Press Release

10 February 2026

Tokushukai Medical Group

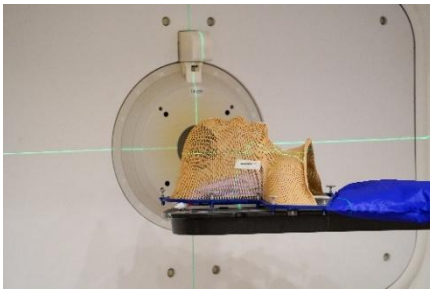
Shonan Kamakura General Hospital

Boron Neutron Capture Therapy (BNCT)

~ A New Treatment Option for Cancers Difficult to Treat Surgically ~

Key Features of BNCT at Our Hospital

- High-output accelerator (approximately three times higher under certain conditions)
- CT integrated with the treatment system
- Japan's first high-precision image guidance
- Applicable to solid tumors throughout the body



Shonan Kamakura General Hospital (Kamakura City, Kanagawa Prefecture), one of the leading general hospitals in the prefecture with a strong focus on cancer treatment, has operated Kanagawa's first proton beam therapy facility.

We are pleased to announce the introduction of **Boron Neutron Capture Therapy (BNCT)** as a new therapeutic approach distinct from conventional particle beam and radiation therapies.

Compared with BNCT systems previously implemented in Japan, the BNCT introduced at our hospital is characterized by a neutron beam output that is approximately three times higher under certain conditions. Unlike proton beam therapy, BNCT is an innovative cancer treatment expected to achieve high therapeutic efficacy with a single irradiation session. It is anticipated to significantly expand treatment options for patients for whom surgery is difficult. This therapy is conducted not as routine clinical care but as a self-pay specified clinical research study based on national regulations and is provided to patients who meet defined eligibility criteria.

About Boron Neutron Capture Therapy (BNCT)

BNCT involves administering a boron-containing drug that preferentially accumulates in cancer cells, followed by neutron irradiation. A reaction occurs inside the boron-containing cancer cells, selectively destroying them.

A major advantage of BNCT is its ability to concentrate therapeutic effects on cancer cells while minimizing damage to normal tissues.

Eligible Patients

- Cancers that are difficult to remove surgically or where surgery would impose significant physical burden
- Recurrent or locally advanced cases for which conventional treatments are difficult to apply
- Cases where sufficient efficacy was not achieved with other radiation therapies
- Patients confirmed—via boron drug imaging—to have higher boron accumulation in tumors than in normal tissues

Background for Introducing BNCT

- Recognition as one of Asia's hub hospitals by the International Atomic Energy Agency (IAEA)
- Need to accumulate experience and achievements in particle beam therapies, including proton therapy
- Necessity to further expand treatment options for patients unsuitable for surgery
- Progress in BNCT clinical research domestically and internationally with promising therapeutic outcomes
- Commitment to fulfilling our mission as a regional core hospital for cancer care

Our hospital is dedicated to providing medical care that reduces patient burden while pursuing effective treatment outcomes.

Benefits for Patients

- Treatment generally completed in a single session
- Relatively low physical burden
- Expanded treatment options even in surgically difficult cases
- Fewer hospital visits and reduced impact on daily life

Future Outlook

Based on the knowledge obtained from this research, we will work toward establishing and disseminating safe and effective BNCT treatment, enabling more patients to access this new therapeutic option.

Contact Information

BNCT Support Desk (for patients and medical institutions)

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