

# Terminal Evaluation

## Asia

### 1. Outline of the Project

**Country:**

China

**Project title:**

The Joint Study Project on Early Detection and Diagnosis of Prostatic Cancers in Jilin Province

**Issue/Sector:**

Health/Medical Care

**Cooperation scheme:**

Research Cooperation

**Division in charge:**

East,Central Asia,and the Caucasus  
Division, Regional Department II

**Total cost:**

78 million yen

**Period of  
Cooperation**

1 Aug 1997 - 31  
July 2002

**Partner Country's Implementing Organization:**

Jilin University, Jilin Provincial Commission of Science and Technology, The Center of Preventive Research in Prostate Diseases of Jilin University(in the China-Japan Union Hospital)

**Supporting Organization in Japan:**

Miyagi Prefecture,  
Miyagi Cancer Center

**Related Cooperation:**

Grant Aid ; "Project for the Improvement of the Equipment of Norman Bethune University of Medical Science"

### 1-1 Background of the Project

In China, cancer was ranked as one of the major diseases in terms of the number of patients who suffered from its ravages. While the proportion of cancer patients was not significantly high, the number of cancer patients had steadily increasing. Having become one of the major causes of death in the country, this treat to the health of the people in China could no longer be ignored.

Since 1995, the Miyagi Cancer Center Division of Urology has conducted research that compares the medical examinations for prostate cancer of Japan and China, and participated in international joint research with the Norman Bethune University of Medical Science, which through integration has become the Jilin University and Hospital of the First Automobile Works. Through these international exchanges, the Jilin Provincial Commission and the Government of China realized that cancer would continue to be a serious disease in China and, as a result, requested the Government of Japan to provide technical cooperation to develop human resources and conduct a joint study in order to establish systems for early detection and diagnosis of prostate cancer.

### 1-2 Project Overview

As the Center of Preventive Research into Prostate Diseases of Jilin University and with Jilin Provincial Commission of Science and Technology serving as the implementing organization, the Project implemented the research cooperation (urology, pathology, biochemistry and epidemiology) on the detection and diagnosis of prostate cancer and established a system of diagnosis. The project trained the Center's staff through research activities, classes and seminars.

#### (1) Overall Goal

The health screening system on prostate cancers will be integrated in the Jilin Province.

## (2) Project Purpose

The systematic structure to implement the health screening system on prostate cancers will be organized in the target area.

## (3) Outputs

- 1) A management structure of the health screening system on prostate cancers is developed.
- 2) The technical capability of the counterparts is upgraded.
- 3) The implementation structure of the health screening system on prostate cancers is established.
- 4) The outcome of the Joint Study is published

## (4) Inputs

Japanese side:

|                    |    |  |                |
|--------------------|----|--|----------------|
| Long-term Expert   | 1  | Equipment and Facilities                 | 76 Million Yen |
| Short-term Experts | 25 | Local cost 684,973 Yuan (11 Million Yen) |                |
| Trainees received  | 11 |  |                |

Chinese side:

|              |    |                                     |  |
|--------------|----|-------------------------------------|--|
| Counterparts | 38 |                                     |  |
| Local Cost   |    | 3.175 Million Yuan (51 Million Yen) |  |

## 2. Evaluation Team

### Members of Evaluation Team

Team Leader/General: Tasuke KONNO, President, Miyagi Cancer Center  
Technical Transfer Planning: Keizo KAGAWA, Deputy Director, Tohoku Branch Office, JICA  
Evaluation Management: Mitsuaki INOUE, East, Central Asia, and the Caucasus Division, Regional Department 2, JICA  
Evaluation Analysis: Ryosuke SASAKI, Tohmatsu & Co.  
Interpretation: Yoko KATO, Japan International Cooperation Center

### Period of Evaluation

20 January 2002 - 2 February 2002

### Type of Evaluation:

Terminal Evaluation

## 3. Results of Evaluation

### 3-1 Summary of Evaluation Results

#### (1) Relevance

Patients with prostate cancer have presented without subjective symptoms, and diagnosis of prostate cancer was largely dependent on conventional technologies such as echo-cardiography and rectal palpation by which only the terminal symptoms of prostate cancer could be detected. Early detection and diagnosis of prostate cancers would become possible by ultrasonic diagnostic examination; however, in Julin Province a prostate cancer examination system had not yet been established. The Project was the first trial to introduce the prostate cancer examination system. The Project Purpose, "a systematic structure to implement a health screening system for prostate cancer will be established in the target area" which at that time had no technical capacity in the field of medicine at that time," was appropriately set in order to achieve the Overall Goal. As Julin University regarded the above mentioned research as one of the five major fields of the international cooperation, the Project was in line with the University Policy.

#### (2) Effectiveness

The Project Purpose is likely to be achieved by the time of Project completion. The counterparts have obtained basic techniques

to conduct the health screening on prostate cancers through seminars and trainings. The counterparts have been conducting health screening for prostate cancer in Chang Chun City, where the number of beneficiaries screened numbered over 12,000 at the termination of the Project. Among them, test results were positive for 813; and 273 of the test subject took a second health screening test for prostate cancer and 69 were diagnosed as having prostate cancer. The health screening tests largely contributed to the early detection and diagnosis of cancer (as of May 2003). Six research papers have been gained academic recognition, and the Ministry of Science and Technology, Jilin Provincial Commission of Science and Technology and Julin University funded the research. As the Project has introduced health screening in the target area for the first time, achievement of the Project Purpose was significantly attributed to Project Outputs.

### (3) Efficiency

The quantity, quality and timing of the Inputs were appropriate for the most part, and the Inputs were efficiently turned into the Outputs. In particular, as the experts in the Project were mainly Short-term Expert, the short-term experts were dispatched right after the participants in training in Japan returned to China where they efficiently trained the counterparts. One of the external factors that influenced the efficiency of the Project was the merger of the Norman Bethune University of Medical Sciences, the original implementing organization, and Julin University in June 2000. The merger positively affected the efficiency of the Project by strengthening human resources and facilitating allocation of a local budget from the university, although administrative procedures were temporarily delayed during the transition period. Overall, the Project has been efficiently implemented because of the cooperation between Jilin Province and Miyagi Prefecture prior to Project Implementation.

### (4) Impact

The Project's introduction of new medical practices to detect prostate cancer the early stages had an innovative impact on the health sector in the target area . As conventional diagnostic methods only detected the terminal symptoms of prostate cancer, the Project increased the possibility of successful treatment of prostate cancers. However, it will take a few more years to achieve the Overall Goal. Some issues concerning Project outcomes still remain. These include pending comprehensive dissemination of outcomes throughout Jilin Province, which consists of mainly rural areas, and the fact that health screening is neither broadly recognized nor understood.

### (5) Sustainability

It is clear by the indicators of the conducted health screening for prostate cancer in Chang Chun City that the counterparts had sustainable capabilities in medical and analytical techniques and that the data obtained through health screening was well managed. The Center of Preventive Research in Prostate Diseases of Jilin University has already settled the mid-term objectives for the next five years to enhance health screening and has clear aims with regard to sustainability. Moreover, Julin University places a high priority on the research conducted by the counterparts and grants to assist the joint study have been continuously provided along with an adequate budget.

With regard to finances, the Center of Preventive Research in Prostate Diseases will be transferred to the China-Japan Union Hospital in June 2002, and health insurance will be applied to treatments. Therefore, the cost of health screening can be appropriated to research, and further collaboration between the basic medical sciences and clinical medicine is also expected. Thus, the impacts produced by the Project will be sustainable even after completion of the Project.

## **3-2 Factors that promoted realization of effects**

---

### (1) Factors concerning Planning

N/A.

### (2) Factors concerning the Implementation Process

More Long-term Experts and Short-term Experts were dispatched than originally planned. With the help of the Long-term Experts, Project management was smoothly conducted. As the Short-term Experts were incumbent doctors, a longer stay was difficult. This was offset by the dispatch of additional Short-term Experts. This flexible approach helped to accomplish Project Outputs.

## **3-3 Factors that impeded realization of effects**

---

### (1) Factors concerning Planning

N/A

## (2) Factors concerning the Implementation Process

N/A

### 3-4 Conclusion

---

The Project accomplishes the Project Purpose and Outputs as originally planned, such as the establishment of a sequence of systems for the collaboration research and experiments, establishment of a health screening system, improvement of a future health screening system for prostate cancer in Jilin Province and upgrading research capabilities both in China and Japan.

### 3-5 Recommendations

---

(1) As the Center of Preventive Research in Prostate Diseases will be transferred to the China-Japan Union Hospital, one urology physician and one pathologic test technician of took the three-month training course at the Miyagi Cancer Center (as of May 2003) for safe and efficient health screening (biochemistry screening on prostate) into the future.

(2) The health screening is the collaborative basic-research activity among clinicians, pathologists, biochemists, and epidemiologists who evaluate the effects of screening effects and upgrade efficiency. Therefore, it is necessary to promote technical improvement in each field and continuous exchange of information among specialists. The Project should be followed up and experts dispatched on an ongoing basis in the technically immature fields for a few years.

(3) The research results at the Center are expected to contribute to the prevention and treatment of cancer both in Japan and China as the information is essential for the prostate cancer research in Japan, as well. Therefore, the Japanese side should continue to help promote the dissemination of the health screening system, the ongoing exchange of information, provide instructions in the specialized fields and try to share the research achievements.

### 3-6 Lessons Learned

---

(1) There was some concern that it was too early to introduce the health screening system on prostate cancer requested by Government of China. However, as a result the system's introduction, the pioneers of the Project were a focus of attention nationwide. The Project was recognized as the main international exchange program of Jilin University, and the future sustainable development is greatly expected. In the selection of future projects of this nature, this Project serves as a good referential example.

(2) The Project emerged as a result of the long and friendly ties between Miyagi Prefecture and Jilin Province, and the roles of the implementing organization and the Project Purpose were clear from the planning stage. In case of Local Governmental Units implementation of the collaborative work, it is important to formulate the Project considering the international exchange history of the Local Governmental Units.

(3) In general, in implementing a project, it takes time for the Project activities to get fully underway because of the time needed for preparation. However, in the case of this Project, project leaders in Japan and China already had a teacher and student relationship at Tohoku University, which contributed to smooth communications and a short preparation time. The mutual trust owing to the long-time friendship program contributed to the quick implementation of the Project.

(4) The Project coordinator, who had experienced many projects in China and understood the situation at China, contributed to the smooth management of the Project.

### 3-7 Follow-up Situation

---

The dispatch of Short-term Experts in Grassroots Technical Cooperation (local proposal type) and acceptance of trainees have been considered from FY2003 in the field of clinical and epidemiology studies on early detection and diagnosis of prostate cancer.