Dendritic cell vaccine therapy is a new and highly innovative means of treating cancer. In the therapy, dendritic cells introduced into the body through a vaccine, “teach” the body's lymphocytes, also known as the immune system’s “strike force”, to recognize cancer cells as a threat and to attack them. Because it uses the patient’s own immune system and affects only pathological cells, the therapy has few side effects and can be administered on an out-patient basis without need for hospitalization.

Mechanism of Dendritic Cell Vaccine Therapy

Dendritic cells act in the immune system as the “control tower” mechanism that recognizes pathogens and directs lymphocytes to attack them. The dendritic cell vaccine is derived from root monocytes extracted from the patient’s body and then cultivated to produce dendritic cells. When the cultivated dendritic cells are exposed to cancer tissue and reintroduced to the body along with artificial antigens, the dendritic cells imprint lymphocytes in the blood stream with the cancer marker, causing them to attack the cancer cells. Other immune system antibodies are also activated under the command of the dendritic cells to combat the cancer.
Characteristics of Dendritic Cell Vaccine Therapy

Compatible with standard therapies

Dendritic cell vaccine treatment can be effectively applied concurrently with other, more standard therapies, such as surgery, chemotherapy, and radiotherapy.

Less burden on patients

As the therapy affects only targeted cancer cells without harming normal cells, patients need not worry about possible side effects. Treatment possible on out-patient basis.

Inhibits Recurrence / metastasis

Efficacy of cancer marker sensitized lymphocytes in combating cancer is long term and non-local, thus also inhibiting recurrence or metastasis.

Types of Dendritic Cell Vaccine Therapy

Therapy using artificially derived antigens

This therapy uses artificially induced cancer markers (artificial antigens) such as WT-1 peptide. This way, the vaccine can be produced without surgical removal of cancerous cells from the patient’s body. However, it may require matching of white blood corpuscle type (HLA).

Therapy using vaccine derived from patient cancer cells

The vaccine used in this therapy is produced through cultivation of cells in cancerous tissue surgically removed from patient’s body. Thus, the therapy is tailored specifically to the patient’s own unique cancer profile. Surgical removal of tissue at least as large as first joint of little finger is required.

Localized therapy

The dendritic cell vaccine is injected directly into the area of the cancerous tissue. For this therapy, the cancerous area must be accessible to injection.

NOBEL PRIZE Laureate in Medicine

The late Professor Ralph Steinman (Rockefeller University) was awarded the 2011 Nobel Prize in medicine for “his discovery of the dendritic cell and its role in adaptive immunity”.

*1 WT-1 is a protein found in almost all types of cancer. Use of WT-1 peptide antigen produces a dendritic cell vaccine that is generally applicable to most cancers.

Offering advanced treatments from Japan with services:

Hospital Matching Consultation
Visa for Medical Stay Support
Airport Pick-up Support
Medical Interpretation
Comprehensive Support in Japan
Post-treatment Follow-up
Online Second Opinion
Written Second Opinion

Contact mj-info@emergency.co.jp
What data prove this therapy is really effective from your clinical results?

Together with our technical affiliate, Tella, Inc., we have completed over 4,950 (as of December 2011) successful courses of treatment using dendritic cells vaccine therapy. (Courtesy of Tella Inc.)

The clinical results in the treatment of advanced pancreatic cancer using dendritic cell vaccine therapy in combination with anticancer agents were cited in an article published in the July 22nd, 2011 digital edition of “Pancreas”, the journal of the American Pancreas Society.

This article reported findings based on 49 case studies of patients with advanced pancreatic cancer and histories of chemotherapy who were treated using dendritic cell vaccine and antigenic peptides such as WT-1 in combination with sodium gemcitabine and/or S-1. Analysis of the results showed the therapy to be both safe and effective.

Case study (Pancreatic cancer, Hepatic metastasis, PET-CT)

Primary tumor and metastasis disappeared. Tumor marker returned to normal range.

CR: 100% tumor reduction (disappearance) for period of four or more weeks.
PR: Over 30% tumor reduction for four weeks or more.
SD: 30% or more partial tumor reduction/less than 20% tumor growth/new pathological changes for four weeks or more.
R: Cannot positively identify as PR but reaction observed.
PD: 20% or more tumor growth or the appearance of new pathological changes.

Source:
Clinical and Immunologic Evaluation of Dendritic Cell-Based Immunotherapy in Combination With Gemcitabine and/or S-1 in Patients With Advanced Pancreatic Carcinoma
Yukino Kimura, MS,* Jun Tsukada, PhD,* Takeshi Tomoda, MD, Hidenori Takahashi, MD, Kazuhiro Inai, MA,* Kanae Shimamura, MMS,* Makoto Sunamura, MD, PhD, Yoshikazu Yonemitsu, MD, PhD, Shigetaka Shimodaira, MD, PhD, Shigeo Koido, MD, PhD, Sadamu Homma, MD, PhD,** and Masato Okamoto, DDS, PhD*

CR: 2(4.1%)
PR: 5 (10.2%)
SD: 10 (20.4%)
PD: 26 (53.1%)
R: 6 (12.2%)

Before Dendritic Cell Vaccine Therapy
After Dendritic Cell Vaccine Therapy
Cosmetic Surgery in Japan:
Medical visa support from embassy in the third country

Med in Japan received a request from Mr. ZC, a foreign national, for assistance in obtaining a medical stay visa for purposes of undergoing cosmetic surgery in Japan. As Mr. ZC was currently studying abroad in country A, we contacted the Japanese consulate in country A in order to arrange issuance of the visa.

Med in Japan’s visa specialist reviewed Mr. ZC’s visa application. We also contacted the medical facility with which Mr. ZC had made direct arrangements to confirm that the appointment was in order. After receiving an officially endorsed confirmation of appointment from the medical facility, Med in Japan in turn issued a certified letter of personal guarantee to the consulate in country A. As this was the first time that the consulate in country A had ever issued a medical-stay visa, Med in Japan communicated directly with the consulate by telephone and email to ensure that the process went smoothly. As a result, the visa was issued within four days after the application was filed.

Furthermore, to ensure that Mr. ZC did not encounter any difficulties at Japanese immigration, Med in Japan prepared a letter to be shown to the immigration officials explaining the purpose of Mr ZC’s visit and the address and telephone number of the hotel where he would be staying.

A staff member of Med in Japan met Mr. ZC at arrival in the airport and accompanied him to the hotel. During the journey to the hotel, the staff member briefed Mr. ZC on Japanese culture and what to expect and what to avoid during his stay. Moreover, Med in Japan also provided Mr. ZC with a mobile phone for use during his stay and advised him of Med in Japan’s 24-hour help line service number.

As Mr. ZC spoke good English, medical interpretation or translation was not necessary. After undergoing examination, the physician in charge of the examination confirmed that the procedure that Mr. ZC was requesting could be performed. However, because the earliest opening for operation was two weeks in advance, he decided to return home, to reapply for a second medical-stay visa, and to come back before the operation.

Med in Japan informed Mr. ZC of the medical facility’s proposed scheduling of the operation. After consideration, however, Mr. ZC decided to postpone the operation until after completion of studies.

Cosmetic Surgery: Typical Sequence of Events
1. Confirmation of appointment date for examination by email
2. At time of examination, patient is interviewed for medical history and advised regarding the procedures, risks, and costs associated with the operation
3. The date of the operation is confirmed
4. The patient undergoes the operation
5. A follow-up examination is conducted

Persons desiring to receive medical treatment in Japan may contact Med in Japan to obtain medical referrals, support in obtaining medical stay-visas, payment agency services, medical interpretation and translation, and other related services.

Med in Japan under operation of Emergency Assistance Japan is the first Japanese corporation officially authorized medical-stay visa facilitator and guarantor agency.
Mrs. KH from the Middle East contacted Med in Japan for the Dendritic Cell Vaccine Therapy (DCVT) in Nagano. Here is a report from our medical coordinator about her case.

A Middle Eastern woman has recently undergone DCVT at a hospital in Nagano. Med in Japan facilitated all of the arrangements, including procurement of a “medical stay” visa, hotel reservations, automobile transportation from the airport, coordination of communications and scheduling between the patient and her physician at the hospital, and medical interpretation and translation of test results and medical advice.

The patient’s condition permitting, DVCT does not require hospitalization. After undergoing apheresis, this patient was administered the prepared vaccine over a period of two weeks on an outpatient basis. As she experienced almost no side effects from the treatment, she was able enjoy the experience of living in a Japanese countryside, and on days when she did not need to visit the hospital she strolled neighborhood streets, took in the mountain scenery, and traveled to the city of Nagoya for shopping.

Even though the time of the patient’s visit coincided with the Muslim holy month of Ramadan, she did not participate in the fast, as this would have likely interfered with her recovery. She informed us that she would undergo her fast at a later date when she had regained her strength.

PET CT was taken upon completion of her course of treatment; the tumor was shown to have diminished in size. Fortuitously, the patient had a physician in her home country capable of administering the remaining vaccine, so the hospital packed and sealed the remaining dendritic cell vaccine in liquid nitrogen to be transported home with her. Furthermore, as the fragile vaccine would have been rendered ineffective by the x-ray scanners used in airport security, Med in Japan obtained special permission allowing it to bypass the scanners and to be carried on board on both the patient’s original and connecting flights. The patient is to return to Japan in April to complete her vaccine therapy.

For more information regarding dendritic cell vaccine therapy, please contact Med in Japan.
Gastric Cancer is the most predominant cancer found in Japanese population. The treatment on gastric cancer based illness is also one of the main specialties in Japan. Mr. VZ from Georgia shared with Med in Japan Newsletter of his experience.

After complete removal of patient’s stomach, cancer reappeared in multiple organs, including the esophagus, spleen, diaphragm, liver, and small intestine. Based upon medical records provided, and believing that surgery was not an option, the Japanese physician recommended chemotherapy. Upon receiving a CT scan after arrival in Japan, however, it became clear that I had only a single tumor in one location. Injection chemotherapy was administered two times, followed by Titanium silicate-1 chemotherapy (TS-1), an oral anticancer drug, and I was monitored for changes in condition and side effects with care from Japanese medical staffs.

Two weeks after the commencement of treatment, I was discharged from the hospital and took up residence in a nearby monthly rental apartment. Treatment and monitoring continued on an out-patient basis up until almost two months from the arrival. In the beginning, the doctor was concerned about the side effects of TS-1, as these are typically stronger in Caucasians than in Orientals; however, I was relatively unaffected. Furthermore, as the treatment appeared to be having a positive effect, including a reduction in the tumor level marker, I was deemed well enough to return home. TS-1 therapy, as it is administered orally, does not require hospitalization and can be continued by the patient at home. But since the drug was developed in Japan and is not yet available in the Republic of Georgia, I decided to hand-carry a half-year supply, which I continue to self-administer.

Written Second Opinion Service:
Advice from Japanese Expert to your home

To those patients who are incapable of traveling to Japan for treatment due to the severity of their illness, or who wish not to travel abroad just for second opinion but nevertheless question the adequacy of the treatment available to them in their home country,

Med in Japan offers the option of providing a “written second opinion” with world-leading medical experts in Japan. If you are able to provide us with adequate medical records, including test results, x-rays, and a medical certificate from your current doctor, then we can submit these to a qualified Japanese specialist for evaluation. Med in Japan also provides a translation of the physician’s second opinion in your native language. Recently, the written second opinion program has given some patients the confidence they needed before choosing to come to Japan for further tests and treatment. Contact Med in Japan today for the second opinion service for you or your patients.
Health Tips: Kampo, Traditional Japanese Medicine

Not only is Japan a leader in many areas of modern medical science, but it also home to a long tradition of natural and homeopathic remedies known as kampo. While kampo has been gaining attention as a viable form of alternative medicine, it is still not well known or understood outside of Japan.

A form of traditional herbal medicine that was originally passed on to Japan from China, kampo has been in use in Japan since the 7th century. Since the beginning of the modern era, kampo has been used concurrently with modern western medicine in Japanese hospitals. Table 1 lists some of the kampo remedies commonly prescribed by medical doctors.

Kampo is derived entirely from natural ingredients using certified manufacturing practices and is subject to modern quality control and laboratory testing (GMP, GLP). Kampo remedies are favored by many people as alternatives to synthetic pharmaceuticals because they are well known to produce fewer side effects than many of those more modern medicines. A Keio University group, headed by Dr. Watanabe, reports that there have been over one hundred clinical trials involving kampo conducted internationally.

Prescription, manufacture, and sale of kampo is strictly regulated by the Japanese Ministry of Health, Labor and Welfare. Typically, a doctor prescribing kampo will keep his patient under observation for about two weeks to determine the medicine’s effect before making further prescriptions. Kampo provides yet another treatment option for foreign visitors in search of healthcare.

Table 1: Currently used Kampo Medicine for treatment in Japan

<table>
<thead>
<tr>
<th>Usage</th>
<th>Name of Medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atherosclerosis &amp; Cerebrovascular disease</td>
<td>Keishibukuryogan, Chotosan</td>
</tr>
<tr>
<td>Gastrointestinal Cancers</td>
<td>Ninjin’yoito, Juzentaihoto, Hochuekikko, Shoaiikoto, Daikenchuto, Hangeshashinoto</td>
</tr>
<tr>
<td>Hepatocellular Carcinoma</td>
<td>Juzentaihoto, Shoaiikoto, Daikenchuto</td>
</tr>
<tr>
<td>Ovarian disorders (polycystic ovary, primary ovarian failure)</td>
<td>Unkeito</td>
</tr>
<tr>
<td>Obesity</td>
<td>Bofutsushosan</td>
</tr>
<tr>
<td>Alzheimer’s disease</td>
<td>Kihito, Goshajikigan</td>
</tr>
</tbody>
</table>

Watanabe et al. 2011, Goo et al. 2012

References:

Disclaimer:
The purpose of this article is to illustrate the depth and scope of healthcare available in Japan. Please be advised that Med in Japan is not able to provide referrals or support services to patients seeking treatment solely by traditional means, including kampo. Support services will be extended, however, to those patients for whom the use of kampo has been recommended by a physician, for example, as an antidote to side effects caused by conventional therapies or medications.

Understanding Japan: Accommodations

Hotel and other accommodations may be difficult for foreign visitors to arrange. The visitor may encounter problems in communicating, or in arranging payment or guaranteeing his reservations. Furthermore, in the case of long-term stay, as may be required for medical treatment, hotel lodging may not be the best solution.

Depending upon the visitor’s needs and lifestyle requests, there are a number of different accommodation options available. Short-term visitors will be most comfortable staying in western-style hotels, but may also want to experience staying in a Japanese-style inn, called a ryokan, or in a guest house, called a minshuku—or in temple lodging, a youth hostel, or even a capsule hotel!

Visitors staying for a longer term, as in the case of patients undergoing extended outpatient medical treatment, may find it more economical to stay in a “weekly mansion”, or to rent a weekly condo or even a Japanese house.

Med in Japan can assist in ensuring that your stay, as well as that of any accompanying family members, is comfortable and enjoyable. We will arrange accommodations for you based upon your needs and special requests, and we will also ensure that your accommodations are close and convenient to the medical facility where you will be receiving treatment.

For more information, visit http://medin.jp and inquire using the Inquiry Form link posted on the website.
Japan has one of the most modern and efficient healthcare systems in the world. Now, the doorway to that healthcare system is open to the people of Bangladesh. This was the message delivered at a seminar entitled "Advanced Medical Treatment and Care in Japan for Patients from Bangladesh" held on June 29th at the Radisson Blu Hotel in Dhaka.

The seminar was part of a program organized by Emergency Assistance Japan and Medical Excellence Japan to commemorate 40 years of Bangladesh-Japan friendship. In his welcoming address, Mr. Kazumasa Yoshida, president of Emergency Assistance Japan, said that because of Japan’s advancements in technology and healthcare, the nation now ranks first in the world in length of life expectancy.

Mr. Yoshida also went on to announce the establishment of Emergency Assistance Bangladesh Co., Ltd., a Bangladesh corporation that will serve as a facilitator and intermediary to persons wishing to secure healthcare treatment in Japan, as well as assisting in the transfer of medical technology and knowhow from Japan to hospitals in Bangladesh.

The ceremony and seminar was also attended by Bangladesh’s Minister of Health and Family Welfare, Dr. A.F.M Ruhul Haque. Dr. Haque said that Japan’s healthcare system is among the best in the world and that the transfer of medical technologies and skills from Japan to Bangladesh will benefit both countries.

The seminar keynote speaker, Dr Hirohiko Tsujii, the director of Japan’s Association for Nuclear Technology in Medicine, remarked that Japan is currently the only country in Asia performing heavy ion radiation therapy, an advanced form of radiotherapy that has proven effective in the treatment of inoperable cancers. The therapy can be performed on an outpatient basis.

Furthermore, Dr. Tsujii noted that Japan is pioneering stem cell therapies that have proven to be revolutionary in the treatment of paralysis. A number of patients who have undergone this type of therapy are now pursuing active lives.

Emergency Assistance Bangladesh Co., Ltd. was incorporated on July 9th, 2012. The company will serve as a facilitator to patients in Bangladesh and neighboring countries wishing to receive medical attention and medical treatment in Japan. Emergency Assistance Bangladesh will work closely with its Japan affiliate, Med in Japan, to ensure that patients receive the best medical attention and treatment available. Med in Japan also provides assistance with travel and accommodation arrangements, medical-stay visa procurement, and medical translation and interpretation.