

Who We Are

Haimbio Co., Ltd is an **emerging biotechnology** company focused on exploring **novel therapeutic approaches** designed to target cancer's unique metabolism.

Haimbio is advancing proprietary **cancer energy metabolism-based therapies(CEMBTs)** for **solid, blood, and refractory cancers**

Haim bio to Make An Impact

Our unique science gives us the potential to have a significant influence on the current cancer landscape:

- 1) Offering cancer patients new treatment options to extend and improve quality of life
- 2) Developing a first-in-class oral CEMBT, Starvanip, NYH817100, showing compelling initial clinical trial results across 9 cancers
- 3) Advancing our pipeline of CEMBTs to change the standard of cancer care

Company Profile

- Established in 2011. Metabolic anticancer drug, acidosis remover, cancer stem cell growth inhibitor development company
- Clinical trial phase 1 IND on Starvanip approval complete after securing key source technology from National Cancer Center and Yonsei Medical Center (8 patent registration, 6 applications)
- Global clinical and business development is in the process through the cooperation with a new drug development professional consulting company (Axcelead) and clinical test specialist company (Sekisui Medical).

Starvanip (NYH817G + NYH100P)

- **NYH817G** (ALDH inhibitor)+**NYH100P** (Mitochondria Complex 1 inhibitor)
→ Has the mechanism for cancer cell growth inhibition through cancer cell energy metabolism inhibition, apoptosis and autophagy induction
- **Clinical trial phase 1 IND approved** (approval in 22th, August). Patients with progressive solid tumors who have failed standard therapy will be subjects for treatment with 2 substances as Part 1 single treatment and Part 2 combination treatment. Clinical results are expected at the end of 2020 for Part 1 and at the end of 2021 for Part 2.
- After securing stability in clinical trial phase 1, it is possible to **expand rapidly to 9 types of indications** such as glioblastoma (GBM), non-small cell lung cancer (NSCLC), breast cancer and blood cancer. In addition, **combination treatment possibility with existing chemotherapeutic drugs and immunotherapy anticancer drugs** is confirmed. (preclinical data acquisition)

Haim Bio

Executive Summary

Investment Highlights

Core Technology

- Development of anticancer drugs that target the universal metabolic process of cancer
- **Starvanip**: ALDH inhibitor + Mitochondria Complex 1 inhibitor
- Expansion of indications, combination treatment with target/immunotherapy anticancer drugs

Pipelines

- Starvanip: IND Application to the Ministry of Food and Drug Safety, Clinical trial phase 1 part 1 results expected in the second half of 2020, Clinical trial phase 1 expected to finish in the second half of 2021
- When stability is secured in clinical trial phase 1 Fast indication expansion possible
- Additional pipelines secured including cancer stem cell inhibitor and acidosis remover

Use of Proceeds

- Clinical Trial Phase 1 Costs
- Operating Funds

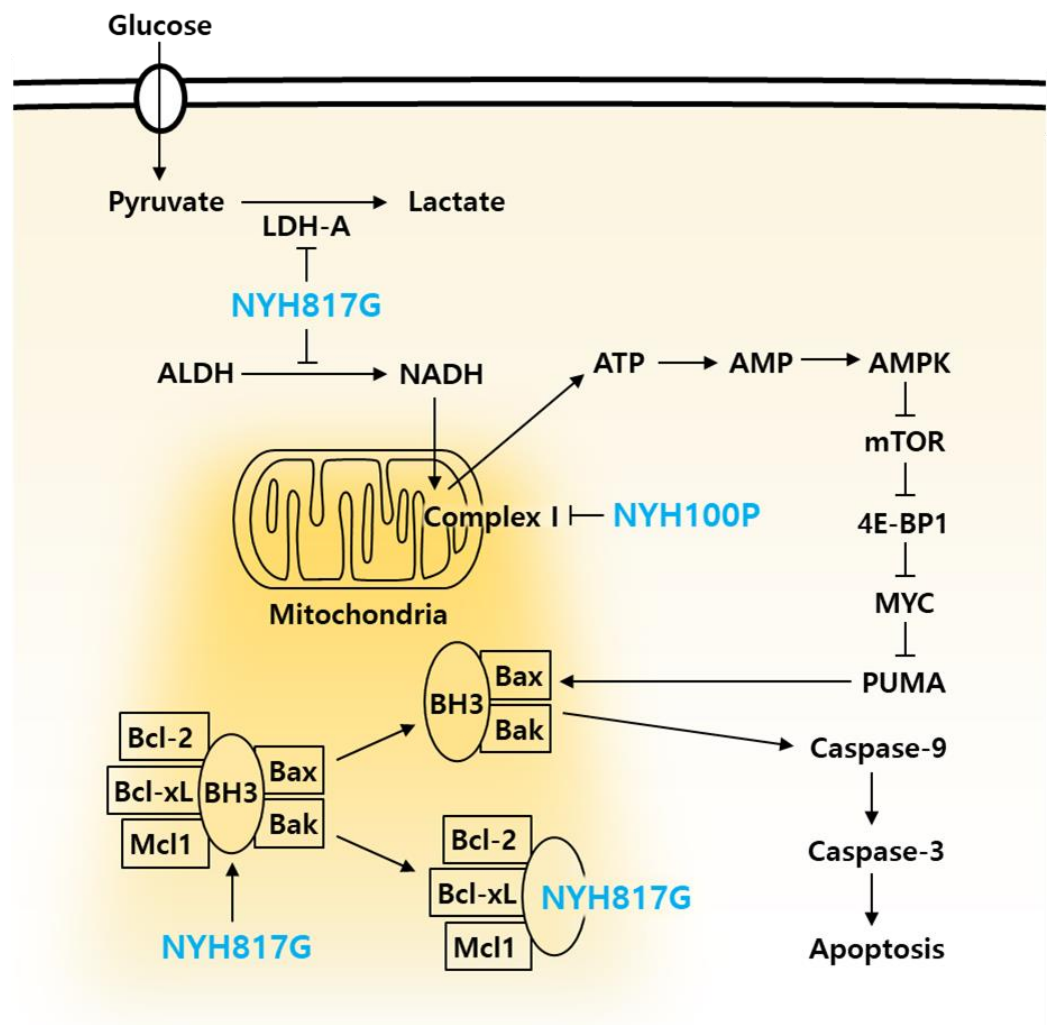
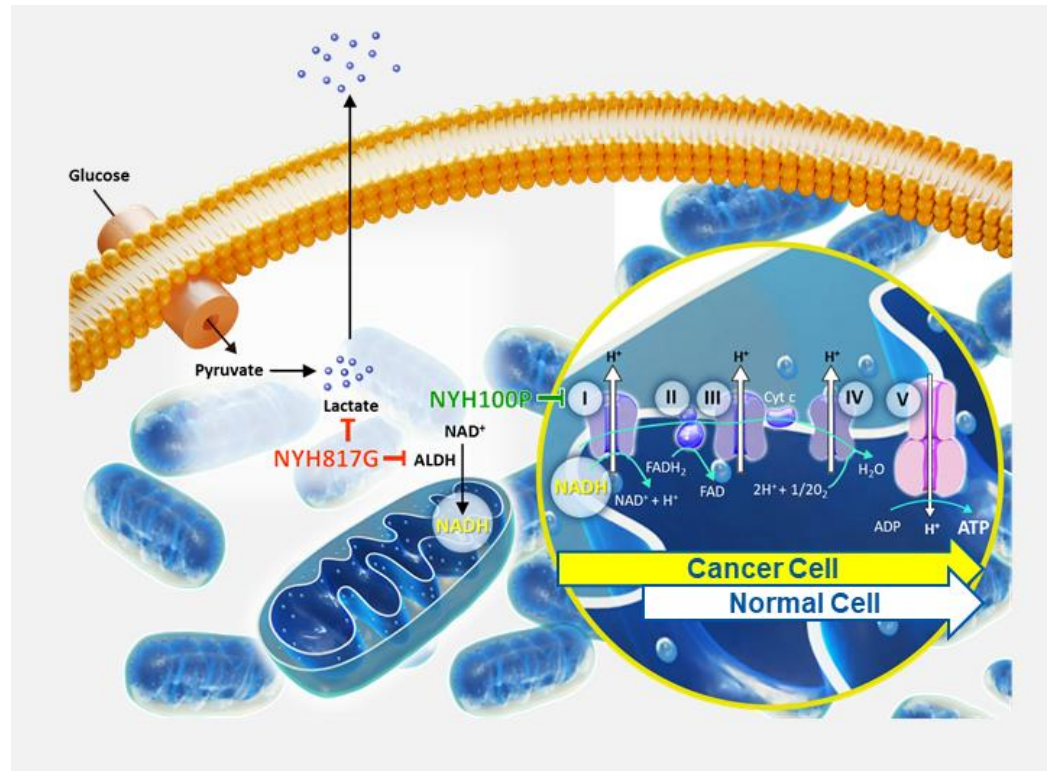
Our Team

- **President: Kim Hong Yeoul, Ph.D**
- Professor of Biochemistry, Kyunghee University and Health and Medical Evaluation professional evaluation committee, Health and Welfare Department
- Ph.D. program, University of Warwick, UK, Doctor of Science, Carleton University, Canada, Post-Doc, Stanford University School of Medicine, USA
- **Kim Yong Bae Research Director**
- Ewha Woman's University MRC Enterprise Organization Tissue Damage Defense Research Center
- Biochemistry, Molecular Biology, George Washington University, Ph.D. in Tumor Biology, Seoul National University
- **Yang Jae Hyuk Clinical Director**
- Junior Researcher, Gwangju Institute of Science and Technology (GIST) and Researcher, Research Institute for Toxicology, Ministry of Food and Drug Safety (MFDS)
- Chonnam National University Graduate School of Dentistry, Ph.D. and Embryology, Korea University, M.S.

Scientific Advisory Group

- **Professor Jung Jae Ho**
- Current, Yonsei University College of Medicine (Department of Surgery, Gastrointestinal Surgery)
- MD, Ph.D. Yonsei University, Department of Medicine
- **Professor Kang Seok Gu**
- Current, Yonsei University College of Medicine (Neurosurgery)
- MD, Ph.D. Catholic University Medical School
- **Dr. Kim Soo Yeol**
- Current, National Cancer Center (Cancer Biology Research Department)
- National Institutes of Health (NIH) & MD, Ph.D. Seoul National University Department of Medicine

Cancer Energy Metabolism-based Therapies (CEMBTs)



Pipeline Summary

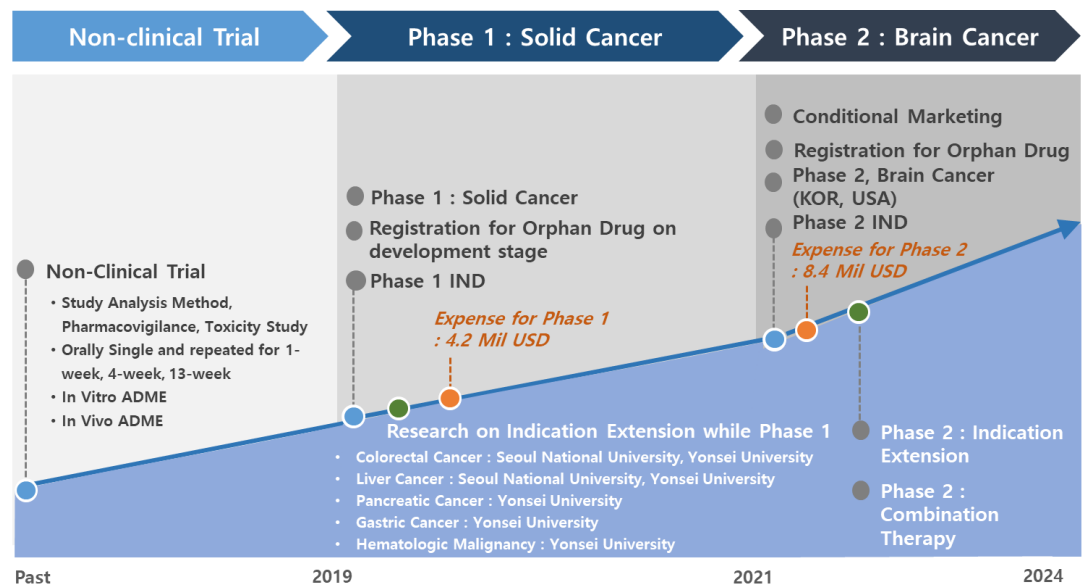
Program	Pipeline	Indication	Discovery	Pre-Clinical	Phase 1	Phase 2	
Metabolic Anticancer Drug	Starvanip (NYH817G + NYH100P)	Solid Cancer (GBM, etc.)	~ Expected to end P1 at the end of 2021				
		Blood Cancer					
	New target (#8)	Solid Cancer /Blood Cancer					
	New target (#8) + Starvanip	Solid Cancer /Blood Cancer					
	New target (#8) + Existing anticancer drug	Refractory cancers					
	New targets (#5/7/10/13) + Starvanip	Solid Cancer /Blood Cancer					
	New targets (#5/7/10/13) + Existing anticancer drug	Refractory cancers					
Cancer Stem Cell Growth Inhibitor	3 medicine combination	Solid Cancer/Blood Cancer					
Anti-lactic Acidosis	ALDH inhibitor	Anticancer Adjuvant					

* If Starvanip clinical trial phase 1 confirms safety and efficacy, there will be a rapid expansion to other indications.

Other R&D Pipelines

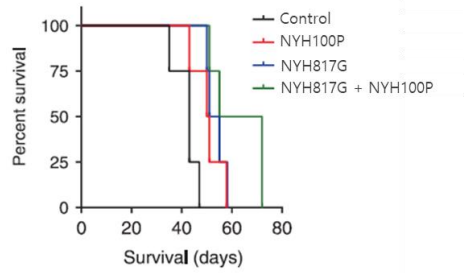
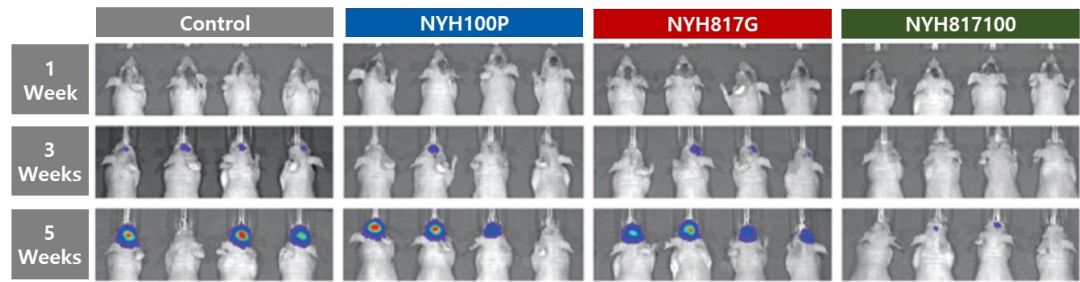
- **New Substance:** Five substances were derived as candidates for single or combination treatment that can be developed into a cancer metastasis inhibitor for refractory cancer patients that do not respond to existing anticancer drugs.
- **Cancer stem cell inhibitor:** Prevents cancer metastasis and recurrence to increase the possibility of curing cancer
- **Acidosis Remover:** Synergistic effect is anticipated through the concurrent use with anticancer drugs as anti-cancer adjuvant therapy

Development Strategy



In Vitro/In Vivo Data (Main Target : Orphan Disease)

1) Glioblastoma model



2) NSCLC model

