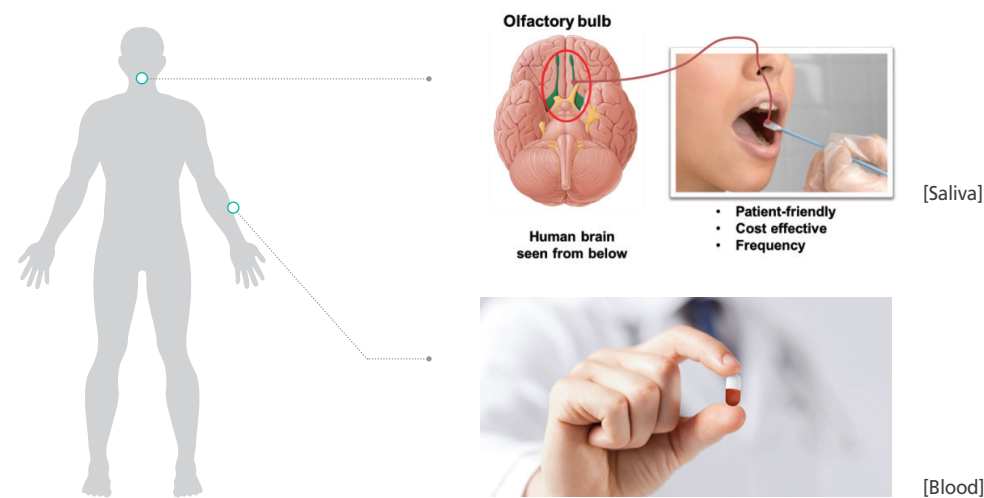


Detection



We use patient-friendly fluid collection methods to determine the risk of diseases.

The medical intervention strategy is designed based on detection of the changing biomarkers and ES(Early Screening), even before preclinical stage.

Building the Early Screening(ES) Platform

- Detection of toxic amyloid beta and phosphorylated tau with patient friendly(saliva) methods(Biomarker 1)
- Detection of toxic amyloid beta and phosphorylated tau-related single miRNA biomarkers in plasma(Biomarker 2)

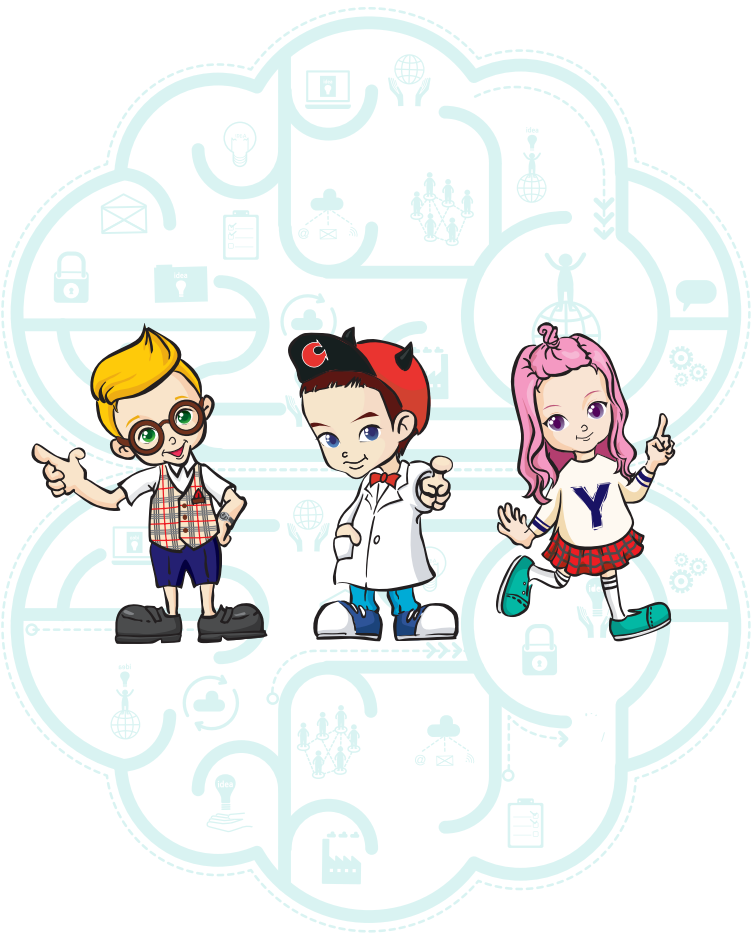
■ Normal person ■ Patient with Alzheimer's disease

Biomarker 2 \ Biomarker 1	Biomarker 1			
	Very Low	Low	Intermediate	High
Low				
Intermediate				
High				



ES-SAP
STRATEGY

ES-BRAIN
FITNESS™

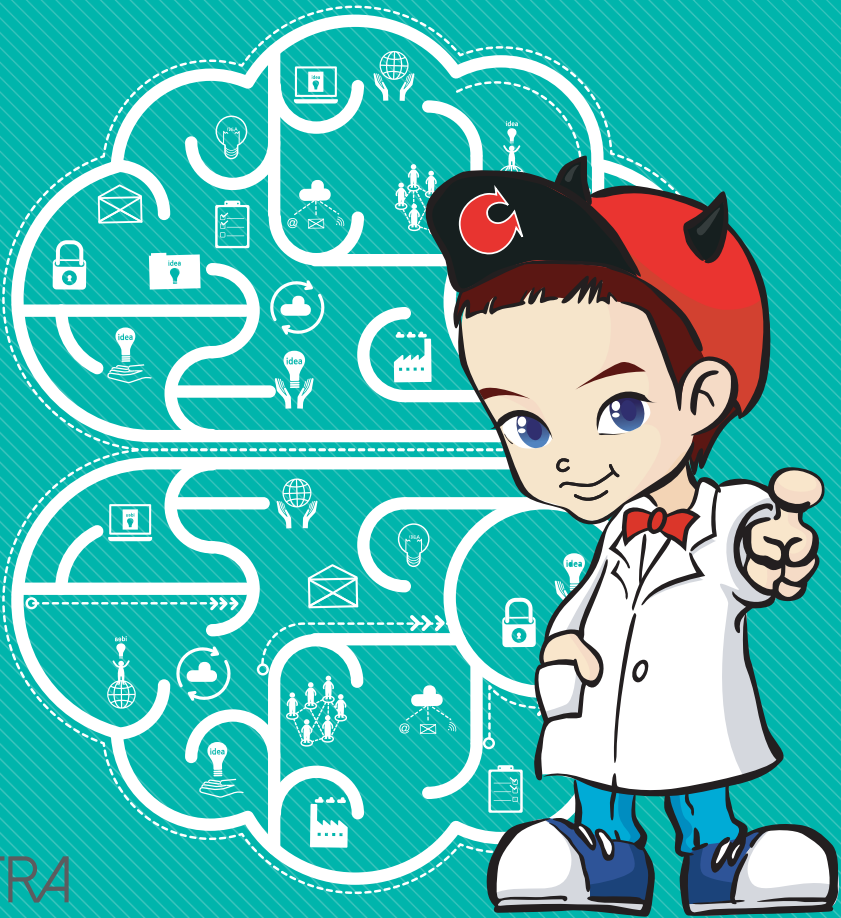


BIORCHESTRA

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" KNOW YOUR BRAIN AND WHO YOU ARE, THEN YOU'LL NEVER LOSE."

Knowledge of your brain, along with better Alzheimer's prevention with early detection, will help you ward off diseases.



BIORCHESTRA

Vision

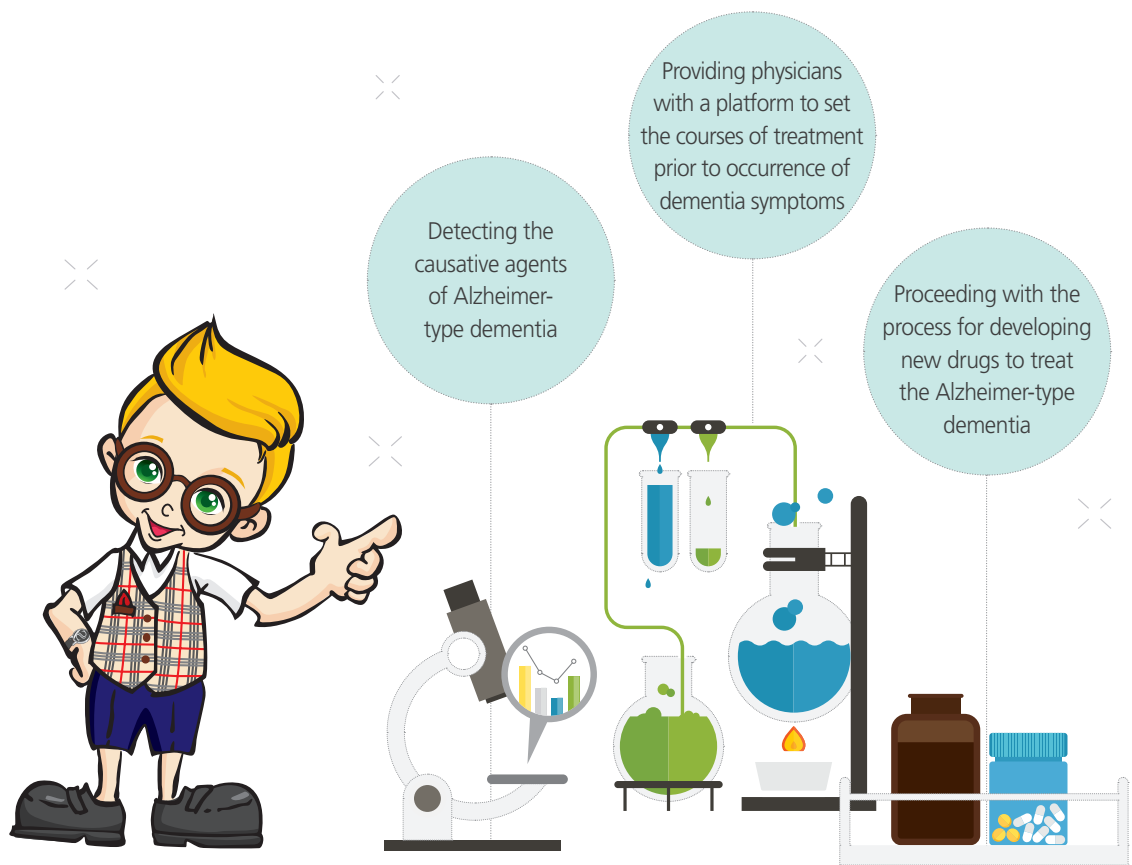
OUR SCOPE

BIORCHESTRA Co., Ltd was established to provide harmony and balance for healthy life and to eradicate disease through "Bio".

We aim to provide treatment of Alzheimer-type dementia and intend to provide total solutions to dementia through early screening and constant development of treatment drugs for Alzheimer-type dementia. We provide the data useful for physicians to set the course of treatment for **better Alzheimer's prevention with early detection**(early screening) prior to the onset of symptoms as we detected amyloid beta protein and pTau, the causative agents of Alzheimer-type dementia in saliva, and found a single miRNA in the blood which are known to control the APP(amyloid beta precursor protein) and pTau simultaneously, for the first time in the world.

In addition, we are proceeding with the process(amyloid beta accumulation and pTau inhibition strategy) to develop new drugs for treatment of Alzheimer-type dementia through synthesis of antagonist inhibiting the biomarkers, which have been detected. Moreover, we have mapped out a plan to build a preventive/therapeutic platform for Alzheimer-type dementia by leveraging our diagnostic-therapeutic strategy based on subjects' stages ranging from early screening, through pharmacological intervention programs, to non-pharmacological intervention programs.

BIORCHESTRA Co., Ltd, a company cherishing the dreams of a world without dementia

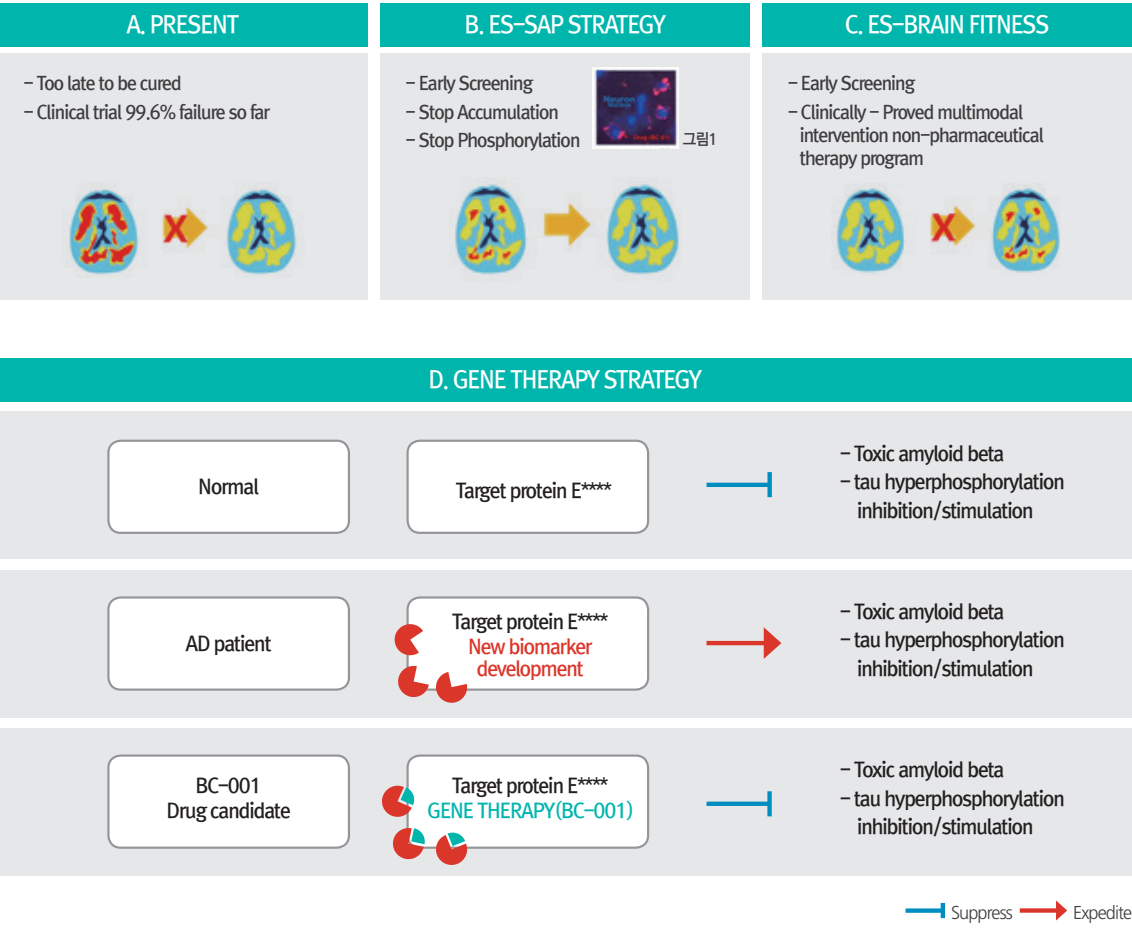


Research

R&D PIPELINE

Our ES-based strategy can be summarized like this

- We aim to overcome the Alzheimer-type dementia with SAP(Stop Accumulation and Phosphorylation) strategy.
- The key to this strategy is early prevention of hyperphosphorylated tau and amyloid beta, the causative agents of Alzheimer-type dementia, thus naturally removing the amyloid beta accumulated in small quantity and inhibiting tau hyperphosphorylation. (The amyloid beta accumulated in small quantity is cleared by the Protein Quality Control System(UPS, AUTOPHAGE).) Previously, neurons damaged by amyloid beta could not be regenerated as the focus was placed on eliminating the amyloid beta that had been already accumulated(A).
- By contrast, ES-based therapeutic agent(BC-001) can be immediately intervened to stop amyloid beta accumulation, eliminating small amount of amyloid beta easily and inhibiting the tau hyperphosphorylation(B, D).
- The drug needs to pass through the cerebrovascular barrier(BBB) and act on brain cells before accumulation of amyloid beta begins(Figure 1).
- Non-pharmacological intervention is applied actively to normal persons based on clinically proven combined intervention methods, since changes in biomarkers begin even before symptoms occur(C).



Participation

Investigator-initiated clinical study

It is known that biomarkers in human body already start changing as early as 20 years before symptoms of Alzheimer-type dementia occurs. There have been very few studies worldwide to investigate the correlation between the prevalence of Alzheimer-type dementia and intervention for people who have not yet experienced any symptoms. We provide services to healthy people who have not been clinically diagnosed with the Alzheimer-type dementia with the premise that early detection of Alzheimer-type dementia can maximize therapeutic effect. In addition, patient-friendly liquid biopsies are performed with the consent of the subjects to accumulate data. These data is also expected to influence the policies mapped out in each country around the world to fight Alzheimer-type dementia in the near future. Samples of the subjects are collected, analyzed and used for research purposes with the consent of subjects.

We are moving ahead vigorously with research to determine the correlation between prevalence of Alzheimer-type dementia and prevalence of Alzheimer-type dementia after several years in subjects trained intensively to control risks based on measurement of their genetic factors, RNA, and protein with programs designed by our company. We will carry out this breakthrough with strong sense of mission as we stand firm in our belief that even small actions can have a positive effect on the preclusion of prevalence of Alzheimer-type dementia.

