

Advancing Greater Precision in Cancer Treatment

brighamhealthhub.org/cancer/advancing-greater-precision-in-cancer-treatment

August 2, 2019

Daphne Haas-Kogan, MD

Contributor: Daphne Haas-Kogan, MD

Daphne Haas-Kogan, MD, is Chair of the Radiation Oncology Department at Dana-Farber/Brigham and Women's Cancer Center (DF/BWCC).

Raymond H. Mak, MD

Contributor: Raymond H. Mak, MD

Raymond H. Mak, MD, is a thoracic radiation oncologist in the Radiation Oncology Department at the Dana-Farber/Brigham and Women's Cancer Center (DF/BWCC).

This summer, the Dana-Farber/Brigham and Women's Cancer Center (DF/BWCC) will become the first health system in New England—and one of the first in the United States—to offer a new state-of-the-art radiation therapy for cancer patients, known as MRI-Guided Radiation Therapy (MRI-RT). This new therapy is part of a relentless pursuit to advance cancer care and provide the most innovative treatments for patients.

"Innovations in radiation oncology are constantly occurring. Every so often there's a really transformative change in terms of what we offer patients. The MRI-Guided Radiation Therapy technology that we are bringing to the Dana-Farber/Brigham and Women's Cancer Center is one of these moments of transformative change," says Daphne Haas-Kogan, MD, Chair of the Radiation Oncology Department at DF/BWCC.

MRI-Guided Radiation Therapy (MRI-RT) is part of a relentless pursuit to advance cancer care and provide the most innovative treatments for patients.

MRI-Guided Radiation Therapy is a high-precision radiation treatment that targets tumors with high doses of radiation while minimizing damage to healthy tissues. MRI-RT offers the greatest benefit for soft-tissue tumors, including breast, gastrointestinal, gynecological, sarcoma, prostate and head and neck tumors—and for tumors that are highly mobile (e.g., lung cancers).

"MRI-Guided Radiation Therapy gives physicians a more precise way to see, track and treat tumors compared to the current standard of care that uses CT imaging or X-ray films to locate and target tumors for radiation treatment," says Raymond H. Mak, MD, a thoracic radiation oncologist in DF/BWCC's Radiation Oncology Department.

This revolutionary technology helps clinicians fine-tune the radiation treatment plan and personalize each treatment in ways they have never been able to do before.

MRI-RT also allows clinicians to adapt daily treatments. "Adaptive treatment plans that are personalized to the real-time location of a patient's tumor and organs can be developed in an hour with the patient in the treatment room instead of taking a week," says Dr. Mak.

This revolutionary technology helps clinicians fine-tune the radiation treatment plan and personalize each treatment in ways they have never been able to do before.

— August 2, 2019



[Watch Video At: https://youtu.be/veRrcQzWq7c](https://youtu.be/veRrcQzWq7c)

For the first time, cancer patients in New England will have a cutting-edge option for radiation treatment, known as MRI-Guided Radiation Therapy (MRI-RT).

Subscribe for more from Brigham Health.
