

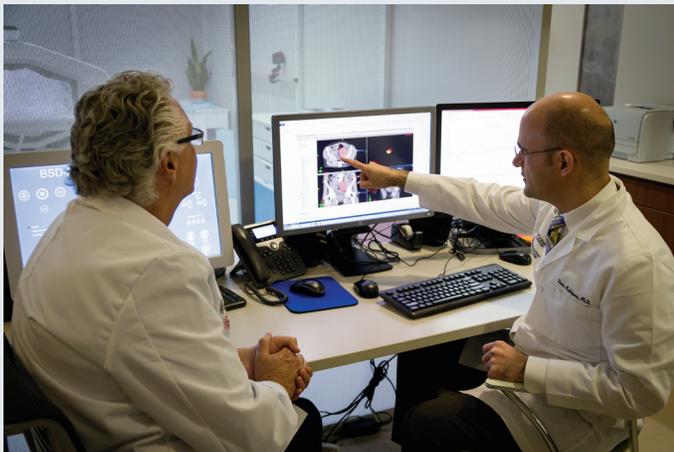


## Thermal Therapy

The Maryland Proton Treatment Center (MPTC) is the **only center in the world** to offer thermal therapy and proton therapy at the same facility. Since the fall of 2018, MPTC has offered deep-tissue external thermal therapy as a potential way to boost survival chances for patients.

### How it Works

- The thermal therapy system heats the tumor tissue to 104-110 degrees Fahrenheit.
- Doctors continuously monitor temperature with internal and external probes.
- A water-filled applicator is placed over the region to be treated, and non-invasive radio frequency energy is focused at the tumor site.
- The heat dilates the tumor blood vessels, bringing more oxygen into the tumor, which makes cancer cells more vulnerable to radiation therapy.
- The procedure is non-invasive and does not require anesthesia.
- Patients undergo one-hour sessions at therapeutic temperature, 2-3 times a week, for 4-5 weeks.



### The Benefits

Research has shown that thermal therapy can be especially useful in difficult-to-reach cancers in the abdomen and pelvic region. Studies have found that adding thermal therapy to standard treatments can significantly shrink tumors and improve survival for some cancer patients.

Deep-tissue thermal therapy can be combined with standard radiation therapy as well as proton-beam therapy to enhance the radiation cancer-killing effects.

Thermal therapy improves clinical outcomes with an acceptable side-effect profile.

Moderate temperatures (104-110 degrees Fahrenheit) have been shown to stimulate the immune system as well as damage and kill cancer cells, usually with minimal injury to normal tissues.

***“We are very pleased to be able to offer deep-tissue thermal therapy, which can be combined with standard radiation therapy as well as proton-beam therapy to enhance the cancer-killing effects of the radiation.”***

– Zeljko Vujaskovic, MD, PhD  
Professor of Radiation Oncology; Director of the Division of Translational Radiation Sciences, University of Maryland School of Medicine

***For more information on thermal therapy,  
please call 410-369-5200***