



# Cancer and Its Cure

## Proton Beam Therapy is a cure, not just a treatment for Cancer.

### 1. How many people will be diagnosed with cancer each year?

**Answer:** Over 500,000 men, women and children will be told they have cancer each year.

### 2. Is there a cure for cancer?

**Answer:** Yes. Proton Beam Therapy Centers have been **curing** cancer since 1961. Loma Linda University Medical Center was the first proton beam center to **cure** patients on a daily basis when it opened in 1990.

In 1961, the Harvard Cyclotron Laboratory at Harvard University in Boston began treating patients with proton therapy. Advances in imaging technology such as CT, MRI and PET scans, helped researchers to better diagnose and visualize tumors and made proton therapy a more practical treatment option. The first hospital-based proton treatment center in the United States was built in 1990 at Loma Linda University Medical Center in Loma Linda, Calif.

### 3. If you are diagnosed with cancer, what do you do?

**Answer:** Step 1: Become your own Health Care Advocate. Learn everything you can about your disease and the available treatments.

Step 2: Call the Help Desk at your Proton Beam Therapy Center. They can help you find the answers you need.

### Proton Therapy Centers in the United States:

- Loma Linda University Medical Center, Southern CA. – 1-800-PROTONS
- Midwest Proton Radiotherapy Institute at Indiana University – 1-866-487-6774
- The University of Florida Proton Therapy Institute – 1-877-686-6009
- M.D. Anderson Cancer Center's Proton Center, Houston - 1-866-632-4782
- Francis H. Burr Proton Center at Mass. General Hospital - 1-800-388-4644

### 4. I hear proton beam therapy is expensive. How can I pay for it?

**Answer:** Proton Beam Therapy is covered by **Medicare** and by more than **200** insurance companies.

### 5. What types of cancer can Proton Beam Therapy be used to cure?

**Answer:** Proton Beam Therapy can be used to **cure** cancer in many parts of the body including areas that cannot be operated on. Some of the cancers Proton Beam Therapy is used for are: Lungs, throat, prostate, pediatric, esophageal, head and neck, brain, central nervous system, spine, gastrointestinal, ocular, sarcoma, female genital tract, and skull base cancers.

*NO MEDICAL ADVICE: Material appearing here represents opinions offered by non-medically-trained laypersons. Comments shown here should NEVER be interpreted as specific medical advice and must be used only as background information when consulting with a qualified medical professional.*

**6. If I am diagnosed with cancer and choose Proton Beam Therapy will I live a full life?**

**Answer:** Proton Beam Therapy kills cancer not people. It also has the fewest side effects when compared to any other cancer treatment available today.

According to the M.D. Anderson Proton Therapy website, the clinical benefits of proton beam therapy over conventional radiation therapy include:

1. Increased tumor control, due to proton beam therapy's ability to increase the radiation dose administered to the targeted tumor;
2. Reduced occurrence of treatment-related tissue damage and other side effects, because of the precision of dose delivery and the resulting limited amount of radiation delivered to healthy tissues adjacent to the tumor site;
3. Decreased normal tissue toxicity when radiation and chemotherapy are given simultaneously;
4. Increased long-term disease-free survival rates for many tumors, due to proton beam therapy's superior local tumor control; and
5. Potential increase in the daily dose of radiation being delivered to the tumor, thereby reducing the number of daily patient treatments.

Proton therapy is not considered experimental and it can be used to treat many different types of cancers. Tumors considered for proton therapy should be localized, require high doses of radiations for control, and be located near sensitive normal tissues.

**7. Can children benefit from Proton Beam Therapy?**

**Answer:** According to Jeffrey D. Bradley, M.D., who was recently named director of the Kling Center for Proton Therapy, "[Proton Beam Therapy] gives us another option for treating cancers so that we can ensure we have the best solution for each patient. Children are an ideal group to use the proton therapy because X-ray beam radiation therapy (traditional radiation therapy) can potentially affect their growth or lead to secondary cancers later in life."

Note: The Kling Center for Proton Therapy is scheduled to open in summer 2009 at the Siteman Cancer Center at Washington University School of Medicine in St. Louis and Barnes-Jewish Hospital.

**8. Where are Proton Beam Therapy Specialists trained?**

**Answer:** In March 2007, ProCure Treatment Centers, Inc. opened the ProCure Training and Development Center (TDC) in Bloomington, Indiana. It is the first facility in the world dedicated to proton therapy training. A second training center is expected to open in Oklahoma City, Oklahoma in 2009.

The TDC will provide hands-on training for radiation oncologists, medical physicists, dosimetrists, radiation therapists and other staff involved in proton therapy treatment. The facility offers clinical, technical, interpersonal and administrative training that simulates all aspects of proton therapy treatment in a replica of a proton therapy treatment center featuring everything but the actual protons.

There are currently only five proton therapy centers operating in the United States, but it is anticipated that within the next five years, at least 10 new proton therapy facilities will open across the country, increasing the demand for skilled clinical, technical and administrative staff.

People will have the opportunity to be in a profession that **cures** cancer instead of just **treating** cancer.

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