

The image shows the interior of a proton therapy gantry. A patient is lying on a white-covered treatment table, positioned inside the large circular gantry. The gantry's inner wall is white and features a large circular opening. On the right side of the gantry, there is a control panel with various buttons and a 'BEAM ON' indicator. The patient's table has 'OPTIVUS PROTON THERAPY' printed on its side. The overall scene is brightly lit, highlighting the clean and clinical environment of the treatment room.

THE POWER AND PRECISION OF
PROTON BEAM THERAPY IS
WITHIN REACH™

OPTIVUS®
PROTON THERAPY

PROTON THERAPY OVERVIEW

The American Cancer Society estimates 1.6 million new cancer cases in the United States this year. Approximately two thirds of those patients will receive some form of radiation therapy as part of their treatment course.

Proton Beam Therapy (PBT) is a proven and highly advanced form of external-beam radiation therapy. PBT holds several advantages over other types of radiation therapy for many diseases, in that it provides a precise treatment dose to the disease site, while sparing healthy surrounding tissue. Thus, minimizing side effects and toxicity.

PBT is not new or experimental. The use of protons to kill cancer was first proposed by an American physicist, Dr. Robert R. Wilson in 1946. Proton therapy was first proposed for practical use in a clinical environment in the mid-1980's by Dr. James M. Slater, a physician with a background in physics.

The world's first hospital-based proton radiation treatment facility was built at the Loma Linda University Medical Center in Loma Linda California. This center delivered its first proton treatment in October of 1990. Named for the visionary who made the development of the center a reality, the James M. Slater, MD, Proton Treatment and Research Center (JMSPTRC) has today treated more than 18,000 patients.

In 1993, the core engineering team who designed the JMSPTRC, formed Optivus Proton Therapy, Inc. (Optivus) with a singular focus of advancing the technology it pioneered to expand the reach of proton therapy to more patients for more disease sites.



With proton therapy, patients experience few to no side effects - providing a better quality of life both during and after treatment.

BENEFITS OF PROTON THERAPY

Leading experts in the field of radiation therapy believe proton therapy to be the most advanced and accurate form of radiation therapy available today.

Proton therapy involves accelerating protons to approximately one-half the speed of light and delivering a prescribed dose to a precise three-dimensional volume in a patient's body. This process is repeated daily for 1-45 treatments depending on the patient specific prescribed plan.

Proton therapy has been shown to be an exceptional option for childhood cancers. Studies show that using proton therapy to control pediatric tumors provides excellent results while reducing damage to healthy developing tissue and reducing the likelihood of cancers occurring at other sites in the body.

Proton therapy is ideal for treating solid tumors, tumors of the prostate, brain, eye, head and neck, inoperable small cell lung cancers as well as, liver, certain gastrointestinal cancers and certain types of breast cancer.

At the JMSPTRC, more than 240 types of tumor sites have been treated and more research and trials are ongoing to expand the use of proton therapy.



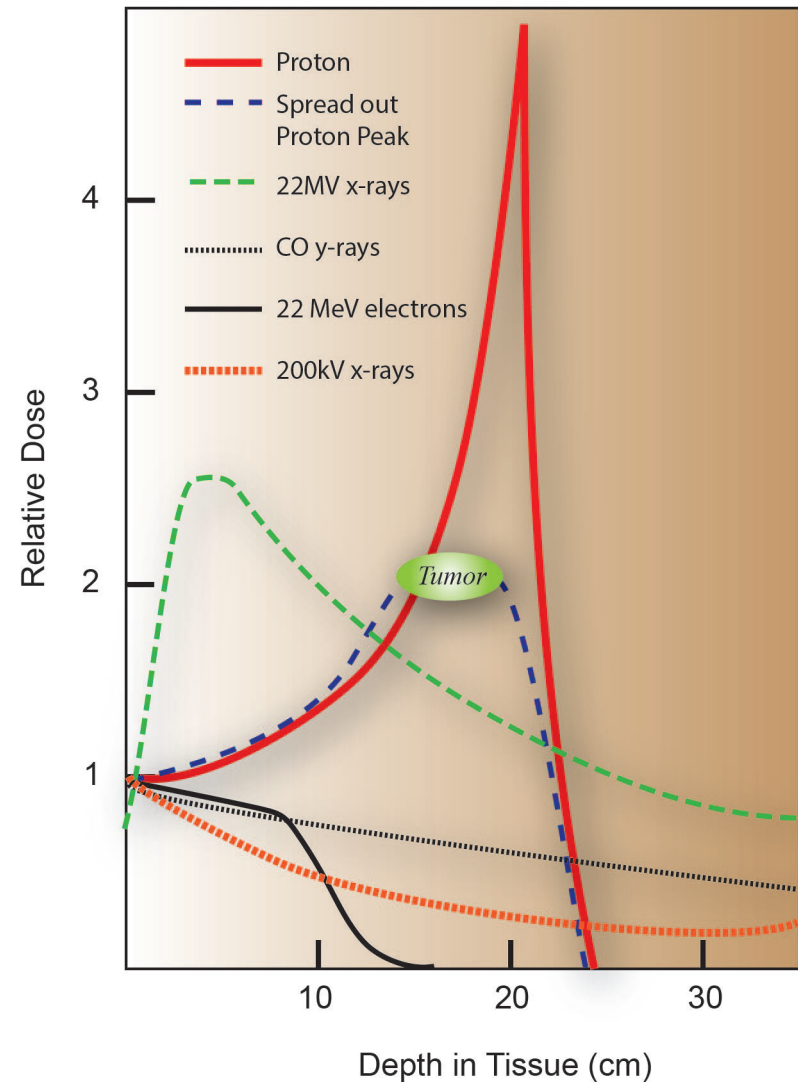
HOW DOES PBT WORK

Bragg Peak

There are several types of radiation therapy in use today. Radiation therapy uses high energy radiation to kill cancer cells by damaging their DNA.

Proton treatment differs from conventional radiation therapy (photon or x-rays,) in that protons have 1800 times greater mass than electrons and a greater absorption rate can be controlled in three dimensions, allowing their energy at the end of their desired path to cause very little lateral secondary scatter.

As the protons travel through the body they slow down as they interact with electrons. When they have slowed down sufficiently, they release a burst of energy, (Bragg Peak). By regulating the velocity of the protons, a physician can design the proton radiation treatment so this burst occurs at the precise site of the cancer or benign tumor, minimizing damage to healthy tissue.



ABOUT OPTIVUS®

For more than two decades, clinicians and patients have trusted Optivus to provide safe, reliable and precise proton therapy technology to treat cancer and other conditions.

In 1987, a team of engineers joined with physicians and scientists from Loma Linda University Medical Center, (LLUMC) a major Southern California teaching hospital, to pioneer the world's first hospital-based proton treatment center. In 1990, the first treatment room went on line.

Inspired by the success physicians and patients experienced, that engineering team founded Optivus Proton Therapy, Inc. (Optivus) in 1993 to pursue their vision of making proton therapy available to cancer patients throughout the world.

Since its formation, the Optivus team has demonstrated its commitment to this vision by designing, developing and integrating significant technological enhancements to the original LLUMC system, while maintaining an unsurpassed record of patient throughput, operational reliability and safety. The Optivus system today, the Conforma 3000®, represents sixth generation advanced proton technology that, when matched with Optivus' track record for reliability and customer support, provides a superior treatment modality combined with proven revenue generation.

Optivus' singular driving force and company mission is "To Save Lives With Proton Therapy".

Since its early beginnings, the Optivus team embraced all aspects of proton therapy research and development, maintenance and operations and quality assurance to insure the success of future Optivus systems.

Optivus helped to create and define the 'gold' standard in the proton therapy industry. Centers that offer Optivus' proton technology, will enjoy the benefits of enhanced prestige, as they bring a superior form of treatment to patients who would benefit from it.

THE OPTIVUS® ADVANTAGE

Experience

With more than 20-years experience building, maintaining and upgrading the proton treatment center at the Loma Linda University Medical Center (LLUMC,) Optivus led the radiation medical device industry with it's pioneering designs and vision of creating the most sophisticated and successful proton treatment systems in the world.

The Optivus team is comprised of experienced professionals, seasoned in the health care and medical technology industry, and the proton beam therapy segment, specifically; with combined years of proton therapy experience of 300+ years.

Technology

The Conforma 3000® Proton Beam Treatment System, is the latest generation of the technology originally installed at the LLUMC. The LLUMC center began clinical operations in 1990. Since that time, Optivus has completed hundreds of major and minor upgrades to the original design, continuously working with physicians, physicists and therapists to realize the full potential of proton therapy. Optivus was the first commercial company to acquire FDA clearance for its technology. (2000)

Efficiency

Optivus has demonstrated a 98% uptime to our equipment for more than 15 years. We have the best record on report, in the industry, for operational efficiencies. Patients are currently scheduled in 15 minute intervals using our technology. However, recent upgrades to our technology will permit 10 minute patient scheduling.

Safety

Optivus' technology has been used to treat more than 18,000 patients, representing more than 600,000 individual treatments, all with a perfect safety record.

Proprietary

Optivus has the exclusive rights through a license agreement with LLUMC to the original proton beam technology it pioneered, covered by more than 20 patents. Additionally, Optivus holds over 50 worldwide patents for it's technology.

OPTIVUS CONFORMA 3000®

Optivus' Conforma 3000® Proton Beam Treatment System is an integrated facility designed to deliver cost effective proton radiation therapy. This design was created to deliver protons to patients in the most efficient and safe manner possible.

Optivus' custom-designed system features six major sub-systems:

Synchrotron: An FDA cleared particle accelerator designed for clinical use. Safe enough to service only minutes after shut down.

Beam Transport System: Carries the proton beam from the accelerator to any one of the treatment rooms.

Stationary Beam (Fixed Beam): One or more systems with beam shaping and spreading capabilities.

Gantries (isocentric gantry treatment rooms): A large rotating structure that supports the beam delivery systems such that proton beams can be aimed a full 360 degrees around the patient. The gantry maintains sub-millimeter accuracy. Each gantry weighs over 90 tons and stands 30 feet tall.

Image Guided Proton Therapy (IGPT): A sophisticated patient alignment system that includes a robotic based patient positioning system and x-ray digital imaging to ensure the proton beam is precisely aligned to the target in the patient.

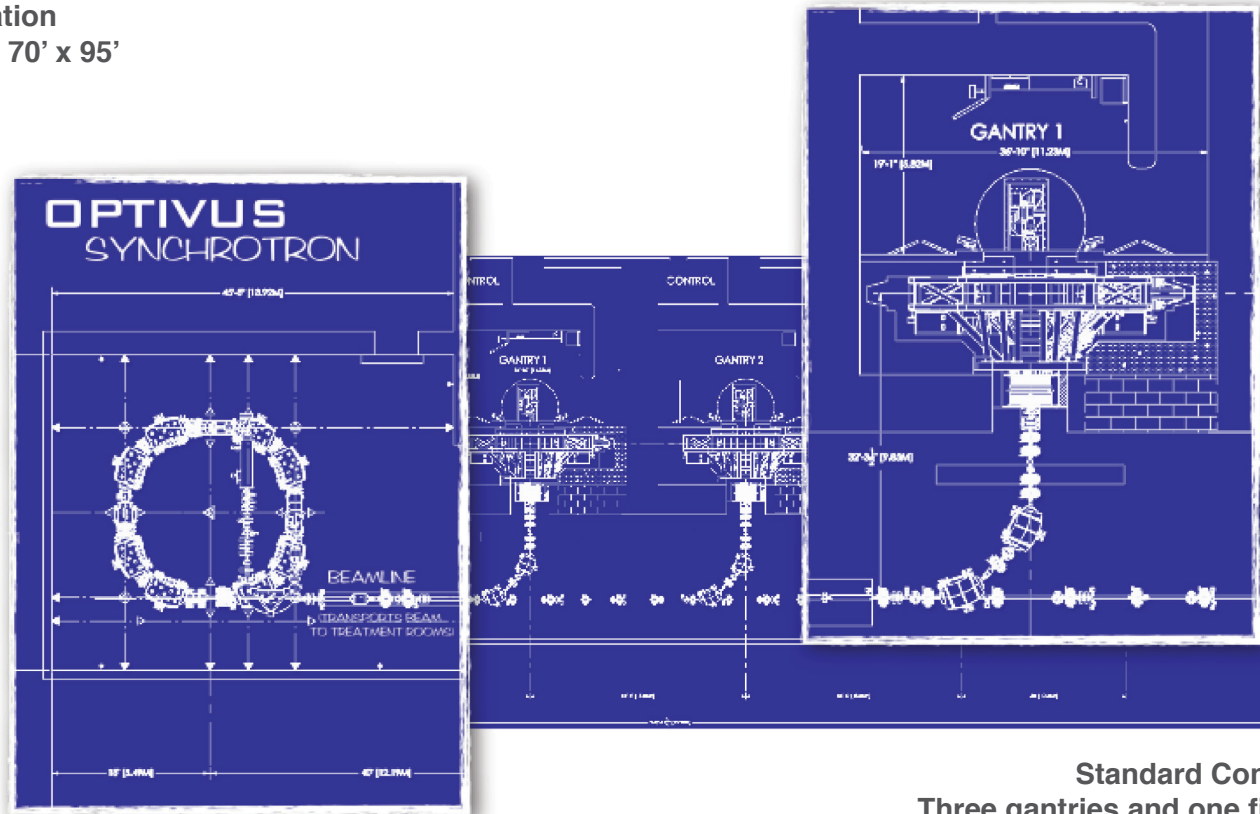
Facility Control System: An integrated computer based system including electronic patient prescriptions, record and verification, scheduling, and control of the beam generation and delivery systems to ensure patients are treated safely and effectively.

New systems may include Intensity Modulated Proton Therapy (IMPT): This will allow physicians to vary dosage intensity within a single target using a narrow proton beam (about a centimeter in diameter) which is painted across a target from multiple directions, while depositing a radiation dose.

The power and precision of proton therapy is within reach with the Conforma 3000®

Single Room Configuration

All the clinical capabilities of a standard configuration
footprint: 70' x 95'



Standard Configuration
Three gantries and one fixed-beam
treatment room
footprint: 202' x 95'

Options

Optivus' FDA Cleared, modular and scalable Conforma 3000 allows institutions looking to enter the proton therapy market the ability to choose from a single room system or a multi-room system. Designed with more than two decades of experience in real-world therapeutic treatments, the Conforma 3000 is the most efficient, reliable, safe, and environmentally friendly proton system on the market today.

THE FUTURE OF PROTON THERAPY

The superior clinical advantages of Proton Beam Therapy (PBT) continues to gain acceptance in the radiation oncology community while patients are rapidly becoming aware of its benefits.

PBT has moved into the mainstream of cancer treatment technology. PBT presents an unprecedented opportunity for healthcare organizations to draw new patients to their facilities, improve their reputations as leading-edge treatment centers and most importantly, effect positive outcomes for patients.

The range of treatable diseases continues to expand in today's world of medical advancements. Radiation oncologists can take full advantage of the proton's power and precision using Optivus' latest technology, including Image Guided Proton Therapy (IGPT) and Intensity Modulated Proton Radiation Therapy, (IMPT) also referred to as Pencil Beam Scanning.

Extending proton therapy to larger cancers, advanced cancers as well as, non-cancerous and neurological diseases, will enable many more patients the opportunity to receive this superior form of radiation therapy.

BIBLIOGRAPHY

A vast number of clinical studies have taken place using Optivus' technology, as well as, equipment provided by other medical device companies. A sample of proton publications can be found below, as well as <http://www.ncbi.nlm.nih.gov/pubmed>

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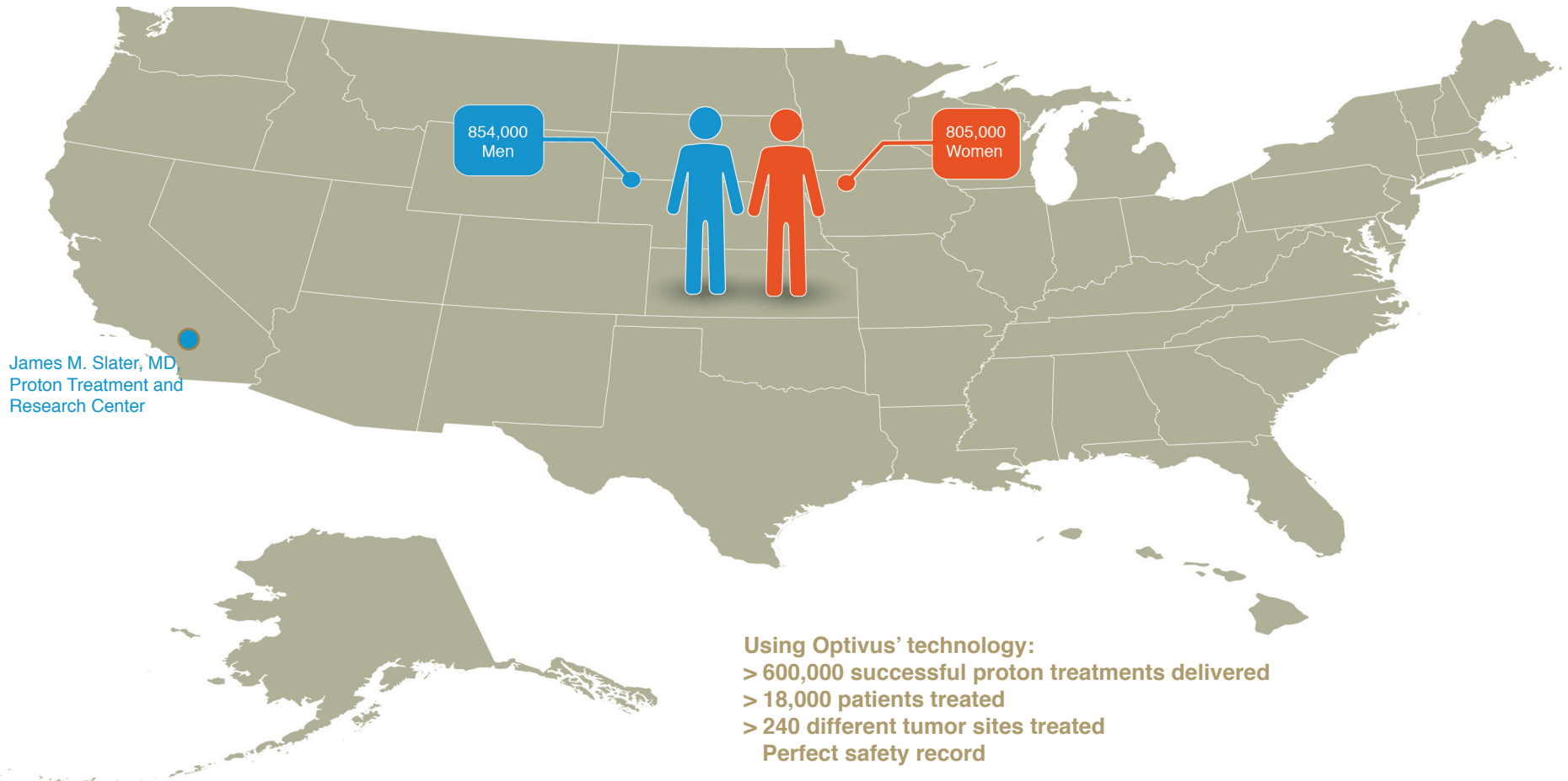
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Cancer Facts: 1.6 Million people will be diagnosed with cancer each year in the United States
854,000 Men (Leading types of cancer, 28% prostate, 14% lung & bronchus)
805,000 Women (Leading types of cancer, 29% breast, 14% lung & bronchus)
Nearly two-thirds of all cancer patients will receive radiation therapy



Using Optivus' technology:

- > 600,000 successful proton treatments delivered
 - > 18,000 patients treated
 - > 240 different tumor sites treated
- Perfect safety record

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PROTON THERAPY

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