UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): <u>December 4, 2023</u>

Cocrystal Pharma, Inc.

(Exact name of registrant as specified in its charter)

	Delaware	001-38418	35-2528215
	(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)
19805 N. Creek Parkway Bothell, WA			98011
	(Address of princ	ipal executive offices)	(Zip Code)
	Re	egistrant's telephone number, including area	:ode: <u>(786) 459-1831</u>
		(Former name or former address, if changed	since last report.)
	appropriate box below if the Form 8-K filing truction A.2. below):	g is intended to simultaneously satisfy the fi	ling obligation of the registrant under any of the following provisions ⅇ
□ Writter	n communications pursuant to Rule 425 under	r the Securities Act (17 CFR 230.425)	
□ Soliciti	ing material pursuant to Rule 14a-12 under th	e Exchange Act (17 CFR 240.14a-12)	
☐ Pre-con	mmencement communications pursuant to Ru	ıle 14d-2(b) under the Exchange Act (17 CFI	240.14d-2(b))
□ Pre-co	mmencement communications pursuant to Ru	ıle 13e-4(c) under the Exchange Act (17 CFF	. 240.13e-4(c))
Securities r	egistered pursuant to Section 12(b) of the Act	t:	
	Title of each class	Trading Symbol(s)	Name of each exchange on which registered
	Common Stock	СОСР	The Nasdaq Stock Market LLC (The Nasdaq Capital Market)
			5 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of
the Securiti	es Exchange Act of 1934 (§240.12b-2 of this	chapter).	
			Emerging growth company □
	ging growth company, indicate by check mark standards provided pursuant to Section 13(a)		xtended transition period for complying with any new or revised financial
accounting	standards provided pursuant to Section 13(a)	of the exchange Act.	
Item 7.01 I	Regulation FD Disclosure.		
	per 4, 2023, James Martin, Chief Financial C f the investment community. A copy of the sli		perystal Pharma, Inc. (the "Company") is making a presentation to certain 99.1.
or otherwis			of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") d by reference into any filing of the Company under the Securities Act of
Item 9.01 I	Financial Statements and Exhibits.		
Exhibit No	. Description		
99.1	Cocrystal Pharma, Inc. Corporate Presenta	ation, dated December 4, 2023	
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)		

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

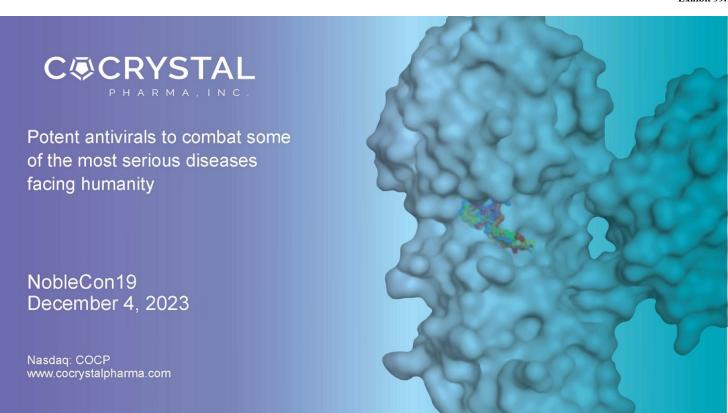
Dated: December 4, 2023

Cocrystal Pharma, Inc.

By: /s/ James Martin

Name: James Martin

Title: Chief Financial Officer and Co-Chief Executive Officer



Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding the market opportunities for the treatment of acute and chronic viral diseases which are the focus of our programs; our development pipeline; our technology platform's ability to produce viable drug candidates at reduced development timelines and costs; the potential future payments and royalties in connection with the collaboration with Merck Sharp & Dohme Corp. ("Merck"); the expected future characteristics and progress of product candidates and development efforts in our clinical programs, including our ongoing Phase 2a study for oral influenza PB2 inhibitor; our ongoing Phase 1 study with 3CL protease inhibitor for coronavirus and norovirus; and a planned Phase 1 study for inhaled influenza PB2 inhibitor in 2024; our exploration of other collaboration opportunities including our pursuit of opportunities related to pandemic preparedness, and the expected sufficiency of our cash balance to fund our planned operations.

Forward-looking statements are prefaced by words such as "anticipate," "expect," "plan," "could," "may," "will," "should," "would," "intend," "seem," "potential," "appear," "continue," "future," believe," "estimate," "forecast," "project," and similar words. Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. We caution you, therefore, against relying on any of these forward-looking statements. Our actual results may differ materially from those contemplated by the forward-looking statements for a variety of reasons, including, without limitation, the risks arising from interest rate increases in response to inflation, uncertainty in the financial markets, the possibility of a recession and the geopolitical conflict in Israel and Ukraine on our Company, our collaboration partners, and on the U.S., U.K., Australia and global economies, our ability to proceed with studies including recruiting volunteers for and procuring or manufacturing materials for such studies by our clinical research organizations and vendors, the results of the Phase 2a and Phase 1 studies referred to above, the risk that Merck may cease to provide support for further development of the influenza A/B program under the license and collaboration agreement, the risk that Merck may cease to provide support for further development of the influenza A/B program under the license and collaboration agreement, our and our collaboration partners' technology and software performing as expected and maintenance and protection of related intellectual property rights, financial difficulties experienced by certain partners, the results of any current and future preclinical and clinical trials, general risks arising from clinical trials, receipt of regulatory approvals, regulatory changes, development of effective treatments and/or vaccines by competitors, including as part of the programs financed by the U.S. government, and potential mutations in the viruses we are targeting which may result in variants that are resistant to a product candidate we develop. Further information on our risk factors is contained in our fillings with the Securities and Exchange Commission, including our Annual Report on Form 10-K for the year ended December 31, 2022. Any forward-looking statement made by us in this presentation speaks only as of the date on which it is made. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.



About Cocrystal Pharma

Applying powerful, proprietary drug discovery platform technology to develop first- and best-in-class broad-spectrum antiviral drugs

Advancing programs in high-value antiviral drug targets

- · Pandemic and seasonal influenza A
- Pandemic SARS-CoV-2, SARS-CoV-2 variants, and coronaviruses
- · Norovirus gastroenteritis

Drug candidates with clinically validated mechanisms of action

- · Effectively cure viral diseases
- Broad-spectrum and potent antiviral activity
- Designed to be effective for emerging variants and existing drug resistant viruses

Proprietary drug discovery platform technology

 Unique drug discovery platform technology developed with Nobel Prize-winning technology

Focused on advancing a robust product pipeline toward commercialization

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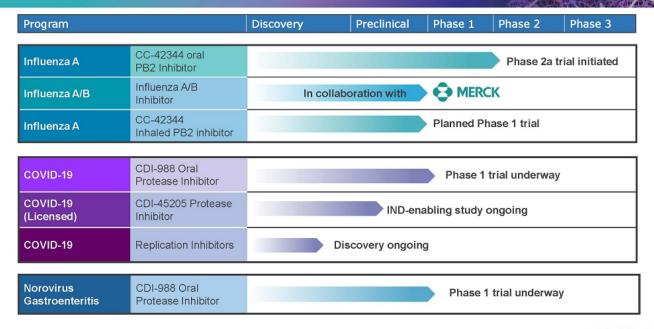


Investment Highlights

- Targeting multibillion-dollar, global markets for the treatment of acute and pandemic viral diseases
- Proprietary structure-based drug-discovery platform technology provides opportunity for discovery and development of novel, potent, broad-spectrum drug candidates
- Advancing multiple clinical programs
 - Oral influenza PB2 inhibitor CC-42344 Phase 2a initiated in 2023.
 - First dual oral coronavirus-norovirus protease inhibitor CDI-988 Phase 1 trial underway
 - Inhaled influenza PB2 inhibitor CC-42344 Phase 1 to begin in 2024
- Ongoing Merck collaboration for influenza A/B therapeutic Potential milestones and royalties for up to \$156 million and validation of Cocrystal's drug discovery platform technology
- Additional pandemic preparedness collaboration opportunities are being explored
- Seasoned leadership includes experienced management, senior scientists and two Nobel laureates
- Cost-efficient operations and clean capital structure; cash sufficient to fund planned operations



Robust Therapeutic Pipeline Addressing Unmet Medical Needs

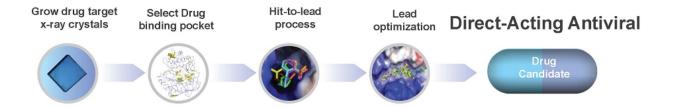


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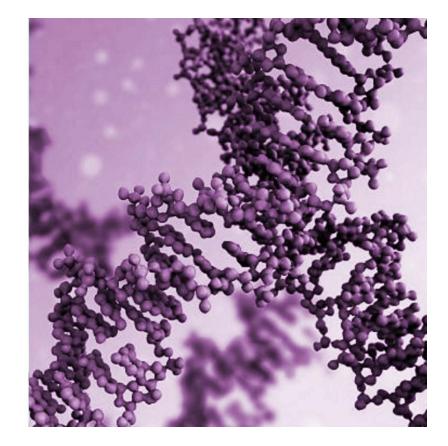
Proprietary Drug Discovery Platform Technology for Direct-Acting Antivirals

Cocrystal's technology platform provides potential for novel drug candidates at reduced development timelines and costs



Provide high-resolution 3D structures of drug target complexed with inhibitor at atomic level





Pandemic and Seasonal Influenza A Program

Pandemic and Seasonal Influenza: A Major Global Health Concern

- 1 billion cases, 3-5 million severe illnesses and up to 650,000 deaths worldwide annually¹
- Not well managed with currently approved vaccines having only 40-60% effectiveness²
- On average ~8% of the U.S. population contracts influenza each season³
- Influenza is responsible for ~\$10.4 billion in direct costs for hospitalizations and outpatient visits for adults in the U.S. annually
- Potential emerging pandemic influenza and drug resistance threats against approved influenza antivirals, Tamiflu® and Xofluza®
 - Tamiflu® has long history of drug resistance⁵
 - Xofluza[®] has shown emergence of drug resistant mutations⁶

⁶ NEJM Journal Watch (September 2018) A Promising Drug for Influenza?: https://www.jwatch.org/na47413/2018/09/12/promising-drug-influenza



¹ World Health Organization (WHO) (March 2019): https://www.who.int/news-room/fact-sheets/detail/influenza-(seasonal)
2 Center for Disease Control and Prevention (CDC): Vaccine Effectiveness: How Well Do Flu Vaccines Work?: https://www.cdc.gov/flu/vaccines-work/vaccineeffect.htm

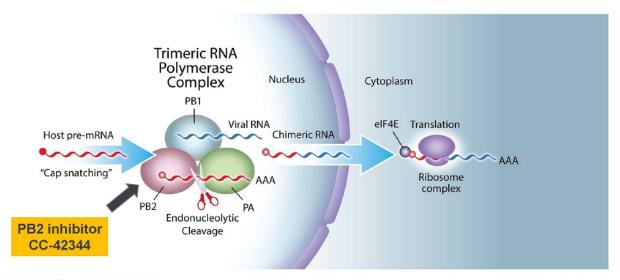
³ CDC Seasonal Flu Microsite

⁴CDC: Make It Your Business to Fight the Flu

⁵ Science Daily (March 2014) Tamiflu-resistant influenza related to mutations in genome: https://www.sciencedaily.com/releases/2014/03/140331114237.htm

PB2 Inhibitor CC-42344 Blocks First Step of Influenza A Viral Replication

Cap Binding (PB2), Endonuclease (PA), and Polymerase (PB1) are Essential for Influenza Viral Replication



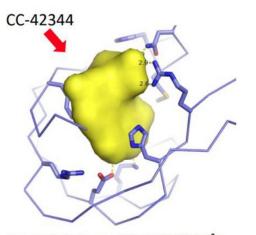
Boivin S et al. J. Biol. Chem. 2010;285:28411-28417



CC-42344: Pandemic and Seasonal Influenza A Therapeutic and Prophylactic



Pandemic and seasonal influenza A PB2 crystals (H1N1, H2N2, H3N2, H5N1, and H7N9)



Cocrystal structure of CC-42344 (1.47 Å)

- Potent anti-influenza structure-based inhibitor
- Binds a highly conserved region of influenza A PB2 of polymerase complex (PA:PB1:PB2)
- Broad-spectrum activity against pandemic and seasonal influenza strains (EC50, 0.12 – 5 nM)
- Active against oseltamivir and baloxavir resistant strains (EC50, 0.5 – 9 nM)
- Exhibits high barrier to drug resistance
- Shows strong in vitro synergistic effects with oseltamivir, baloxavir, and favipiravir
- Inhaled CC-42344 inhibitor is being developed for household and community prophylaxis of influenza

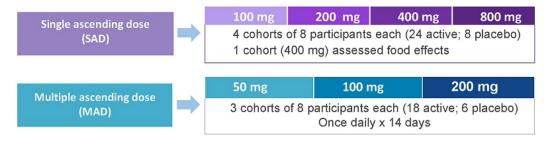


Oral CC-42344: Phase 1 Data Demonstrates Favorable Safety Profile

Phase 1 site: Linear Clinical Research - Harry Perkins Research Institute, Perth, Australia

Participants:

- Single-center, randomized, double-blind, placebo-controlled
- Single-ascending dose, multiple-ascending dose; 7-day nontreatment follow-up period
- Healthy adult volunteers
- Each cohort comprised of 8 subjects; 6, CC-42344 and 2, placebo
- N = 56; 32, SAD; 24, MAD



Endpoints

- · Adverse events (AEs), physical exam, viral signs, ECGs, and lab indices
- Food effect

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CC-42344 Oral PB2 Inhibitor: Phase 1 Trial Summary & Phase 2a Trial Design

- Phase 1 study healthy volunteer trial completed
 - No serious or grade 3 AEs reported
 - No treatment discontinuations
 - No clinically significant observations noted in laboratory assessments, vital signs, physical exam findings, or ECGs
- Phase 2a human challenge trial underway
 - CRO: hVIVO, Queen Mary's Bioenterprise Centre, London, UK
 - Study design: randomized, double-blind, placebo-controlled in healthy volunteers treated after inoculation with an influenza strain



Development of Novel Inhaled PB2 Inhibitor CC-42344



Advantages of inhalation antiviral therapy

- Directly targets infected respiratory epithelial cells
- Achieves higher accumulation of drug in the pulmonary system
- Produces rapid clinical response
- Reduces potential systemic side effects

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CC-42344 Shows Potent Antiviral Activity in Influenza-Infected Lung Epithilium

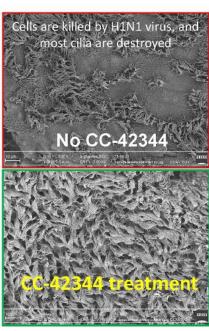
Uninfected human bronchial airway epithelia



Influenza A H1N1 infection







- Favorable safety profile: No toxicity in CC-42344treated human lung epithelium
- Showed potent antiviral activity in influenza A (H1N1)-infected human lung epithelium
- Inhalation formulation development is completed



CC-42344: Potential Influenza Therapeutic and Prophylactic Treatment

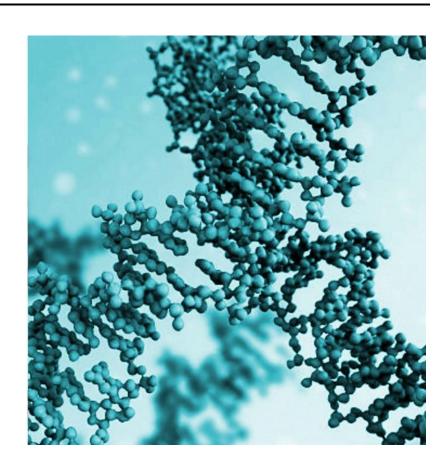
- Favorable safety profile
- Potent, broad-spectrum activity against pandemic and seasonal strains
- High barrier to resistance
- Superior pulmonary pharmacology: high exposure and long half-life, EC50 >5,000fold at 96 hours after single administration
- Oral CC-42344: Phase 2a ongoing
- Inhaled CC-42344: Phase 1 planned in 2024

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Influenza A/B Program with





Collaboration Validates Technology with Potential for Lucrative Returns

- Broad-spectrum, potent candidates developed to be active against seasonal, pandemic and existing drug-resistant influenza A and B strains
- Announced exclusive worldwide license and collaboration with Merck in January 2019

Cocrystal eligible to receive up to \$156 million in milestone payments + royalties on product sales

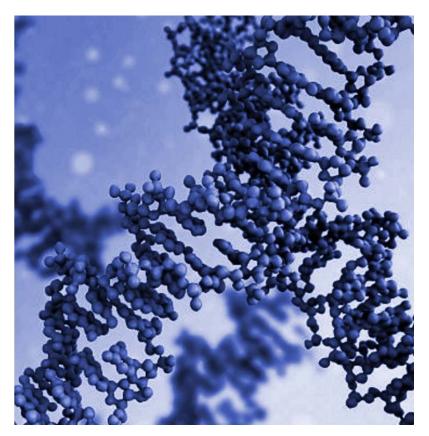
- Agreement structure for first 2 years:
 - Cocrystal received \$4 million upfront and reimbursed R&D expenses
 - Jointly developed potent influenza A/B inhibitors
 - Cocrystal met all research collaboration agreement obligations
- Merck's responsibilities under current phase of agreement:
 - R&D, including clinical development and funding
 - Worldwide commercialization of product(s) derived from collaboration
- Merck notified Cocrystal of continued development activities in Q1 2023
- Merck has filed multiple U.S. and international patent applications on behalf of both companies with Merck responsible for managing the patents

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SARS-CoV-2 and SARS-CoV-2 Variants, and other Coronaviruses



Significant Need for New Antivirals to Combat Coronavirus Infections

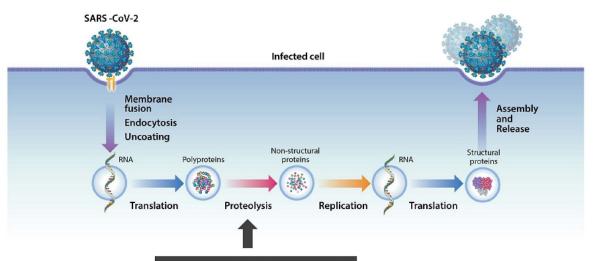
- Pfizer's paxlovid (nimatrevir plus ritonavir) received FDA approval as oral treatment for COVID-19 in adults
- Merck's molnupiravir received emergency use authorization; Shionogi's Ensitrelvir received emergency regulatory approval in Japan
- Coronaviruses constantly change through mutation
- Multiple variants of COVID-19 have emerged¹
- Global COVID-19 therapeutics market estimated to exceed \$16 billion by the end of 2031²

¹ CDC: Variants of the Virus https://www.cdc.gov/coronavirus/2019-ncov/variants/index.html

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Oral Main (3CL) Protease and Replication Inhibitors



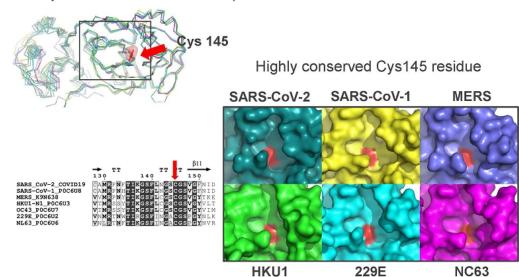
Main (3CL) protease inhibitor



² https://www.transparencymarketresearch.com/covid-19-therapeutics-market.html

Cocrystal Protease Inhibitors Target a Highly Conserved Cysteine Residue of Main (3CL) Proteases

Overlay structures of coronavirus proteases



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CDI-988: Pandemic COVID-19 Oral Main (3CL) Protease Inhibitor























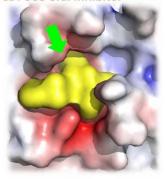
SARS-CoV-2 main protease (1.8 Å)

SARS-CoV-1 main protease (1.56 Å)

6Å) MI

MERS-CoV main protease (1.9 Å)

CDI-988 oral inhibitor



Cocrystal structure of SARS-CoV-2 Main(3CL) protease

- Binds to a highly conserved, essential residue (Cys145) of SARS-CoV-2 main (3CL) protease and other coronavirus main (3CL) proteases
- Exhibits broad-spectrum activity against SARS-CoV-2 and its variants
- Shows favorable safety profile

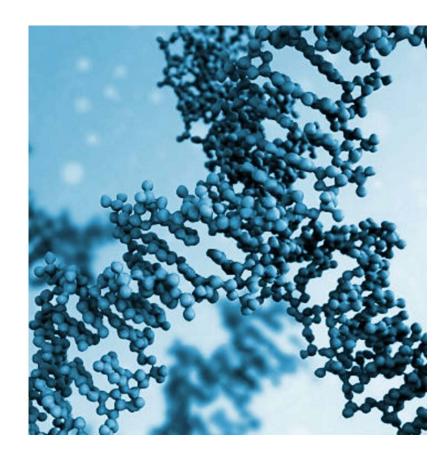
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CDI-988 Phase 1 Trial Underway & Phase 2 COVID-19 Trial Design

- Phase 1 trial with orally administered CDI-988
 - Randomized, placebo-controlled, double-blind, single-ascending dose/multiple-ascending dose trial
 - Conducted in healthy volunteers in Australia
 - Evaluate safety, tolerability, PK and effect of food
- Planned Phase 2 trial design for CDI-988
 - Randomized, double-blind, placebo-controlled trial
 - Non-hospitalized patients with mild or moderate COVID-19
 - Change in viral load as primary outcome measure

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Norovirus Gastroenteritis Program



Norovirus: Large Market with No Approved Treatments or Vaccines

- Highly contagious virus that causes symptoms of acute gastroenteritis including nausea, vomiting, stomach pain and diarrhea
- Major cause of gastrointestinal illness in closed and crowded environments including hospitals, nursing homes, childcare facilities and cruise ships
- Responsible for approximately 685 million infections and 200,000 deaths annually worldwide and nearly 90% of all epidemic, non-bacterial outbreaks of gastroenteritis¹
 - ~200 million cases among children under five years of age and ~50,000 child deaths worldwide annually
- Estimated annual cost of \$60 billion worldwide due to direct healthcare costs and lost productivity¹
- 19 million-21 million cases and 109,000 hospitalizations annually in the U.S.¹

¹CDC: Norovirus Disease in the United States https://www.cdc.gov/norovirus/burden.html

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Selection of Broad-Spectrum Protease Inhibitor CDI-988 as Norovirus Lead

- Dual indication oral protease inhibitor, CDI-988, for the treatment of coronavirus and norovirus infections
- CDI-988 discovered using proprietary drug discovery platform
- Phase 1 healthy volunteer trial underway
- Targets highly conserved region in the active site of coronaviruses, noroviruses and other 3CL viral proteases
- Showed potent broad-spectrum antiviral activity in in vitro studies against a panel of pandemic GII.4
 norovirus proteases and favorable PK property targeting the gastrointestinal tract
 - Preclinical activity in genogroup II, genotype 4 (GII.4) strains that are attributable to nearly 60% of outbreaks¹

¹Genetic and Epidemiologic Trends of Norovirus Outbreaks in the United States from 2013 to 2016 Demonstrated Emergence of Novel GII.4 Recombinant Viruses



Seasoned Leadership

Sam Lee, Ph.D.

Co-Chief Executive Officer & President

25+ years of anti-infective drug discovery research experience, including HCV and influenza antivirals; played key role in early development of phosphoinositide 3kinase (PI3K) delta inhibitor, Zydelig





James J. Martin, MBA, CPA

Co-Chief Executive Officer & Chief Financial Officer

25+ years of finance and management experience including providing financial leadership to commercial-stage, publicly traded health science companies









Scientific Advisory Board

Roger Kornberg, Ph.D.

Chairman of the Board, Chairman of the Scientific Advisory Board

- Professor Stanford University School of Medicine
- Nobel Laureate

Michael Levitt, Ph.D.

Member

· Professor Stanford University School of Medicine

· Nobel Laureate

Baek Kim, Ph.D. Member

· Director of Center for Drug Discovery **Emory University**

Bob Lehman, Ph.D.

· Professor (Emeritus) Stanford University School of Medicine

Gary Schoolnik, M.D.

· Professor (Emeritus) Stanford University School of Medicine

Roland Strong, Ph.D. Member

 Professor Fred Hutchinson Cancer Research Center

Christophe Verlinde, Ph.D.

· Professor (Emeritus) University of Washington

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Experienced Board of Directors

Roger Kornberg, Ph.D.

Co-founder, Chairman of the Board & Chairman of the Scientific Advisory Board

- · Nobel Laureate in Chemistry
- · Welch Prize highest award granted in the field of chemistry in the U.S.
- · Leopald Mayer Prize highest award granted in the field of biomedical sciences from the French Academy of Sciences

Steve Rubin

Vice Chairman

- EVP-Administration & Director of OPKO Health, Inc.
- · Former SVP & General Counsel of IVAX Corporation; SVP & General Counsel of Telergy Inc.

Phillip Frost, M.D.

Co-founder & Director

- · Chairman & CEO of OPKO Health, Inc.
- Former Chairman of Teva Pharmaceuticals: Chairman and CEO of IVAX Corporation sold for \$7.4 billion
- · Board of Regents of Smithsonian Institution; Board of Trustees of University of Miami; Trustee of Scripps Research Institutes

Fred Hassan

Director

- · Chairman of the investment firm Caret Group; Director of global private equity firm Warburg Pincus LLC

· Former Chairman & CEO of Pharmacia Corporation; senior positions at Wyeth & Sandoz Pharmaceuticals

Director

- · President, CEO & Director of iTolerance · Former CEO of AdvancedDx Biological Laboratories-USA; Medical Director of ICON plc
- · Former with Elite Health Medical Group specializing in infectious diseases

· Former Chairman & CEO of Schering-Plough - acquired by Merck

Anthony Japour, M.D.

Richard C. Pfenniger, Jr. Director

- . Director of OPKO Health, GP Strategies Corporation & Asensus Surgical, Inc.
- · Former Chairman, CEO & President of Continucare Corporation; CEO & Vice Chairman of Whitman Education Group.
- · Former COO, SVP-Legal Affairs & General Counsel of IVAX Corporation



Expanding Intellectual Property Portfolio

Coronavirus

- Issued patents in U.S. and major countries
- Pending U.S. provisional applications

Pandemic Influenza A

- PB2 (influenza A inhibitor)
 - Pending applications in PCT and Taiwan
 - Pending U.S. provisional applications

Influenza A/B

- Influenza A/B inhibitor
- Pending applications in U.S. and worldwide

Norovirus

- Issued patents in U.S. and major countries
- Pending U.S. provisional applications

HCV

NS5B (NNI)

- Issued patents in U.S.
- Pending applications in U.S. and worldwide
- Pending U.S. provisional application

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Financial Snapshot

~\$20 Million

Market cap1

27,000

Average 3 month daily share volume

\$29.8 Million

Cash/equivalents as of September 30, 2023

10.2 Million

Common shares outstanding

10.3 Million

Fully diluted shares

- Clean balance sheet
 - No preferred shares
 - No debt
- Cash sufficient to fund planned operations

¹ Yahoo Finance (November 27, 2023)



Investment Highlights

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