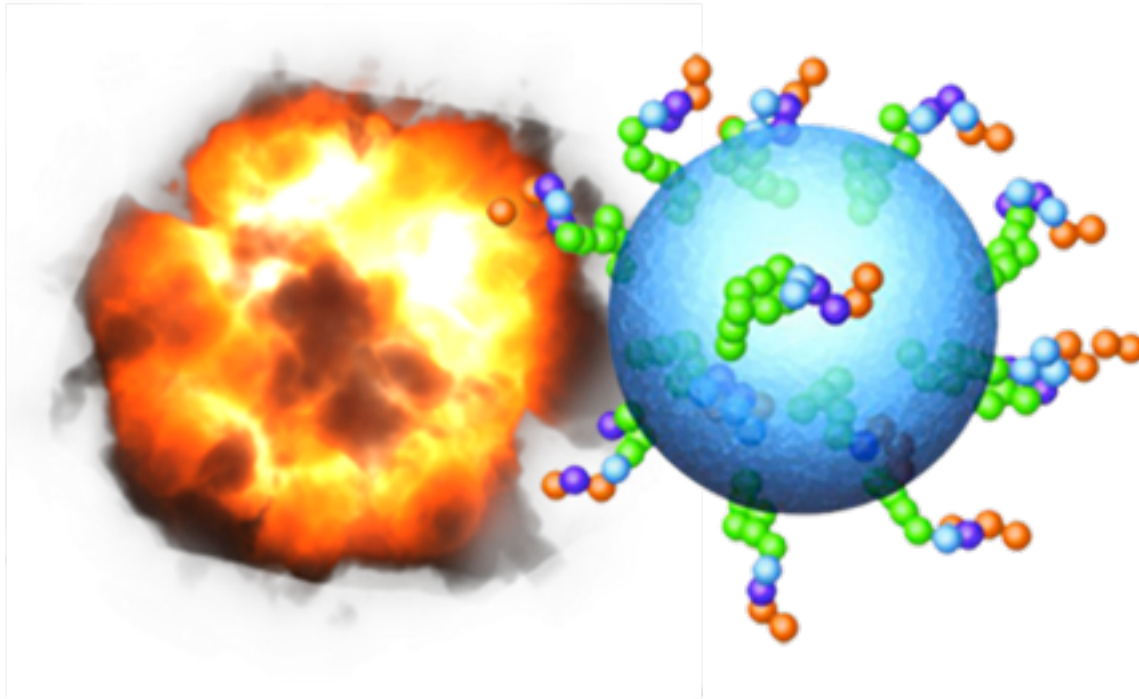


A nanoviricide's ligands attach to the virus' attachment proteins in the same manner as any virus attaches to its target cell

nanoviricide slimes the virus...

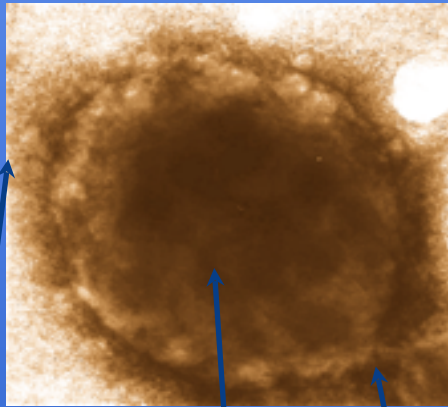


...and Ultimately Destroys the Virus



nanoviricide effect on a CytomegaloVirus (CMV)

Control



Attachment Proteins

Capsids

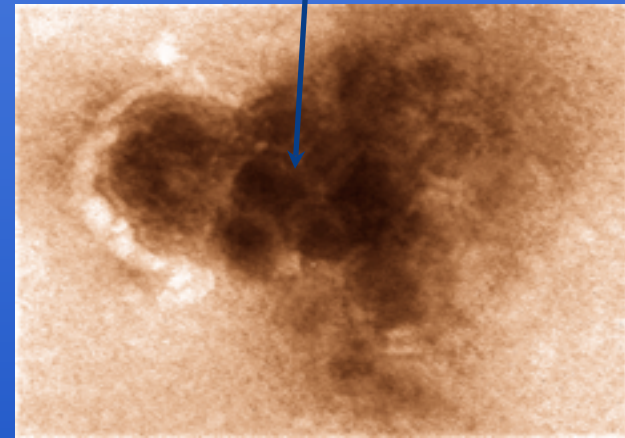
Envelope of Virus

Intact cytomegalic virus containing multiple capsids and a surrounding envelope with attachment proteins on its surface

Treated

This is a cytomegalic virus being destroyed by a nanoviricide. The envelope of the virus has been breached and the capsids containing the genetic material are seen spilling out.

A weakly effective ligand was employed to capture this intermediate state. With a stronger ligand, only capsids were visible in the EM



2 FluCide™ Dosage Forms

Dosage Forms of FluCide



For hospitalized patients with Influenza

>300,000 hospitalized patients with influenza in the US alone every year

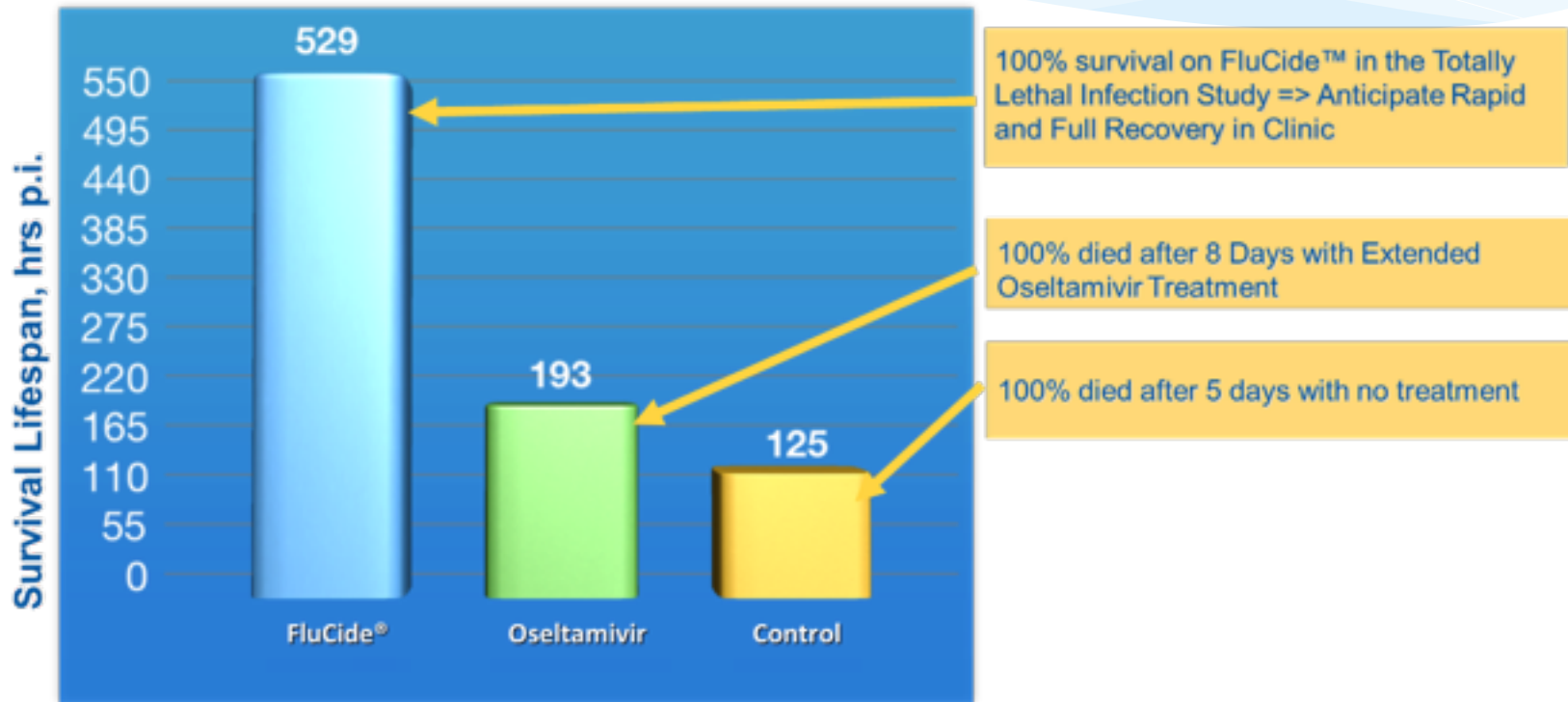


Oral unit-dose twist-top aseptic package

For outpatients with Influenza

30-60M Influenza cases per year in the US annually
Billions of cases world-wide in a pandemic

FluCide™ Preclinical Results – Survival

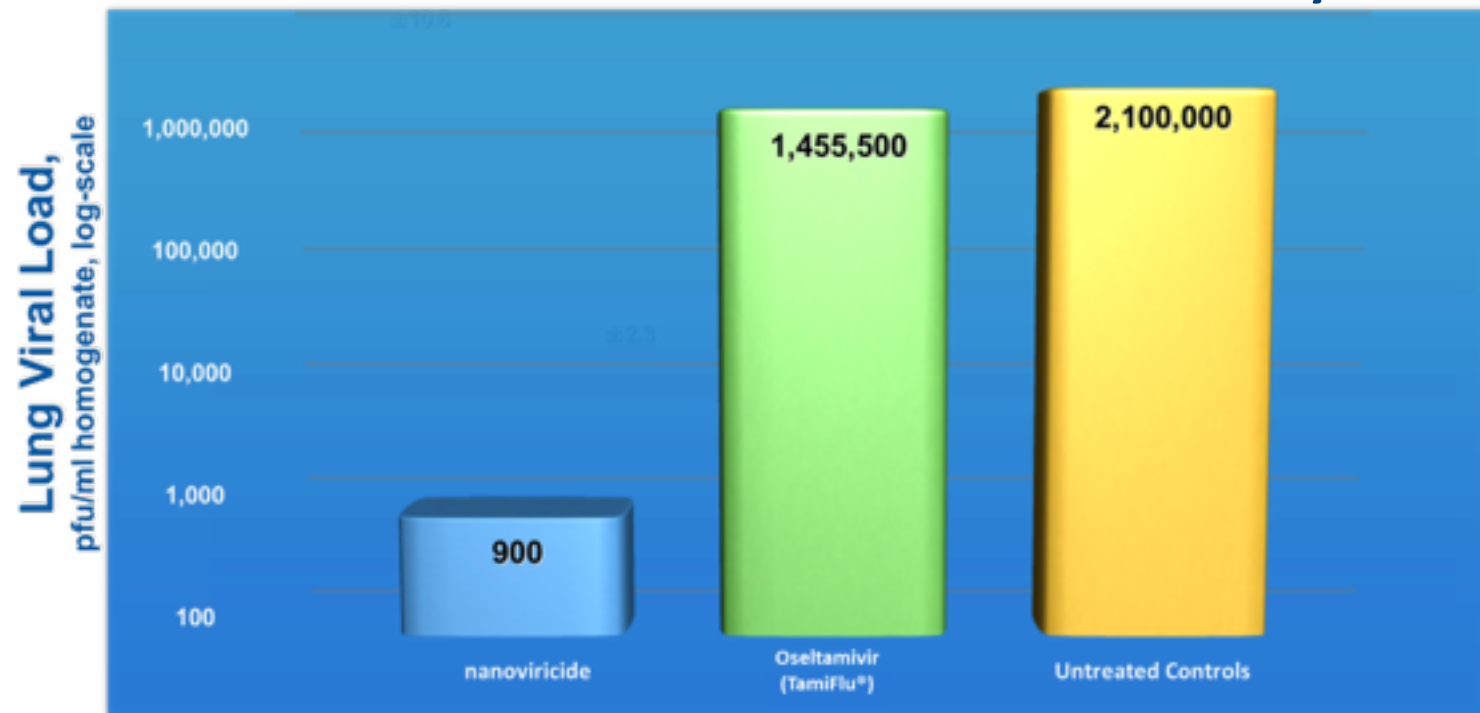


Hours of survival after lethal influenza injection



FluCide™ Preclinical Results – Viral Load

>1,000-fold Lung Viral Load Reduction in IV FluCide™ Treated Animals
<2-fold reduction with Oseltamivir in this study



4.5 Days (108h) Post-Infection

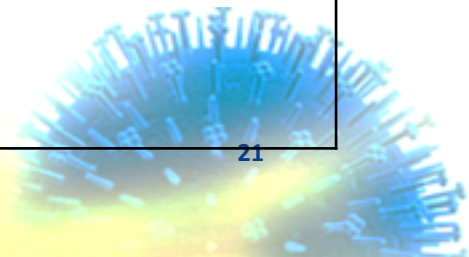


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Product Pipeline

Disease & Indication	Drug Candidate	In Vitro Development	Efficacy-Animals	IND-Enabling Studies	Human Clinical Trials
Primary Programs					
Hospitalized Patients; All Influenzas	Injectable FluCide™	→			Pandemic, Epidemic, Seasonal, Bird Flu
Out-Patients; All Influenzas	Oral FluCide™	→			Pandemic, Epidemic, Seasonal, Bird Flu
All Dengue Viruses Dengue Hemorrhagic Fever	DengueCide™	→			Type I, II, III, IV
HIV-I, HIV/AIDS	HIVCide™	→			
Eye Viral Diseases EKC & Ocular Herpes	EKC-Cide™ HerpeCide™	→			
Herpes genital lesions, cold sores	HerpeCide™	→			HSV-I, HSV-II, Zoster/ Shingles?
<i>Biodefense & Neglected Diseases</i>					
Rabies		→			
Ebola/Marburg		→			



>\$40 Billion Global Market

Disease / Virus	\$Billions, estimate
HIV/AIDS	\$ 25 B
Influenzas	\$ 10 B
Eye Drops Antiviral	\$ 1-5 B
Herpes "Cold Sores" Skin Cream & Gel	\$ 2-5 B
Hepatitis C	\$ 5-10 B
Dengue, Rabies, other NTD's (combined)	\$ 1-5 B
Ebola/Marburg/VHF (combined)	\$ 1 B

Global “First-in-Class” Intellectual Property

- **Field-defining, pioneering, platform technology enables nanoviricides drugs**
- **More than seventy-five patents issued to date in 25 countries, including the U.S., Australia, Japan, China, Canada, and all of Africa**
- **>100 countries expected to approve patent applications by the end of 2014**
- **NanoViricides has exclusive worldwide licenses to the platform technology**
- **All Patents to date Issued as “first-in-class” with no existing prior art, showcasing the Company’s leadership position in this field**
- **Nanoviricides drugs themselves are also separately patentable**
 - We will file these patents in the future to maximize patent life

Regulatory Recognition

- 🌐 **The U.S. FDA and the European Medicines Agency recently granted “orphan drug” designation to DengueCide™, the NanoViricides drug for Dengue Fever and Dengue Hemorrhagic Fever**
- 🌐 **NanoViricides was granted an early pre-IND meeting by the US FDA, held in March 2012, for FluCide™, our drug candidate for all forms of influenza A**
 - 🌐 An early meeting was granted in recognition of our advanced technology

Partners and Collaborators

- **Biologics Consulting Group (BCG, regulatory consultants)**
- **BASi (GLP safety/toxicology studies)**
- **Feinstein Institute of Medical Research**
- **Southern Research Institute**
- **Lovelace Respiratory Research Institute**
- **National Institute of Hygiene and Epidemiology, Republic of Vietnam**
- **UC Berkeley, School of Public Health**
- **Northeast Ohio University College of Medicine**
- **LSU School of Veterinary Medicine**
- **US Centers for Disease Control and Prevention**
- **US Army Med Research Institute for Infectious Diseases**
- **Walter Reed Army Institute of Medical Research**
- **Public Health England**

Manufacturing Capability

In the process of negotiating a lease agreement for a fully operational 18,000 square feet R&D laboratory with cGMP manufacturing capabilities

Construction expected to be complete by Q1 2014

We expect that the cGMP plant will be capable of manufacturing any of the NanoViricides drug candidates in quantities needed for initial human clinical trials

Highly customizable cGMP facility can process injectables, oral liquids, skin creams and lotions, optical solutions, etc. in an aseptic fashion for bulk drug manufacture

Final fill and finish of the bulk drug will be subcontracted out for the initial human clinical trials



Goals and Milestones

2013 Milestones

- ✓ Completed non-GLP toxicology studies for FluCide™, with excellent safety demonstration
- ✓ Production Scale-up and characterization studies for FluCide™ progressing satisfactorily
- ✓ Signed NDA with Lovelace Respiratory Research Institute in preparation for formal contracts.
- ✓ Signed NDA with Public Health England (PHE) in preparation of a formal contract for the Middle East MERS Corona virus (60% mortality) study
- ✓ HerpeCide™ drug candidate optimization in vitro studies continued successfully
- ✓ HivCide™ drug candidate improvement studies continued, a potential “functional cure”
- ✓ Awarded orphan drug designation by both the FDA and the European Medicines Agency (EMA). The EMA encompasses all 27 countries within the European Union
- ✓ Began construction of the cGMP plant
- ✓ Listed on to NYSE (MKT) in mid-September

2014 Goals

- 🕒 Initiate FluCide™ GLP safety/toxicology studies towards IND
- 🕒 Conduct FluCide™ Efficacy studies in multiple subtypes of Influenza A as needed for IND
- 🕒 Complete new pilot cGMP manufacturing plant
- 🕒 Set up cGMP manufacturing operations for FluCide
- 🕒 Continue development of DengueCide, oral FluCide, HerpeCide, HIVCide, and other drug candidates
- 🕒 IND filing for FluCide™ human clinical trials (possible by Q1/Q2 2015)

Note: The activities described above have a strong dependence on factors outside the Company's control. In addition, the Company does not presently have all the personnel or facilities needed for conducting these projects. Hiring and training, bringing equipment online, as well as the planned move to the new facilities may cause significant delays. In addition, the program costs may be substantially greater than the Company anticipates. The Company may adjust its priorities due to such constraints resulting in delays in accomplishments.



Risk Factors-Technology

Is it Safe?

Yes. Whenever we engage into first animal efficacy study, we test safety of that drug candidate. Safety is built into the composition and design of the nanomicelle itself. Besides, we design the antiviral ligands, as well as nanoviricide construction chemistries, using a special methodology focused on pharmacological safety.

Does it Work?

Yes. FluCide has demonstrated unparalleled 1,000-fold virus reduction when oseltamivir (Tamiflu®) in the same study showed only 2-fold virus reduction. DengueCide has demonstrated an unmatched 50% animal survival in a special model of DHF. HIVCide has demonstrated effectiveness equal to a triple-drug HAART cocktail, and continued to exhibit viral load suppression even 3 weeks after treatment was stopped.

Any Evidence of Toxicity?

NO evidence of toxicity observed to date, in any of our drug development programs. FluCide was well tolerated even at the maximum feasible dose in a non-GLP study. See our press release “NanoViricides, Inc. Reports Excellent Safety Profile of Its Broad-Spectrum anti-Influenza Drug Candidate, FluCide™, in a Non-GLP Study” (Dec. 02, 2013).

Any Evidence of Resistance?

NO resistant mutants were observable so far in any of our studies. Resistance is highly unlikely because no matter how much the virus changes, it binds to the same receptor site. We design ligands as receptor-mimics, copying these invariant features. However, our studies were not designed to specifically look at resistance.

Potential FDA Concerns?

We believe that there should be no regulatory concerns. FDA is concerned with Safety, Efficacy, and Reproducibility of the Drug Product. We have developed proprietary technologies to ensure reproducible manufacture of our drugs, and continue to refine these processes as we advance towards an IND filing.

Risk Factors - Corporate

Capital Risk

- NanoViricides has ca. \$22M in cash & equivalents (Sept 30), and spends about \$6M cash per year.
- We believe we have sufficient cash reserves to take FluCide and possibly DengueCide through initial human clinical trials.
- Our drug development costs have been substantially lower than industry standards so far because of our rapid drug development platform technology.

Personnel Risk

- We believe we are global pioneers and experts in developing novel, specifically targeted, nanomedicine drug technologies.
- We rely on collaborators for regulatory affairs as well as biological (in vitro and in vivo) testing of our drug candidates.
- Many of our collaborators for regulatory affairs have been US FDA officers.
- Our personnel and associates have taken several drugs from preclinical development into drug approval, including three blockbusters.

Competitive Risks

- We believe we offer some of the very few anti-viral drugs against which viral resistance is highly unlikely, a highly sought-after characteristic.
- We have 6 blockbuster-capable drugs in our pipeline. All of our disease-target areas are highly competitive, with many pharmaceutical companies in the field.
- We believe we have seen substantially superior efficacies compared to standard-of-care in these six drug programs.
- We believe we have very strong patent protection. We believe that our manufacturing processes have proprietary technologies that are hard to copy.
- At present, NanoViricides, Inc. is the only company that enables destruction of virus particles in circulation (other than neutralizing antibodies, which tend to be highly specific with resistance appearing rapidly).
- We believe that our orthogonal mechanism to the rest of the antiviral drugs provides a strong competitive as well as collaborative edge.

In Summary

- **Leveraging patented technology to rapidly create powerful new drugs that have the ability to destroy most all viruses in and on the body.**
- **Preclinical stage products addressing very large markets (>\$40B)**
 - **Influenza (seasonal, H1N1, H7N9, etc.) - Injectable drug**
 - **Influenza (seasonal, H1N1, H7N9, etc.) - Oral drug**
 - **Dengue fever**
 - **HIV**
 - **Herpes, genital, oral - cream and lotion formulations**
 - **Eye Viral Diseases (adenovirus-caused EKC and Herpes Keratitis) gels and eyedrops**
- **cGMP pilot manufacturing facility near completion**
- **FDA and EMA grant orphan drug designation for DengueCide™**
- **First pre-IND meeting with the FDA for FluCide has already been held**
- **Sufficient cash to support initial clinical trials for FluCide™ and DengueCide™**