Third Quarter 2023 Financial and Business Update

November 8, 2023

NASDAQ: AVIR

DISCLAIMERS

Forward-Looking Statements

This presentation contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, our clinical results and other future conditions including without limitation the future of the COVID-19 and HCV landscapes and related commercial market opportunities. All statements other than statements of historical facts contained in this presentation are forward-looking statements, including statements by Atea Pharmaceuticals, Inc. (the "Company") regarding future results of operations and financial position, including our anticipated cash runway; business strategy; current and prospective product candidates; anticipated milestone events; potential benefits of our product candidates and market opportunity; clinical trials, including, without limitation, anticipated initiation, enrollment, regulatory submission and data readout timelines; preclinical activities; product approvals; manufacturing availability; degree of market acceptance of any products that may be approved; research and development costs; current and prospective collaborations; and prospects and opportunities for investors. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expects," "plans," "anticipates," "could," "intends," "targets," "projects," "contemplates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these terms or other similar expressions.

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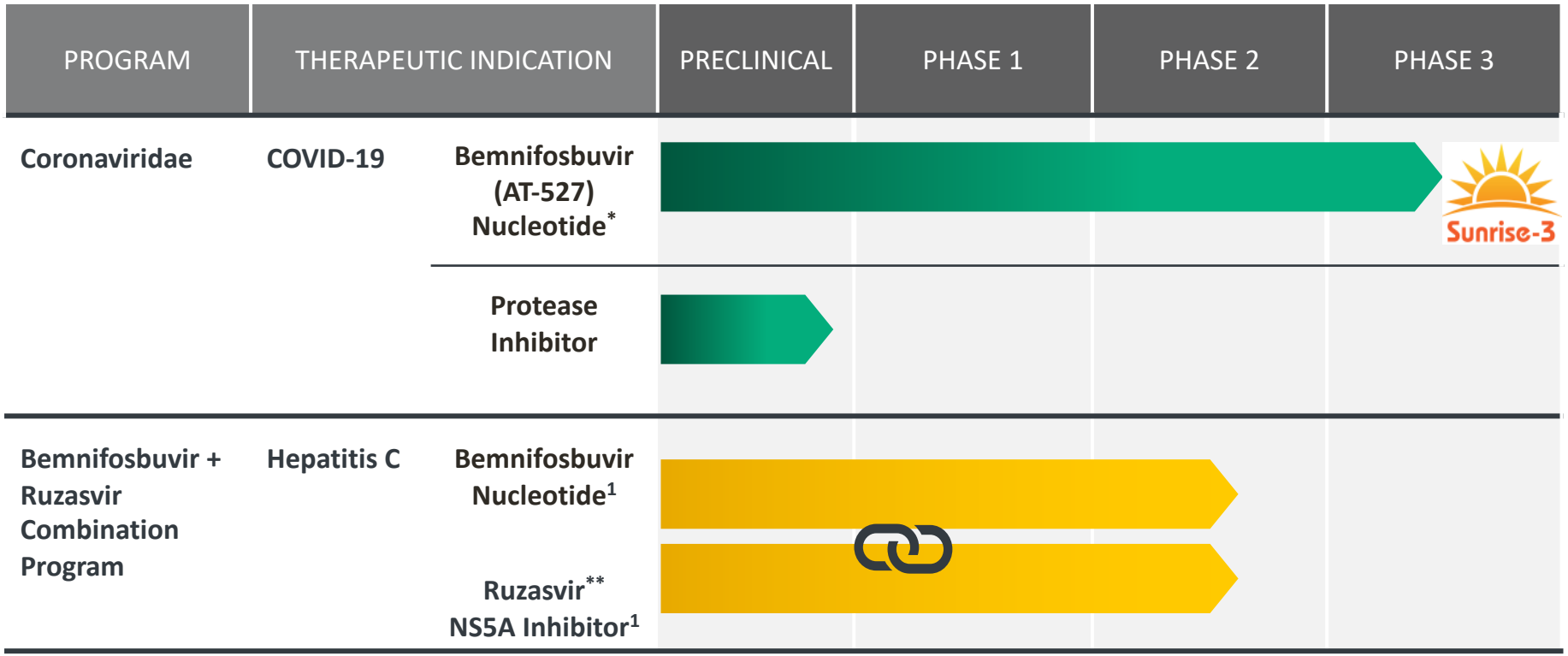
Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.

Industry Information

Market data and industry information used throughout this presentation are based on management's knowledge of the industry and the good faith estimates of management. We also relied, to the extent available, upon management's review of independent industry surveys and publications and other publicly available information prepared by a number of third-party sources. All of the market data and industry information used in this presentation involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. Although we believe that these sources are reliable, we cannot guarantee the accuracy or completeness of this information, and we have not independently verified this information. While we believe the estimated market position, market opportunity and market size information included in this presentation are generally reliable, such information, which is derived in part from management's estimates and beliefs, is inherently uncertain and imprecise. No representations or warranties are made by the Company or any of its affiliates as to the accuracy of any such statements or projections. Projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described above. These and other factors could cause results to differ materially from those expressed in our estimates and beliefs and in the estimates prepared by independent parties.

Focused Antiviral Pipeline, Fully Funded Through Key Inflection Points

✓ Advancing innovative oral therapeutics that address the unmet medical needs of patients with serious viral diseases



- **SUNRISE-3:** 1st interim analysis expected Q1'24
- Topline results mid-2024
- NDA submission target YE'24
- **Protease inhibitor:** program update Q1'24
- **Ph 2 HCV trial:** lead-in cohort SVR4 data expected Q1'24
- Ph 3 initiation target Q4'24
- Cash, cash equivalents & marketable securities: **$595.1M** Cash runway well into 2026

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1. Bemnifosbuvir and ruzasvir have each separately generated clinical results and are being developed as a combination for HCV.

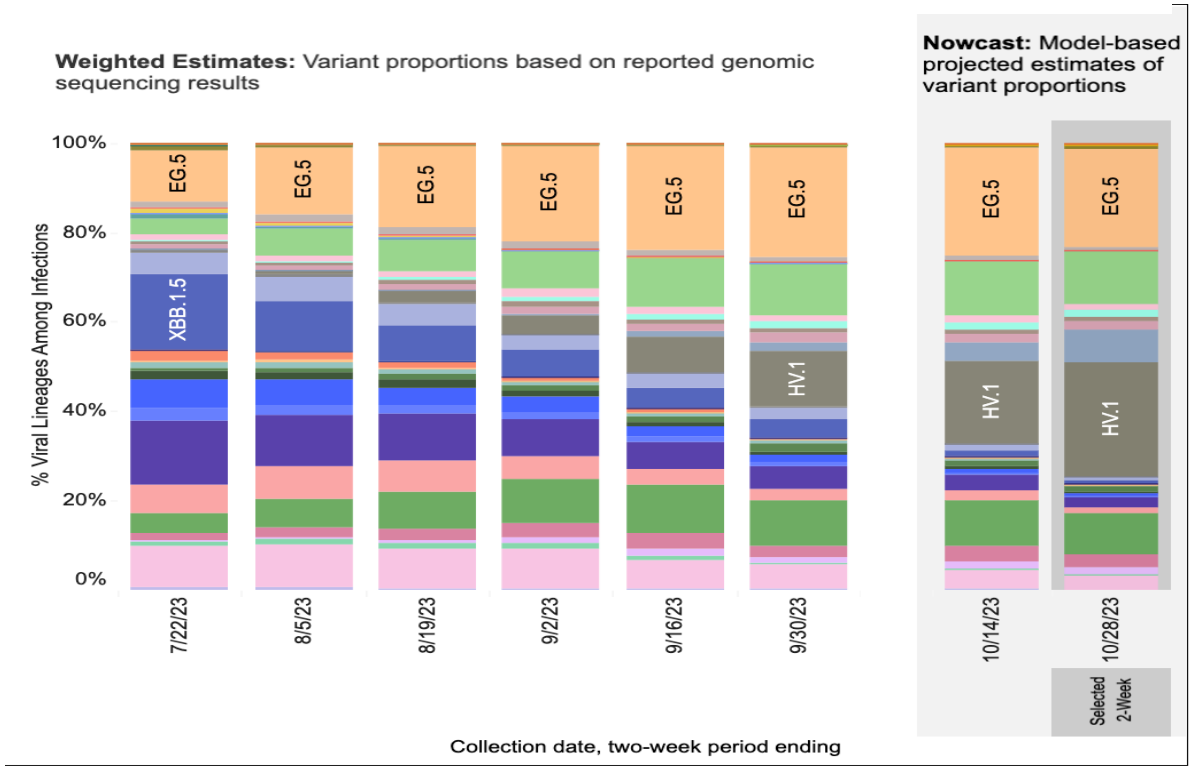
Bemnifosbuvir

Phase 3 Program for COVID-19

- COVID-19 Update
- Global Phase 3 SUNRISE-3 Trial

COVID-19 Variants Continue to Rapidly Emerge Creating Waves of Infection

Weighted and Nowcast Estimates in United States for 2-Week Periods in 7/9/2023 – 10/28/2023



Nowcast Estimates in United States for 10/15/2023 – 10/28/2023

USA

WHO label	Lineage #	%Total	95%PI
Omicron	HV.1	25.2%	22.7-27.9%
	EG.5	21.9%	19.6-24.3%
	FL.1.5.1	12.0%	9.8-14.6%
	XBB.1.16.6	9.2%	8.0-10.5%
	HK.3	7.5%	5.6-9.9%
	XBB.1.16.11	3.1%	2.4-4.0%
	XBB.2.3	3.0%	2.5-3.6%
	XBB.1.16	2.2%	1.8-2.7%
	HF.1	1.8%	1.1-3.0%
	GK.1.1	1.8%	1.3-2.6%
	XBB.1.16.15	1.5%	1.1-2.2%
	XBB.1.16.1	1.4%	1.1-1.8%
	XBB.1.5.70	1.3%	0.8-2.1%
	GE.1	1.1%	0.8-1.5%
	XBB	1.1%	0.8-1.4%
	GK.2	0.9%	0.6-1.2%
	CH.1.1	0.8%	0.5-1.3%
	EG.6.1	0.7%	0.5-1.0%
	XBB.1.5	0.6%	0.5-0.8%
	XBB.1.9.1	0.5%	0.4-0.7%
	BA.2	0.5%	0.2-0.9%
	XBB.1.42.2	0.3%	0.2-0.6%
	XBB.1.5.72	0.3%	0.2-0.4%
	XBB.1.5.68	0.3%	0.2-0.5%
	XBB.1.9.2	0.3%	0.2-0.4%
	XBB.1.5.10	0.2%	0.1-0.2%
	XBB.2.3.8	0.1%	0.1-0.2%
	XBB.1.5.59	0.1%	0.1-0.2%
	FD.1.1	0.1%	0.0-0.1%
	FE.1.1	0.0%	0.0-0.0%
	EU.1.1	0.0%	0.0-0.0%
	XBB.1.5.1	0.0%	0.0-0.0%
	BQ.1	0.0%	0.0-0.0%
	B.1.1.529	0.0%	0.0-0.0%
Other	Other*	0.0%	0.0-0.1%

* Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one 2-week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all 2-week periods displayed.

BA.1, BA.3 and their sublineages (except BA.1.1 and its sublineages) are aggregated with B.1.1.529. Except BA.2.12.1, BA.2.75, XBB and their sublineages, BA.2 sublineages are aggregated with BA.2. Except BA.2.75.2, CH.1.1 and BN.1 BA.2.75 sublineages are aggregated with BA.2.75. Except BA.4.6, sublineages of BA.4 are aggregated to BA.4. Except BF.7, BF.11, BA.5.2.6, BQ.1 and BQ.1.1, sublineages of BA.5 are aggregated to BA.5. Except the lineages shown and thei sublineages, sublineages of XBB are aggregated to XBB. Except XBB.1.5.1,XBB.1.5.10,FD.2,EU.1.1,XBB.1.5.68 and XBB.1.5.70 sublineages of XBB.1.5 are aggregated to XBB.1.5. Except FL.1.5.1, sublineages of XBB.1.9.1 are aggregated t XBB.1.9.1. Except XBB.1.16.1,XBB.1.16.11,XBB.1.16.15 sublineages of XBB.1.16 are aggregated to XBB.1.16, sublineages of XBB.1.42.2 are aggregated to XBB. Except FE.1.1, sublineages of XBB.1.18.1 are aggregated to XBB. For all the othe lineages listed, their sublineages are aggregated to the listed parental lineages respectively. Previously, FL.1.5.1, GE.1, EG.6.1 and HV.1, FD.1.1, XBB.2.3.8, HF.1, GK.2, GK.1.1, HK.3 was aggregated to XBB.1.9.1, XBB.2.3.10, XBB.1.9.2, XBB.1.5.15, XBB.2.3, XBB.1.16.13, XBB.1.5.70 and XBB.1.9.2.5.1.1 respectively. Lineages BA.2.75.2, XBB, XBB.1.5 , XBB.1.5.1, XBB.1.5.10, FD.2, XBB.1.9.1, XBB.1.9.2, XBB.1.16, XBB.1.16.1, XBB.2.3, BN.1, BA.4.6, BF.7, BF.11, BA.5.2.6 ,BQ.1.1, EU.1.1, XBB.1.5.68, FE.1.1, EG.5, XBB.1.5.72 , FL.1.5.1, GE.1, EG.6.1,XBB.1.16.11, FD.1.1, XBB.1.5.70, XBB.2.3.8, HV.1, XBB.1.42.2, GK.2, HF.1, XBB.1.16.15, GK.1.1 and HK.3 contain the spike substitution R346T.

https://covid.cdc.gov/covid-data-tracker/#variant-summary

COVID-19: Unmet Medical Need Remains in High-Risk Population

New, Safe and Well-Tolerated Oral Therapies Needed

- Majority of patients globally enrolled in SUNRISE-3 are in monotherapy arm despite currently available oral antiviral therapies
- Approximately 50% of patients are coming from US sites
- Clear ongoing unmet medical need due to safety concerns, tolerability and drug-drug interactions associated with current options
  - CDC predicts high hospitalization rates for respiratory season in winter 2023/2024[1]
  - COVID-19 predicted to account for half of those hospitalizations, with flu and RSV combined accounting for the other half
  - Low COVID-19 booster uptake currently at ~7% of US adults, leaving many susceptible to COVID-19 infections
  - Unmet medical need particularly important in most vulnerable patient populations including the elderly, immunocompromised and those with underlying risk factors

1. https://www.cdc.gov/forecast-outbreakanalytics/about/season-outlook.html#october-update

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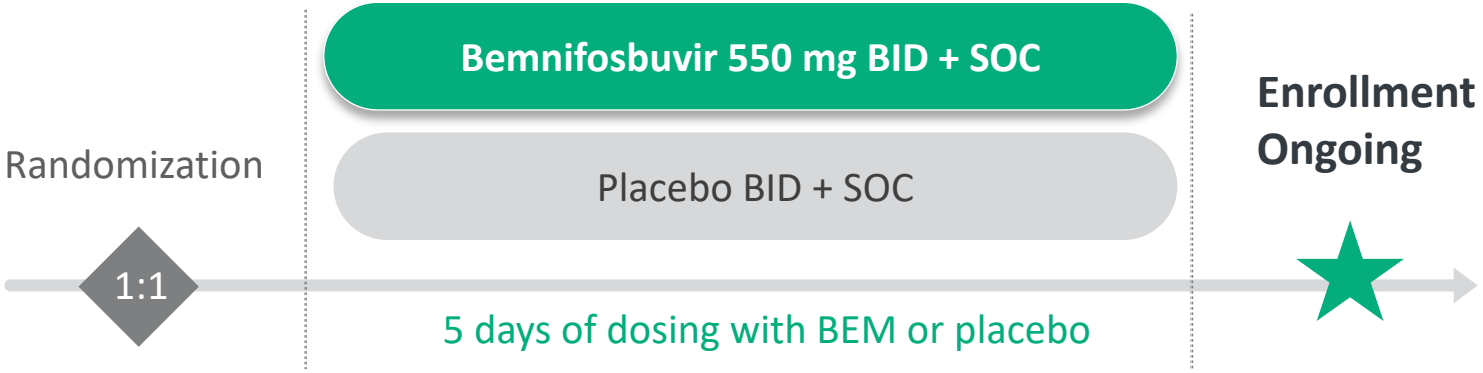
SUNRISE-3: Global Phase 3 Trial in High-Risk COVID-19 Outpatients

Bemnifosbuvir – U.S. Fast Track Designation for COVID-19

Inclusion Criteria: High-risk outpatients with mild or moderate COVID-19, regardless of vaccination status; symptom onset ≤5 days before randomization

Geography: US, Europe, Japan and ROW



Phase 3 Study Design:

- Randomized, double-blind, placebo-controlled
- Study drug (bemnifosbuvir or placebo) to be initiated at the same time as locally available standard of care (SOC)
- Two study populations derived from the type of SOC received:
  - "Supportive care population" – *monotherapy* (primary analysis)
  - "Combination antiviral population" – *combination therapy* (secondary analysis, local SOC includes treatment with other compatible antiviral drugs against COVID-19)
- Two interim analyses for DSMB review to be conducted (safety, futility)

High-risk outpatients: ≥70, ≥55 with one or more risk factors, ≥50 with two or more risk factors, ≥18 with immunocompromised conditions

Primary Endpoint:

All-cause hospitalization or death through Day 29 in supportive care population (n=~2,200 patients)

Secondary Endpoints (assessed in each population):

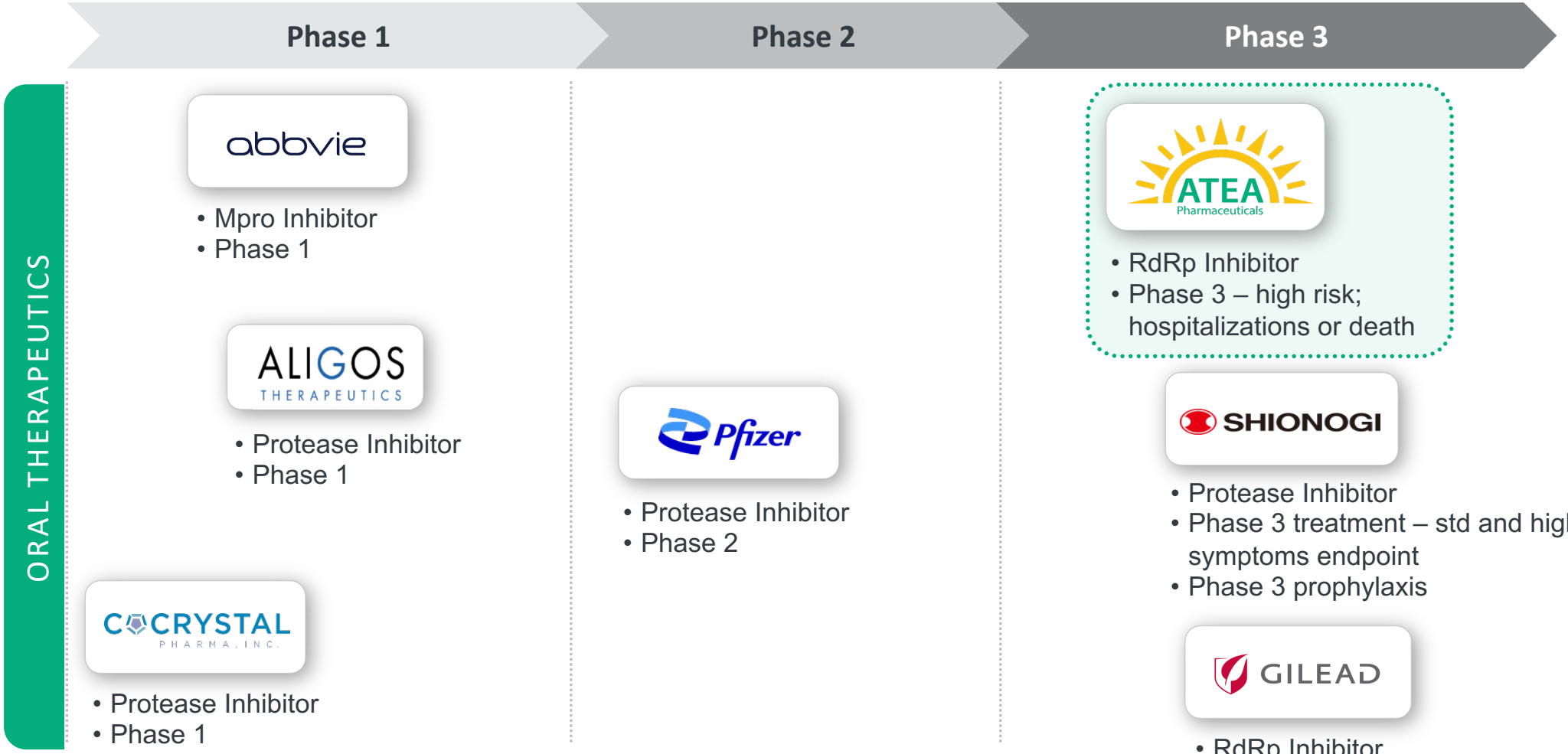
- COVID-19 related hospitalizations and deaths
- Medically attended visits
- Symptom rebound / relapse
- Viral load rebound

COVID-19

- US Oral Antiviral Landscape and Market Opportunity for COVID-19

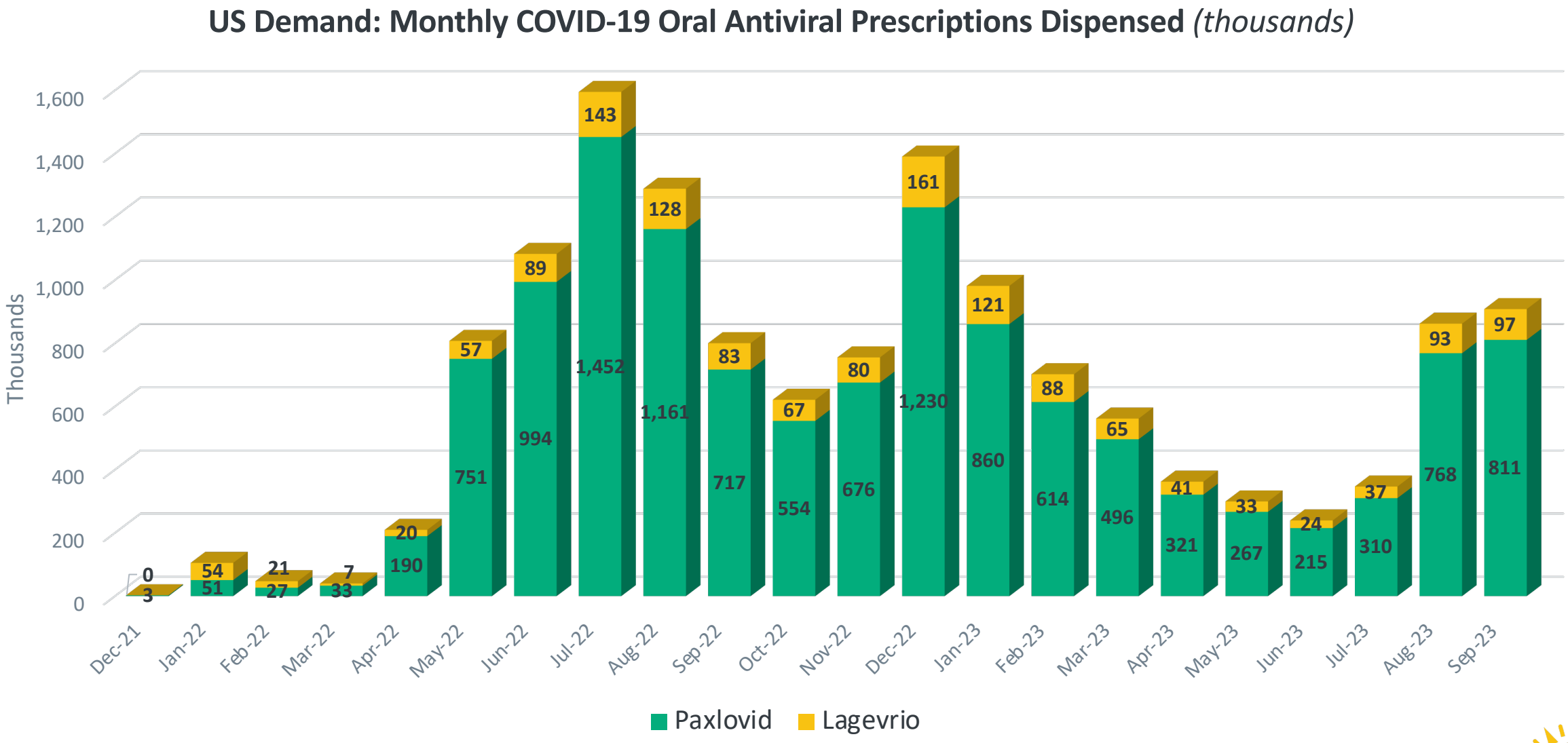
COVID-19 Oral Antiviral Therapeutic Landscape

Active Clinical Development Programs, Under US FDA Review, Standard & High-Risk



Source: Company Websites

US TRx Demand for COVID-19 Oral Antivirals Correlates with Infections



Source: IQVIA NPA Sep 2023

US Market Expected to Remain a Long-Term Multi-Billion Dollar Opportunity

Projected Annual US COVID-19 Oral Antiviral (OAV) Retail Demand[1]

~7M+
Annual US Retail Rxs
Annualized COVID-19 OAV Rxs[1]

× **Cost of Treatment[2]**
($1,390)

= **~$10B**

Expanded Market Opportunities

Paxlovid™ Drug-Drug Interactions are a Concern

Annual US retail prescriptions (2022)[3] for commonly used drug classes where Paxlovid DDI is a concern

Cancer Therapies	Immunosuppressants & Immunomodulators	Oral Corticosteroids	HIV Antivirals	Anti Coagulants	Anti Arrhythmics	Calcium Blockers	Seizure Medications	Anti Psychotics
11M	13M	123M	10M	74M	10M	113M	166M	71M

- **Better safety and tolerability profile could lead to broader use**
- **Increased promotion & awareness**
- **No testing needed for prescription**

(1) IQVIA TRxs for Paxlovid and Lagevrio from Jan'23–Sep'23 annualized for full year
(2) Cost of Treatment per Rx for both Paxlovid and Lagevrio assumed at the Pfizer announced price of $1,390
(3) IQVIA TRxs for 2022

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HEPATITIS C

Potential Best-in-Class Pan-Genotypic Regimen

- Phase 2 Open Label Study of Bemnifosbuvir and Ruzasvir for HCV

Phase 2 Open Label Clinical Study Update

Bemnifosbuvir + Ruzasvir: Potential Best-in-Class Pan-genotypic Regimen

- **Update:** Completed enrollment for 60-patient lead-in cohort; results expected Q1 2024
- ~50 clinical sites in ~15 countries planned for completion of Phase 2 study
- Laying groundwork for Phase 3 study, initiation anticipated Q4 2024

Bemnifosbuvir + Ruzasvir Compelling Profile

Convenient and potential short duration protease inhibitor-free treatment

Potential for first RBV-free therapy for decompensated disease

- ✓ Bemnifosbuvir is being developed as the most potent nucleotide inhibitor for HCV[1]
- ✓ Ruzasvir, a NS5A inhibitor, is a highly potent drug candidate[2]

1. PLoS ONE 15(1):e0227104 https://doi.org/10.1371/journal.pone.0227104 2. Journal of Viral Hepatitis, 2019, September:26 (9); 1127-1138.

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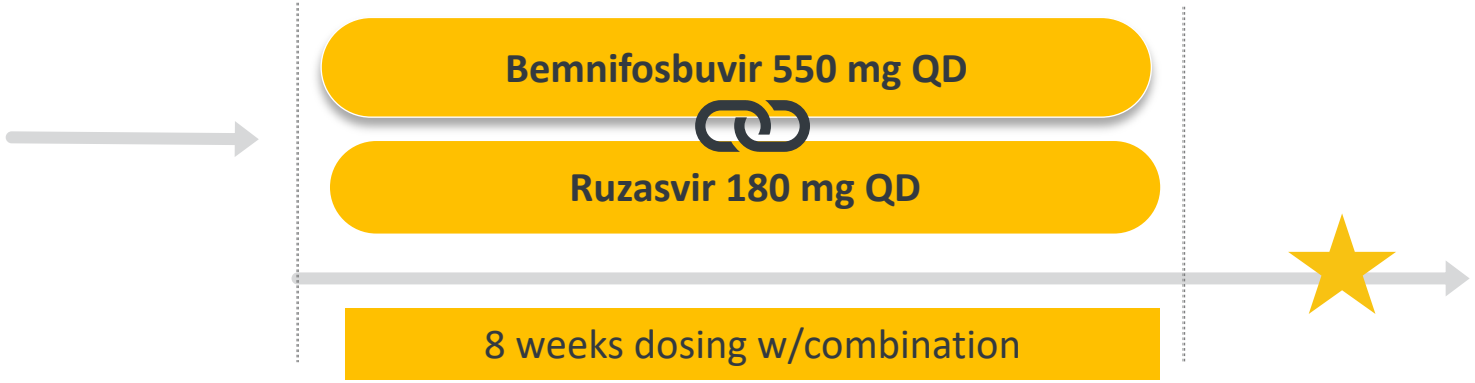
Phase 2 Open Label Study of Bemnifosbuvir + Ruzasvir in HCV Patients

Study Design: Open label combination

N=280: including a lead-in cohort of n=~60



Patient Population:

- HCV-infected patients, including compensated cirrhosis
- Direct-acting antiviral naïve
- All genotypes

60-patient Lead-in Cohort:

- Safety and tolerability
- Sustained virologic response (SVR) at Week 4 post-treatment (SVR4)

Primary Endpoints:

- SVR at Week 12 post-treatment (SVR12)
- Safety

Other Endpoints:

- Virologic failure
- SVR24
- Resistance

Financial Summary

Financial Update Third Quarter 2023

Condensed Consolidated Statement of Operations and Comprehensive Income (Loss)
(in thousands, except share and per share amounts)
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Operating expenses				
Research and development	$ 28,181	$ 4,905	$ 79,198	$ 54,396
General and administrative	12,604	11,376	38,391	36,355
Total operating expenses	40,785	16,281	117,589	90,751
Loss from operations	(40,785)	(16,281)	(117,589)	(90,751)
Interest income and other, net	7,864	4,382	21,466	5,560
Loss before income taxes	(32,921)	(11,899)	(96,123)	(85,191)
Income tax benefit (expense)	(221)	3,833	(669)	3,713
Net loss	$ (33,142)	$ (8,066)	$ (96,792)	$ (81,478)
Other comprehensive income (loss):				
Unrealized gain (loss) on available-for- sale investments	48	(855)	422	(855)
Comprehensive loss	$ (33,094)	$ (8,921)	$ (96,370)	$ 82,333
Net loss per share – basic and diluted	$ (0.40)	$ (0.10)	$ (1.16)	$ (0.98)
Weighted-average common shares used in computing net loss per share – basic and diluted	83,399,769	83,258,537	83,374,328	83,231,146

Financial Update Third Quarter 2023

Selected Condensed Consolidated Balance Sheet Data
(in thousands)
(unaudited)

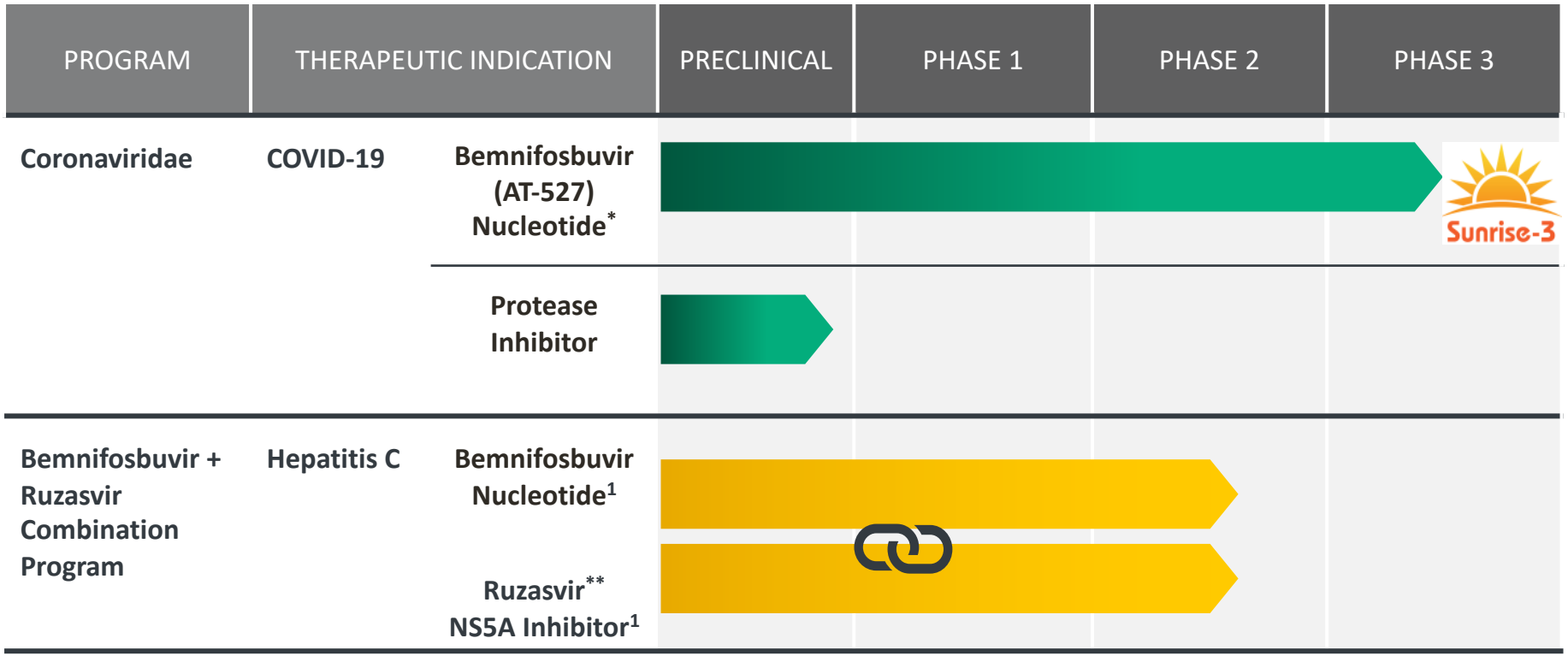
	September 30, 2023	December 31, 2022
Cash, cash equivalents and marketable securities	$ 595,126	$ 646,709
Working capital(1)	584,423	642,444
Total assets	608,075	666,708
Total liabilities	26,345	26,136
Total stockholders' equity	581,730	640,572

(1) The Company defines working capital as current assets less current liabilities. See the Company's condensed consolidated financial statements in its Quarterly Report on Form 10-Q for the three months ended September 30, 2023 for further detail regarding its current assets and liabilities.

Closing Remarks

Focused Antiviral Pipeline, Fully Funded Through Key Inflection Points

✓ Advancing innovative oral therapeutics that address the unmet medical needs of patients with serious viral diseases



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