



ORBITAL THERAPY

Radiotherapy without a bunker.

Orbital Therapy reaches a major technical milestone.

Bedford, MA, March 15, 2010 – Orbital Therapy has completed the build of their proof-of-concept prototype for breast cancer irradiation, and demonstrated the feasibility to develop and operate an external beam radiotherapy device without the use of a heavily shielded bunker infrastructure.

Current treatment machines, mainly linear accelerators, are housed in a concrete and lead bunker that shields the direct and scattered radiation from exiting the treatment room. The patient remains in the room to receive the prescribed treatment dose, but in addition is exposed to leakage and scatter radiation that is present in the treatment room when the beam is turned on. The operator sets up the patient and leaves the bunker so as not to receive any dose of radiation. “Controlling the radiation scatter and directing it away from the patient as well as absorbing the transmitted radiation are key technological milestones in developing a linac based therapy unit with an integrated bunker”, said Alan Sliski, CTO and founder of Orbital Therapy. With a self-shielded machine, the operator can remain in the same room with the patient during the procedure greatly reducing patient anxiety of receiving radiation. This concept brings many clinical and financial benefits when compared to current equipment and its use. For the first time ever, the patient will remain “outside” of the bunker and receive a much lower whole body dose. “We have reached a major milestone and demonstrated the feasibility to develop an integrated self-shielded breast radiotherapy device”, said Jason Koshnitsky, CEO and founder. The design allows for a lower cost installation for these therapy units, and offers the possibility to make them mobile treatment devices; to provide care in remote underserved areas as well as developing countries.

External beam radiotherapy equipment has been in existence and used to treat cancer patients since the middle of the 20th century. Although many features have been added to the treatment machines, mainly linear accelerators, the basic geometry of the machine has not changed. The patient comes in for daily fractionated treatment, and is inside this bunker for the duration of treatment, which can last up to 8 weeks depending on the cancer. The governing principle of the use of radiation for medical procedures is to deliver As Low As Reasonable Achievable dose (ALARA). The basis for Orbital Therapy’s research, which has been funded by a grant from the National Institute of Standards and Technology, is to integrate the bunker into the design of the machine to minimize the unintended dose to the patient as well as allow machine operation without a conventional bunker.

Orbital Therapy LLC, a company located in Bedford, MA, was founded in 2006 to develop products for the treatment of breast cancer. Our innovative approach to the treatment of this particular disease will offer numerous benefits over currently used techniques and provide many benefits to the patient, as well as the care provider. www.orbitaltherapy.com

Media Contact:

Jeanne-Marie Phillips

HealthFlash Marketing

203-977-3333 / 203-363-0347 Office

jphillips@healthflashmarketing.com