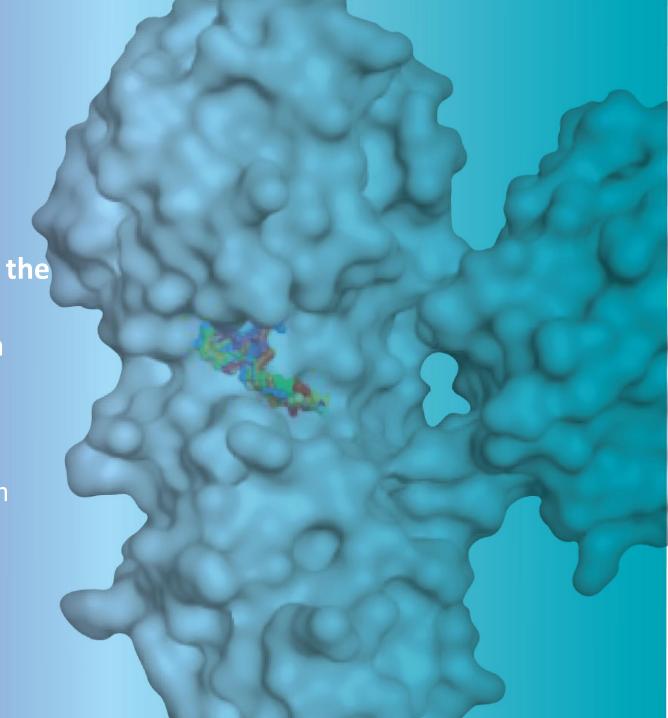


Title: An Oral Pan-viral Protease Inhibitor for the Prevention and Treatment of Norovirus and Coronavirus Infections: Mechanism of Action and Phase 1 Study Results

2025 Military Health System Research Symposium August 4, 2025

Sam Lee, PhD Mon\_1530\_MHSRS-25-16669\_Lee.pptx



### Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including our development pipeline; our technology platform's ability to produce viable drug candidates at reduced development timelines and costs; development efforts in our clinical programs, including our ongoing Phase 2a study for oral influenza PB2 inhibitor; our Phase 1 study with 3CL protease inhibitor for coronavirus and norovirus; 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 any future interest rate increases in response to inflation, uncertainty in the financial markets, the possibility of a recession and the geopolitical conflicts in Israel and Ukraine on our Company, our collaboration partners, and on the U.S., UK, 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 our CRO's studies referred to above, 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 and our ability to secure and maintain new collaboration partners, 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 filings with the Securities and Exchange Commission, including our Annual Report on Form 10-K for the year ended December 31, 2024. 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**

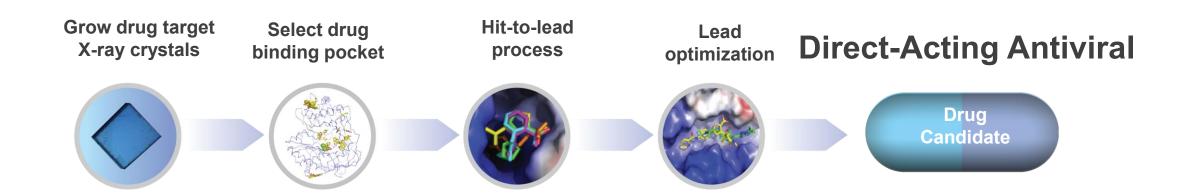
Applying powerful, proprietary drug discovery platform technology to develop first- and best-in-class broad-spectrum antiviral drugs

- Advancing programs in direct-acting small molecule antivirals
  - Norovirus
  - Influenza
  - Coronavirus and respiratory viruses
- Drug candidates with clinically validated mechanisms of action
- Proprietary drug discovery platform technology
  - Unique drug discovery platform technology developed with Nobel Prize-winning technology



## 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

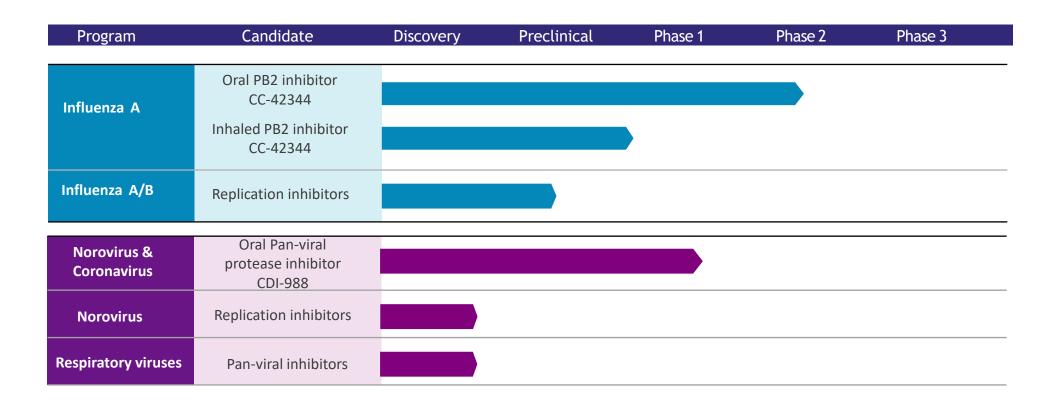


Provide high-resolution 3D structures of drug target complexed with inhibitor at atomic level



### Robust Pipeline Addressing Unmet Medical Needs

### Multiple clinical assets poised to deliver significant growth





### Norovirus Infection: Highly Infectious and Transmissible

Norovirus Symptoms: Vomiting, Diarrhea, Stomach Cramping, Fever, Headaches, and Body Aches

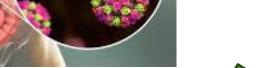
#### Cruise Ships







Schools





Restaurants



Nursing homes



Military

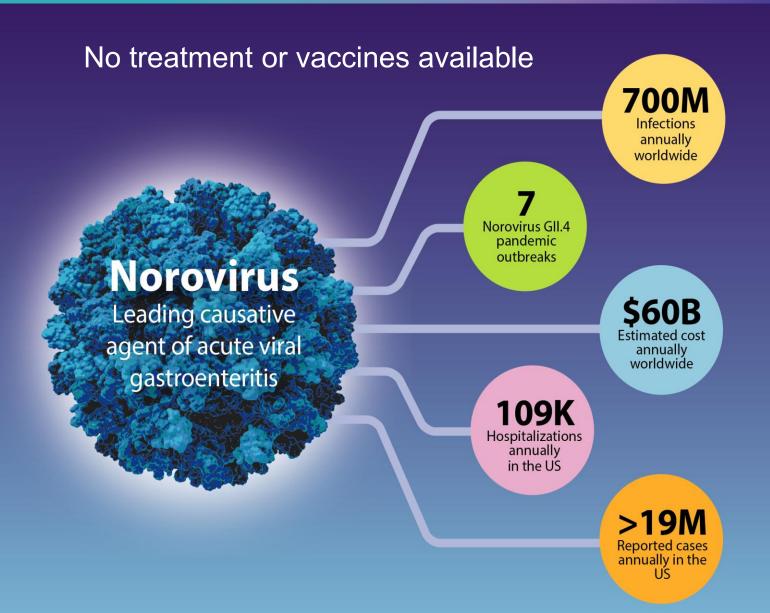








# Norovirus Viral Gastroenteritis Represents Significant Unmet Need



### Cocrystal's Antiviral, CDI-988:

- First-in-class oral antiviral for norovirus infection
- Potential for both prevention and treatment of viral gastroenteritis
- Additional broad-spectrum antiviral activity against coronaviruses and enterovirus D68
- Phase 1 study complete

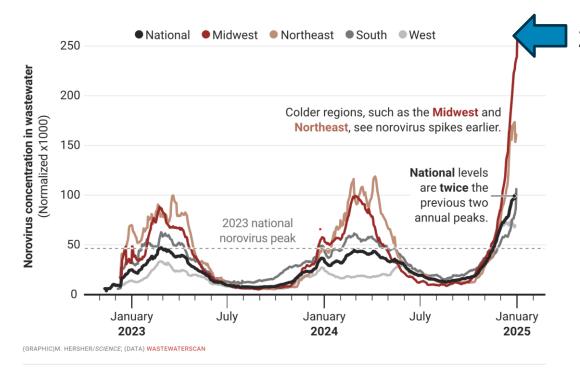


### Big Surge of Norovirus Outbreaks in 2024-2025 After COVID-19 Pandemic

# Why the 'Ferrari of viruses' is surging through the Northern Hemisphere

Norovirus, which causes explosive diarrhea and vomiting, may be on the rise because of an antibody-dodging variant and post–COVID-19 socializing

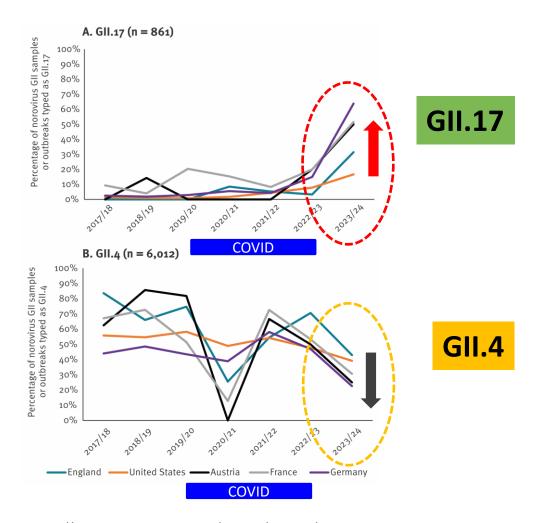
13 JAN 2025 · 6:00 PM ET · BY JON COHEN



2024-2025 norovirus outbreaks

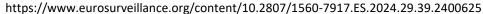


### Norovirus GII.17 Has Rapidly Overtaken GII.4 As The Leading Cause of Norovirus Outbreaks, >70%



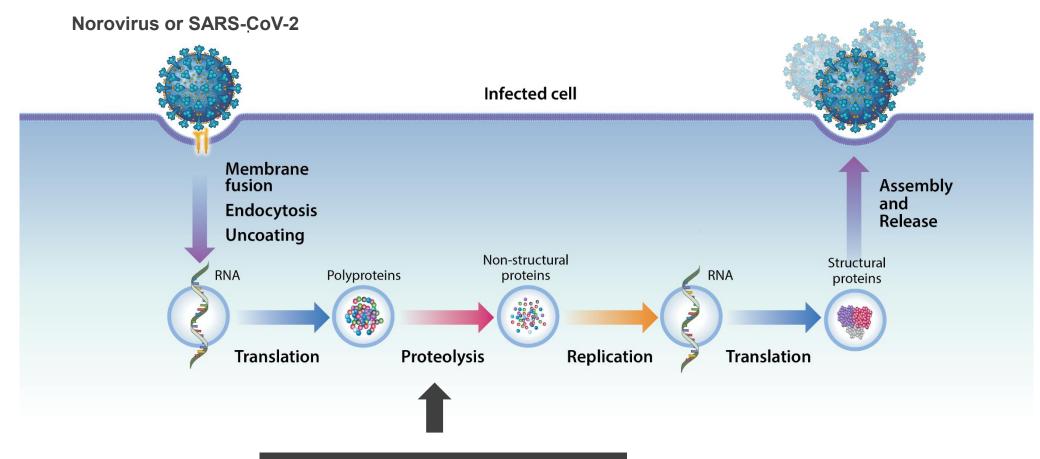
Noroviruses are genetically diverse:

- > 10 genogroups are subdivided into different genotypes, currently 49 genotypes
- Vaccine development has been challenging due to the genetic diversity
- Variants of the GII.4 genotype were the most common genotype, responsible for the majority of norovirus outbreaks until 2023/2024





### Cocrystal's Protease Inhibitor CDI-988 Blocks the Viral Essential Replication Process

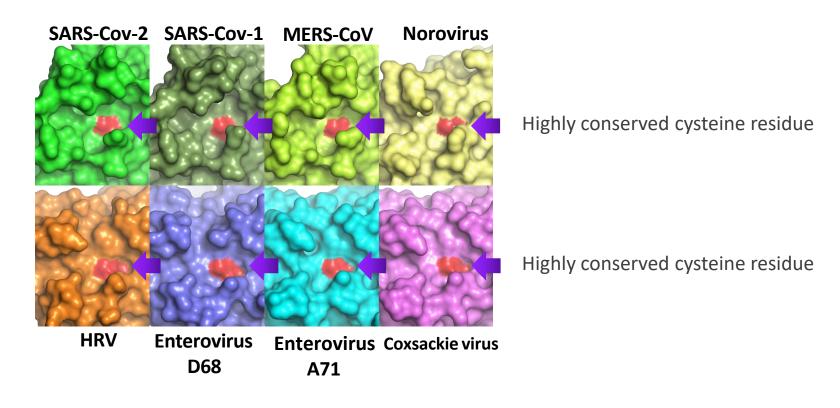


Cocrystal's protease inhibitor blocks this essential step



# Cocrystal's Structure-Based Drug Discovery Platform Technology For Pan-viral Protease Inhibitor Development

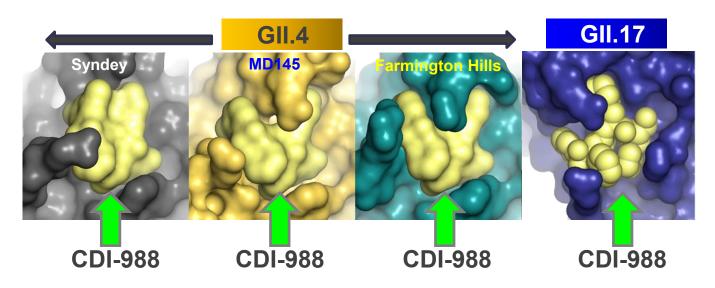
# Cocrystal pan-viral inhibitors target highly conserved viral protease active site



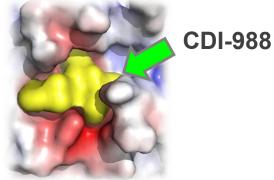


# Cocrystal's Protease Inhibitor CDI-988 For All Norovirus Genogroups Including GII.17 and COVID

### (A) Cocrystal structures of norovirus protease:CDI-988 complex



(B) SARS-CoV-2



- Binds to highly conserved region of the viral protease active site
- Exhibits broad-spectrum, potent antiviral activity against all norovirus and coronavirus proteases
- Developed using Cocrystal's proprietary drug discovery platform technology
- First-in-class norovirus antiviral



### Phase 1 Study of First-in-Class Direct-Acting Oral Antiviral Protease Inhibitor, CDI-988

A Phase 1, Randomized, Double-Blinded, Placebo-Controlled, First-in-Human Study to Evaluate the Safety, Tolerability, and Pharmacokinetics of Single-Ascending and Multiple-Ascending Doses of Oral CDI-988 in Healthy Adult Participants

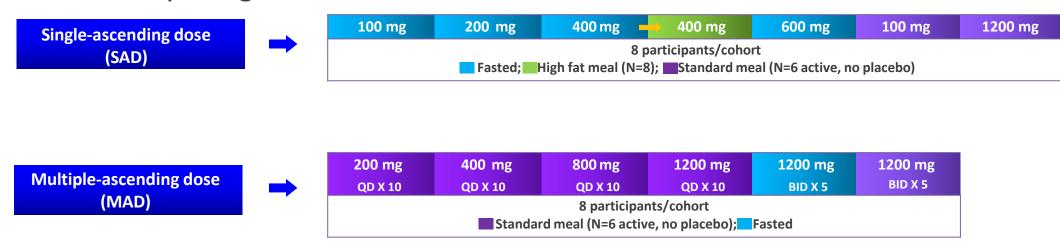
Clinical Trial Registration: NCT05977140



### Oral Pan-viral Protease Inhibitor CDI-988 Showed Favorable Safety and Tolerability

- Single-center, randomized, double-blind, placebo-controlled
- Single-ascending dose (SAD) and Multiple-ascending dose (MAD) cohorts
- Healthy adult volunteers (18 55 years old)
- Each cohort comprised 8 participants (6 on CDI-988; 2 on placebo)

### Phase 1 study design





## Key Entry Criteria

- Healthy males and females ≥ 18 and ≤ 55 years
- Body weight ≥ 50 kg
- Body mass index ≥ 18 and ≤ 32 kg/m<sup>2</sup>
- Non-pregnant, non-lactating
- Must abstain from alcohol or caffeine from 48 hours before study confinement through duration of study
- Must not have taken prescribed medication in 14 days before dosing, or OTC drugs, herbal remedies within 7 days before dosing (except vitamins, minerals, paracetamol, HRT)
- Other routine screening criteria to include exclusion due to concurrent illness and/or clinical laboratory values or history



# Demographics of SAD and MAD cohorts

	SAD (N=36)	Placebo (N=10)	MAD (N=36)	Placebo (N=12)
Age (Years)	29.5	32.5	30.0	30.6
Mean	27.6	27.4	28.3	29.6
Median				
Range	21-49	20-56	21-45	25-39
/lale, n (%)	14 (39%)	2 (20%)	23 (64%)	7 (58%)
emale	22 (61%)	8 (80%)	13 (36%)	5 (42%)
thnicity, n (%)				
Hispanic or Latino	1 (3%)	3 (30%)	9 (25%)	5 (42%)
Not Hispanic or Latino	35 (97%)	5 (50%)	26 (72%)	7 (58%)
Not reported	0	2 (20%)	1 (3%)	0
Race, n (%)				
Asian	13 (36%)	1 (10%)	10 (28%)	3 (25%)
Black or African American	0	1 (10%)	0	2 (17%)
White	22 (61%)	5 (50%)	23 (64%)	6 (50%)
Native Hawaiian or Other Pacific Islander	0	0	1 (3%)	0
Not Reported	0	1 (10%)	0	0
American Indian or Alaska Native	0	1 (10%)	2 (6%)	1 (8%)
Multiple	1 (3%)	1 (10%)	0	0



# SAD Clinical Safety Summary (N=46)

- All dose cohorts well tolerated (100mg to 1200mg)
- Safety profile
  - 100% of AEs were mild severity (CDI-988 (N=11, 100%) vs Placebo (N= 4, 100%))
  - Only 7 treatment-related AEs across all dose cohorts (CDI-988 (N=5, 14%) vs Placebo (N=2, 20%))
  - Most commonly occurring treatment related AE was headache (CDI-988 (N=1, 3%) vs Placebo (N=1, 10%))
  - No deaths, other SAEs or severe treatment emergent AEs
- No clinically relevant ECG changes
- No clinically significant pathology results (hematology, chemistry, urinalysis)
- No discontinuations from study or study drug



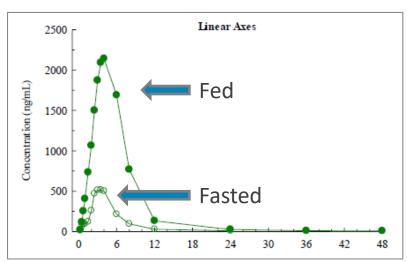
# MAD Clinical Safety Summary (N=48)

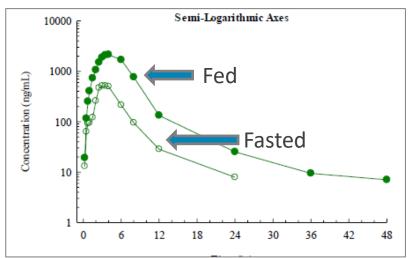
- All dose cohorts well tolerated (200mg to 1200mg)
- Safety profile
  - Total of 30 reported AEs (CDI-988 (N=19, 53%) vs Placebo (N=11, 92%))
  - 26 of these were mild severity (CDI-988 (N=16, 84%) vs Placebo (N=10, 91%))
  - 8 AEs of moderate severity (CDI-988 (N=4, 21%) vs Placebo (N=4, 36%))
  - 15 treatment-related AEs across all dose cohorts (CDI-988 (N=9, 25%) vs Placebo (N=6, 50%))
  - Most commonly occurring treatment related AE was headache (CDI-988 (N=3, 8%) vs Placebo (N=1, 8%))
  - No deaths, other SAEs or severe treatment emergent AEs
- No clinically relevant ECG changes
- No clinically significant pathology results (hematology, chemistry, urinalysis)
- 1 discontinuation from study and study drug (CDI-988 1200mg BID Fed, diarrhea), probably related, G2 moderate diarrhea



## CDI-988 Demonstrates Strong Food Effect







High fat meal prior to dosing results in a 5- to 6-fold higher plasma exposure compared to fasted state dosing



# Topline Safety Data Summary and Next Steps

SAD cohorts	MAD cohorts		
<ul> <li>Overall treatment-emergent AE (TEAE) rate</li> <li>28% (10/36) in CDI-988 cohorts</li> <li>40% (4/10) in placebo subjects</li> </ul>	<ul> <li>Overall treatment-emergent (TEAE) rate</li> <li>53% (19/36) in CDI-988 cohorts</li> <li>92% (11/12) in placebo subjects</li> </ul>		
<ul> <li>Headache was the most frequently reported TEAE</li> <li>14% (5/36) in CDI-988 cohorts</li> <li>30% (3/10) in placebo subjects</li> </ul>	<ul> <li>Headache was the most frequently reported TEAE</li> <li>8% (3/36) in CDI-988 cohorts</li> <li>33% (4/12) in placebo subjects</li> </ul>		

### Next Steps:

- Phase 1b human challenge study planned in 2H of 2025
- Norovirus challenge study design: Randomized, double-blind, placebo-controlled in healthy volunteers infected with a norovirus strain





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