

Delivering Novel Anti-Viral Therapies to Patients with Weakened Immune Systems



March 2024

#### **AICURIS AT A GLANCE**





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Executive management and prize-winning R&D team with direct experience bringing antivirals to market

Delivering precision therapies for a growing population of immunocompromised

revenue generating commercial product, PREVYMIS<sup>®1</sup>

product launch in 2026

designed to treat recurrent and resistant HSV infections

people in need for effective treatment options for otherwise manageable infections

Privately held, cash-flow positive, late-stage biopharmaceutical company with

Pivotal phase 3 candidate Pritelivir with Breakthrough Therapy Designation

Multiple upcoming inflection points, and limited projected cash need until

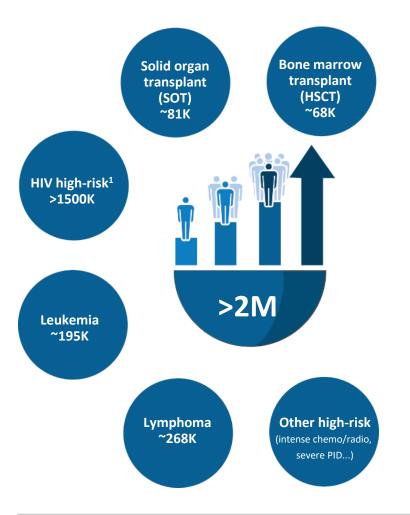


Germany-based with recently formed US subsidiary to prepare for expected US commercial launch of Pritelivir

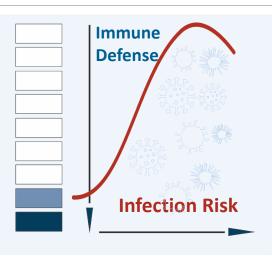


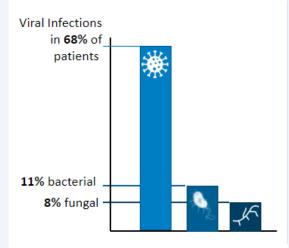
#### HIGH MEDICAL NEED FOR ANTIVIRALS

#### A growing number of patients are severely immunocompromised



- Multiple diseases are directly associated with severe immune deficiencies or require immunosuppressive treatments
- Novel and aggressive treatments to prolong life expectancy lead to prolonged immunosuppression
- Population of severely immunocompromised patients is growing rapidly (e.g., HSCT growing at 11.2% CAGR<sup>2</sup>; SOT at 3.7%<sup>3</sup>)
- In addition, >1B patients are moderately immunocompromised (e.g., patients with cancer, chronic or autoimmune diseases)
- Recurrent viral infections lead to severe disease and mortality in many patients







Patient numbers are shown as new cases per year for the 7 major markets (US, China, Japan, Germany, France, Italy, UK; references on file), developing countries not referenced.

<sup>2</sup>www.coherentmarketinsights.com/press-release/hematopoietic-stem-cell-transplantation-market-3658. <sup>3</sup>United Network for Organ Sharing (www.unos.org).

<sup>1</sup> Based on low CD4 T cell count (multiple references on file)

#### FOCUSED R&D PIPELINE WITH LATE-STAGE LEAD ASSET

HSV treatment		Pre-Clinical	Phase 1	Phase 2	Phase 3	Market	Rights	
Pritelivir (AIC316)	፟፟፟፟፟	Immunocompromised, Acyclovir-resistant pts						AiCuris Anti-infective Cures

#### **BKV** treatment

AIC468
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#### AdV treatment



#### HCMV prophylaxis



#### کے Small Molecule شمس Antisense oligonucleotide

Merck & Co., Inc., Rahway, NJ, USA (Hereinafter MSD)



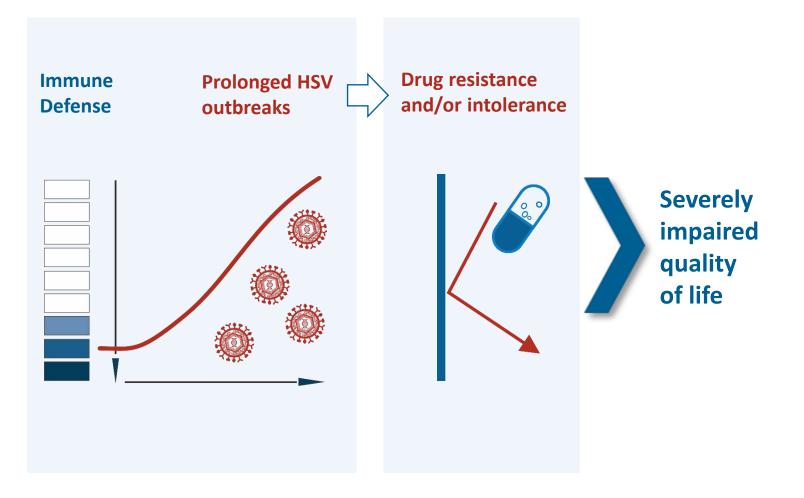
## 01

### Pritelivir (AIC316)



#### PRITELIVIR AIMS TO SOLVE HIGH MEDICAL NEED IN IMMUNOCOMPROMISED PATIENTS

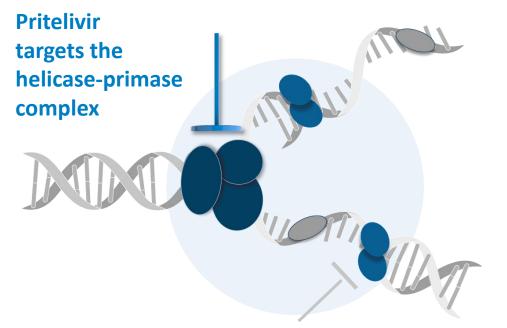
- 3.7B & 0.5B people latently infected with HSV-1 & HSV-2, respectively<sup>1</sup>
- HSV manifests in genital and labial herpes, keratitis, encephalitis, disseminated disease and neonatal herpes
- More frequent, prolonged and severe manifestations in immunocompromised (IC) patients
- Up to 27%<sup>2</sup> of IC patients develop drug resistances and are at risk for disseminated disease
- Increased hospitalization rates due to painful mucocutaneous lesions





#### PRITELIVIR IS DESIGNED TO TREAT PATIENTS WITH DRUG-RESISTANT INFECTIONS

A small molecule inhibiting viral replication of HSV-1 and HSV-2 via a novel mechanism

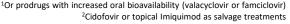


Nucleoside analogs (standard-of-care)

inhibit the HSV DNA polymerase

- Differentiated from standard-of-care and rescue therapy by:
  - Favorable bioavailability and half-life, allowing for once-a-day dosing in an oral application
  - Superior risk/benefit ratio and safety profile to Foscarnet
  - Lower propensity of resistance compared to Acyclovir







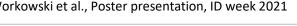
#### PRITELIVIR OBTAINED FDA BREAKTHROUGH THERAPY DESIGNATION (BTD)

#### Phase 2 data demonstrated a favorable safety profile and lesion healing in majority of patients

- Higher healing rate observed vs. Foscarnet in Acyclovir-resistant patients
- **Favorable safety profile:** No drug-related AEs in Acyclovir-resistant patients
- Healing also demonstrated in dual-resistant patients with highest unmet need and no approved treatment options



Healing r	ates after treatment	Acyclovir-resistant infection > After Pritelivir treatment				
Healing Rates	Pritelivir	Foscarnet				
Acyclovir-resistant Pts	<b>93%</b> (14/15 pts)	<b>57%</b> (4/7 pts)		1		
Dual-resistant <sup>1</sup> Pts	<b>63%</b> (5/8 pts)	N.A		>		
<sup>1</sup> Acyclovir-resistant and foscarnet-resistar	Workowski et al., Poster presentation, ID week 20					



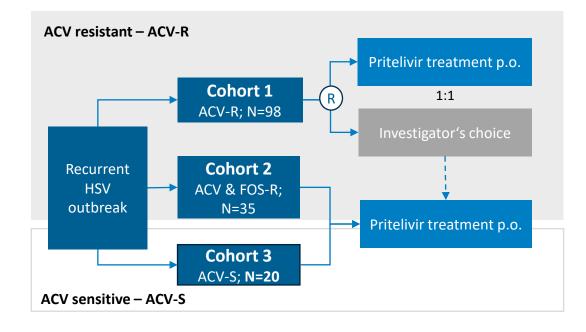


#### **PRITELIVIR PHASE 3 TRIAL IS ACTIVELY ENROLLING PATIENTS**

#### NDA filing planned for 2H2025

Randomized, open-label, multi-center trial enrolling 153, mostly acyclovir-resistant, immunocompromised patients

#### Trial design

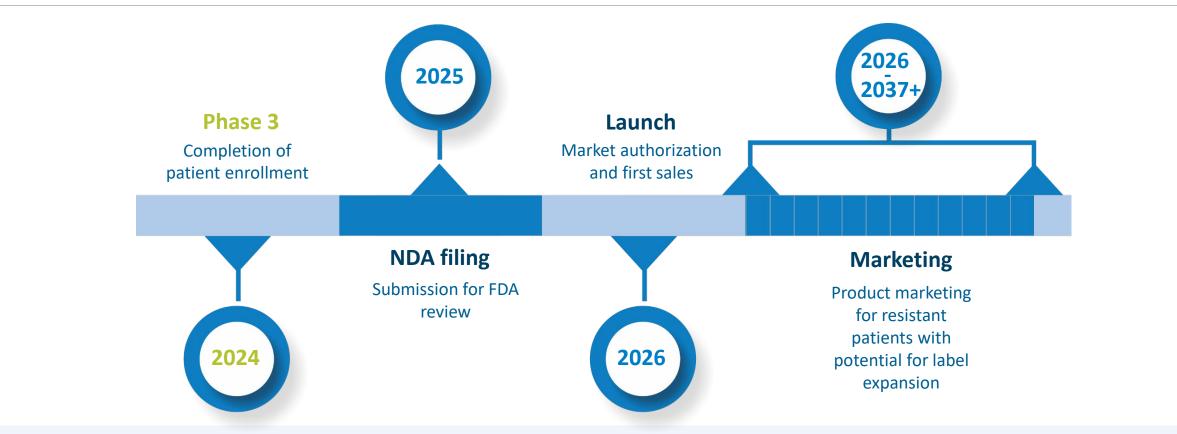


- Primary Endpoint: Healing rate of lesions (day 28)
- Secondary Endpoints:
  - Several efficacy endpoints including healing rate of lesions (day 42), time to healing, recurrence & resistance rate
  - Several safety endpoints including rates of chronic kidney disease, renal impairment, other AEs, discontinuation, and resource utilization
- Global study with 70 sites in 14 countries





#### PRODUCTIVE ONGOING DIALOGUE WITH FDA FOR RAPID PATH TO MARKET

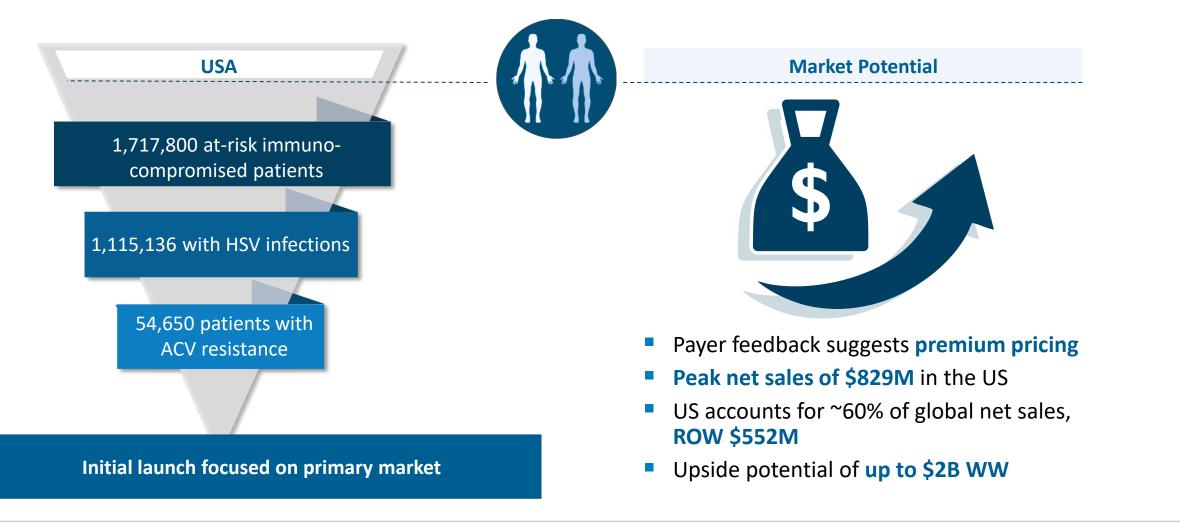


#### Launch Preparation ongoing

- Ongoing FDA dialogue facilitated by Breakthrough Designation
- Medical Awareness activities started

- CMC registration/validation batches successfully manufactured
- AiCuris US presence established

#### SIGNIFICANT MARKET POTENTIAL IN IMMUNOCOMPROMISED PATIENTS

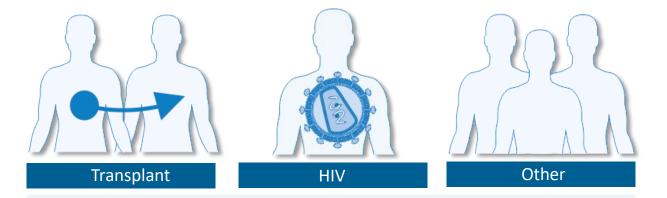


🔂 AiCuris

#### PRITELIVIR IS WELL POSITIONED TO FILL RELEVANT GAPS IN A HIGH-NEED MARKET

#### Early Access Program ongoing:

- >85 patients with more than 130 outbreaks treated in 12 countries
- Majority are transplant (57%) or HIV-infected (25%) patients
- Interim analysis: 31 out of 44 evaluable patients with documented healing of lesions (70%)<sup>1</sup>



Results confirming data from Phase 2 trial, de-risking Phase 3 analysis



#### **Resistance-breaking**



Favorable **safety and efficacy** profile



**Oral administration,** no hospitalization required



Accelerated development path (FDA Breakthrough Designation)



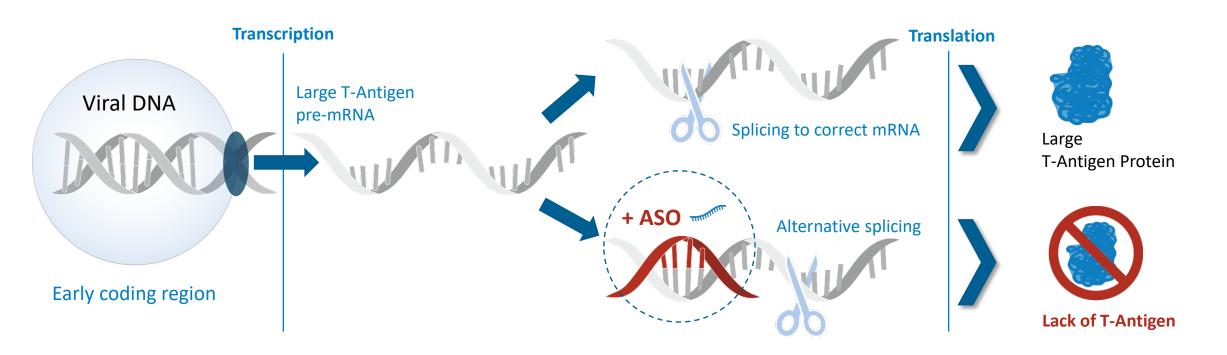
# 02

### AIC468



#### AIC468 IS A SECOND-GENERATION ANTISENSE OLIGONUCLEOTIDE TARGETING BK VIRUS

Aiming to protect against severe conditions caused by BKV reactivation in SOT and HSCT patients

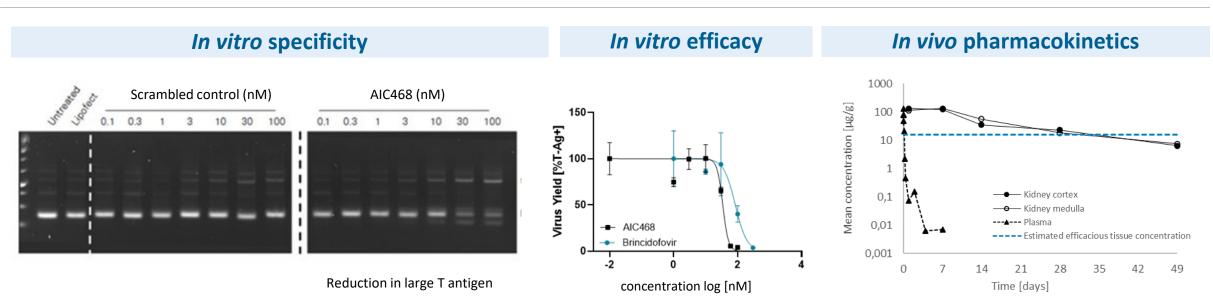


- As a direct-acting agent, AIC468 targets the virus intracellularly
- Inhibition of correct splicing prevents formation of large T-Antigen
- The large T-Antigen is essential for BK virus replication



#### **CLINICAL TRIAL APPLICATION APPROVED Q1 2024**

#### Supported by preclinical data



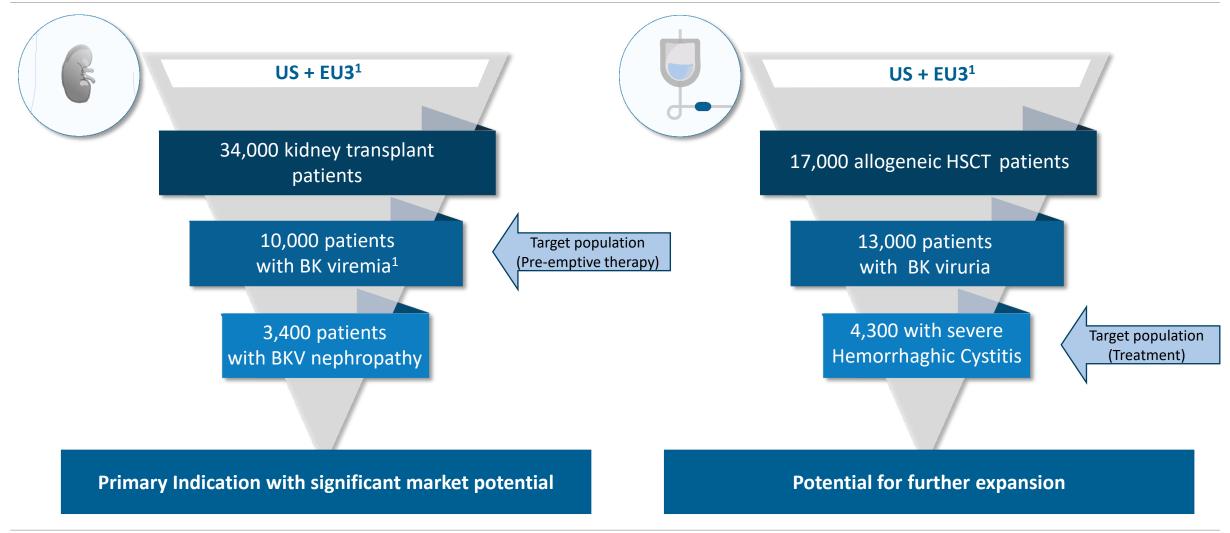
- AIC468 significantly reduces large T-Antigen expression and inhibits BKV replication in vitro in a dose-dependent manner
- Pharmacokinetic studies in mini pig model demonstrated biodistribution to kidney tissue and coverage of estimated effective dose over more than 3 weeks
- First indication of *in vivo* efficacy: Reduction of T-Antigen was observed in a pilot study in a BKV-Tat transgenic mouse model
- First-in-human trial starts mid 2024: Adaptive trial design combining a single and a multiple ascending dose escalation to investigate safety and tolerability; enrollment of N≥80 healthy individuals within 12 months planned





#### AIC468 INITIAL LAUNCH PLANNED IN KIDNEY TRANSPLANT PATIENTS

#### With potential to expand to human stem cell transplants (HSCT)



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Market research Trinity, multiple references (on file at AiCuris). <sup>1</sup>Germany, France, and Italy



#### AIC468 IS IDEALLY POSITIONED TO TACKLE BK VIRUS-RELATED SEVERE CONDITIONS

#### Intracellular approach with novel mode-of-action

- Overcomes limitations of other approaches in development (antibodies, cellular immunotherapies)
- Significant market potential in kidney transplant patients, option to expand to bone marrow transplant (HSCT) patients
- US patent granted Q2 2023
- GMP grade drug substance successfully manufactured
- Clinical trial application approved in Q1 2023
- Phase 1 single and multiple ascending dose study starts mid 2024



AiCuris and Hybridize Therapeutics entered worldwide license agreement for a direct-acting RNA-based therapy against BK Virus in 2022



**Novel ASO approach** with direct anti-viral activity



**Preclinical data package** warranted clinical trial application



**Fast development track** in niche indication



# 03

### PREVYMIS<sup>®</sup> (Letermovir)



#### PREVYMIS® (LETERMOVIR) PROTECTS IMMUNOCOMPROMISED TRANSPLANT PATIENTS

#### First-and-only marketed treatment to prevent HCMV reactivation



Perceived by the medical community as **"Game Changer"** in acute hospital care. HCMV reactivation in 60-70% of seropositive transplant patients can lead to severe conditions and death

- PREVYMIS<sup>®</sup> (Letermovir) prevents HCMV reactivation in transplant patients
- Approved and marketed for HSCT patients in 60 countries by MSD
- Label recently expanded for kidney transplant patients in the US and EU
- AiCuris participates in commercial success by royalty and milestone payments



>\$600M Net Sales in 2023 Quarterly royalty stream to AiCuris



Approved for prophylactic treatment of immunocompromised patients



**New viral target** with no human counterpart

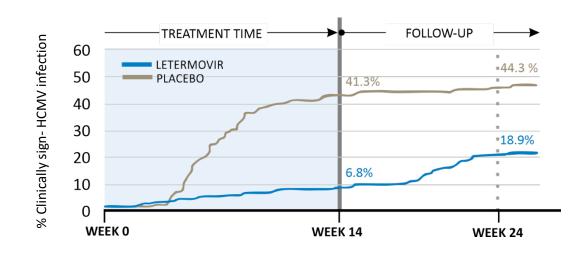


#### Initial Launch in HSCT supported by Safety & Efficacy Data<sup>2</sup>



**HSCT** 

- **Efficacy:** Prevention of symptomatic HCMV infection starting with day 1 of treatment
- Safety: Comparable safety profiles in Letermovir and placebo-controlled patients
- Improvement of all-cause mortality 24 weeks after start of treatment



#### **Two additional Phase 3 trials met Primary Endpoint**



- HSCT Phase 3 trial demonstrated improved outcomes with longer treatment duration (200d)
- **sNDA approved** in Q3 2023



- **Kidney transplant Phase 3 trial** met primary endpoint and showed noninferiority to valganciclovir with superior tolerability
- sNDA approved in Q2 2023



#### PREVYMIS® (LETERMOVIR) GENERATED \$605M NET SALES IN 2023

Ongoing label extensions will open additional market opportunities

#### Prophylactic treatment (100d) of CMV-seropositive HSCT patients 200 180 160 157 140 143 120 129 mio. USD 118 100 103 +41% 80 60 40 20 32 01.2019 02.2019 03.2019 04.2019 3.2023 QA.2023

#### Net sales increasing year over year

#### Additional market opportunities:

- HSCT patients with longer treatment duration (200d), sNDA approved in the US and EU
- Kidney transplant patients; sNDA approved in the US and EU; submitted in other countries
- US and EU pediatric filing expected in 2024
- Investigator-initiated trials in other solid organ transplants (SOT), neonates, HIV and ICU patients might drive additional upside



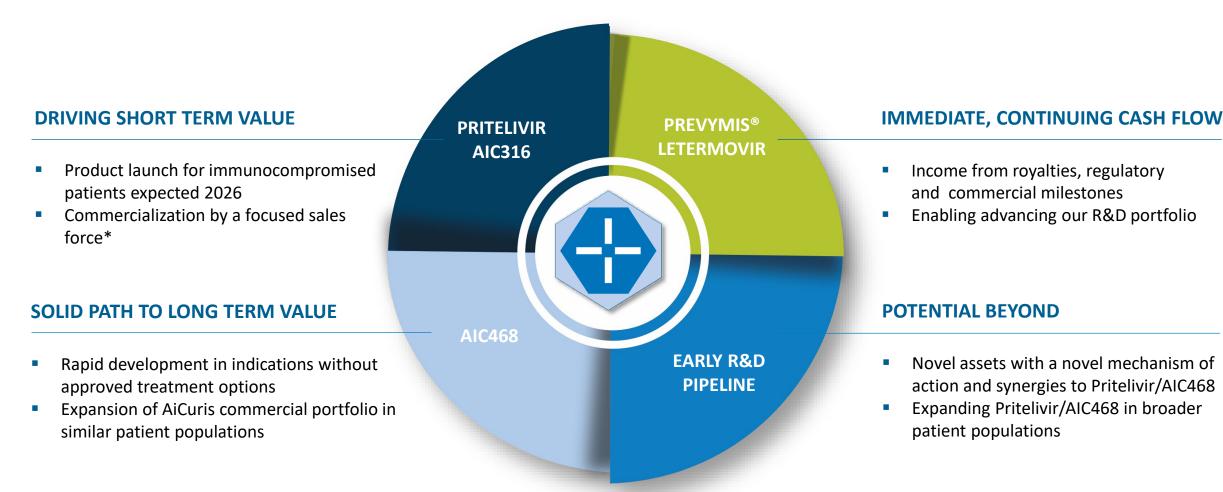
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### Corporate



#### **DRIVING VALUE THROUGH R&D AND COMMERCIALIZATION**

#### With focus on defined immunocompromised patient population

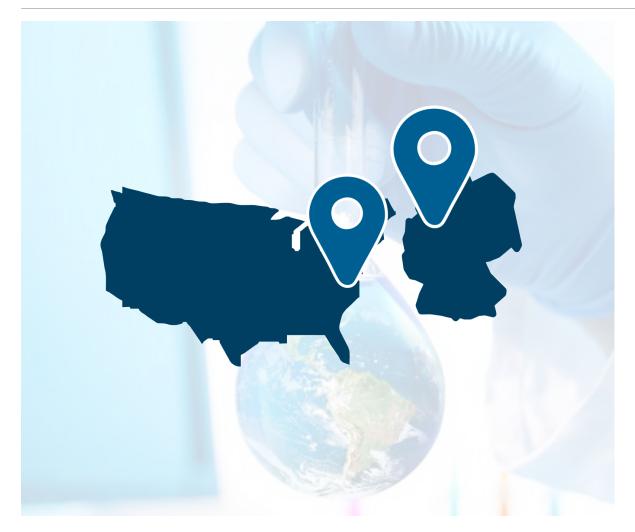


\*in-licensing/acquisition of additional late-stage asset can create commercial synergy for AiCuris



#### **ESTABLISHMENT OF US SUBSIDIARY**

#### Experienced and Targeted US Medical and Sales Force

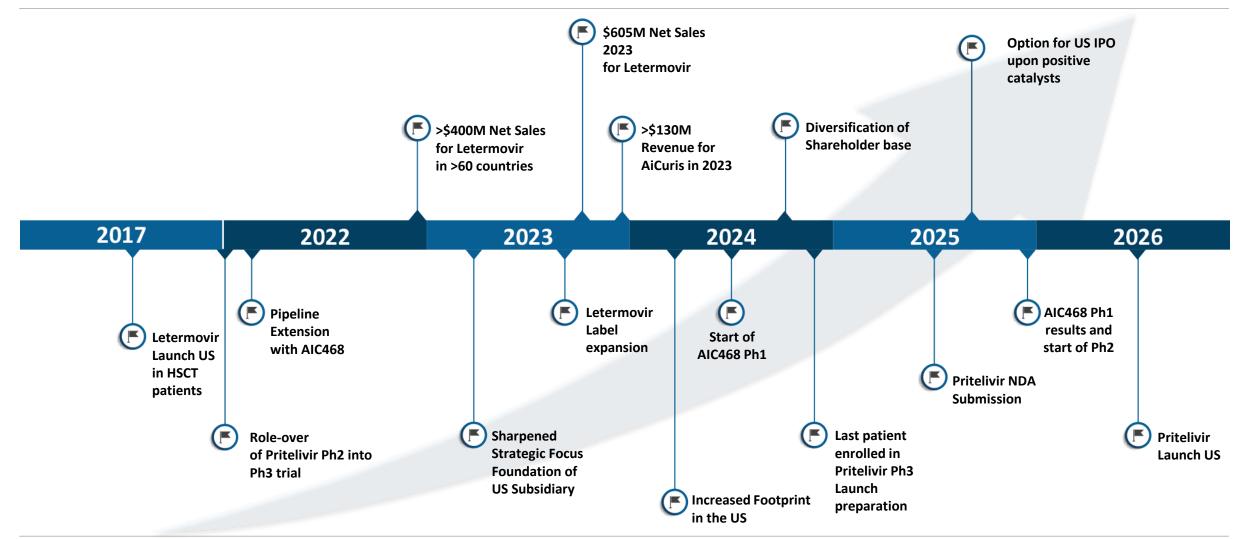


- US subsidiary established in 2023 in Marlborough, MA
- AiCuris current structure allows CEO and CFO to directly manage US Subsidiary and includes access to services (e.g. HR, IT, Finance) from the parental company
- The US buildout will be in an appropriate staggered fashion to maximize growth and minimize cash burn
- A streamlined medical and sales team will be focused on HSCT and SOT centers in the US
- Key HIV centers and HCPs will also be targeted
- Our experienced marketing team will approach noncore patients through effective and measurable nonpersonal marketing strategies
- For Europe and rest of the world we are aiming to outlicense commercialization rights



#### **BECOMING A FULLY INTEGRATED BIOPHARMACEUTICAL COMPANY**

Delivering Novel Antiviral Therapies to Patients with Weakened Immune System





#### **AICURIS BENEFITS FROM A STRONG LEADERSHIP TEAM**

**Executive Board** 



Larry Edwards

**Chief Executive** Officer

>20 Years of Executive Strategic and **Commercial Leadership** experience in **Biotech & Large** Pharma.

Previous CEO of La Jolla, & Tetraphase Pharmaceuticals. Member of several Supervisory Boards for **Emerging Biotech** Companies



Sabrina Kuttruff-Coqui

**Chief Financial** Officer PhD, Immunology

>10 years experience in the biotech industry

Held various R&D and business leadership positions, latest Head of Business Planning Immatics NV

Joined AiCuris 2022



Holger Zimmermann

Chief R&D Officer PhD, Biologist /

and biotech industry

management positions at Bayer & AiCuris, with AiCuris since foundation in 2006

Virologist >20 years in pharma

Various scientific and



Stefan Oschmann

Chairman of AiCuris Supervisory Board

> Chairman of UCB, Member of the Supervisory Board Springer Nature. Various Management positions, latest as Chairman of the Executive Board & CEO of Merck KGaA



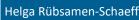


**Executive Officer** Salvia GmbH

Worked in leading positions at ATHOS KG from 2007 until April 2021; Member of numerous Supervisory Boards including BioNTech SE (as Chairman) and 4SC AG

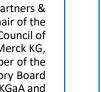
#### **Supervisory Board**





Founding CEO of

Member of the Board of Partners & Chair of the Research Council of E. Merck KG. Member of the Supervisory Board of Merck KGaA and of the National Academy of Science, Leopoldina



Sean Marett

AiCuris



**CBO** and **CCO** 

**BioNTech SE** 

Member of

**BioNTech's** 

**Executive Board** 

since 2012, prior

strategic and

(US) and Pfizer

(EU), Business

Development

and Lorantis

positions in global

regional marketing

at GlaxoSmithKline

**Executive at Evotec** 

#### WELL POSITIONED FOR FUTURE GROWTH

Delivering precision therapies for a growing population of immunocompromised people in need for effective treatment options for otherwise manageable infections

Pivotal phase 3 candidate Pritelivir with Breakthrough Therapy Designation designed to treat recurrent and resistant HSV infections

\$133M<sup>1</sup> Revenue from PREVYMIS<sup>®2</sup> treating CMV in transplant recipients

Multiple upcoming inflection points, and limited projected cash need until product launch in 2026

Executive management and prize-winning R&D team with direct experience bringing antivirals to market

Germany-based R&D hub with recently formed commercial subsidiary in the US

<sup>1</sup>Fx rate 31.12.23; ECB <sup>2</sup> Out-licensed to Merck & Co., Inc., Rahway, NJ, USA (known as MSD outside of the United States and Canada).

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# **BAICURIS**

#### Thank you for your attention

