

September 9, 2024

Company Name: HEALIOS K.K.  
Representative: Hardy TS Kagimoto, Chairman & CEO  
(TSE Growth Code: 4593)  
Contact: Richard Kincaid, Executive Officer CFO  
(TEL: 03-4590-8009)

### **Agreement with the FDA on Pivotal, Global Phase 3 “REVIVE-ARDS” Clinical Trial**

HEALIOS K.K. (“Healios”) today announces that as disclosed in our press release [“Development Plan for Acute Respiratory Distress Syndrome \(ARDS\)”](#) on August 8, 2024, we held an End-of-Phase 2 consultation with the FDA (Food and Drug Administration) on September 6, 2024 (U.S. time) regarding the launch of a pivotal, global Phase 3 study to demonstrate and confirm the efficacy and safety of MultiStem<sup>®\*1</sup> for acute respiratory distress syndrome (ARDS)<sup>\*2</sup> caused by pneumonia, primarily in the United States (the “REVIVE-ARDS” study). We are pleased to report that as a result of the meeting, we have agreed with the FDA on the design of the REVIVE-ARDS study in accordance with our request.

As for the study design, we agreed with the FDA on the use of a primary endpoint based on VFD (Ventilator Free Days: the number of days a patient does not require mechanical ventilation out of 28 days post administration in REVIVE-ARDS study, which is consistent with that utilized in the ONE-BRIDGE study<sup>\*3</sup> previously completed in Japan). Interim analyses will be conducted at the 300 and 400 patient stages, and the REVIVE-ARDS study can be completed when statistical significance is confirmed. The maximum number of patients is 550. We also confirmed the framework for utilizing 3D investigational product in this study.

The specific REVIVE-ARDS study protocol and operational details will be finalized, and the study will be initiated as soon as possible. Further details will be announced in due course.

With this agreement with the FDA, we will consult with the regulatory authorities in Japan regarding the application for conditional and time-limited approval, based on the positive results of the already completed Phase 2 study (ONE-BRIDGE study) and the initiation of REVIVE-ARDS as a confirmatory study.

#### **Future Outlook**

This matter has no impact on our consolidated financial results of the fiscal year ending December 31, 2024 at this time. We will promptly announce any matters that should be disclosed in the future.

#### **\*1 MultiStem<sup>®</sup>**

MultiStem (HLCM051) is a somatic stem cell regenerative medicine product comprised of multipotent adult progenitor cells (“MAPCs”) derived from the bone marrow of healthy adult donors. MultiStem has been shown to exhibit powerful anti-inflammatory and immunomodulatory properties with applicability in a range of disease states, has been tested in hundreds of patients in late stage clinical trials, is manufactured consistently at scale in 3D bioreactors, and has demonstrated both safety and suggested efficacy in hundreds of patients across multiple indications. MultiStem is a proprietary technology wholly owned by Healios.

Healios has a long history developing MultiStem. It originally added MultiStem to its pipeline in 2016 through an exclusive license to develop and distribute the product to treat ischemic stroke in Japan. Further, in 2018 Healios expanded its license to include development and distribution to treat ARDS in Japan, and in 2023 it expanded its ARDS license to include global territories. Having acquired the full technology platform in April 2024, Healios is seeking to advance MultiStem on a global basis for ischemic stroke, ARDS, and trauma. In the U.S., MultiStem for the treatment of ischemic stroke and ARDS has received Fast Track and RMAT designation from the FDA, which allows for expedited approval of drugs that meet certain criteria for serious or life-threatening diseases or those for which no treatment is available.

## \*2 Acute Respiratory Distress Syndrome (ARDS)

ARDS is a general term for respiratory failure that occurs suddenly in a variety of critically ill patients. Although there are many causes of ARDS, approximately one-third of ARDS cases are caused by pneumonia, and it has been confirmed that ARDS also occurs in critically ill patients with COVID-19. There is currently no approved drug therapy that can directly improve the prognosis of patients with ARDS, and respiratory failure is treated with mechanical ventilation. The mortality rate after the onset of ARDS is 30~58%<sup>\*a</sup>, and there is a need for new therapies that can improve the prognosis of patients with ARDS. Currently, the number of patients in Japan is estimated to be approximately 28,000<sup>\*b</sup> per year, and ARDS is designated as a rare disease. However, it is estimated that 262,000<sup>\*c</sup> patients in the United States, 133,000<sup>\*d</sup> in Europe, 670,000 in China, and more than 1.1 million people worldwide are affected annually<sup>\*e</sup>.

(Source)

\*a ARDS Diagnostic Guidelines 2016

\*b Healios Estimates Based on the Incidence Rate of Epidemiological Data and the Total Population of Japan by Demography

\*c Diamond M et al. 2023 Feb 6. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. PMID: Estimates for our company based on 28613773 Data and US Population Based on the Ministry of Foreign Affairs Basic Data

\*d Community Research and Development Information Service (CORDIS) 2020 7-9.

\*e song-et-al-2014-acute-respiratory-distress-syndrome-emergingresearch-in-china

## \*3 ONE-BRIDGE Study

A Phase 2 clinical trial that tested MultiStem for patients with pneumonia-induced ARDS in Japan. In August and November 2021, Healios presented data on the endpoints at 90 and 180 days after treatment with the product, which showed positive results.