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. All statements other than statements of historical facts contained in this presentation are forward-looking statements, including statements by 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; planned 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 approved products; research and development costs; current and prospective collaborations, including our collaboration with Roche and potential milestones thereunder; 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.
Emerging Variants and New Waves of Infection Require Multipronged Approach

AT-527 Being Evaluated for COVID-19

**Variants** have and will continue to emerge; significantly increased transmission with Delta variant.

**Vaccine** Vaccines have variable uptake globally, susceptible to variant (Delta) breakthroughs, data collection ongoing around need for boosters.

**Antibody** Antibodies can be invasive, administered in clinical setting, variable efficacy with emerging variants.

AT-527 targets SARS-CoV-2 RNA polymerase (nsp12), a highly conserved gene, thus potentially limiting impact of naturally-evolving variants.

Future potential coronaviruses

VARIANTS

VACCINE EFFICACY

ANTIBODY EFFICACY

AT-527
AT-527 Addresses Key Challenges of COVID-19: Oral Pill with MOA Designed to Inhibit Viral Replication

- Oral, target specific, direct-acting antiviral (DAA)
- Targets viral RNA polymerase, highly conserved enzyme critical to viral replication
- Unique dual mechanism: Inhibits both NiRAN and RdRp, potentially creating a high barrier to resistance and providing broad antiviral coverage to coronaviruses and different variants of SARS-CoV-2
- Rapid reduction in viral load leading to viral clearance demonstrated in Phase 2 study in hospitalized patients
- Generally safe and well tolerated (no drug related SAEs or discontinuations)
- Targeting outpatient settings for treatment & prophylaxis and hospitalized use
- Global collaboration with Roche with multiple clinical trials advancing in parallel, including global Phase 3 MORNINGSKY trial

Nsp12 Functional Domains SARS-CoV-2

\[
\text{RdRp} = \text{RNA-dependent RNA polymerase} \\
\text{NiRAN} = \text{Ni4dovirus RdRp-Associated Nucleotidyltransferase}
\]
Clinical Development Update

Additional Phase 2 Interim Results and New Phase 1 and Nonclinical Data
## COVID-19: Multiple Clinical Trials Active & Reporting Results in 2021 & 2022

<table>
<thead>
<tr>
<th>TRIAL</th>
<th>DESCRIPTION</th>
<th>TIMING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 1</strong>&lt;br&gt;Healthy Volunteers</td>
<td>PK safety study, clinical pharmacology, standard drug-drug interaction trials and dosing up to 1100 mg BID</td>
<td>Positive results announced with first cohort; Ongoing studies</td>
</tr>
<tr>
<td><strong>Phase 2</strong>&lt;br&gt;Hospitalized Patients with Moderate COVID-19</td>
<td>Safety, tolerability, and virology</td>
<td>Ongoing&lt;br&gt;2Q 2021 Reported Positive Interim Virology Results</td>
</tr>
<tr>
<td><strong>Phase 2 MOONSONG</strong>&lt;br&gt;Outpatient Trial&lt;br&gt;Mild to Moderate Patients +/- Risk Factors</td>
<td>Antiviral activity of AT-527 compared with placebo in outpatients&lt;br&gt;Safety, PK, PK/PD</td>
<td>Ongoing&lt;br&gt;2H 2021 Interim Virology Data Anticipated</td>
</tr>
<tr>
<td><strong>Phase 3 MORNINGSKY</strong>&lt;br&gt;Outpatient Global Trial*</td>
<td>Time to alleviation of symptoms/medically attended visits, mortality and virological endpoints</td>
<td>Ongoing&lt;br&gt;2H 2021 Results Anticipated</td>
</tr>
<tr>
<td><strong>Phase 3 Follow-on MEADOWSPRING</strong>&lt;br&gt;Long-Term Follow-on Study</td>
<td>Evaluate AT-527 impact on long-term sequelae of COVID-19 patients previously enrolled in MORNINGSKY</td>
<td>Ongoing&lt;br&gt;2Q 2021 Initiated</td>
</tr>
<tr>
<td><strong>Supplemental Phase 3 MARJORAM</strong>&lt;br&gt;Prophylaxis Study*</td>
<td>Evaluate efficacy of AT-527 preventing infection in SARS-CoV-2 contacts of patients</td>
<td>2H 2021 Anticipated Initiation</td>
</tr>
</tbody>
</table>

*Country-by-country specific details to be finalized following consultation with applicable regulatory authorities.*
Global Phase 2 Trial COVID-19: Hospitalized Setting in Moderate Patients

**Inclusion Criteria:** adult patients (≥ 18 years old) with risk factors (obesity, diabetes, hypertension), symptoms for ≤ 5 days

**Countries:** Global Study

**Primary and Key Secondary Objectives:**
- Safety and tolerability
- Virology endpoint
- Reduction in progressive respiratory insufficiency
- Improvement vs. worsening in the NIAID ordinal scale of overall clinical status
- Time to clinical recovery
- Duration of hospitalization
- Time to non-detectable SARS-CoV-2
- PK/PD substudy

**AT-527 Treatment (n=95) Randomization Placebo (n=95)**

**Double-blind oral administration: 5 days**

**Next Steps:**
- Part A – 550 mg BID completed; results announced
- Based on evolving COVID-19 environment (limited progression respiratory insufficiency) and study design, amending protocol to virology as the primary endpoint
- Part B – second cohort up to 110 patients; exploring alternative doses
Key Baseline Characteristics of Global Phase 2 Study in Hospitalized Patients:
*Evaluation of AT-527 in Diverse Global Population and Virus Variants*

- **Diverse Global Population:**
  - Broad virus lineage, with > 20 variants including variants of concern, Alpha and Beta
  - Global footprint in 7 countries in North America, Europe, African, and South America, representing a wide geographic distribution

- To date, the only predominant mutation that has emerged in the RNA polymerase is the P323L mutation. At baseline, 98% of patients sequenced had that specific mutation and responded to AT-527 treatment

- 46% of patients were SARS-CoV-2 seropositive (IgM) at baseline and were equally distributed across treatment arms. As expected, seropositive patients had lower baseline viral load
Global Phase 2 Hospitalized Study Interim Results for COVID-19: Rapid and Sustained Decrease in Viral Load in All Evaluable Patients

Viral load decline is consistent with decreasing SARS-CoV-2 viral replication.

Earlier PCR negativity may lead to faster recovery time while minimizing transmission of infection.
Global Phase 2 Hospitalized Study Interim Results for COVID-19: Rapid and Sustained Viral Load Decrease in Patients with Baseline Viral Load Greater than Median of 5.26 Log_{10} (Median Value)

Viral load decline is consistent with decreasing SARS-CoV-2 viral replication

Earlier PCR negativity may lead to faster recovery time while minimizing transmission of infection
Global Phase 2 Hospitalized Study Interim Results for COVID-19: Viral Clearance of SARS-CoV-2 RNA in Patients with Higher Baseline Viral Load (≥ Median) is Faster in Patients Treated with AT-527 vs Placebo

New Data: BLQ

Below Limit of Quantification (BLQ)

Target Non-Detectable (TND)

Earlier PCR negativity may lead to faster recovery time while minimizing transmission of infection

BLQ = Below limit of quantification (TaqPath LOQ < 500 copies/mL [2.7 log_{10}])

TND = Target Non-Detectable being BLQ and no SARS-COV-2 RNA detected
**Evaluation of Drug Levels in Lung Lining Fluid (BAL* Study) in Healthy Volunteers:**

**Target Drug Level Achieved in Lungs; Key Site for Infection & SARS-Cov-2 Replication**

AT-527 550 mg BID regimen led to plasma and intrapulmonary (epithelial lining fluid, ELF) levels of AT-273 (surrogate of the active triphosphate (TP) metabolite) exceeding the target concentration of 0.5 μM or 150 ng/mL (corresponding to \textit{in vitro} EC\textsubscript{90} of the drug for inhibition of viral replication) at 4 hrs.

**Steady-State Plasma v. ELF AT-273 Troughs**

**Antiviral levels in the lungs** where SARS-CoV-2 replicates is critical for any treatment or prophylaxis for COVID-19.

**Active triphosphate of AT-527 formed in the lungs at concentrations that inhibits SARS-Cov-2 replication**

*BAL = Bronchoalveolar Lavage*
New Preclinical and Clinical Results: Expanding AT-527’s Profile

- Analysis of SARS-CoV-2 infected cells treated with AT-511 (the free base of AT-527) by next generation sequencing (NGS) confirmed that AT-527 is not a mutagen and does not introduce mutations in the viral genome.

- A new drug-drug interaction study in healthy volunteers indicates that no dose adjustment should be necessary for co-administration of drugs that are CYP3A substrates as AT-527 is a weak inhibitor of CYP3A.
Global Phase 2 MOONSONG Study for COVID-19: *Outpatient Setting in Mild to Moderate Patients +/- Risk Factors*

**Inclusion Criteria:** > 18 yrs old, SARS-CoV-2 positive 72 hrs prior to randomization, mild-to-moderate COVID-19 patients in outpatient setting

**Countries:** Global Study

**Primary and Secondary Objective:**
- To evaluate antiviral activity of AT-527 compared with placebo
- Up to 220 patients
- Safety, PK, PK/PD

**Next Steps:**
- Interim virology analysis on multiple ongoing cohorts with varying doses

**Randomization**
- Placebo
- Double-blind oral administration: 5 days

**Multiple Cohorts AT-527**

**2H / 21 Interim Virology Data**
Global Phase 3 MORNINGSKY Trial for COVID-19: Outpatient Setting in Mild to Moderate Patients +/- Risk Factors

**Inclusion Criteria:** Patients eligible for management in an outpatient setting

**Objectives:**
- Time to alleviation or improvement of COVID-19 symptoms
- Medically attended visits (including hospitalization)
- Mortality
- Virological endpoints

**Status:**
- Patients actively enrolling globally
  - Additional CTAs pending
- Patients have option to roll over to Phase 3 MEADOWSPRING follow-on study to evaluate AT-527 impact on long-COVID

**Randomization**
- 2:1 ratio
- AT-527 550 mg BID (n~950)
- Placebo BID (n~450)

**Double-blind oral administration:** 5 days

**2H / 21 Anticipated Results**
AT-527

AT-527 COVID-19 Broad Commercial Opportunities
AT-527 US Commercial Opportunity for COVID-19: *Multiple Revenue Opportunities*

**Treatment of Symptomatic Disease**
Symptomatic patients with active disease

**Treatment of Asymptomatic Disease**
Asymptomatic COVID patients identified through consumer, employer and institutional proactive testing

**Government Purchase**
Supply contract
Stockpile contract post NDA

**Prophylaxis**
Pre-exposure opportunities during an outbreak or travel to endemic areas
Post-exposure prevention in family or business setting
AT-752

Clinical Proof-of-Concept Program for Dengue Fever
Phase 1a and Phase 1b Clinical Studies* for the Treatment of Dengue Fever:

**Phase 1a SAD Completed; MAD Initiated**

### Phase 1a

**Inclusion Criteria:** healthy volunteers, sequential dose-escalation

**Country:** Australia

**Objectives:** Safety and PK (with embedded food effect)

- Phase 1a study initiated March 2021
- Part I: Single ascending dose cohort completed
- Part 2: Multiple dose QD and BID for 7 days initiated

### Phase 1b

**Inclusion Criteria:** adults with dengue infection

**Location:** dengue endemic regions/research institutions

**Objectives:** Antiviral activity, viral kinetics, safety and PK

---

AT-752 Dose SAD
AT-752 Dose MAD
Placebo QD & BID

**Randomization**

Double-blind oral administration: up to 7 days

**1Q / 21 Initiated**

AT-752 Dose A
AT-752 Dose B
AT-752 Dose C
Placebo

**Randomization**

Double-blind oral administration: up to 7 days

**2H / 21 Initiation**

*Details to be finalized following consultation with regulatory authorities.
Financial Summary and Closing Remarks
# Condensed Consolidated Statement of Operations and Comprehensive Income
(in thousands, except share and per share data)
(UNAUDITED)

<table>
<thead>
<tr>
<th></th>
<th>Three Months Ended June 30,</th>
<th>Six Months Ended June 30,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2021</td>
<td>2020</td>
</tr>
<tr>
<td>Collaboration revenue</td>
<td>$ 60,391</td>
<td>$ ---</td>
</tr>
<tr>
<td>Operating expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research and development</td>
<td>39,803</td>
<td>7,755</td>
</tr>
<tr>
<td>General and administrative</td>
<td>11,901</td>
<td>2,248</td>
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<tr>
<td>Total operating expenses</td>
<td>51,704</td>
<td>10,003</td>
</tr>
<tr>
<td>Income (loss) from operations</td>
<td>8,687</td>
<td>(10,003)</td>
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<tr>
<td>Interest income and other, net</td>
<td>52</td>
<td>10</td>
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<tr>
<td>Income (loss) before income taxes</td>
<td>8,739</td>
<td>$ (9,993)</td>
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<tr>
<td>Income tax expense</td>
<td>(7,200)</td>
<td>---</td>
</tr>
<tr>
<td>Net Income (loss) and comprehensive income (loss)</td>
<td>$ 1,539</td>
<td>$ (9,993)</td>
</tr>
</tbody>
</table>

Net income (loss) per share attributable to common stockholders

<table>
<thead>
<tr>
<th></th>
<th>Basic</th>
<th>Diluted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ 0.02</td>
<td>$ (0.99)</td>
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</tbody>
</table>

Weighted-average shares outstanding

<table>
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<tr>
<th></th>
<th>Basic</th>
<th>Diluted</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>82,743,530</td>
<td>10,093,689</td>
</tr>
<tr>
<td></td>
<td>82,662,019</td>
<td>88,683,767</td>
</tr>
<tr>
<td></td>
<td>10,093,689</td>
<td>10,093,689</td>
</tr>
</tbody>
</table>
The cash balance at June 30, 2021 does not include the $50 million milestone payment realized under the license agreement Atea entered into with F. Hoffmann-La Roche Ltd. and Genentech, Inc. in October 2020 ("Roche License Agreement"), which was received in July 2021.
# Proprietary Platform Generates Deep Antiviral Pipeline

**Multiple Programs for Life-Threatening Viral Diseases Advancing in Parallel**

<table>
<thead>
<tr>
<th>ssRNA VIRUS</th>
<th>THERAPEUTIC INDICATION</th>
<th>DISCOVERY</th>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronaviridae</td>
<td>COVID-19</td>
<td>AT-527(^1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flaviviridae</td>
<td>Dengue</td>
<td>AT-752(^2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Hepatitis C</strong></td>
<td><strong>AT-787(^3)</strong> (fixed-dose combo of AT-527&amp;777)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>AT-527 (NS5B inhibitor)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>AT-777 (NS5A inhibitor)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paramyxoviridae</td>
<td>RSV</td>
<td>AT-889 &amp; Others</td>
<td></td>
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</tr>
</tbody>
</table>

### HIGHLIGHTS

- AT-527 efficacy results 2021-2022
- Projected near-term launch of AT-527, an oral DAA for COVID-19
- Multiple value-driving milestones over the next 18-months in several therapeutic indications
- $816.5 million in cash & cash equivalents as of 6/30/21 (does not include the $50M milestone payment realized under Roche License Agreement, which was received in July 2021.)
- Cash runway through 2023

\(^1\) Ex-US development and commercialization rights (other than for certain hepatitis C virus uses) licensed to Roche.

\(^2\) Rights to develop and manufacture globally and to commercialize in the US for Dengue, among other viruses, retained. Ex-US commercialization subject to agreement with Roche.

\(^3\) AT-787 is our selected product candidate for the treatment of HCV.
Q & A Session