Forward Looking Statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding expected results of our collaboration with Merck Sharp & Dohme Corp. ("Merck"), including the expected acceleration of our influenza program, the anticipated characteristics of the drug candidates developed as the result of this collaboration, expected funding by Merck of future research, development and commercialization of products derived from such collaboration, and the expected future payments and royalties in connection with the collaboration; the expected progress in developing an effective first-in-class therapeutic and prophylactic treatment of COVID-19 infections and the anticipated timing of achieving the value-driving milestones, including identifying additional inhibitors using our proprietary platform technology in Q3 2020, and the selection of a preclinical lead molecule in Q4 2020; the expected progress of our HCV program, including future partnership discussions; the expected progress of our influenza program and the anticipated timing of achieving the value-driving milestones, including securing a supply line in Q2 2020 and initiating the 2nd batch API synthesis in Q3 2020; 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 Q4 2020; and the expected future success of our drug candidates compared to approved drugs.; Forward-looking statements are prefaced by words such as "expect," "plan," "intend," "anticipate," 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 our risk factors is contained in our filings with the SEC, including our Annual Report on Form 10-K for the year ended December 31, 2019. 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.
Cocrystal’s Seasoned Senior Leadership

**Management Team**

**Gary Wilcox, Ph.D.**
*Chairman and Chief Executive Officer*
- Over 35 years of executive biotech leadership experience and played a key role in the development of Cialis

**Sam Lee, Ph.D.**
*President*
- Over 25 years of anti-infective drug discovery research experience and played a key role in the early development of phosphoinositide 3-kinase (PI3K) delta inhibitors

**James J. Martin, MBA, CPA**
*Chief Financial Officer*
- Over 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.**
*Director, 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
Corporate Overview

**Highlights**
- Clinical Stage Antiviral Company
- Proprietary Drug Discovery Platform
- Merck Influenza Collaboration

**Target Diseases**
- Influenza
- Coronavirus (COVID-19)
- Hepatitis
- Norovirus (Gastroenteritis)
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**

- Protein Engineering
- Expression & Purification
- Crystal Production
- X-ray Diffraction Test & QC
- High Throughput X-ray Crystallography
- Crystal Screening
- Crystal Candidates
- Crystal Optimization

- 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

<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>
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<tr>
<td>Hepatitis C (HCV)</td>
<td>CC-31244</td>
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<td>– University of MD</td>
<td>(Pan-genotypic NS5B NNI)</td>
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<td>(Influenza A PB2 Inhibitor)</td>
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<tr>
<td></td>
<td>Influenza A/B inhibitor</td>
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<td></td>
<td></td>
<td></td>
<td>In collaboration with MERCK</td>
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<td>Coronavirus (COVID-19)</td>
<td>Replication and Protease Inhibitor</td>
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<tr>
<td>Norovirus (Gastroenteritis)</td>
<td>Replication and Protease Inhibitor</td>
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</table>
Merck/Cocrystal Influenza Collaboration

Recognized revenue of **$6.56 million** in 2019, eligible to receive up to **$156 million** in milestone payments and royalties on product sales

- Exclusive license and collaboration agreement to discover and develop certain proprietary influenza A/B antiviral agents
- Merck continues to fund all:
  - Research and development
  - Clinical development
  - Worldwide commercialization of any products derived from the collaboration
- Dedicated joint research committee in place
- First year of program completed and second year ongoing
- Collaboration is expected to advance the development of certain influenza A/B antivirals
Overview | Antiviral Programs:

Coronavirus
License agreements with Kansas State University Research Foundation (KSURF) to further develop certain proprietary broad-spectrum compounds for coronavirus and norovirus

- Demonstrated *in vitro* antiviral activity against SARS-Cov2 and *in vivo* efficacy in proof-of-concept animal model

- Advances the Company's programs significantly by providing potent compounds for further development

- Opens new development opportunities to apply Cocrystal's antiviral platform technology

Cocrystal acquires exclusive patent rights and know-how for coronavirus and norovirus therapeutics for human use
COVID-19: Current Global Pandemic as of 9/4/2020

Total Global Confirmed: 26,398,466
Total Global Deaths: 870,477
Total U.S. Confirmed: 6,164,267
Total U.S. Deaths: 187,052

Coronavirus COVID-19 Global Cases by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU) as of 9.4.20
Current Status of COVID-19

Research is moving forward on many fronts and multiple options are needed to prevent or treat COVID-19

- There is no vaccine
- There is no prophylactic treatment
- There is no therapeutic cure
- We are only beginning to understand medical best-care practices
Stages of COVID-19

**Clinical Symptoms**
- Mild constitutional symptoms
  - Fever > 99.6F
  - Dry Cough
- Shortness of breath without (IIA) and Hypoxia (IIB)
  - (PaO2/FiO2≤300mmHg)
- ARDS
- SIRS/Shock
- Cardiac Failure

**Clinical Signs**
- Lymphopenia
- Abnormal chest imaging
- Transaminitis
- Low-normal procalcitonin
- Elevated inflammatory markers
  - (CRP, LDH, IL-6, D-dimer, ferritin)
  - Troponin,
  - NT-proBNP elevation

**Stage I**
- (Early Infection)

**Stage II**
- (Pulmonary Phase)
  - IIA
  - IIB

**Stage III**
- (Hyperinflammation Phase)
Aggressively Pursuing Development of Novel Antiviral Therapies for the Treatment of COVID-19 Infections

• Potential to be effective treatment for COVID-19 (SARS-CoV-2)
• Develop COVID-19 (SARS-CoV-2) inhibitors using proprietary platform technology
• Targeting viral replication complex and protease
• Potential first-in-class therapeutic and prophylactic treatment

NEXT STEPS:
✓ Q2 2020 Filed Additional Patent Application
✓ Q2 2020 Proof-of-Concept Animal Model Study
✓ Q2 2020 Initiated Preclinical Studies of COVID-19 Inhibitors
✓ Q3 2020 Identified Additional Inhibitors Using Our Proprietary Platform Technology
• Q4 2020 Preclinical Lead Molecule Selection
Overview | Antiviral Programs:

Hepatitis C
HCV Is Still a Global Issue

71 Million people infected globally¹

400,000 people die annually from related causes¹

Only 20% of infected patients have been diagnosed¹

Only 2% of infected patients are being treated¹

¹: Polaris Observatory, 2019
Cocrystal’s HCV Strategy

Lead program CC-31244, Phase 2a study for the treatment of Hepatitis C

Current HCV Market Overview

- Limitations of existing long-term HCV therapies:
  - Longer period for viruses to replicate and mutate, creating significant drug resistance challenges
  - Increased risk of adverse events
  - Greater opportunity for missed doses
  - Multiple opportunities in developing shorter combination therapy with approved HCV drugs

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
Shorter Treatment Drives Increased Market Share

2017 Annual Sales: $12.69 Billion
- Gilead: $9.14B
- Merck: $1.66B
- AbbVie: $1.27B
- J&J: $619M

2018 Annual Sales: $8.3 Billion
- Gilead: $3.71B
- AbbVie: $3.62B
- Merck: $455M
- J&J: $533M

Source: 2017 Form 10-K
Source: 2018 Form 10-K

Gilead (Harvoni, Epclusa, Sovaldi, Vosevi)
J&J (Olysio)
AbbVie (Viekira, Mavyret)
Merck (Zepatier)
CC-31244: HCV Non-Nucleoside Inhibitor (NNI)

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

**Next Generation Combination (Cocktail) Therapy**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Genotype</th>
<th>Dose (mg)</th>
<th>Treatment Frequency</th>
<th>Viral Load Reduction (Log₁₀IU/ml)</th>
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<tbody>
<tr>
<td>CC-31244</td>
<td>Genotypes 1-6</td>
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<td>QD</td>
<td>(3.0)</td>
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<td>ABT-333</td>
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<tr>
<td></td>
<td></td>
<td>120</td>
<td>BID</td>
<td>(1.5)</td>
</tr>
</tbody>
</table>

**Potential Best-in-Class NNI**

1. ABT-333 (Dasabuvir)

HCV GT1 – GT6 NS5B Polymerase Crystals
Cocrystal Pharma Phase 2a Completed

• The treatment was well tolerated with no study discontinuations due to adverse events
• Eight of 12 subjects (67%) achieved both SVR12 and SVR24, considered virologic cure
• Four patients had virologic relapse at Week 10, 4 weeks after completion of treatment
• Eight patients that achieved SVR had significantly higher frequency of CD8+ T cells compared with the four who relapsed, providing opportunities for personalized medicine

NEXT STEPS:
✓ Q1 2020 Completed Final Report on Phase 2a U.S. Trial
• Partnership Goal – Development Point Achieved
Overview | Antiviral Programs:

Influenza
Significant Unmet Need in Growing Influenza Market

Seasonal and pandemic infection

- 1 Billion cases annually
- 3-5 Million cases of severe illness annually
- Up to 650,000 deaths worldwide

Current antiviral treatments are burdened by significant viral resistance

- Approved influenza therapies have major limitations
  - Tamiflu® has a long history of drug resistance issues
  - Xofluza™ (approved November 2018) also has shown emergence of drug resistant mutations

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?
Influenza Remains a Major U.S. and Global Concern

Flu season deaths top 80,000 last year, CDC says

US on track for one of the worst flu seasons in decades

Swine flu strain with human pandemic potential increasingly found in pigs in China

Flu Season Off To Early Start, And It Could Be Severe

Flu Rates Rising, Pediatric Deaths Double Compared to 2018: CDC

Child Flu Deaths Hit Record High for This Time of Year

The Flue Season My Yet Turn Ugly, CDC Warns

Flu viruses resistant to new drug Xofluza uncovered in Japan

Another Flu Pandemic Is Inevitable, World Health Organization Says
• Broad spectrum, potent dual influenza A/B preclinical lead will be developed
  • Result of Cocrystal’s drug discovery platform technology
  • 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
CC-42344: Influenza A 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 (oral, inhalation, and injection)

**NEXT STEPS:**
- ✓ Q2 2020 Secured Supply Line
- ✓ Q3 2020 Initiated 2\textsuperscript{nd} Batch of API Synthesis
Potential for Cocktail Therapy

CC-42344 Shows Strong Synergistic Effects with Approved Influenza Antivirals

Polymerase Inhibitor

Favipiravir

Cocrystal 42344

Xofluza PA Inhibitor

Tamiflu Neuraminidase Inhibitor
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)
Overview | Antiviral Programs:
Norovirus
Norovirus: No Approved Treatment

Norovirus Polymerase and Protease Crystals

$4.2 billion in direct health system costs

~685 million infections worldwide annually\(^1\)

19-21 million cases in the U.S.\(^2\)

465,000 emergency department visits in the U.S.\(^2\)

109,000 hospitalizations in the U.S.\(^2\)

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1. World Health Organization, 2020
2. CDC, Norovirus Disease in the United States, 2020
Cocrystal’s Norovirus Program

- Potential first therapy
- Potent and broad-spectrum polymerase and protease inhibitors
- Structure-based lead discovery ongoing
- Licensed potent, broad spectrum protease inhibitors from KSURF

**NEXT STEPS:**

- ✓ Q2 2020 Filed Additional Patent Application
- • Q4 2020 Complete Proof-of-Concept Animal Study
Well-Positioned for Growth
Growing Intellectual Property Portfolio

- **HCV**
  - NS5B (non-nucleoside inhibitor)
    - Issued patents in U.S.
    - Pending applications in U.S. and worldwide
    - Pending U.S. provisional application

- **Influenza**
  - 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

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

- **Norovirus**
  - Issued patents in U.S. and major countries
  - Pending U.S. provisional applications
Financial Snapshot: NASDAQ: COCP

~$68MM
Market cap\(^1\)

68.6MM
Common shares outstanding

~4.9MM
Average 3 month daily volume\(^2\)

~$19.3MM
Cash Balance as of June 30, 2020

$17.2MM
Proceeds from August 31, 2020 Financing not included in cash balance

• 70.6 MM Fully Diluted Shares

• Clean balance sheet
  • No Preferred Shares Outstanding
  • No Debt Outstanding
  • Only 243K warrants outstanding

1: Based on September 1, 2020 closing price of $.99 per share; 2: Yahoo Finance, 3-month daily volume
Strategy Directed at Advancing Programs and Growing Value

- Advance preclinical COVID-19 Coronavirus program by leveraging patent rights and compounds recently acquired from Kansas State University Research Foundation

- Ongoing collaboration with Merck has accelerated influenza A/B development program

- Continue to progress our innovative pipeline for Influenza, Hep C, COVID-19 and Norovirus gastroenteritis

- Form additional strategic collaborations
Thank you!