



December 13, 2022 SymBio Pharmaceuticals Limited Fuminori Yoshida Representative Director President and Chief Executive Officer (Securities Code: 4582)

# Presentation on the Anti-lymphoma Activity of Brincidofovir at the 64<sup>th</sup> ASH Annual Meeting

**TOKYO, Japan, December 13, 2022** -- SymBio Pharmaceuticals Limited (Headquarters: Tokyo, "SymBio" or the "Company") today announced that results of its research collaboration with the National Cancer Centre Singapore ("NCCS") on brincidofovir ("BCV") were presented by Dr. Jason Yongsheng Chan at the 64<sup>th</sup> American Society of Hematology (ASH) Annual Meeting in New Orleans.

This was the first announcement of the findings from a non-clinical study demonstrating that BCV could be effective in the treatment of NK/T-cell lymphoma<sup>\*1</sup>, a rapidly progressing form of lymphoma, for which no effective treatment is available. During the study, BCV showed strong anti-lymphoma activity compared to other existing antiviral agents, as most NK/T-cell lymphomas are known to be Epstein-Barr virus (EBV)<sup>\*2</sup> positive. Furthermore, this study confirmed for the first time that BCV suppressed both the expression of MYC<sup>\*3</sup>, an oncogene that contributes to tumor malignancy, and the expression of a dominant gene cluster, and that BCV induced immunogenic cell death which is known to activate cancer immunity. In addition, BCV showed clear tumor growth inhibitory effect in a mouse model in which the tumor was transplanted.

Dr. Jason Yongsheng Chan, Principal Investigator of the study, Consultant in the Division of Medical Oncology, NCCS, and Clinical Assistant Professor at Duke-NUS Medical School said: "In this joint research, the anti-tumor activity of BCV against NK/T-cell lymphoma was newly confirmed, and its mechanism of action is very interesting. BCV has the potential to become a new therapeutic agent in the field of oncology, including lymphoma."

Mr. Fuminori Yoshida, President and Chief Executive Officer of SymBio said: "The anti-tumor effect of BCV, confirmed by the results of this study, also suppresses factors that worsen the prognosis of tumor diseases, including lymphoma, suggesting that BCV may be an option not only for EBV-positive malignant lymphomas but also for a wide range of other diseases."

The Company does not anticipate the information presented herein to have any material impact on its financial outlook for the fiscal year ending December 2022.





# [Contact]

Investor Relations Tel: +81 (0)3 5472 1125

# (Note1) NK/T cell lymphoma

A type of malignant lymphoma that originates from NK or T cells. NK/T-cell lymphomas are classified as low-grade (progressing yearly), intermediate-grade (progressing monthly), or high-grade (progressing weekly), and mainly present as extranodal NK/T-cell lymphomas in the perinasal space or on the skin. This disease is characterized by its relatively high prevalence in Southeast Asia, including China.

### (Note2) Epstein-Barr virus (EBV)

The EBV is one of the human herpesvirus types and firstly investigated in the Burkitt lymphoma in child, prevalent mainly in Africa, in 1964 as the oncogenic virus. Infection with EBV in childhood is usually asymptomatic or mild disease. When infection with EBV occurs during adolescence, it causes infectious mononucleosis accompanied by transient fever, sore throat or lymphadenopathy. The causal relationship of EBV with some malignant lymphoma, nasopharyngeal cancer and so on has been clarified.

### (Note3) MYC

Also known as c-Myc, is one of the oldest oncogenes, and abnormalities of this family of genes have been found in a wide range of cancer types, including translocations, mutations, and amplifications in hematopoietic tumors. It functions as a nuclear transcriptional regulator and is known to be a very important factor that controls the balance of proliferation and differentiation of hematopoietic cells by regulating the expression of dominant genes.

### About anti-viral drug brincidofovir

Brincidofovir (BCV) is a lipid conjugate of cidofovir (CDV). CDV is an antiviral drug already approved and marketed in the United States and the European Union, but unapproved in Japan. As BCV exhibits not only higher anti-viral activity, but also a superior characteristics profile in comparison with CDV and other antiviral drugs, BCV is expected to be an effective treatment against a wide spectrum of dsDNA viruses such as herpesviruses such as cytomegalovirus (CMV), adenovirus (AdV), Epstein-Barr virus (EBV), polyomaviruses and papillomavirus. Moreover, BCV is expected to be a highly active antimultiviral agent that can reduce the risk of nephrotoxicity or myelosuppression, which are serious side effects of other antiviral drugs including CDV.

The Company aims to expand its business to become a global specialty pharmaceutical company by 2030. To maximize business value, the Company is currently conducting a global Phase II clinical trial mainly in the U.S. for patients with adenovirus infection in immunocompromised conditions including





after hematopoietic stem cell transplantation, and initiated a global Phase II clinical trial mainly in Australia, Japan, and South Korea for patients with BK virus nephropathy after kidney transplantation.

In addition to its high antiviral activity, BCV is also expected to have anti-tumor effects, and we are currently conducting joint research with the National Cancer Center of Singapore, the University of California, San Francisco, and Brown University in the U.S. to confirm BCV's anti-cancer activity and synergistic effects when combined with its antiviral activity. Furthermore, the Company has initiated a study to evaluate the potential antiviral activity of BCV against EBV in collaboration with the National Institute of Neurological Disorders and Stroke (NINDS) of the National Institutes of Health (NIH) in the U.S.

#### About SymBio Pharmaceuticals Limited

SymBio Pharmaceuticals Limited was established in March 2005 by Fuminori Yoshida who previously served concurrently as Corporate VP of Amgen Inc. and founding President of Amgen Japan. In May 2016, the Company incorporated its wholly-owned subsidiary in the U.S., SymBio Pharma USA, Inc. (Headquarters: Durham, North Carolina, President: Carolyn Yanavich).

The Company's underlying corporate mission is to "deliver hope to patients in need" as it aspires to be a leading global specialty biopharmaceutical company dedicated to addressing underserved medical needs.