Japanese cutting-edge medical technology

Japan Federation of Medical Devices Associations (JFMDA)

Chairman

Koji Nakao
<table>
<thead>
<tr>
<th></th>
<th>Russia</th>
<th>Japan</th>
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</thead>
<tbody>
<tr>
<td>Average life expectancy (yrs)</td>
<td>67.7</td>
<td>82.0</td>
</tr>
<tr>
<td>Infant mortality rate (/1,000)</td>
<td>11.3</td>
<td>6.9</td>
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<tr>
<td>Cause of death</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Cardiac disease</td>
<td>Cancer</td>
</tr>
<tr>
<td>2</td>
<td>Cancer</td>
<td>Cardiac disease</td>
</tr>
<tr>
<td>3</td>
<td>Accidental death</td>
<td>Cerebrovascular disease</td>
</tr>
<tr>
<td></td>
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<td>Pneumonia</td>
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</table>
Cancer therapy without surgery

Proton Therapy Systems

Heavy ion radiotherapy

Treatment for: Brain tumor, liver cancer, prostate cancer, uterus cancer

Photo: Sumitomo Heavy Industries, Ltd.  Website
Non Invasive diagnostic imaging

Early detection of cancer cells and vascular disease with high definition imaging
Better for patients due to less exposure to radiation

Multi-detector computed tomography

PET CT

From the homepage of Toshiba Medical Systems

From the homepage of Shimadzu
Supporting Interventional procedures with the use of images of blood vessels

Optical Coherence Tomography

Image of a longitudinal section of the blood vessel

Imaging system

Optical Coherence Tomography
Interventional Cardiology

Percutaneous coronary intervention

- **PTCA**
  - Dilation of blood vessels with a balloon

Drugs Eluting Stents

- Stents coated with a drug to block cell proliferation

Peripheral Vascular stents

- Insertion of catheters via the femoral artery
- Blood flow resumes and prevents restenosis
- Insertion of catheters via the radial artery

Neurovascular embolization coils

- Filling the aneurysm with coil to prevent rupture.
- Cerebral aneurysm
- Platinum coil
Less pain for insulin injections with the world's thinnest needle

Production process

Tip Diameter
Φ0.18mm  34G
High accuracy diagnosis

Non-invasive therapy

Less-invasive treatment
(Interventional Cardiology)

To contribute to medical care and the people of Russia