

## KOREA-SINGAPORE R&D JOINT CALL PRE-PROPOSAL APPLICATION FORM

<b>Title</b>	Market development Strategy for GenesWell™DX BCT in Southeast Asia
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### **Brief Description of Proposed Collaboration (Not to exceed 2 pages)**

#### **1. Research Aims**

- List briefly the key aims/objectives of the research.

GenesWell™DX BCT has been developed for the early stage breast cancer patients to predict their distant metastasis free long-term survival rate based on the unique gene signature. This diagnostic kit combined with one-step fully automated system produces constant and precise data to predict a patient prognosis but also a benefit of chemotherapy. With the Korea-Singapore R&D Joint Program, we aim the followings;

- ✓ perform a clinical validation using Southeast Asian patient sample.
- ✓ acquire approvals from the individual Southeast Asian countries.
- ✓ launch on Southeast Asian market.

#### **2. Research Need & Problem**

- What are the need of this research and the problem of the precedent study?

For a last decade, we have been experienced an unmet medical need newly developed, especially in cancer diagnostics. A number of data support the diversity of cancer thereby the requirement of tailored treatment to assure the best treatment plan for individual patient. Until now, however, the cytotoxic treatment is the major way to cure cancer patients even though it gives a serious side-effect. Gencurix has developed a molecular diagnostic gene set as a new prognostic test for breast cancer to identify patients at risk of recurrence and to aid physicians in selecting adjuvant therapy. The GenesWell™DX BCT test will make the personalized medicine possible giving patients a benefit of medical advancement and restoring their quality of life.

- ✓ recently presented demand for personalized cancer treatment.
- ✓ require a local research center to collect patient samples.

### 3. Solution Overview

- What is the proposed solution and why do you think it will work?

The GenesWell™DX BCT test measures the expression of several prognostic marker genes which form a unique gene signature. It can stratify the patient into three distinct groups, low, intermediate, and high risk based on the scores generated by our proprietary algorithm. The GenesWell™DX BCT *has been evaluated in several studies in Korea involving over 1,000 patient's samples. Taken the collaboration with A\*STAR, we will perform a clinical validation of the GenesWell™DX BCT for the breast cancer patients in Singapore, Malaysia, and Indonesia, etc. Base on the data generated from the local patients, we will take the marketing approval for each countries to give a benefit of GenesWell™DX BCT test to the suffering patients.*

### 4. Solution Impact

- If successful, what is the potential impact of the solution?

*This research data will show the characteristics of breast cancer patients in Southeast Asian countries. This will give doctors valuable information to help understand the need of local patient and improve their treatment outcomes. The GenesWell™DX BCT is expected to bring the next market trend to meet the need of tailored treatment for cancer patient. It will contribute to bring a state-of-art medical approach for the breast cancer patient of Southeast Asian countries and also support their healthcare system.*

### 5. Collaborative Planning

- What is the proposed collaborative planning with Singapore A\*STAR research team?
- What is your expectation for A\*STAR team's research?
- How will the research leverage the expertise in Korea and Singapore?

*A\*STAR is the world-recognized research organization with its enormous scientific achievements and its flexible application to industry. Through A\*STAR, the breast cancer patient sample will be collected from Singapore and Southeast Asian countries. We will analyze them with GenesWell™DX BCT test to verify the feasibility to other ethnic group rather than Korean. If it is needed, the gene signature will be regenerated and the algorithm will be modified to optimize the system for each ethnic group. GenesWell™DX BCT test is a single combined system composed of the GenesWell™DX BCT test kit, the One-Step Automated RT-qPCR System, and analyzing algorithm. For the accessibility to the local patient in Southeast Asian countries, the One-Step Automated RT-qPCR System will be established in A\*STAR after acquiring approvals, and it will maintain the prolonged collaboration with A\*STAR for our research and market development.*