

Bio<sub>2</sub>XyTran<sup>Inc.</sup>

# Galectin Antagonists in Long-COVID

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# What is “Long-COVID”?

## Terminology

Long COVID, Long Haulers, Long-term COVID, Post-COVID conditions (PCC), Post-acute sequelae of SARS-CoV-2 infection (PASC), Post COVID-19 Syndrome (PCS)



Post-COVID conditions describe a range of new, returning, or ongoing health issues that persist four or more weeks after a person is first infected with the virus that causes COVID-19, sometimes after initial symptom recovery.

<https://www.covid.gov/longcovid/definitions>



## An Insidious COVID that Lingers

- Lack of return to the usual state of health
- Not explained by an alternative diagnosis
- Not due to acute viral infection



# Long Covid: Disabling America



- 65<sup>1</sup>-100<sup>2</sup> million estimated cases worldwide
- Lost work days: 1.6 million full-time equivalent workers
- \$3.7 trillion<sup>3</sup> estimated economic burden
- 7.5%<sup>4</sup> of people report having long-COVID
- Quality of life decreases<sup>5</sup>
- CDC estimates that 6% of U.S. adults report currently having Long-COVID symptoms<sup>6</sup>
- No FDA-approved drugs for Long-COVID

<sup>1</sup><https://www.nature.com/articles/s41579-022-00846-2>

<sup>2</sup><https://www.medrxiv.org/content/10.1101/2021.11.15.21266377v1>

<sup>3</sup><https://www.brookings.edu/research/is-long-covid-worsening-the-labor-shortage/>

<sup>4</sup>[https://www.cdc.gov/nchs/pressroom/nchs\\_press\\_releases/2022/20220622.htm](https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2022/20220622.htm)

<sup>5</sup><https://www.frontiersin.org/articles/10.3389/fpubh.2022.975992/full>

<sup>6</sup><https://www.cdc.gov/nchs/covid19/pulse/long-covid.htm>

**1 in 5 with  
COVID have  
Long COVID**



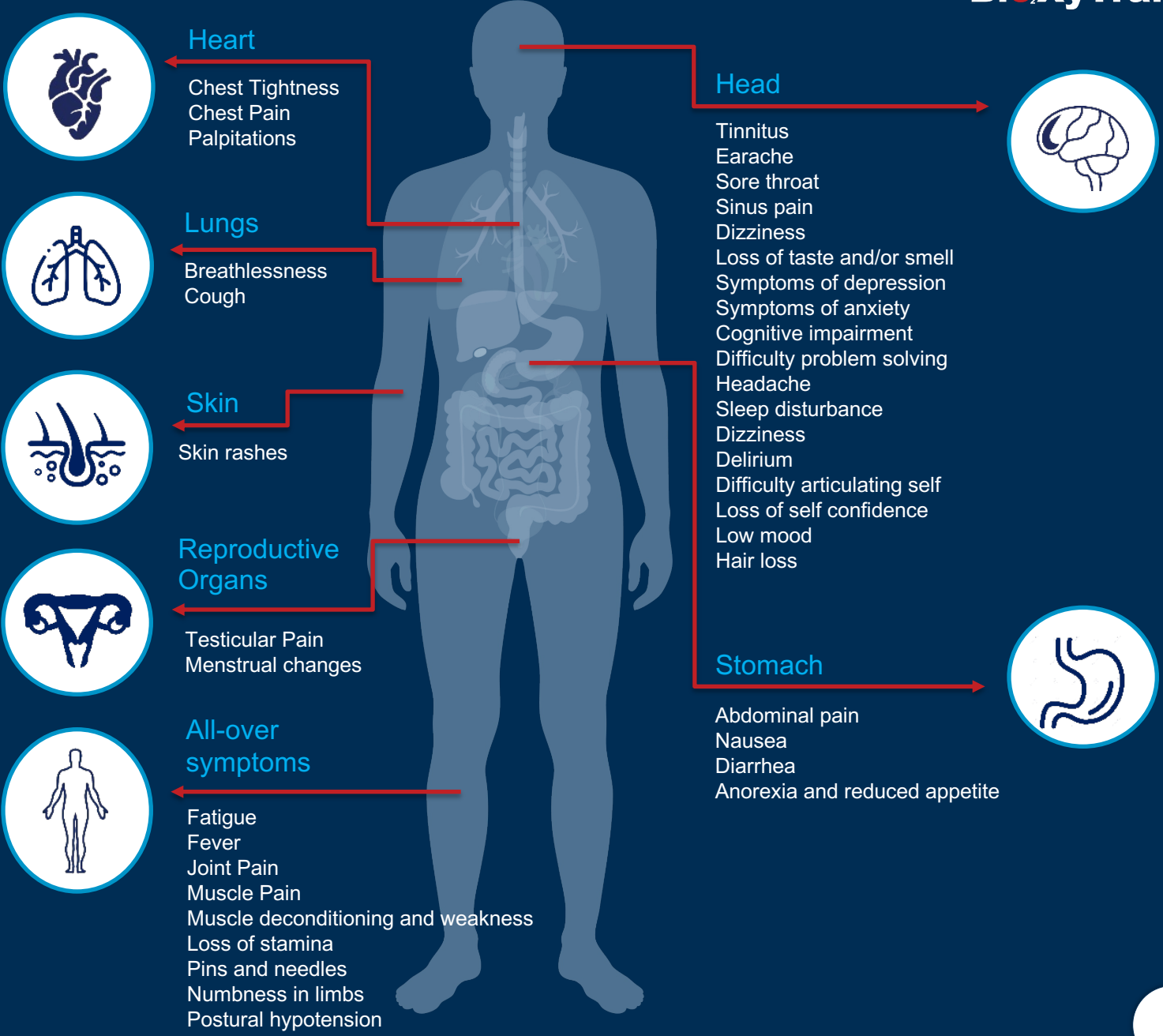
# Long Covid

## Symptoms

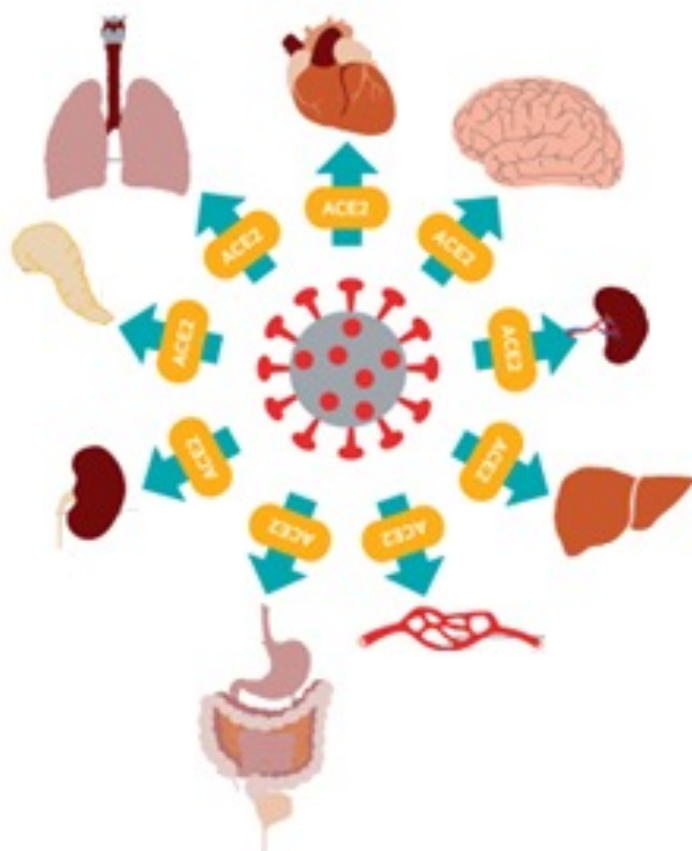
The Most commonly reported symptoms of ongoing symptomatic COVID-19 and post-COVID-19 Syndrome Include (but are not limited to) the following:

## Common Symptoms of Long Covid

- Brain Fog
- Fatigue
- Loss of Smell
- Difficulty Breathing
- Join Pain
- Digestive Issues



## Mapping ACE2<sup>1</sup> (72 Tissues)



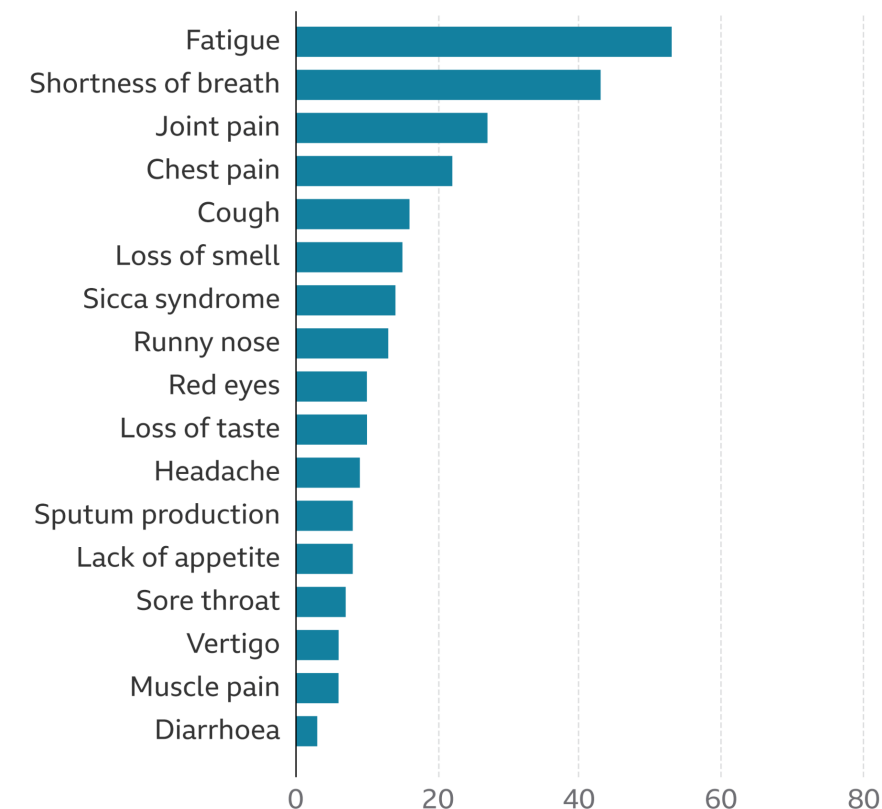
**ACE2 Facilitates  
Viral Spread to  
Organs**

**Residual infection in  
affected tissues lead  
to Long-COVID  
symptoms**

<sup>1</sup><https://www.frontiersin.org/articles/10.3389/fmed.2020.594495/full>

## Long Covid symptoms

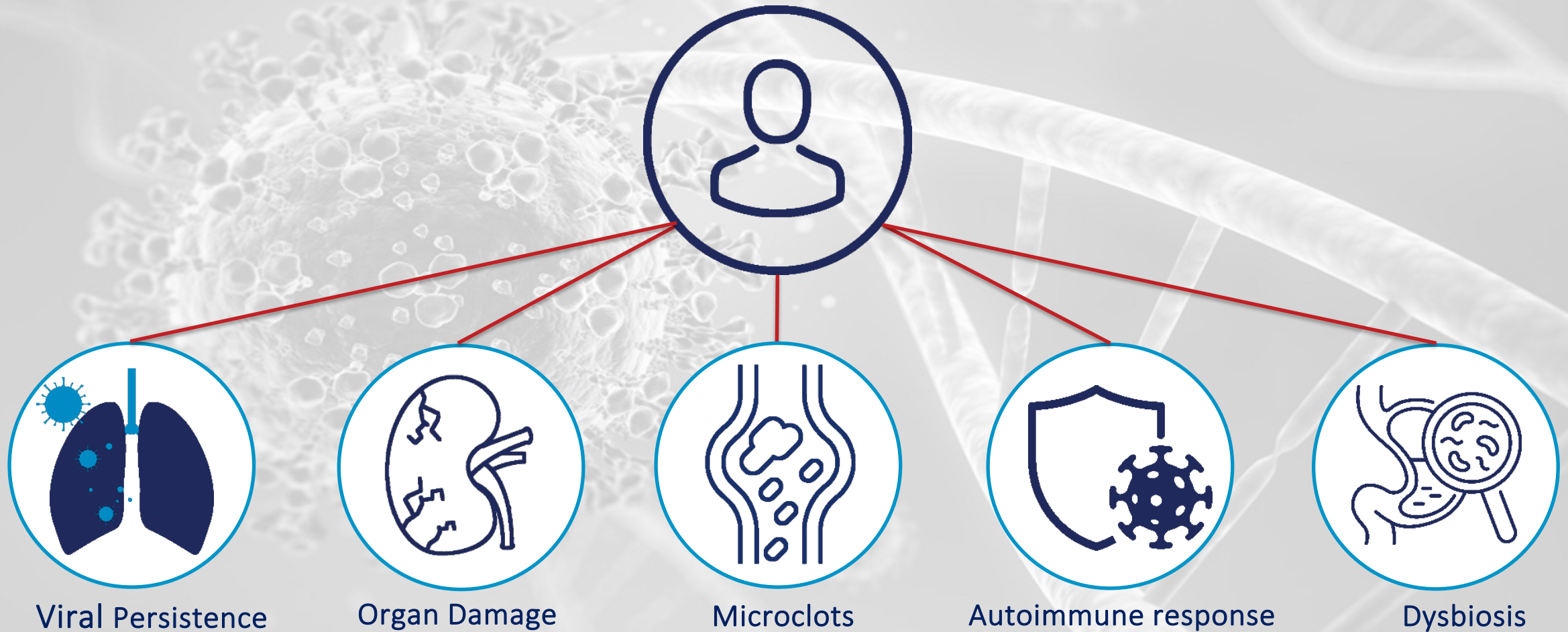
Percentage of patients with symptoms



Source: Agostino Gemelli University

BBC

# Long-COVID Theories

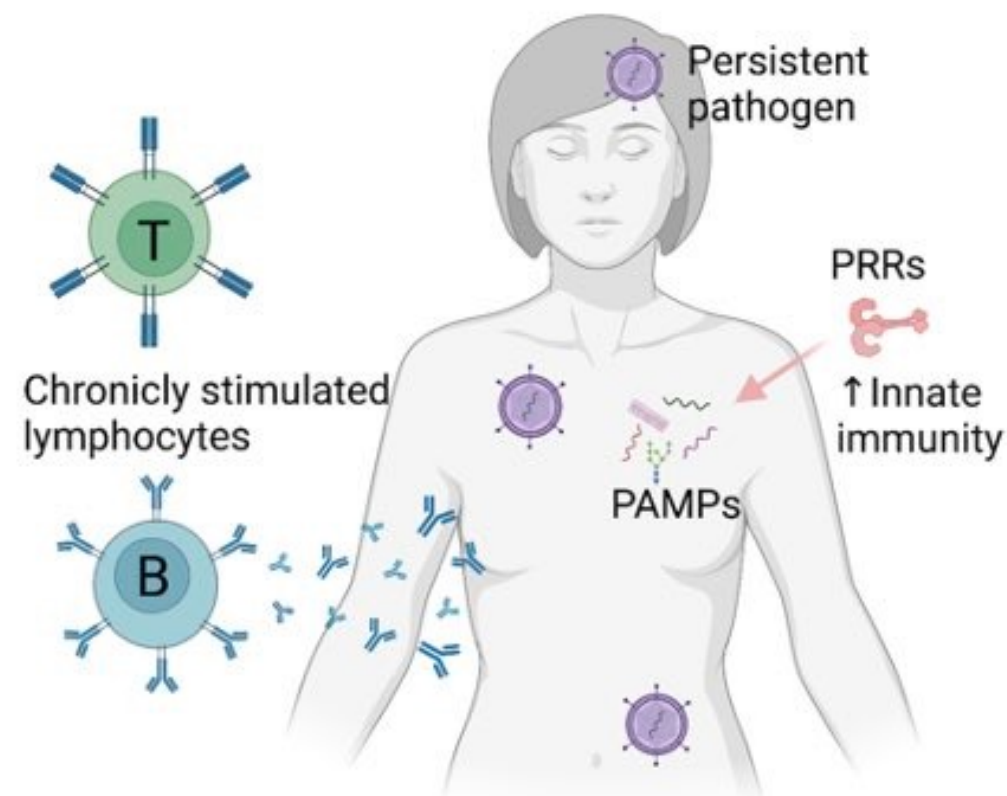




# Viral Persistence/Pathogen Remnants

- Evidence that there's active virus in tissues up to 9 months after infection<sup>1</sup>
- Paxlovid treatment lowers incidence of long-COVID<sup>2</sup>  
(9.43 lowered to 7.11 per 100)
- Ongoing viral replication/viral reservoirs might drive Long-COVID
- Persistence of viral remnants such as S1 subunit may drive pathology<sup>3</sup>
- ProLectin stops infection and binds to S1, potentially addressing both persistence theories

## a. Viral reservoir/viral PAMPs



<sup>1</sup><https://academic.oup.com/cid/article/76/3/e487/6686531>

<sup>2</sup><https://www.medrxiv.org/content/10.1101/2022.11.03.22281783v1>

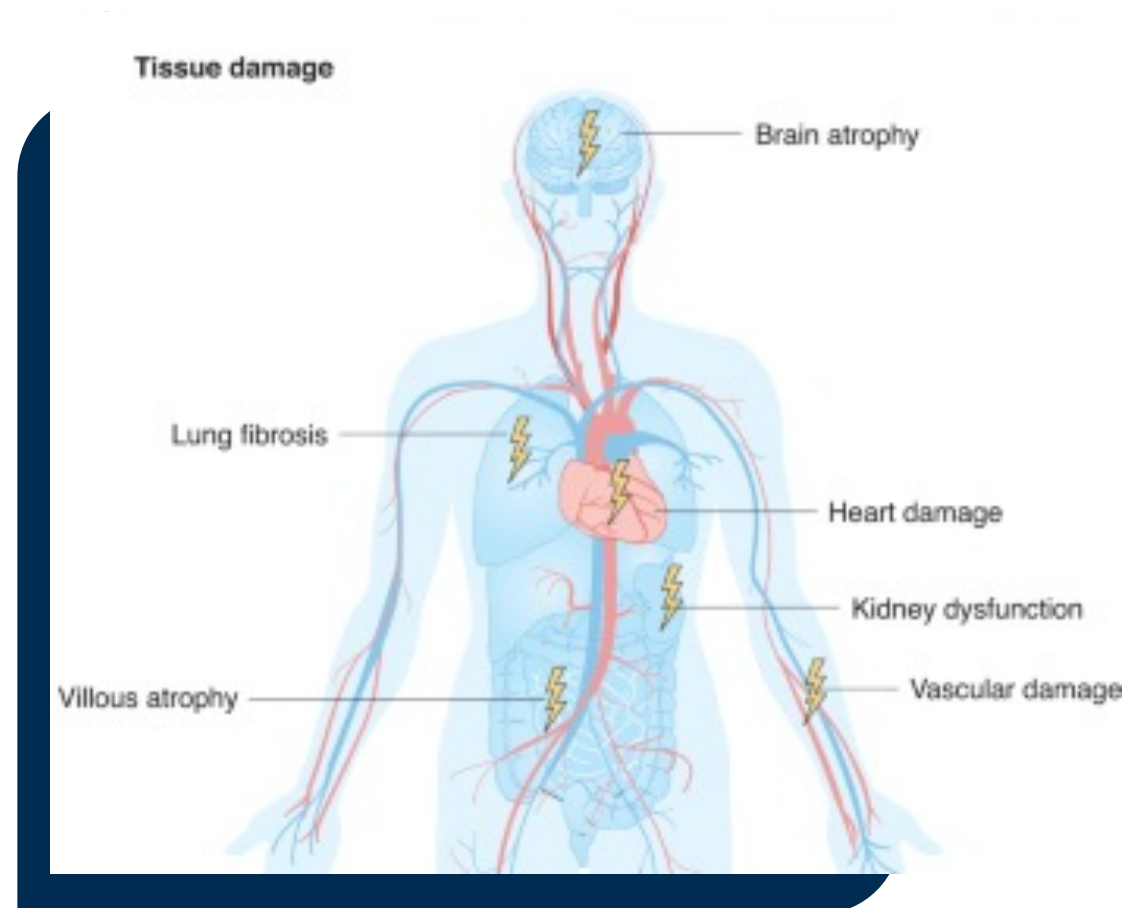
<sup>3</sup><https://www.frontiersin.org/articles/10.3389/fimmu.2021.746021/full>

# Tissue Damage and Microclots

- Galectin-3 is a DAMP and promotes coagulation
- Galectins promote fibrosis/scarring and are being studied as antifibrotics
- ProLectin-I blocks various galectins including 1 and 3

<sup>1</sup><https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4357586/>

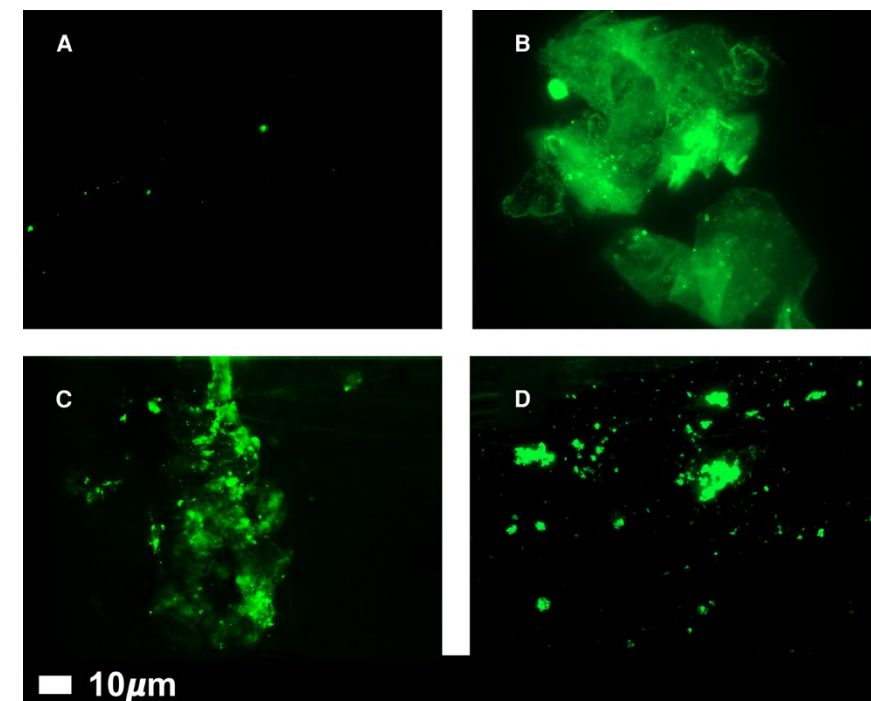
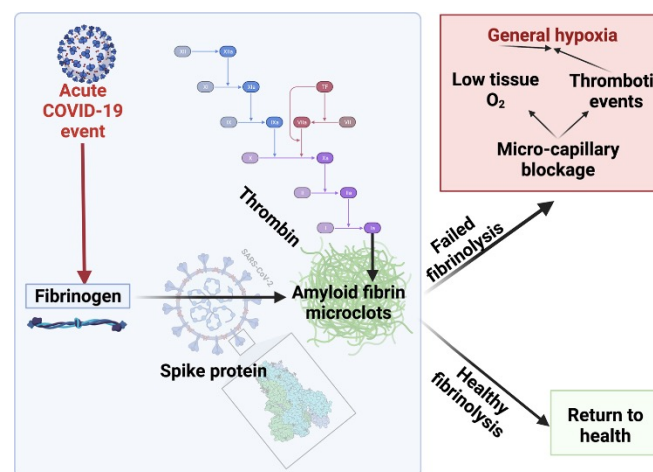
<sup>2</sup><https://www.sciencedirect.com/science/article/pii/S1357272520301989>



# Microclots

## A central role for amyloid fibrin microclots in long COVID/PASC: origins and therapeutic implications<sup>1</sup>

- Microclots formed by aberrant amyloid fibrin triggered by the spike protein.
- Microclots present novel antigens that lead to production of autoantibodies, exacerbating symptoms.



Fluorescence microscopy of sample micrographs showing microclots (green) in the circulation of controls (A) and in patients with Long COVID (B–D).

<sup>1</sup> <https://portlandpress.com/biochemj/article/479/4/537/230829/A-central-role-for-amyloid-fibrin-microclots-in>

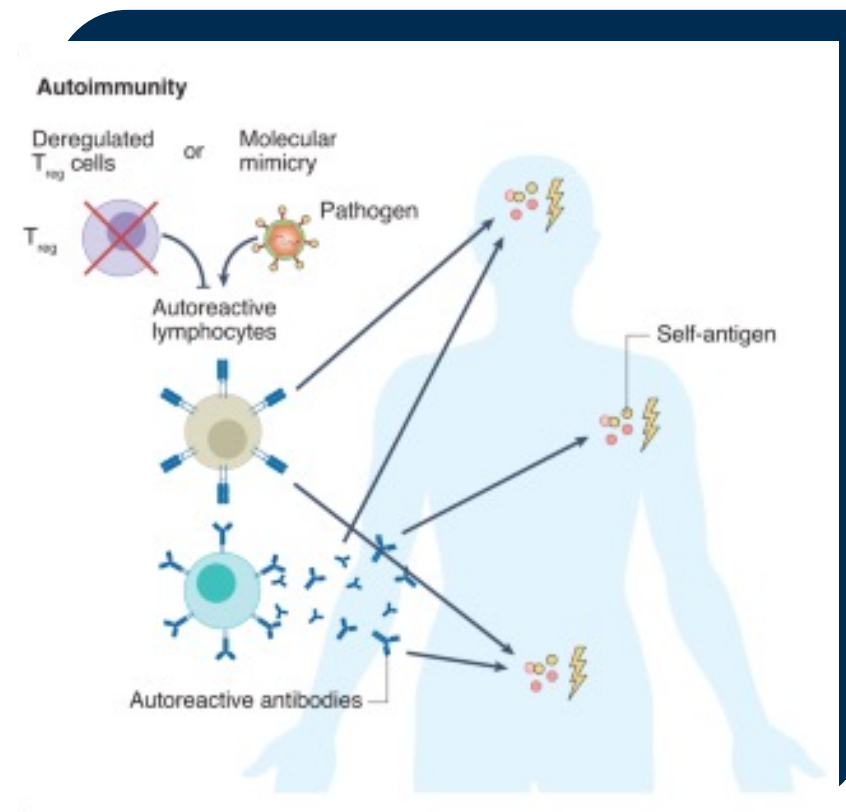
<sup>2</sup> <https://cardiab.biomedcentral.com/articles/10.1186/s12933-022-01579-5>

<sup>3</sup> <https://europepmc.org/article/ppr/ppr436609>



# Autoimmunity

- Inflammation or autoimmunity might drive Long-COVID symptoms
- Galectins are drivers of inflammation and are implicated in autoimmunity
- Prolectin-I may have a beneficial effect in reducing autoimmune reactivity
- Iwasaki says galectin-1 is elevated in long-COVID<sup>2</sup>

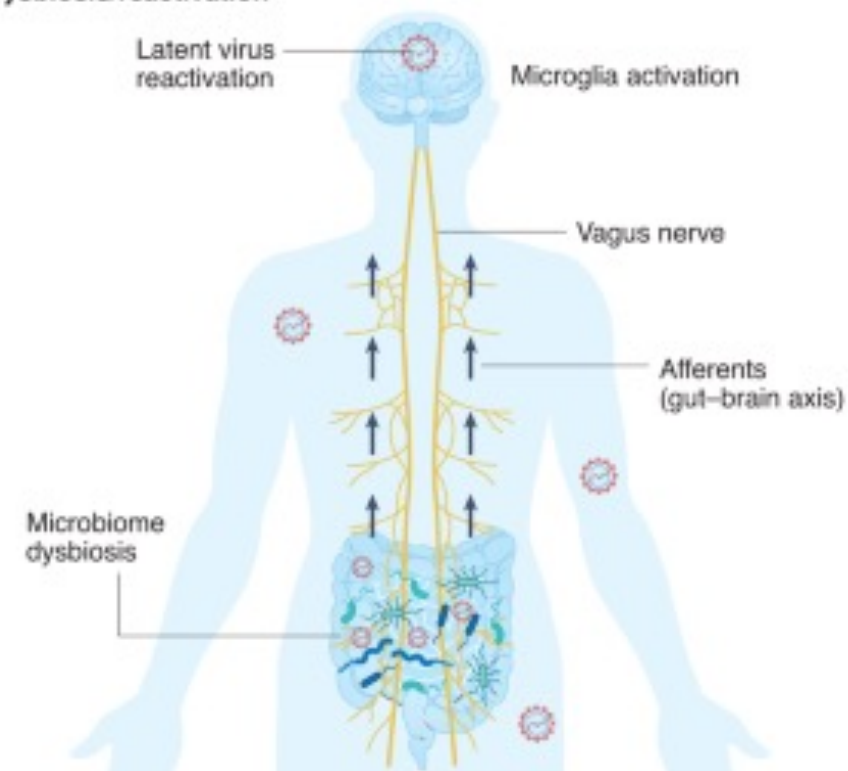


<https://www.medrxiv.org/content/10.1101/2022.08.09.22278592v1.full-text>

# Dybiosis/Reactivation

- Disruption of flora and subsequent reactivation of latent viruses (EBV) may cause long-COVID symptoms
- ProLectin has not been tested against EBV yet, but has demonstrated broad-spectrum activity with other viruses

## Dysbiosis/reactivation



# Heterogeneous Disease = Clinical Trial Challenge



Short Long-Haulers: 9 months

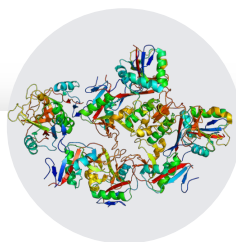
## Testing Long COVID & Determining Endpoints

- No validated tests/diagnostics
- No industry guidance on endpoints

Long Long-Haulers: Over 9 months

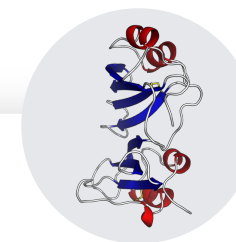


# Inspiration For Glycoviropology



## Adhesion Drug

- Common means of viral adhesion: surface lectins combining with carbohydrates
- Carbohydrates can block surface lectins.
- Galectins are adhesion molecules (extracellular matrix)
- Galectins thought to aid in viral docking
- Galectins strongly implicated in viral diseases

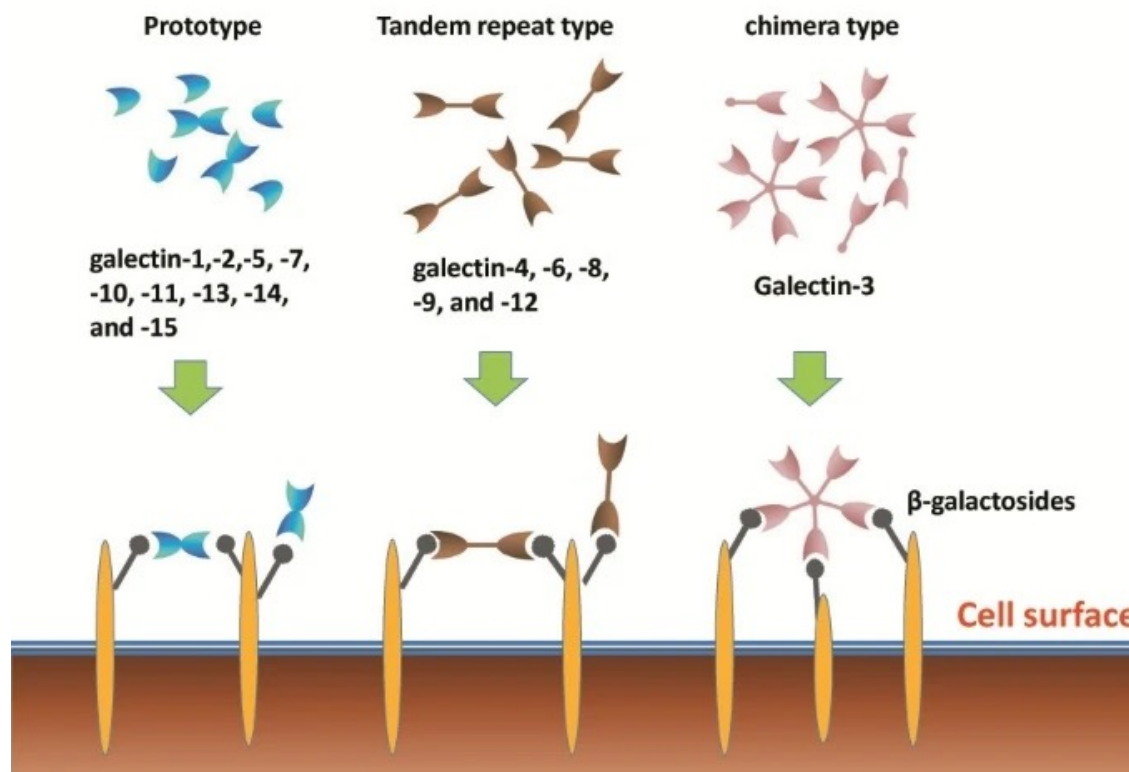


## Entry Inhibitor

- Galectin Fold discovered on spike protein in a conserved region
- Interfere with spike protein activation
- Creation of a physical barrier

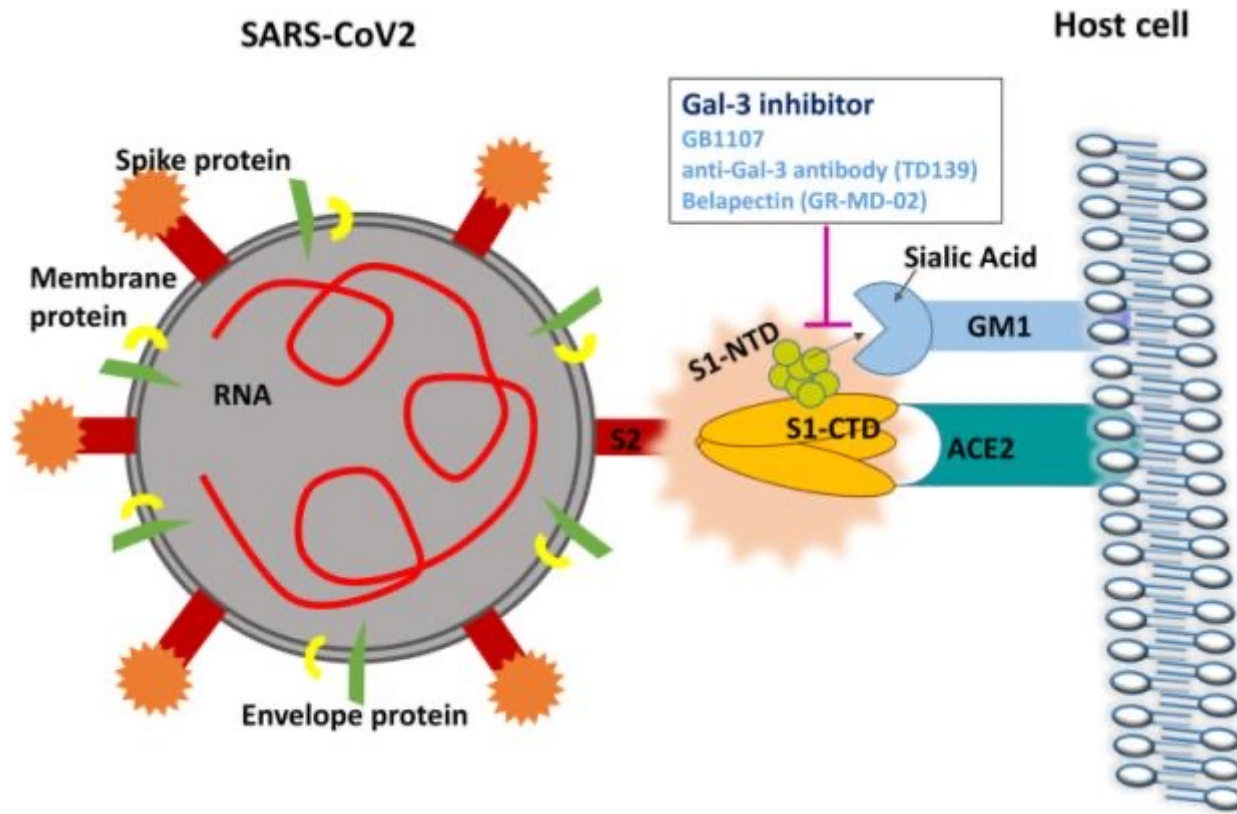
# Galectins Explained

A Galectin is a protein that recognizes carbohydrates and modulates intra cellular and extracellular interactions primarily related to the immune system. In some cases, Galectins act as a glue bringing molecules such as surface receptors together. The major focus of research is on extracellular interactions.



<https://www.pharma-iq.com/pre-clinical-discovery-and-development/articles/why-galectin-3-has-emerged-as-a-focus-for-drug-research-and-development-1>

# Galectin Inhibition MOA



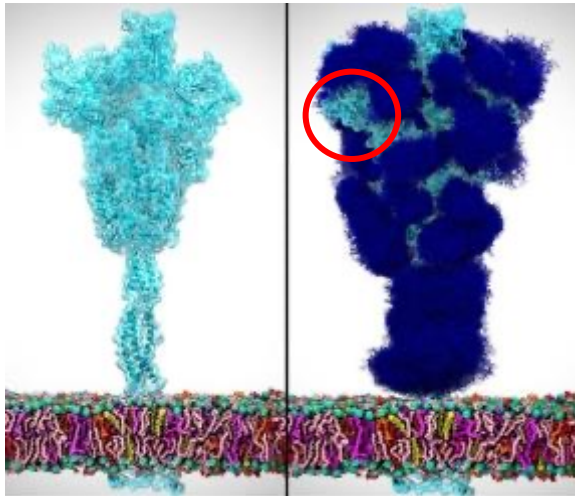
- Binding to the spike protein in Blood
- Liver removes carbohydrates drug and virus.
- Restoration of Adaptive immune system – peel off galectin plaque
- Adaptive immune system creates long term immunity



# Neutralizing the Spike Protein

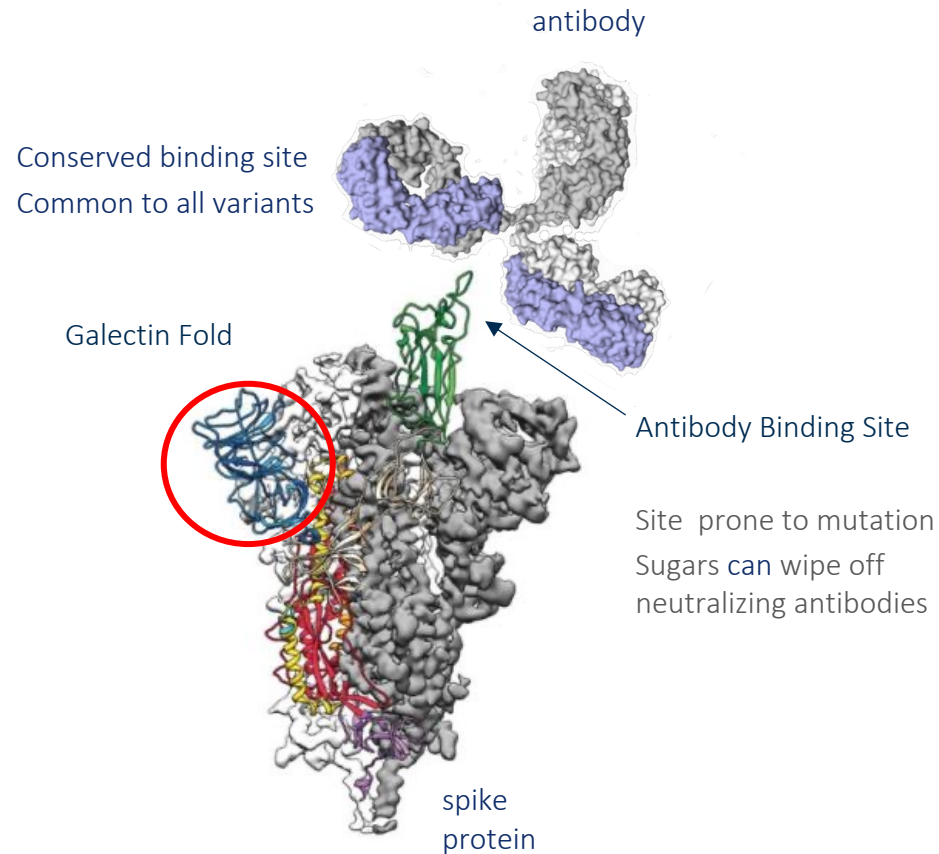
## How it Works

No Sugar Shield      Shielded in Sugar



### Part of the Problem

Antibodies need a place to attach. The sugar shield is not static, but rather a dynamic shape shifting like coating with windshield wipers on the surface that limit areas of attachment.



### Galectin Fold Ideal Binding Site

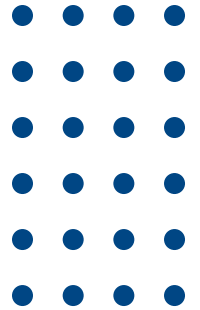
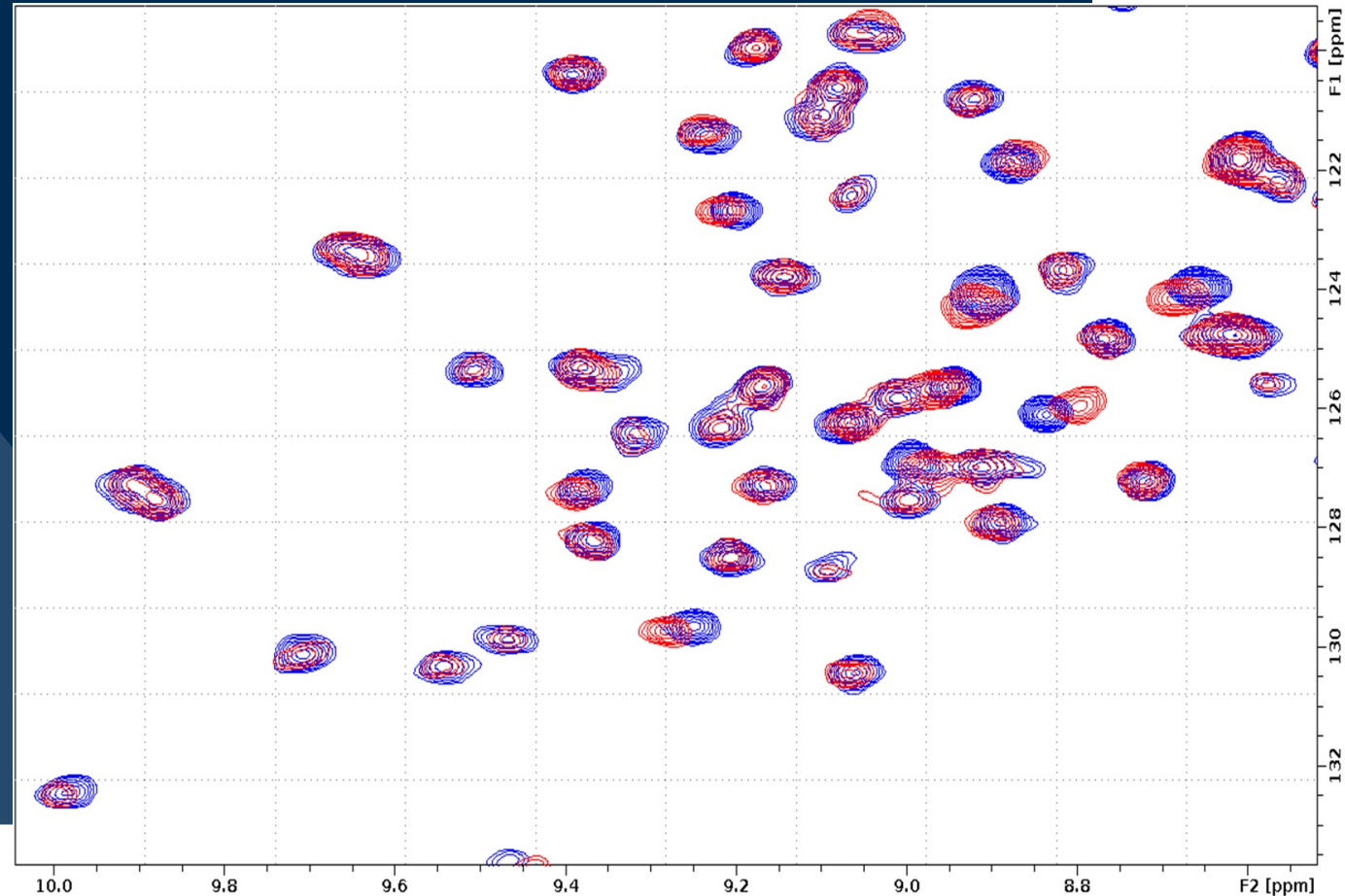
Binding to the spike protein prevents viral entry

Immensely tighter bond to galectin fold vs tip  
(Prolactin-RX 99% binding affinity)

Antibodies take time to be produced – slower  
response to infection

### Prolactin Neutralizes Like Antibodies

# Complex Carbohydrate Design Using Advanced NMR Spectroscopy Techniques

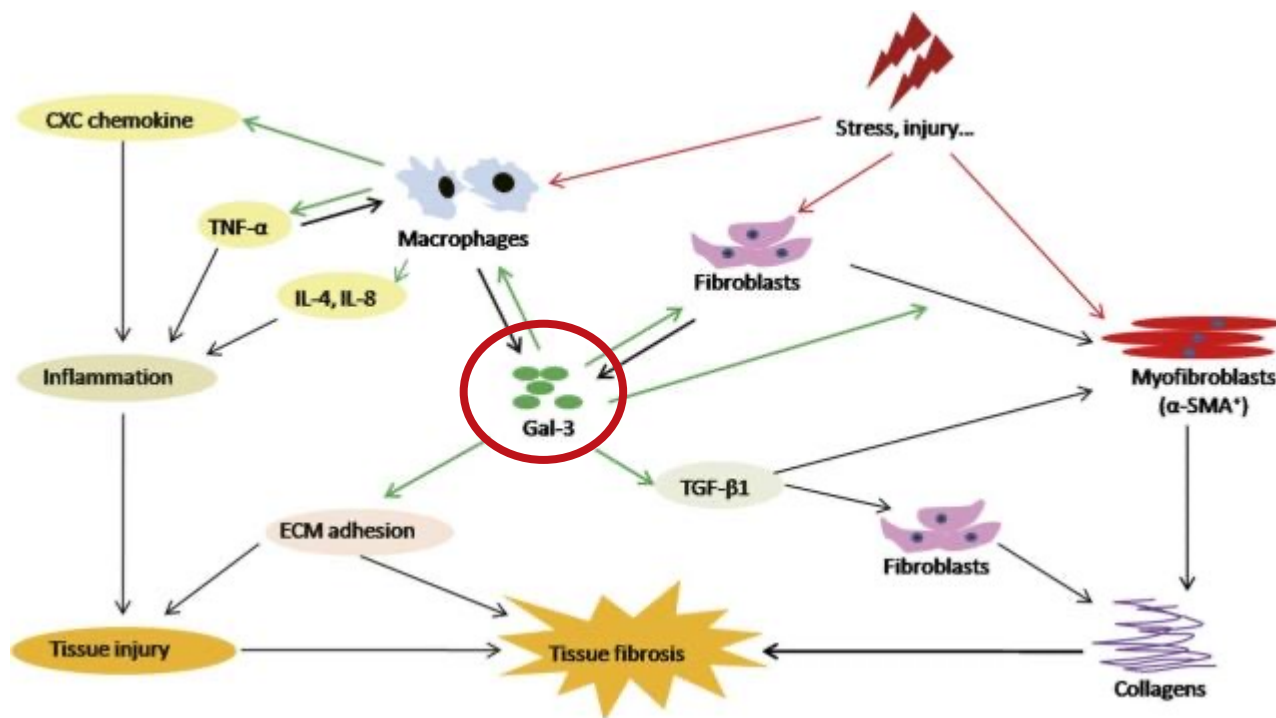


<sup>1</sup> Galectin approach to lower covid transmission - Drug Development for clinical use



# Galectin Trouble-Maker

## The Center of Inflammatory Feedback Loops



- Gal-3 is a Pro-inflammatory Molecule
- Inhibiting it blocks cycle of inflammation
- Galectin is the KEY modulator of inflammatory molecules

<http://jpet.aspetjournals.org/content/351/2/336>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5752178/>

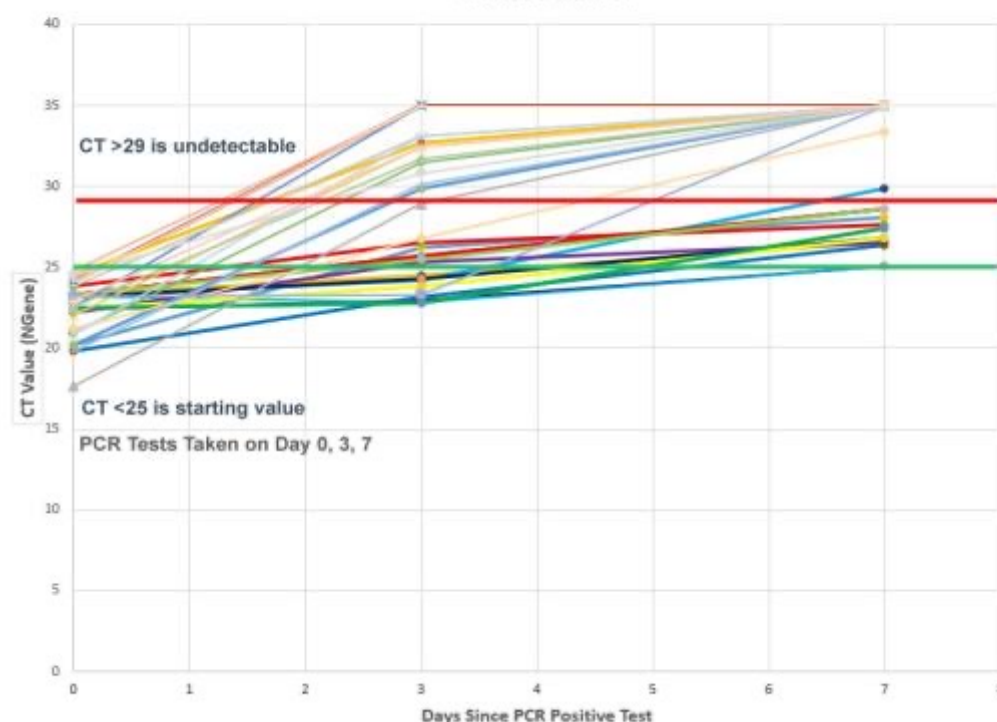
There is little downside to blocking galectin-3 entirely from the body potentially ameliorating many chronic and deadly diseases



# PCR Test Data (Blinded Phase 2)

## Prolectin-M Clinical Trial Results

Blinded Data n=34



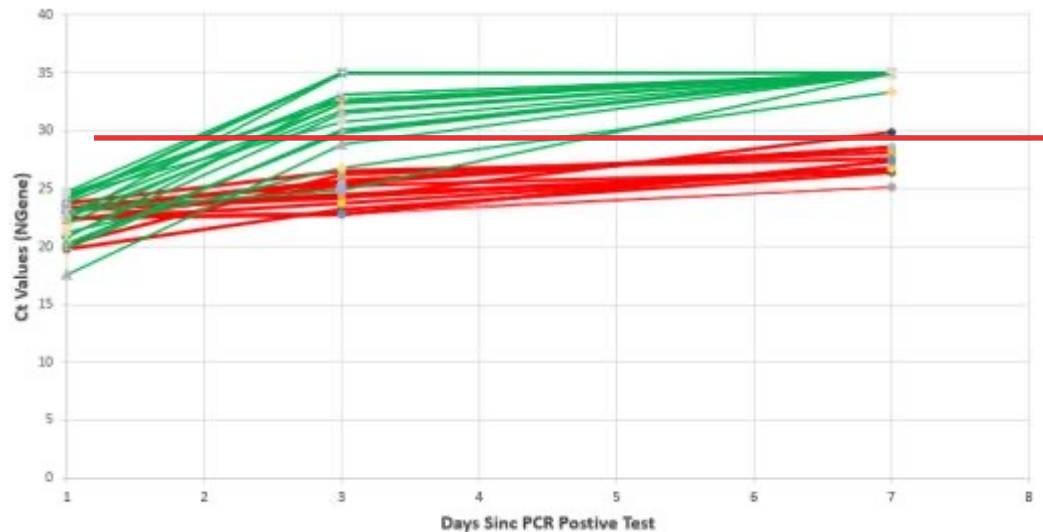
- Cycle Threshold (Ct) values are used to assess infectivity of the patient using a nasal pharyngeal test. Lower values are a proxy for higher viral loads and increased infectivity. Values over 29 are considered PCR negative. Starting Ct values of patients were under 25.
- Day 3 – 15 out of 34 were PCR negative (44.1%)
- Day 7 – 18 out of 34 were PCR negative (52.9%) n = 34
- No toxicity signals
- Randomized 1:1
- Double Blind Placebo Controlled
- Very Encouraging Data Grouping and indications of efficacy with no safety signals

<sup>1</sup>Galectin approach to lower covid transmission - Drug Development for clinical use (medRxiv.org)

# PCR Test Phase 2 Data

## ProLectin-M Ct Values

Unblinded Data n=34

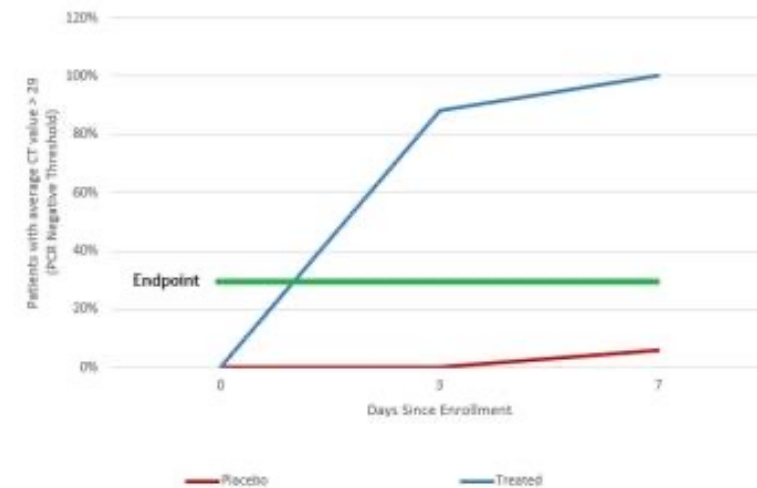


Actual results show tight grouping btw treated arm and placebo arm

<sup>1</sup>Galectin approach to lower covid transmission - Drug Development for clinical use (medRxiv.org)

- Day 3 – 14 out of 17 were PCR negative (88%)
- Day 7 – 17 out of 17 were PCR negative (100%) n = 34
- No toxicity signals
- Randomized 1:1
- Double Blind Placebo Controlled Trial

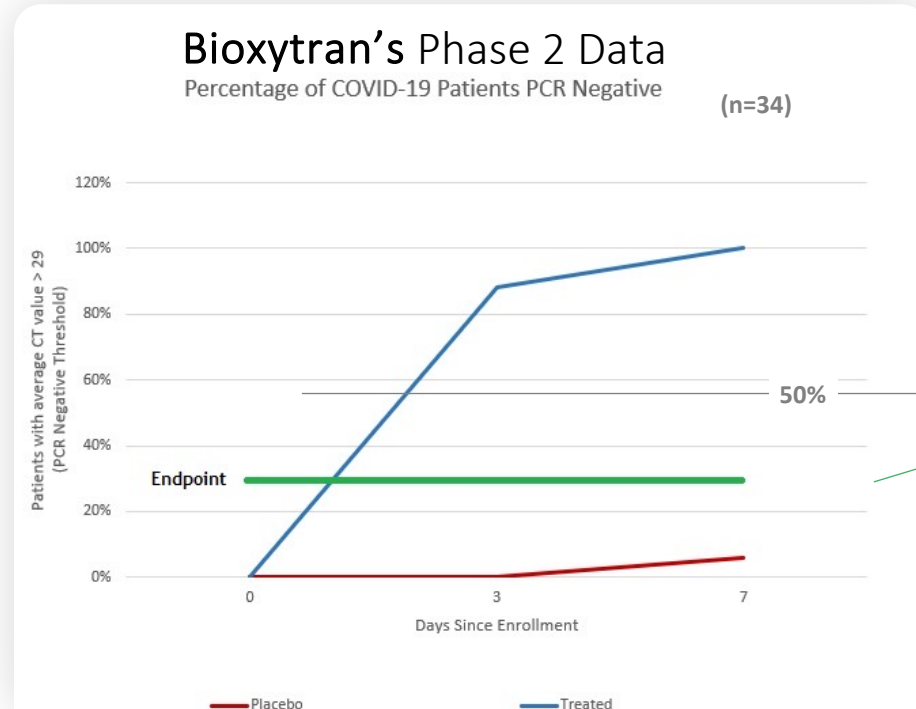
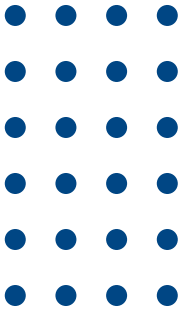
Percentage of COVID-19 Patients PCR Negative



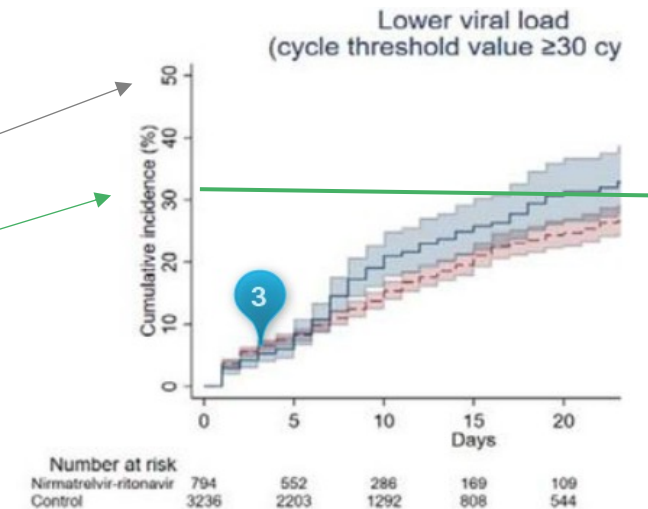
# ProLectin-M vs Pfizer's Paxlovid

- Day 3 – 14 out of 17 were PCR negative (88%)
- Day 7 – 17 out of 17 were PCR negative (100%) n = 34
- No toxicity signals
- Randomized 1:1
- Double Blind Placebo Controlled Trial

- Day 20 PCR negative (30%)
- Toxicity (Drug to Drug Interactions)
- Limited to Underlying Medical Conditions

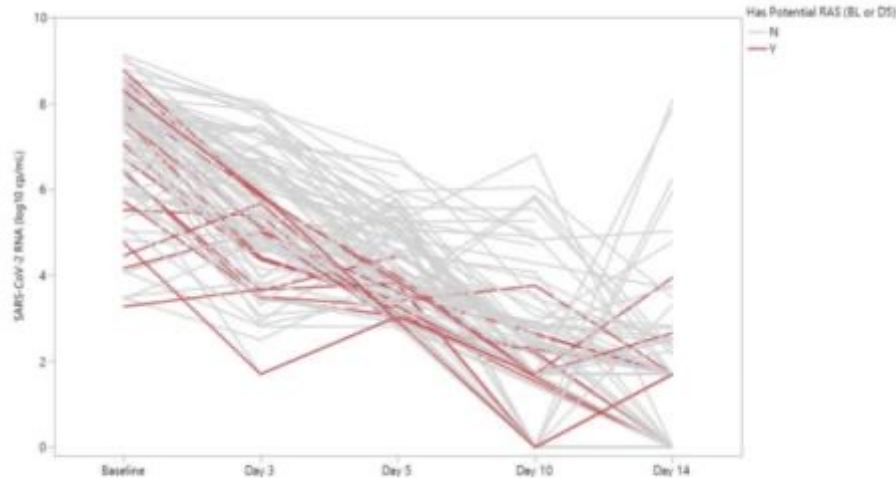


## Pfizer's Paxlovid Real World Data<sup>1</sup>



<sup>1</sup> [https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(22\)00507-2/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(22)00507-2/fulltext)

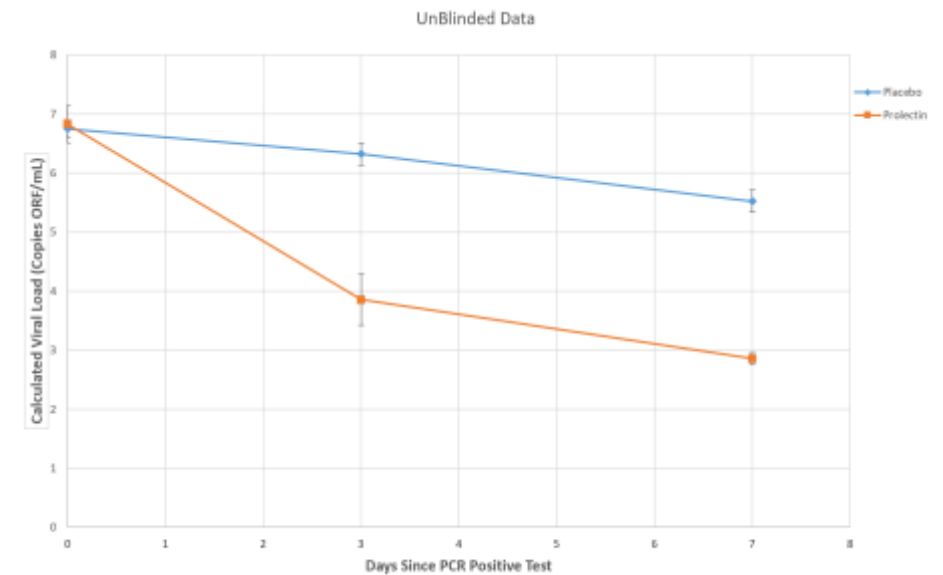
# Elimination of Viral Rebound



Source: FDA analysis.

**Figure 2. SARS-CoV-2 RNA levels in NP swabs among Paxlovid treated subjects with or without SARS-CoV-2 amino acid substitutions detected in Mpro or cleavage site positions potentially associated with resistance.**

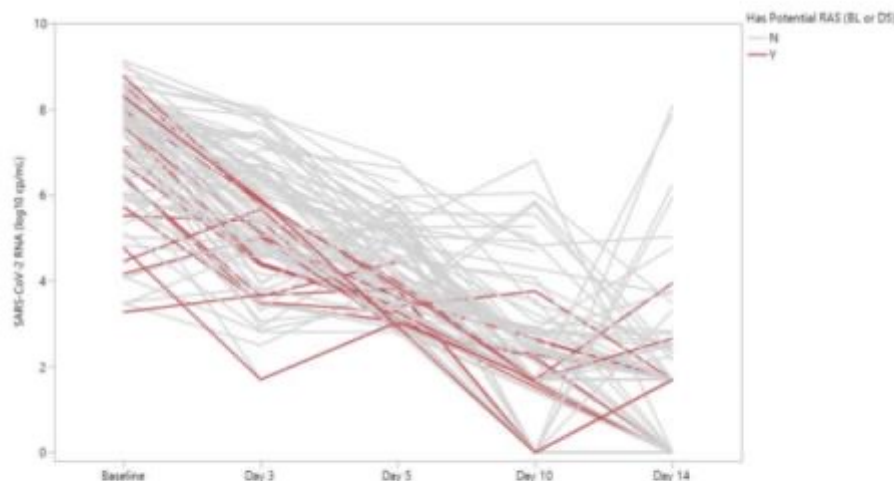
There were no rebounds within 14 days.



<sup>1</sup>Galectin approach to lower covid transmission - Drug Development for clinical use (medRxiv.org)



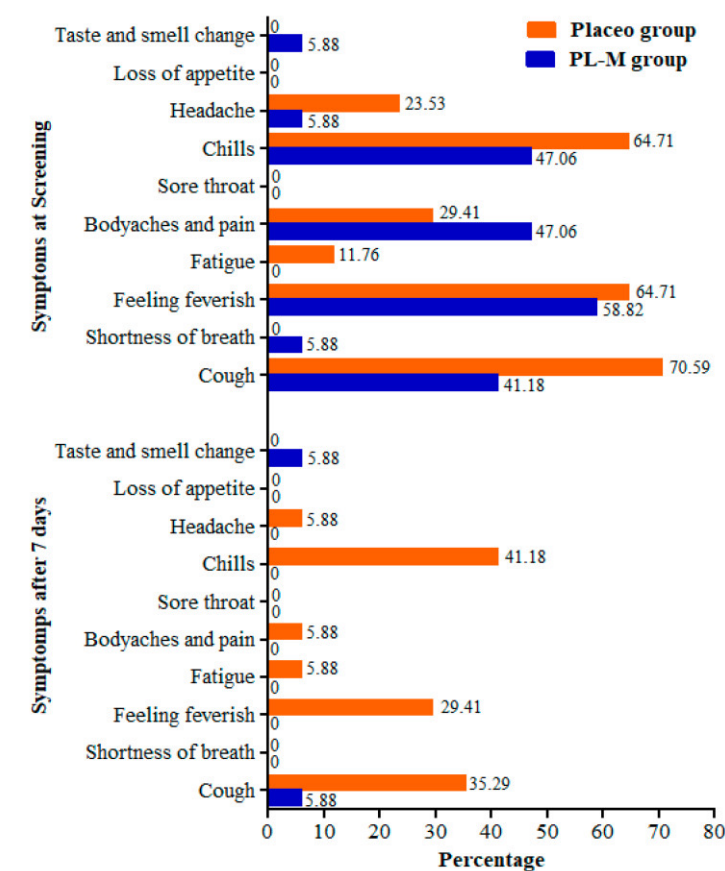
# Elimination of Viral Rebound



Source: FDA analysis.

**Figure 2. SARS-CoV-2 RNA levels in NP swabs among Paxlovid treated subjects with or without SARS-CoV-2 amino acid substitutions detected in Mpro or cleavage site positions potentially associated with resistance.**

Frequency of COVID-19 symptoms in the study groups before and after treatment



<sup>1</sup>Galectin approach to lower covid transmission - Drug Development for clinical use (medRxiv.org)

<sup>2</sup>An Oral Galectin Inhibitor in COVID-19—A Phase II Randomized Controlled Trial

# Clinical Trial Results Summary



Elimination of the viral load and symptoms within 5 days



Reduction of infectivity



Quieting the cytokine storm













Robust antibody response  
(Post Infection Immunization)

# Glycovirology Pipeline

Drug & Process Development Cleared

→ Completed

→ Planned

Product	Indication	Preclinical	IND Submission	Phase I	Phase II	Phase III	Phase IV
<b>ProLectin-M</b> <i>Oral</i>	<b>Virology – Mild to Moderate</b> <ul style="list-style-type: none"><li>Covid-19</li></ul>						
<b>ProLectin-I</b> <i>Intravenous</i>	<b>Virology – Severe cases</b> <ul style="list-style-type: none"><li>Covid-19</li><li>Long Covid</li></ul>						
<b>ProLectin-F</b> <i>Intravenous</i>	<b>Fibrosis:</b> <ul style="list-style-type: none"><li>Pulmonary Fibrosis</li><li>Other Fibrotic Conditions</li></ul>						
<b>ProLectin-X</b> <i>Miscellaneous</i>	<b>Other Viral Indications:</b> <ul style="list-style-type: none"><li>Conjunctivitis (in progress)</li><li>Influenza (evaluation)</li><li>RSV (evaluation)</li></ul>						
<b>ProLectin-A + Oxsense*</b>	<b>ARDS</b> as result from viral infection						

\* FDA 510(k) Clearance



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# Hypoxia Science Research Won the Nobel Prize in 2019



## 2019 NOBEL PRIZE WINNERS

William Kaelin Jr., Sir Peter Ratcliffe, and Gregg Semenza

Discovery: how cells adapt to changing oxygen levels

## BIOXYTRAN

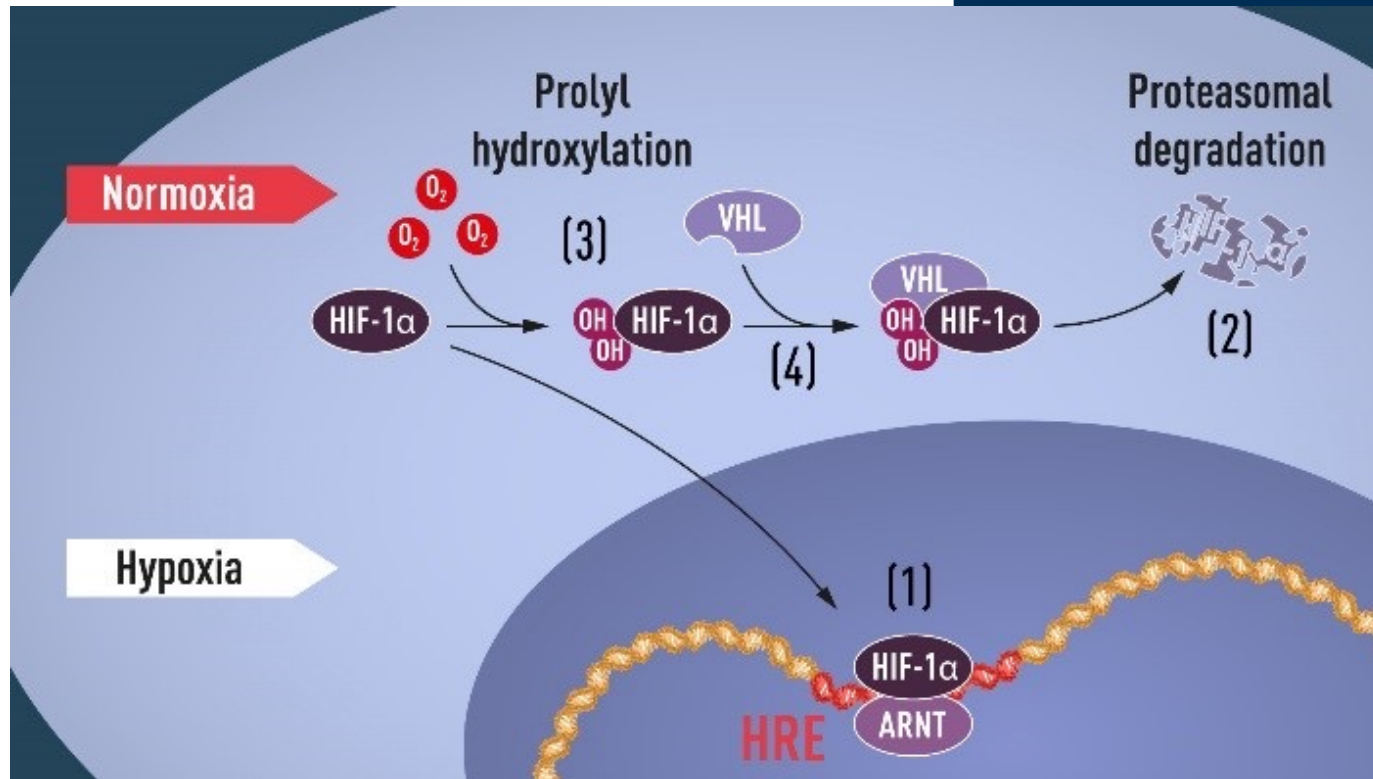
### World Leaders in the Field of Hypoxia

- Bioxytran has the only FDA approved device to measure tissue oxygenation.
- Its MDX Viewer quantify hypoxia (measuring the efficacy of treatments).
- Bioxytran has a molecule (BXT-25) to deliver oxygen and reverse cell hypoxia.
- Increased research activity could generate demand for Bioxytran's tools in clinical research and medicine.

# Theory of the Cellular Universe

## This is the $E=mc^2$ for cells

Delivering Oxygen to Tissues Reduces Hypoxia:  
Reduced Hypoxia Improves the Condition of Tissues



Theory Predicts Cellular Interaction  
within the Tissue Micro-Environment

# Defeating the Outbreak – A Simple Plan

## Time a luxury we don't have.

- Containing the disease takes time
- Developing a vaccine take time
- Learning how it transmitted takes time
- Use of antiretrovirals



## Use of Virus Drugs

Only Viable Option to Treat Symptoms

Distribution of drugs a real challenge in uncontrolled settings. Measuring efficacy is impossible without a device to measure tissue health.

Primary Reason People Die From the Virus



Fluid in the lungs.  
Why does fluid in the lungs kill people?

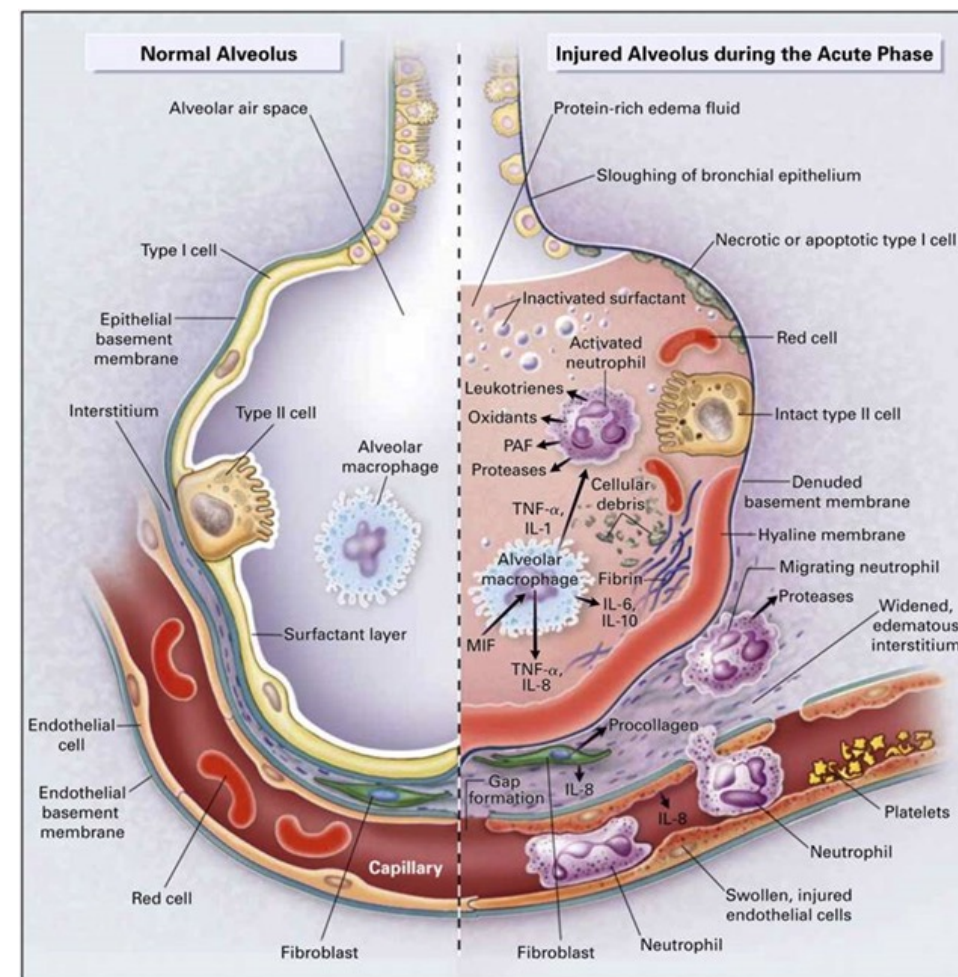


They cannot get enough oxygen to sustain the organs and the lack of oxygen leads to organ failure and death.



# The Real Problem – Tissue Oxygenation & Real-time Monitoring

- Late-Stage Coronavirus Patients develop fluid in their lungs
- Respirators force liquid levels of alveoli sacks lower so blood can get closer to O<sub>2</sub> (Not very effective)
- The blood is physically not close enough to the O<sub>2</sub> to get oxygenated
- Organs start to shut down from lack of oxygen that leads to death
- Perfect environment for infection to take route



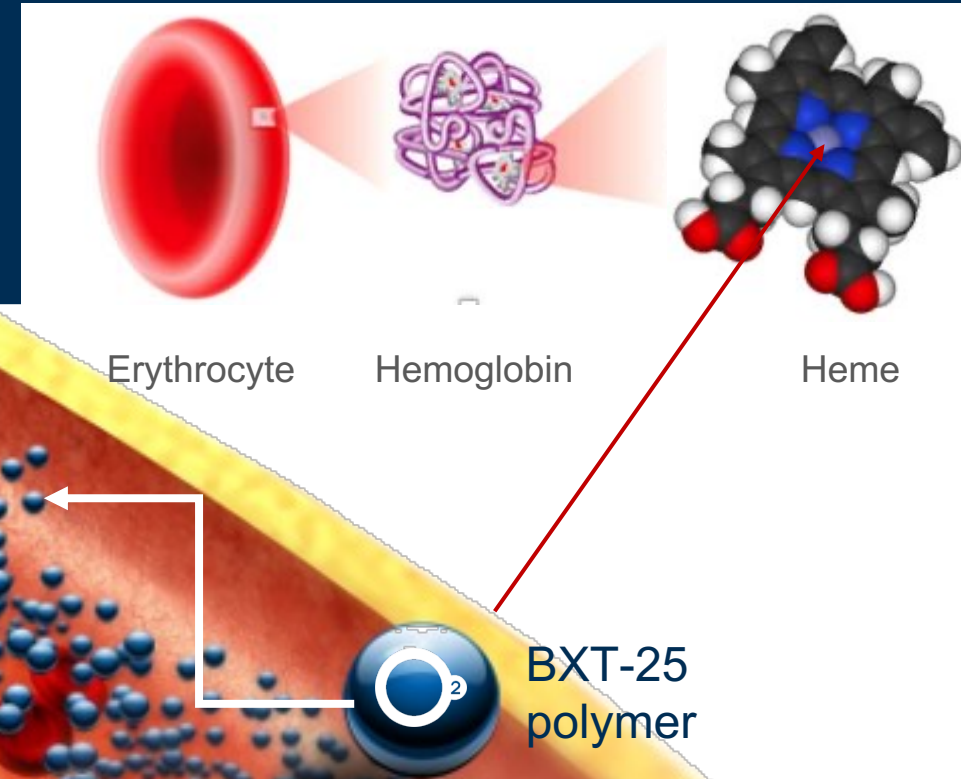


## Solution:

### BXT-25

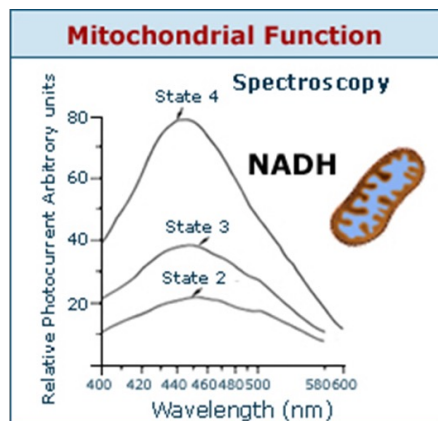
#### an Oxygen Bridge

- BXT-25 is a hemoglobin-based polymer; 5,000 times smaller than a red blood cell
- It can be used both in Ischemic and Hemorrhagic Stroke
- It can penetrate a blood-clot and reach the brain within 3 minutes
- Reduction of average Time-to-Needle by 90%

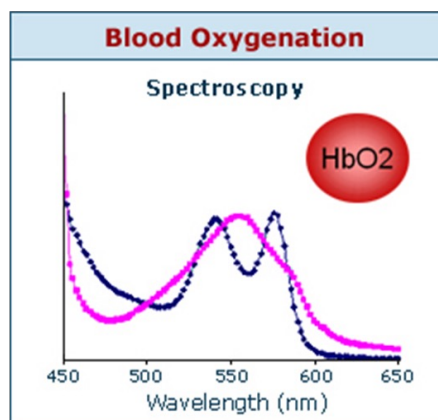


# Continuous Real-time In-vivo Tissue Spectroscopy

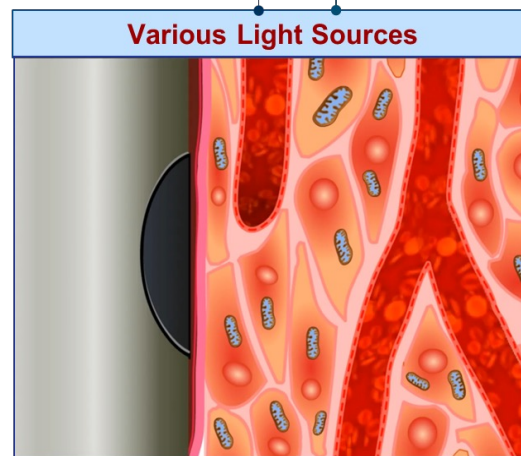
When oxygen level in the cell is limited (i.e. Hypoxia) the NADH is accumulated in the mitochondria and the production of ATP will decrease.



The microcirculatory HbO<sub>2</sub> level reflects the balance between the supply and demand of oxygen in the Tissue.

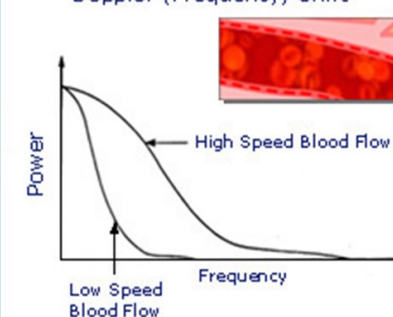


## Various Light Sources



## Tissue Blood Flow

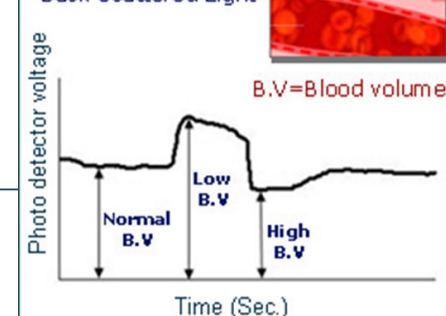
### Doppler (Frequency) Shift



When TBF will decrease to a very low-level production of ATP will stop.

## Tissue Reflectance

### Back Scattered Light

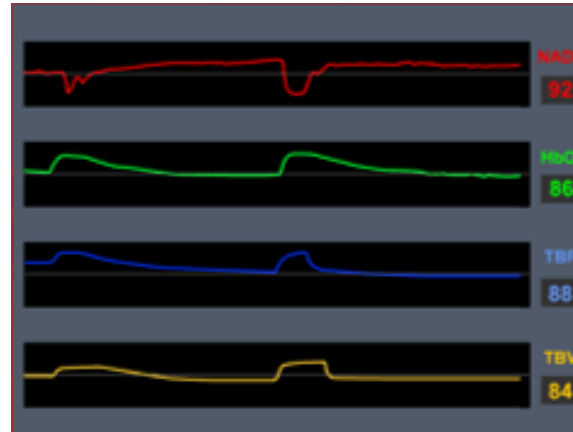


This parameter is used in calculating the corrected NADH fluorescence.

# FDA Approved Proprietary Companion Diagnostics

MDX Viewer - A clinical end-point for measuring oxygen delivery to the brain in real-time

Tissue/brain monitored parameters



Mitochondrial NADH (ATP)

Hb Saturation (O<sub>2</sub>)

Cerebral Blood Flow

Tissue Reflectance



Brain metabolic score

90

Tissue metabolic score



Measures real time tissue oxygenation levels



Assists in determining organ viability



# Science Behind Galectin Antagonists

## Clinical Research



Proven Safety Profile in Drug Class



Peer-reviewed clinical trial in COVID-19



Galectin Inhibitors in phase 2 & 3 trials for IPF, NASH, Cancer, Atopic Dermatitis, Psoriasis, Covid-19

medRxiv  
THE PREPRINT SERVER FOR HEALTH SCIENCES



BMJ Yale

Galectin antagonist use in mild cases of SARS-CoV-2 cases; pilot feasibility randomised, open label, controlled trial

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ALBEN SIGAMANI, ALBEN SIGAMANI, MADHAVI KADAMBI, MATHU RUTHRA, SUDHISHMA SHIVAPRASAD, ANUP CHUGANI, HANA CHEN-WALDEN, THOMASKUTTY ALUMPARAMBILL, DAVID PLATT  
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Abstract

Info/History

Metrics

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### Abstract

**Importance** Novel SARS-CoV-2 virus has infected nearly half a billion people across the world and is highly contagious. There is a need for a novel mechanism to block viral entry and stop its replication. Background Spike protein N terminal domain (NTD) of the novel SARS-CoV-2 is essential for viral entry and replication in human cell. Thus the S1 NTD of human coronavirus family, which is similar to a galectin human galactose binding lectins, is a potential novel target for early treatment in COVID-19. Objectives To study the feasibility of performing a definitive trial of using galectin antagonist Prolectin-M as treatment for mild, symptomatic, rRT-PCR positive, COVID-

number of cycles  
ase polymerase chain  
+Nucleocapsid gene

**30+ years**  
of research in Galectins,  
carbohydrate-binding  
proteins

4000+

Journal Articles  
on Target  
Receptors



Journal of Vaccines & Vaccination

Open Access Freely available online

Research Article

### Galectin Antagonist use in Mild Cases of SARS-CoV-2: Pilot Feasibility Randomised, Open Label, Controlled Trial

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### ABSTRACT

**Importance:** Novel SARS-CoV-2 virus has infected nearly 500 million people across the world and is highly contagious. There is a need for a novel mechanism to block viral entry and stop its replication.

**Background:** Spike protein N Terminal Domain (NTD) of the novel SARS-CoV-2 is essential for viral entry and replication in human cell. Thus the S1 NTD of human coronavirus family, which is similar to a galectin binding site-human galactose binding lectins, is a potential novel target for early treatment in COVID-19.

**Objectives:** To study the feasibility of performing a definitive trial of using galectin antagonist-Prolectin-M as treatment for mild, symptomatic, rRT-PCR positive, COVID-19.

**Main outcomes and measures:** Cycle threshold (Ct) value is number of cycles needed to express fluorescence, on real time reverse transcriptase-polymerase chain reaction. Ct values expressed for RNA polymerase (RM/RP) gene+Nucleocapsid gene and the small envelope (SE) gene determine infectivity of the individual. A digital droplet PCR based estimation of the Nucleocapsid genes (N1+N2) to absolute copies/pl. determines active viral replication.

# Galectin Antagonist Treatment Results in SARS-CoV-2 Spike Protein Specific Antibody Immunity

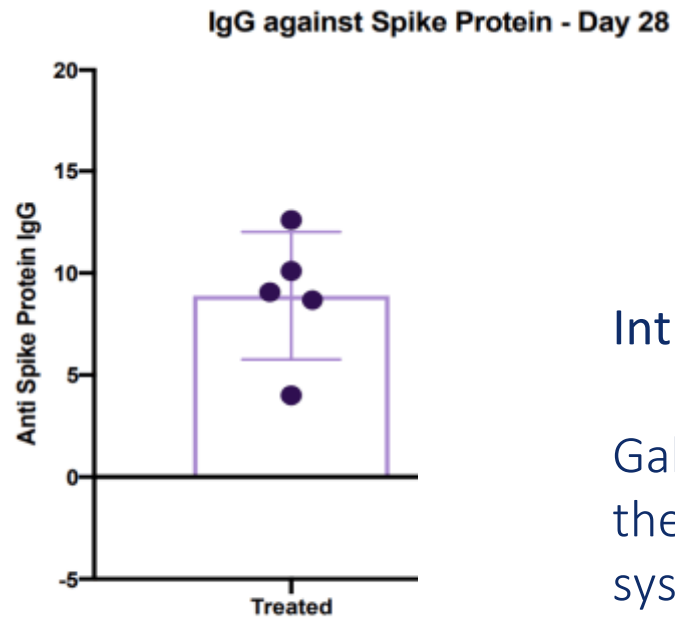
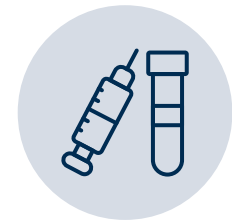


Figure 4 – difference in IgG on day 28

## Introducing Post Infection Immunization

Galectin antagonists clear the blood of viral load thereby reducing the strain on the Innate immune system so the Adaptive immune system can build a robust response toward future infection.



<sup>1</sup> [Galectin Antagonist use in Mild Cases of SARS-CoV-2; Pilot Feasibility Randomised, Open Label, Controlled Trial \(longdom.org\)](https://www.longdom.org)

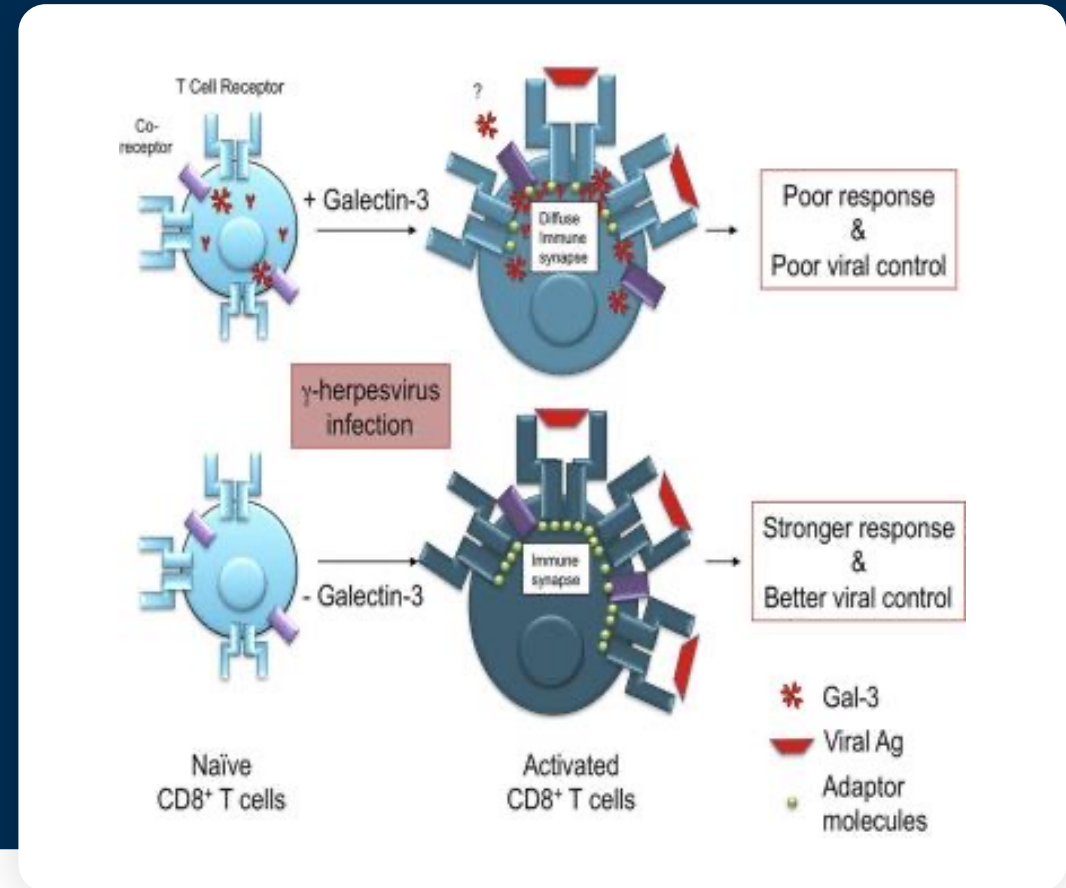


## Galectin-3 Upregulated

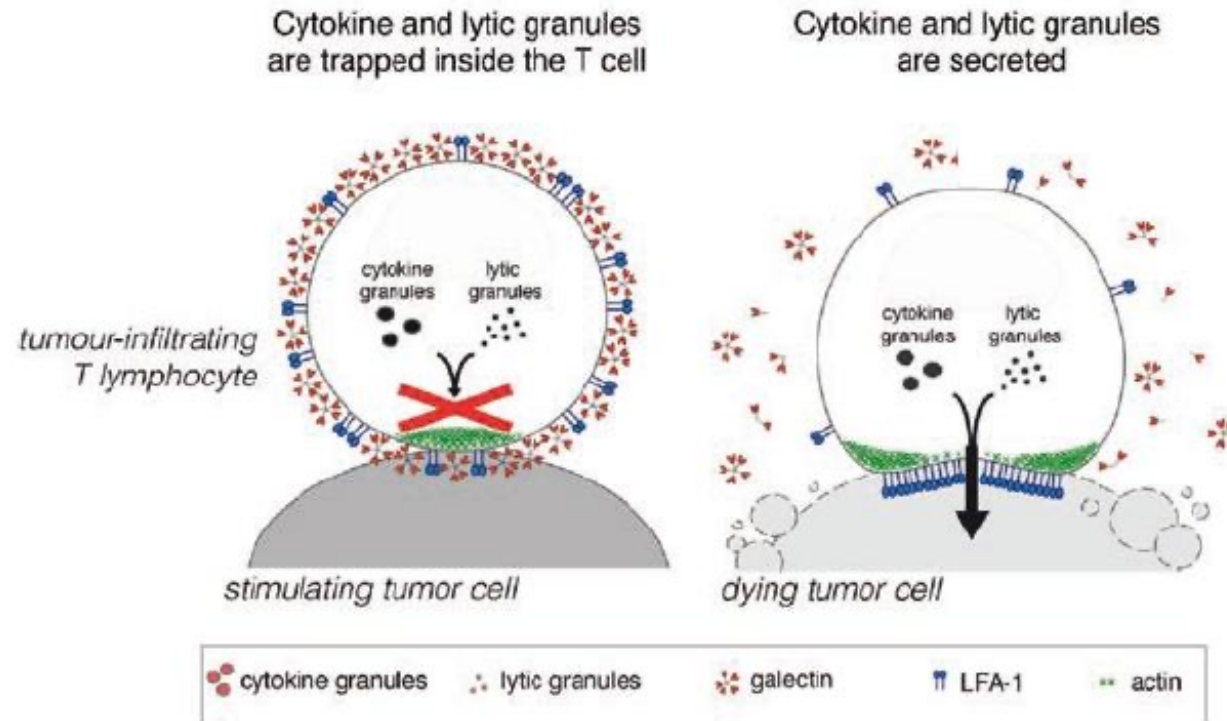
Virally infected cells upregulate Gal-3 which is used in the budding process of virion. When cells burst after the nuclear material is used up it goes into the inflammatory environment.

## Effect of Elevated - Galectin-3

Galectin-3 plaque creates CD8+ T-Cell Anergy. Gal-3 also promotes the trafficking of inflammatory macrophages via adhesion that allows invasion and extravasation into the vasculature. Gal-3 is also responsible for all types of organ fibrosis (brain, heart, lungs, kidney, GI tract).



# Galectin Effect (T-Cell Anergy)



Cytokines and lytic enzymes are produced normally by human tumor-infiltrating T lymphocytes but remain trapped inside the cells.

<https://www.deduveinstitute.be/sites/default/files/upload/%20Annual%20Report%20DDUV%202017.pdf>  
<https://seekingalpha.com/instablog/47560554-vision-and-value/5210387-gr-mdminus-02-keytruda-s-partner>

Galectins are responsible for T-Cell anergy and prevent the LFA-1 lectins (depicted in blue) from coalescing at the target cell and developing good adhesion in order to destroy it with cytotoxins.

**SAME MOA IN VIRUSES**

# Proposed Clinical Trial Design



## Clinical Trial

- 408 participants
- Double Blind Randomized Controlled Trial (DBRCT)
- Change in seropositivity at day 14
- Broad inclusion criteria  
(Vaccination status irrelevant)

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Trial record 2 of 2 for: **proleclin-m**

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**PROleclin M, a Nucleocapsid Terminal GateCTin Antagonist for COVID-19 (PROTECT)**

ClinicalTrials.gov Identifier: **NCT05000052**

**Recruitment Status** Not yet recruiting  
**First Posted** October 27, 2021  
**Last Update Posted** October 27, 2021  
[See Contacts and Locations](#)

**Sponsor:**  
 Proleclin Inc.

**Collaborators:**  
 ALKE RESEARCH PRIVATE LIMITED  
 Research Consultancy

**Information provided by (Responsible Party):**  
 DR ALBEN SAGRAMAN, Proleclin Inc.

**Study Details** **Tabular View** **No Results Posted** **Disclaimer** [How to Read a Study Record](#)

**Study Description** Go to

**Brief Summary:**  
 A galectin inhibitor that prevents viral replication of the SARS-CoV-2 virus through blocking the specific terminal on the surface that enables the virus to enter human cells. This inhibitor - **Proleclin M** is a novel substance that is given orally to individuals who have an infection with SARS-CoV-2 or COVID-19 disease. The oral tablet is chewed every hour for the first 14 days. We hypothesize that patients receiving the active investigational product (ProleclinM) will have a faster recovery from COVID-19 compared to those receiving its matching placebo. The trial is approved by Institutional Review Board for safety and all participants will need to provide a written informed consent to volunteer in this trial. The safety of Proleclin is established as the drug substance is recognised as a safe substance. However its benefits in relieving patients from the COVID-19 infection and providing the patients faster recovery from its clinical symptoms and prevention of delayed sequelae of the infection has not been proven yet.

Condition or disease	Intervention/treatment	Phase
COVID-19	Drug: Galactomannan	Phase I
COVID-19 Pandemic	Drug: PLACEBO	
COVID-19 Respiratory Infection		
SARS-CoV2 Infection		
Cytokine Release Syndrome		

**Study Design** Go to

**Study Type** **Interventional (Clinical Trial)**

**Estimated Enrollment** **408 participants**

**Allocation** **Randomized**

**Intervention Model** **Parallel Assignment**

**Masking** **Quadruple (Participant, Care Provider, Investigator, Outcomes Assessor)**

# Galectins Linked to Chronic Disease



30 years of  
research



Over 4000 Journal  
articles on Galectins



Galectins are a key  
biomarker of chronic  
disease



No approved Galectin  
inhibitor - YET

Disease Indication	Journals	Areas of Focus
Cancer	1500	Cervical, Breast, Endometrial, Pancreatic, Thyroid, CRC, <u>Biomarker</u>
Cardiovascular Disease	622	<u>Biomarker</u> for heart failure, stroke, other cardiovascular disease
Brain	350	Predictive <u>Biomarker</u> stroke, TBI, Postpartum Depression
Kidney	211	Fibrosis, <u>Biomarker</u> in chronic kidney disease
Lung	200	Cancer, Fibrosis, <u>Biomarker</u>
Liver	185	NASH, NAFLD, Fibrosis, <u>Biomarker</u>
Skin	127	Wound Healing, infection, Lupus, Psoriasis, Cancer, <u>Biomarker</u>
Digestive System	109	Gastric & Colorectal Cancer, Metastasis, Inflammatory, <u>Biomarker</u>

<https://www.pharma-iq.com/pre-clinical-discovery-and-development/articles/why-galectin-3-has-emerged-as-a-focus-for-drug-research-and-development-1>

# MDX Monitoring for Acute Respiratory Distress Syndrome (ARDS)

