

Explaining Radiation Therapy: Fact Sheet



What is radiation therapy?

Radiation therapy (RT), also known as radiotherapy, is a cutting-edge cancer treatment that uses beams of high energy to kill, shrink, or control the growth of tumors.



Radiation therapy contributes to the long-term survival of millions of cancer patients around the world.

Approximately 50 – 60 percent of all people diagnosed with cancer receive radiation therapy at some point during their care.¹ If, by 2035, every cancer patient who needs radiation therapy has access to it, estimates show that more than one million more lives would be saved every year.²



Radiation therapy is curative.

Radiation has a curative role in nearly every type of cancer, including common cancers such as breast, lung, prostate, colorectal, head and neck, and cervical cancer, which account for more than 50 percent of cancer cases worldwide. It can be used alone or in combination with other treatments, like chemotherapy, immunotherapy, and surgery.



Radiation therapy is valuable.

When stereotactic radiosurgery (SRS) and stereotactic body radiation therapy (SBRT) are used to treat brain, spine, lung, prostate, and pancreatic cancers, treatment outcomes were comparable and even superior to other treatment options while simultaneously saving the patients and providers money.³ In addition to curing cancer, radiation therapy is also used for palliative care and to enhance quality of life and end of life support and care.



Radiation therapy is convenient.

Radiation therapy is an outpatient treatment, and its side effects are usually mild and temporary. Most patients can continue normal activity during and immediately following treatment.



Radiation therapy is a clear choice during the pandemic.

With the COVID-19–induced cancer backlog and future worldwide cancer burden, radiation therapy has emerged as a safe cancer therapy to continue to treat patients and substitute for canceled surgery in some tumors. Radiation therapy adapts well to social distancing and infectious disease restrictions.

¹ Baskar R, Lee KA, Yeo R, Yeoh KW. Cancer and radiation therapy: current advances and future directions. *Int J Med Sci.* 2012;9(3):193-199. doi:10.7150/ijms.3635

² Atun R, Jaffray DA, Barton MB, et al. 2015. Expanding global access to radiotherapy. *Lancet Oncol* 16(10): 1153-86

³ <https://www.radiologyinfo.org/en/info/stereotactic>