What is the Proton Therapy?

The Proton Treatment is a treatment method that destructs that cancer cells by using high heat to accelerate the protons that make up the nucleus of the atom. The proton beam passes through the body and transfers maximum energy to the cancer tissues and subsequently annihilates to minimize radiation exposure to the normal tissues. This process is composed of physical characteristics called, "Bragg peak," which achieves effective treatment results while decreasing the risks associated to side effects in comparison to the existing radiotherapy methods.

What type of cancer can the proton treatment be applied to?

Although the proton treatment can be applied all cancer treatments that involves radiotherapy, it is mainly used in cases where it is difficult to apply sufficient level of radiation to the cancer tissues while preventing safe range of radiation exposure to the surrounding normal tissues.
What is the differentiated point of the Proton Therapy Center at the Samsung Medical Hospital?

**Customized and Integrated Treatments for patients**
The Proton Therapy Center suggests the optimal proton treatment and radiotherapy method through the consultation from the radiation oncology specialists of each field. Furthermore, we provide the best method of cancer treatment through the multidisciplinary approach for various types of tumors.

**Advanced Proton Equipment**
The Proton Therapy Center has the respiratory gated system that traces and treats tumors through respiration movements, imaging equipment to locate the exact position of the tumor before the treatment, latest equipment that makes the next generation proton treatment method, “Intensity Modulated Proton Treatment,” and customized treatment possible. Moreover, we have tomotherapy, Novalis TX, and the latest X-ray special treatment equipment to apply the most suitable radiation treatment method to patients.

**Wellness Care**
The Proton Therapy Center provides wellness care for each patient to foster the patients’ lifestyle in addition to the treatment. During the treatment, the specialists from each area consult the patient to provide a more comforting treatment. Also, we are giving our greatest effort in helping our patients return to their normal lifestyle after the treatment.

How is the Proton Treatment proceeded?

Depending on each patient’s conditions and treatment objectives Customized consultation > Construct the treatment plans through the simulation treatment > Appropriate Treatment