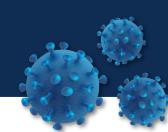


Novel, synergistic combination antiviral approach (protease inhibitor + cox-2 inhibitor) delivers clinical benefits for patients suffering from suspected viral mediated illness

Nasdaq: VIRI



# **Forward Looking Statements**

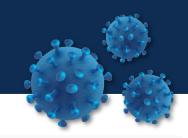


- Statements in this presentation contain "forward-looking statements" that are subject to substantial risks and uncertainties. Forward-looking statements contained in this presentation may be identified by the use of words such as "anticipate," "expect," "believe," "will," "may," "should," "estimate," "project," "outlook," "forecast" or other similar words, and include, without limitation, all statements other than those regarding historical facts, statements regarding Virios Therapeutics, Inc.'s expectations regarding our future financial or business performance, plans, prospects, trends or strategies, objectives of management, competition and other financial and business matters; the potential, safety, efficacy, and regulatory and clinical progress of our current and prospective product candidates, planned clinical trials and preclinical activities, and projected research and development costs; the estimated size of the market for our product candidates; and the timing and success of our development and commercialization of our anticipated product candidates and the market acceptance thereof. Forward-looking statements are based on our current expectations and are subject to inherent uncertainties, risks and assumptions that are difficult to predict. Further, certain forward-looking statements are based on assumptions as to future events that may not prove to be accurate. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including, but not limited to, the following: the ongoing effects of COVID-19 has adversely impacted and may continue to adversely impact our business, including our preclinical studies and clinical trials; our limited operating history, which may make it difficult to evaluate our current business and predict our future success and viability; we have and expect to continue to incur significant losses; our need for additional funding, which may not be available; our substantial dependence on the success of our lead product candidates; failure to identify additional product candidates and develop or commercialize marketable products; the early stage of our development efforts; potential unforeseen events during clinical trials could cause delays or other adverse consequences; risks relating to the regulatory approval process or ongoing regulatory obligations; our product candidates may cause serious adverse side effects; our reliance on third parties; effects of significant competition; the possibility of system failures or security breaches; risks relating to intellectual property; our ability to attract, retain and motivate qualified personnel; and significant costs as a result of operating as a public company. These and other risks and uncertainties are described more fully in the section titled "Risk Factors" in the Annual Report on Form 10-K for the year ended December 31, 2022 filed with the Securities and Exchange Commission ("SEC") and elsewhere in our filings and reports with the SEC. While we may elect to update these forward-looking statements at some point in the future, we assume no obligation to update or revise any forward-looking statements except to the extent required by applicable law. Although we believe the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. Accordingly, readers are cautioned not to place undue reliance on these forward-looking statements. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.
- This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such data and estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk. Neither we nor our affiliates, advisors or representatives makes any representation as to the accuracy or completeness of that data or undertake to update such data after the date of this presentation.
- You should read the documents that we have filed with the SEC for more complete information about us. We encourage you to read such documents in full for more detailed information on statistics, reports and clinical trials referenced in this presentation. You may access these documents for free by visiting EDGAR on the SEC website at http://www.sec.gov.





## **Experienced Team with Extensive Drug Development and Commercialization Experience**



#### **EXECUTIVE TEAM**



**Greg Duncan** Chairman & CEO









R. Michael Gendreau MD. PhD CMO







**Angela Walsh SVP** of Finance







**Ralph Grosswald SVP** of Operations





#### **DIRECTORS**



Rich Whitley, MD

- · Distinguished Professor, UAB
- · Remdesivir was originally developed by Dr. Whitley's team at UAB

Abel De La Rosa, PhD

Chairman, Co-Founder Anitos

Led Bus Dev for Pharmasset

acquisition by GILD for \$11.5

· Leadership for Development Programs for the Treatment of HIV, Hepatitis B & C, including

John Thomas, CPA

· CorMatrix Inc., MiMedx Group,

Inc., DARA BioSciences, GMP

· MRI Interventions, EnterMed, Inc.,

· Medicis Pharm Corp., CytRx Corp

Therapeutics

billion in 2012

Sofosbuvir

Companies

DSMB Chair, Operation Warp



#### **Rick Keefer**

- 30-vear Pharma industry veteran with broad-based experience in leading commercial operations
- · Executive roles at Pharmacia, Pfizer, Wveth, Biovail and Publicis Health
- · Seven-time winner of Pharma Voice's top 100 healthcare leaders



#### Rick Burch

- 30 years at PFE including SVP
- · VP and GM UCB Pharmaceuticals
- · Former President of VIRI. Inc.
- · Product launches include Lyrica & Celebrex



#### Skip Pridgen, MD **VIRI Founder**

- · Company Founder
- Board-certified surgeon practicing with Tuscaloosa Surgical Associates, P.C.
- · Served as a physician and surgeon in the U.S. Navv

Management's Brand **Development &** Commercialization Experience Includes:















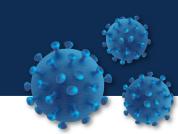








### Virios Therapeutics, Inc. Summary

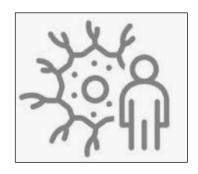


- Novel combination antiviral approach (combines protease inhibitor + cox-2 inhibitor) delivers clinical benefits for patients suffering from diseases with a suspected viral mediated catalyst, including fibromyalgia (FM) and Long-COVID
- Advancing two clinical stage development assets:
  - **❖ IMC-1 (famciclovir + celecoxib) for FM:** 
    - Phase 2a and Phase 2b in FM
    - FDA alignment on steps required to enter Phase 3
    - Enriching Phase 3 for "New" FM Patients, key efficacy readout projected mid-2025
    - Exploring partnership and extended-release dosage formulation to extend IP
  - **IMC-2** (valacyclovir + celecoxib) for Long-COVID:
    - Proof of concept completed in study 2023, new IP filed with protection potential to 2044
    - We have clarity from FDA on the development requirements associated with advancing IMC-2 into Phase 2 development as a treatment for Long-COVID symptoms
    - \* Three-arm, confirmatory Phase 2 study of IMC-2 enrolling, topline data readout expected mid-2024



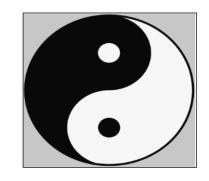


# Synergistic Antiviral Mechanism Serves as the Basis for Proposed IMC1 and IMC-2 Treatment Effect



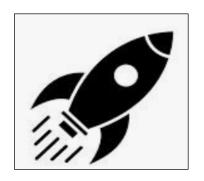
#### **Generally Healthy Patient:**

- Everyone previously infected with herpes viruses of some kind
- Virus lies dormant in nerves and a range of human cells
- Homeostasis achieved



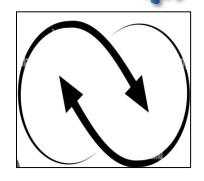
#### **Infection/Other Stressor:**

- Activates dormant virus, triggers immune response
- Immune response produces inflammatory mediators, including cyclooxegenase-2 (COX-2)



#### **Reactivated Herpes Virus:**

- Replicates using DNA
- Further increases COX-2 production
- COX-2 accelerates viral replication



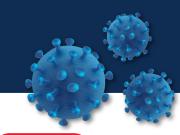
#### **Combination Antiviral Treatment:**

- <u>Protease inhibitor</u> reduces herpes virus replication
- <u>Celecoxib</u> inhibits Cox-2, thus
  - Reduces inflammation
  - Inhibits viral replication
  - Blunts viral accelerant
- Synergistic combination converts virus back into a dormant state
- Delivers clinical response



Sources: P.A. Bond, Medical Hypotheses, 1993; R. A Vere Hodge and Y.-G. Cheng, Antiviral Chemistry & Chemotherapy, 1993; Liu Y, et al, Scientific World Journal, 2014; Higaki S, et al Current Eye Research, 2009; Francisco Javier Ibañez et al, Frontiers in Microbiology, 2018

# IMC-1 and IMC-2 Deliver Consistent Efficacy Across Multiple Clinical Studies



Endpoint/ Study	Placebo/Control CFB	IMC-1/ IMC-2 CFB	Contrast	P Value	
PROMIS Fatigue - NIH Patient Reported Outcomes Measurement Information System					
P2A (Fam/Cel)	-4.15	-7.62	-3.47	0.020	
P2B (Fam/Cel) New FM Patients	-1.94	-5.64	-3.70	0.001	
P1 (Val/Cel) Long-COVID	-0.34	-7.24	-6.90	0.008	
NRS Pain – Numerical Rating Scale	0-10				
P2A (Fam/Cel)	-1.05	-1.85	-0.80	0.031	
P2B (Fam/Cel) New FM Patients	-1.02	-1.69	-0.67	0.016	
P1 (Val/Cel) Long-COVID	0.32	-1.14	-1.45	0.041	
Global Health: Percentage of patie	nts with at least a 2 degree imp	provement on the PGIC scale*			
P2A (Fam/Cel)	19%	33%	14%	0.040	
P2B (Fam/Cel) New FM Patients	20%	38%	18%	0.010	
P1 (Val/Cel) Long-COVID*	12%	55%	43%	0.006	



<sup>\*-</sup> PGIC responder calculation for P1 is based on 3 degrees of improvement vs. 2 degrees in PRID studies

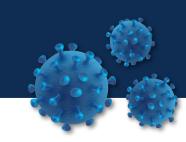


IMC-1 for Fibromyalgia (Phase 3)

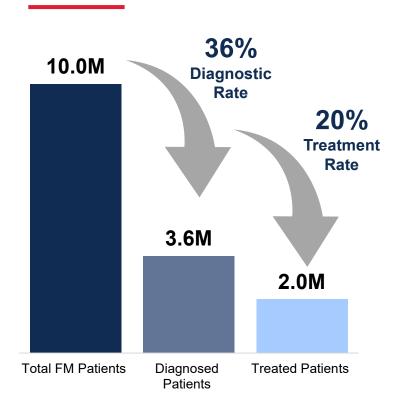


Nasdaq: VIRI

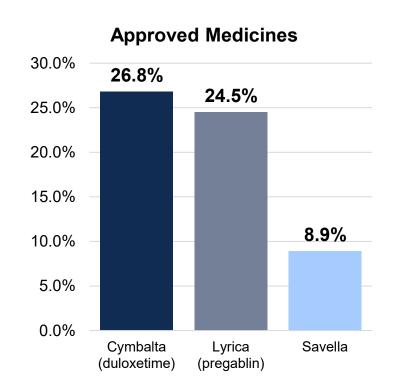
# Fibromyalgia Market Dynamics: Addressable Patients, Current Treatments and Market Size



# Addressable Patients in the US



#### Global FM Market Sales Estimated at \$1.9B in 2019



#### **Virios Market Focus**

- Patients who are not on any existing therapy, 1.6M patients
- Patients who discontinue current therapy (Lyrica, Cymbalta and Savella) within 1 year due to tolerability issues, 25.1% of 2M = 502K patients
- 3. Focus on "New" patients excludes less than 3,000 patients in the US (<0.2% of FM market)

Virios has ability to target ~2.1M patients who are not on any current therapy, excluding "add-on" therapy opportunity

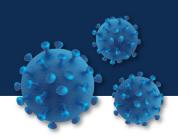
Significant commercial potential (~\$2B)

Source: National Fibromyalgia and Chronic Pain Association 2021; Vincent, A et al Arthritis Care Research 2013; Robinson et al Pain Medicine, 2012, Fortune Business Insights, 2021





### IMC-1 Phase 3 Study Designs Reviewed with FDA



#### Pharmacokinetic/Food Effect Study

#### Study 1 - 301

- Head-to-Head IMC-1 vs Placebo (n=320)
- 1:1 Randomization 160 in each group
- Primary Endpoint Reduction in Pain at 12 Weeks

#### Study 2 - 302

- ❖ Multifactorial Study of IMC-1 vs Placebo vs Famciclovir reference drug tablet vs Celecoxib reference drug capsule (n=640)
- 1:1:1:1 Randomization 160 each group
- Primary Endpoint Reduction in Pain at 12 Weeks

#### Long Term Extension - 309

- Patients from both studies above will roll over into a long-term extension study
- Treatment with IMC-1 for a year (n= 300 subjects at 6 months and 100 at 1 year)







IMC-2 for Long-COVID (in Phase 2)



Nasdaq: VIRI

### Long-COVID Represents a Major Unmet Medical Need

- Center for Disease Control (CDC) Long-COVID diagnosis criteria: New, recurring or continuation
  of symptoms > 4 weeks after acute COVID infection
  - ❖ Up to 30% of Long-COVID patients were asymptomatic during acute COVID illness
- Prevalence estimates suggest @ 65m people worldwide suffer Long-Covid sequelae
  - ❖ A 2022 CDC estimate revealed that 6.9% of adults had Long COVID in 2022 and 3.4% of adults exhibited active Long COVID sequelae at the time of the survey
  - ❖ Data suggest that 22-38% of people with COVID will have at least one symptom 12 weeks after initial onset, and 12-17% will have three or more symptoms
- Long-Covid symptoms include fatigue, cognitive problems, headache, sleep disruption, myalgias, arthralgias, post-exertional malaise, orthostatic intolerance
  - Majority of COVID morbidity is associated not with acute COVID, but with Long-COVID
- More than one in four adults with long COVID reported significant activity limitations
  - Extraordinary disease costs includes \$997B in lost earnings, \$528B in increased medical expenses

Mild



Moderate



Severe

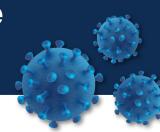


Sources: Anthony L. Komaroff and W. Ian Lipkin, Frontiers in Medicine, June 2023; Ford et al, CDC Morbidity/MortalityWeekly, 2023; NCHS Data Brief, 2023; Cutler, Harvard Kennedy Center Review, 2022





# Treatment of Reactivated Latent Herpes Viruses Holds Great Promise in Treating Long-COVID Sequelae





- Multitude of studies suggest Long-COVID not be related to SARS-CoV-2 virus
- Exhausted immune response to Covid-19 enables reactivation of previously dormant herpes viruses

Reactivated herpes viruses such as Epstein-Barr virus (EBV) and human herpes viruses 6 and 7 (HHV6/7) are associated with fatigue and cognitive dysfunction

 Fatigue and cognitive dysfunction are predominant Long-COVID symptoms

In addition to Long-Covid related morbidity, reactivation of EBV and HH6/7 puts patients at high risk for developing rheumatologic diseases and/or making them worse

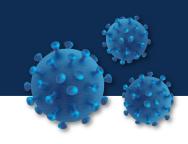
- High unmet medical need for Long-COVID treatments as nothing approved to-date
- Treating Long-COVID may reduce osteoarthritis, rheumatoid arthritis, gout, etc.

Benjamin Chen, Boris Julg, Sindhu Mohandas, Steven B Bradfute; RECOVER Mechanistic Pathways Task Force (2023) Viral persistence, reactivation, and mechanisms of long COVID eLife 12:e86015. https://doi.org/10.7554/eLife.86015; Bernal KDE, Whitehurst CB. Incidence of Epstein-Barr virus reactivation is elevated in COVID-19 patients. Virus Res. 2023 Sep;334:199157. doi: 10.1016/j.virusres.2023.199157. Epub 2023 Jun 26. PMID: 37364815; PMCID: PMC10292739,Zubchenko, 2022; Peluso, 2022.





# IM2- Long-COVID Study Enrolled Population



# Patients were recruited from the BHC database, website and Utah Long Haulers Facebook group

Valacyclovir + Celecoxib Treated Patients	Matched Controls
n=22	n=17
<ul> <li>All female, mean age = 43, mean duration of LC symptoms at enrollment = 2.0 years</li> <li>86% SARS CoV2 vaccination rate</li> <li>Washed out of NSAIDs</li> </ul>	<ul> <li>Matched controls based on treatment group enrolled participants</li> <li>All female, mean age = 47, mean duration of LC symptoms at enrollment = 2.1 years</li> <li>82% SARS CoV2 vaccination rate</li> <li>No wash out</li> </ul>



### Val/Cel Combination vs Control in Long-COVID Patients at Week 14

Study Endpoints	P-Value
NIH PROMIS Fatigue T-Score	0.008
NRS Fatigue 0-10 Scale	<0.001
NRS Pain 0-10 Scale	0.041
PGIC 1-7 (7 is best)	0.022
PGIC 0-10 (0 is best)	0.019
OISAS-Orthostatic Intolerance Symptoms Assessment Scale	0.002
OIDAS-Orthostatic Intolerance Daily Activity Scale	<0.001
HADS Depression Scale	0.059
HADS Anxiety Scale	0.023

- Treatment with Val/Cel was generally well tolerated, with an observed safety profile consistent with the known safety profiles of valacyclovir and celecoxib, nausea being the most common adverse event.
- There were no serious adverse events observed in this study and only one treated patient discontinued treatment due to adverse events, possibly related to Val/Cel treatment.



## Safety: Val/Cel vs Control in Long-COVID Patients

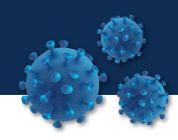
System Organ Class	Control	Val/Cel
Preferred name	(N=17)	(N=21)
Nausea	0 (0.0%)	6 (28.6%)
Headache	3 (17.6%)	3 (14.3%)
Back Pain	0 (0.0%)	3 (14.3%)
Upper respiratory tract infection	1 (5.9%)	2 (9.5%)
Dizziness	1 (5.9%)	2 (9.5%)
Fatigue	1 (5.9%)	2 (9.5%)
Myalgia	2 (11.8%)	1 (4.8%)
Pain in Extremity	1 (5.9%)	1 (4.8%)
Cough	1 (5.9%)	0 (0.0%)
Nasal Congestion	1 (5.9%)	0 (0.0%)
Oropharyngeal Pain	1 (5.9%)	0 (0.0%)
Sinus Congestion	1 (5.9%)	0 (0.0%)
Hypertension	1 (5.9%)	0 (0.0%)

- Treatment with Val/Cel was generally well tolerated, with an observed safety profile consistent with the known safety profiles of valacyclovir and celecoxib, nausea being the most common adverse event.
- There were no serious adverse events observed in this study and only one treated patient discontinued treatment due to worsening fatigue, possibly related to Val/Cel treatment.





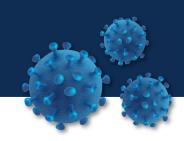
### **Bateman Horne Center 202 PASC Study Status**



- Study run by Bateman Horne Center, Salt Lake City, Utah
- Second IRB approved study supported by Virios via unrestricted, investigator-initiated grant
- Planned enrollment: 60 female patients 3 Arms 1:1:1 randomization, double blinded and randomized study
  - Val/Cel 750/200 BID (1.5g/400mg per day)
  - Val/Cel 1500/200 BID (3g/400mg per day)
  - Placebo capsules
- Four patients randomized to date
- Data Mid-2024



# **Moving Forward**



- We are actively exploring partnership opportunities on three levels:
  - IMC-1 for FM
  - IMC-2 for LC
  - Complementary opportunities to build shareholder value under VIRI team leadership
    - Pain management and anti-infective opportunities
- Preparing to advance IMC-2 Phase 2 Long-COVID program independently
- We will report material progress on any proposed partnership in a timely manner