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; the development pipeline; expected results of our collaboration with Merck Sharp & Dohme Corp. (“Merck”), including the anticipated characteristics of the drug candidates developed as the result of this collaboration, expected funding by Merck of future research, and development and commercialization of products derived from such collaboration, and the expected future payments and royalties in connection with the collaboration; the expected future characteristics and progress in developing a compound for the effective treatment and prevention of COVID-19 infections and the anticipated timing of achieving the value-driving milestones, including achieving pre-IND status and development of additional COVID-19 inhibitors with novel mechanism of action in 2021; the expected progress of our Influenza A program, including the initiation of Phase 1 study in Q3 2021; the expected synergetic effects of CC-42344 with approved Influenza antivirals; the anticipated future success and market share gains of our HCV drug candidate, and the expected progress of our HCV program, including future partnership for further development; the expected progress of our norovirus program and the anticipated timing of achieving the value-driving milestones, including completion of a proof-of-concept animal study in H2 2021; and our estimates with respect to market opportunities and development pipeline. 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 the impact of the COVID-19 pandemic on our Company, including supply chain disruptions, our continued ability to proceed with our programs, receive necessary regulatory approvals and continue to rely on certain third parties, and on the national and global economy, risks arising from our reliance on continuing collaboration with Merck under the collaboration agreement, the future results of preclinical and clinical studies, general risks arising from clinical trials, receipt of regulatory approvals, development of effective treatments and/or vaccines by competitors, and our ability to find and enter into agreements with suitable collaboration partners. Further information on the risk factors that could cause actual results to differ materially from those expressed or implied by forward-looking statements, is contained in our filings with the Securities and Exchange Commission, including our Annual Report on Form 10-K for the year ended December 31, 2020. 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

Overview

Clinical-Stage Antiviral Company

Proprietary Drug Discovery Platform

Merck Collaboration

Potential For Prophylactic and Therapeutic Drugs

Target Diseases

Influenza

COVID-19

Hepatitis C

Norovirus Gastroenteritis

Potential For Prophylactic and Therapeutic Drugs
Investment Highlights

- Applying proprietary structure-based drug design technology to develop first- and best-in-class broad-spectrum antiviral drugs
- Large market opportunities for the treatment of acute and chronic viral diseases including seasonal and pandemic influenza, COVID-19, hepatitis C, and norovirus gastroenteritis
- Near-term initiation of Phase 1 trial for potent, broad-spectrum treatment for seasonal and pandemic influenza A
- Product candidates are tested for multiple routes of delivery
- Robust development pipeline including Merck collaboration
- Seasoned leadership includes two Nobel laureates and biotech veterans with proven success in drug discovery and development, business and finance
- Cost-efficient business model supported by strong cash position and clean capital structure
## Seasoned Leadership

### Management Team

**Sam Lee, Ph.D.**  
*Interim Co-Chief Executive Officer & President*  
- 25+ years of anti-infective drug discovery research experience; played key role in early development of phosphoinositide 3-kinase (PI3K) delta inhibitors

**James J. Martin, MBA, CPA**  
*Interim 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.**  
*Member*  
- Professor (Emeritus)  
- Stanford University School of Medicine

**Gary Schoolnik, M.D.**  
*Member*  
- Professor (Emeritus)  
- Stanford University School of Medicine

**Roland Strong, Ph.D.**  
*Member*  
- Professor  
- Fred Hutchinson Cancer Research Center

**Christophe Verlinde, Ph.D.**  
*Member*  
- Professor (Emeritus)  
- University of Washington
Proprietary Technology and Drug Discovery Platform

Technology Platform

Based on Nobel Prize-winning technology

• Near-atomic resolution
• X-ray quality crystal production
• Drug pocket selection
• Hit-to-lead process
• Lead optimization
• Drug candidates

Drug Discovery Platform

• Fully optimized operations from expression through high-resolution x-ray data
• Stringent quality oversight of procedures for crystal production
• High-throughput x-ray data collection and computational methods
• Large-scale crystal production capabilities
Robust Development Pipeline in High-Value Indications

<table>
<thead>
<tr>
<th>Program</th>
<th>Discovery</th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2a</th>
<th>Phase 2b</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza A/B</td>
<td>Influenza A/B inhibitor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>In collaboration with MERCK</td>
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<tr>
<td>Pandemic Influenza A</td>
<td>CC-42344 PB2 Inhibitor</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>COVID-19 (Licensed from KSURF)</td>
<td>CDI-45205 Protease Inhibitor</td>
<td></td>
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</tr>
<tr>
<td>COVID-19</td>
<td>Replication Inhibitors</td>
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</tr>
<tr>
<td>Hepatitis C (HCV)</td>
<td>CC-31244 Pan-genotypic NS5B NNI</td>
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<td></td>
</tr>
<tr>
<td>Norovirus (Gastroenteritis)</td>
<td>Replication and Protease Inhibitors</td>
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</tr>
</tbody>
</table>
Overview | Antiviral Program:

Influenza A/B Merck Collaboration
• Broad-spectrum, potent dual influenza A/B drug candidates
• Binds to highly conserved site of influenza A and B replication complex
• Expected to be active against seasonal, pandemic and existing drug-resistant influenza A and B strains
Collaboration Terms Overview

• Exclusive worldwide license and collaboration agreement to discover and develop proprietary influenza A/B antiviral agents signed in January 2019
• Agreement structure during the first 2 years:
  • Cocrystal and Merck jointly developed potent influenza A/B inhibitors
  • Cocrystal’s R&D expenses reimbursed by Merck
  • Cocrystal met all research collaboration agreement obligations
• In the next phase, Merck is responsible for:
  • All funding and R&D, including clinical development
  • Worldwide commercialization of product(s) derived from collaboration

Eligible to receive up to $156 million in milestone payments
+ royalties on product sales
Overview | Antiviral Program:

COVID-19
Cocrystal acquired exclusive patent rights and know-how for coronavirus and norovirus therapeutics for human use

- License agreements with KSURF in 2020 to further develop proprietary broad-spectrum compounds for coronavirus and norovirus

- Program status:
  - KSURF compounds demonstrated *in vitro* antiviral activity against SARS-Cov-2 and *in vivo* efficacy in proof-of-concept animal model
  - Preclinical lead, CDI-45205, selected in Q4 2020 from KSURF licensed inhibitors
  - Compound to be developed for injectable and inhalation administration
There is no approved COVID-19 antiviral prophylactic treatment.

There is no currently approved or authorized oral COVID-19 antiviral treatment of mild-to-moderate COVID-19 in adults and pediatric patients.
### Stages of COVID-19

#### Clinical Symptoms

<table>
<thead>
<tr>
<th>Stage I (Early Infection)</th>
<th>Stage II (Pulmonary Phase)</th>
<th>Stage III (Hyperinflammation Phase)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild constitutional symptoms</td>
<td>Shortness of breath without (IIA) and hypoxia (IIB) (PaO2/FiO2 ≤300 mmHg)</td>
<td>ARDS SIRS/shock Cardiac failure</td>
</tr>
</tbody>
</table>
| Fever >99.6°F
Dry cough | | Elevated inflammatory markers (CRP, LDH, IL-6, D-dimer, ferritin) Troponin, NT-proBNP elevation |

#### Clinical Signs

- **Lymphopenia**
- Abnormal chest imaging
- Transaminitis
- Low-normal procalcitonin

#### Time course

- Viral response phase
- Host inflammatory response phase
The bottom line of what we need to do looking forward, and the clear need in this, is the development of potent antivirals directly acting on SARS-CoV-2.

Very similar to what was done with the highly successful drug development program for HIV as well as for Hepatitis C, and what I referred to is the future development of therapeutics, will be based on the identification of vulnerable targets in the SARS-CoV-2 replication cycle and the design of drugs to inhibit these vulnerable targets.

As I mentioned, we are beginning of this and this is going to be the direction of the future.”

Anthony S. Fauci, M.D.
Director, National Institute of Allergy and Infectious Diseases
Chief Medical Adviser to President Biden
Reuters
February 22, 2021
COVID-19 Program Status

• Potential first-in-class therapeutic and prophylactic treatment
• Develop SARS-CoV-2 inhibitors using proprietary platform technology
• Targeting viral replication complex and protease

Achieved Milestones and Next Steps:

✓ Q4 2020  CDI-45205 Selected as Preclinical Lead from KSURF-licensed inhibitors
✓ Q2 2021  CDI-45205 shows activity against SARS-CoV-2 and two prominent variants
• 2021    Working toward pre-IND status with CDI-45205
• 2021    Develop additional COVID-19 Inhibitors with novel mechanism of action
Overview | Antiviral Program:

Pandemic Influenza A
Significant Need for Pandemic Influenza Therapies

Seasonal and pandemic infections

- 1 Billion cases annually\(^2\)
- 3-5 Million cases of severe illness annually\(^1\)
- Up to 650,000 deaths worldwide annually\(^1\)

Current antiviral treatments are burdened by significant viral resistance

Approved influenza therapies have major limitations
- Tamiflu\(^{\circledR}\) has a long history of drug resistance issues\(^3\)
- Xofluza\(^{\text{TM}}\) (approved November 2018) has shown emergence of drug resistant mutations\(^4\)

1. BCC Research (May 2018) The Global Influenza Market
3. ScienceDaily (March 2014) Tamiflu-resistant influenza related to mutations in genome
4. NEJM Journal Watch (September 2018) A Promising Drug for Influenza?
CC-42344 Shows Strong Synergistic Effects with Approved Influenza Antivirals

- *In vitro* combination studies with Xofluza, Tamiflu, and Favipiravir demonstrated strong synergistic effects
- CC-42344 shows high barrier to drug resistance and active against known resistant influenza strains
- CC-42344 is promising cocktail candidate with existing influenza antivirals
CC-42344: Pharmacological, Safety, Toxicity and PK Evaluations Successfully Completed

- In vitro antiviral profiling against seasonal and pandemic influenza A strains
- Cytotoxicity including larger screen: HepG2/high content analysis and 13 cell lines
- Caco-2 bidirectional permeability
- CYP inhibition (HLM): inhibition (2D6, 3A, 1A, 2B6, 2C8, 2C9, 2C19) & time dependent inhibition (2D6, 3A4)
- Thermodynamic/aqueous solubility
- pION solubility determination (at pH 7.4)
- Metabolic stability in rat and human microsomes (intrinsic clearance)
- Plasma protein binding (human)
- Plasma stability/half-life determination (human, rat)
- Pharmacokinetics: in rats (IV/PO), mouse (IV/PO) and dogs (IV/PO)
- In silico genotoxicity /carcinogenicity
- Off-target: kinase/receptor profiling; safety screen (CEREP)
- Mitochondrial toxicity (GLU/GAL)
- Mini Ames (genotox) screen
- Mini hERG (in vitro pharmacology) screen
- Exploratory 7-day mouse tox study (up to 500 mg/kg/day)
CC-42344: Influenza A Pandemic Antiviral Drug

• Binds to the highly conserved pocket on replication enzyme
• Exhibits broad spectrum activity against seasonal and pandemic influenza strains
• Favorable preclinical safety profile and pharmacokinetic properties
• Multiple routes of administration to include oral, inhalation and injection

Achieved Milestones and Next Steps:
• Q2 2021 Completed IND-enabling studies
• Q2 2021 Selected CRO
• Q3 2021 Initiate Phase 1 Study
Overview | Antiviral Program: Hepatitis C
Hepatitis C Strategy

Lead program CC-31244, Phase 2a study completed for the treatment of HCV

Current HCV Market Overview

- Ultrashort treatment strategy
- Limitations of existing long-term HCV therapies:
  - Longer period for virus to replicate and mutate, creating significant drug resistance challenges
  - Increased risk of adverse events
  - Greater opportunity for missed doses
- Multiple opportunities to develop shorter combination therapy with approved HCV drugs
- Proven rapid commercial success and market-share gains with shorter treatment regimens

Evolution of Shorter Therapy

Nucleoside/NS5A Inhibitors

- Gilead’s EPCLUSA®
  - 12-week treatment
  - Approved June 2016

Protease/NS5A Inhibitors

- AbbVie’s Mavyret™
  - 8-week treatment
  - Approved August 2017
CC-31244: HCV Non-Nucleoside Inhibitor (NNI)

**Next Generation Combination (Cocktail) Therapy**

- Potential best-in-class HCV NNI with a strong profile
- Broad-spectrum, potent NS5B polymerase inhibitor
- Effective against known NNI drug resistant variants
- Orally administered; liver targeting
- Ready for combination therapy clinical trials

**Potential Best-in-Class NNI**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Genotype</th>
<th>Dose (mg)</th>
<th>Treatment Frequency</th>
<th>Viral Load Reduction (Log10 IU/ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC-31244</td>
<td>Genotypes 1-6</td>
<td>400</td>
<td>QD</td>
<td>(3.0)</td>
</tr>
<tr>
<td>ABT-333 (Dasabuvir)</td>
<td>Genotype 1</td>
<td>400</td>
<td>BID</td>
<td>(1.08)</td>
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<tr>
<td></td>
<td></td>
<td>800</td>
<td>BID</td>
<td>(0.95)</td>
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<tr>
<td>GS-9190 (Tegobuvir)</td>
<td>Genotype 1</td>
<td>40</td>
<td>BID</td>
<td>(1.0)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>120</td>
<td>BID</td>
<td>(1.5)</td>
</tr>
</tbody>
</table>
Favorable HCV Phase 2a Trial Results with CC-31244

- 6 weeks of Epclusa® therapy including 2 weeks of CC-31244
- Treatment was well tolerated with no study discontinuations due to adverse events
- 8 of 12 subjects (67%) achieved both SVR12 and SVR24, considered virologic cure
- 4 patients had virologic relapse at Week 10, 4 weeks after completion of treatment
- 8 patients who achieved SVR had significantly higher frequency of CD8+ T cells compared with the 4 who relapsed, providing opportunities for personalized medicine

**Achieved Milestones and Next Steps:**
- ✓ Q1 2020 Final Report on Phase 2a U.S. Trial Filed with U.S. FDA
- Development Point Achieved; Seeking Partner for Further Development
Overview | Antiviral Program:
Norovirus Gastroenteritis
Norovirus: No Approved Treatment

Estimated annual cost of $60 billion worldwide due to healthcare costs and lost productivity\(^1\)

- \(~685\) Million infections worldwide annually\(^1\)
- \(465,000\) emergency department visits in the U.S.\(^1\)
- \(19-21\) Million cases in the U.S.\(^1\)
- \(109,000\) hospitalizations in the U.S.\(^1\)

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1. CDC, Norovirus Disease in the United States, 2020
Potential for Developing First Norovirus Therapy

- Potent, broad-spectrum polymerase and protease inhibitors licensed from KSURF
- Structure-based lead molecule discovery ongoing

**Achieved Milestones and Next Steps:**

- ✓ Q2 2020  Filed Additional Patent Application
- • H2 2021  Complete Proof-of-Concept Animal Study
Positioned for Growth
Expanding Intellectual Property Portfolio

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

• **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

• **HCV**
  • NS5B (NNI)
    • Issued patents in U.S.
    • Pending applications in U.S. and worldwide
    • Pending U.S. provisional application

• **Norovirus**
  • Issued patents in U.S. and major countries
  • Pending U.S. provisional applications
Financial Snapshot

~$121 Million
Market cap

16.3 Million
Average 3 month
daily share volume

$67.2 Million
Cash/equivalents as of
June 30, 2021

97.5 Million
Common shares
outstanding

99.5 Million
Fully diluted shares

- Clean balance sheet
  - No preferred shares
  - No debt
  - Only 243,000 warrants
- Cash runway beyond 2024

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1 Yahoo Finance
2 Company prepared bank reconciliation
Investment Highlights

• Applying proprietary structure-based drug design technology to develop first- and best-in-class broad-spectrum antiviral drugs

• Large market opportunities for the treatment of acute and chronic viral diseases including seasonal and pandemic influenza, COVID-19, hepatitis C, and norovirus gastroenteritis

• Near-term initiation of Phase 1 trial for potent, broad-spectrum treatment for seasonal and pandemic influenza A

• Product candidates are tested for multiple routes of delivery

• Robust development pipeline including Merck collaboration

• Seasoned leadership includes two Nobel laureates and biotech veterans with proven success in drug discovery and development, business and finance

• Cost-efficient business model supported by strong cash position and clean capital structure
Thank you!