WHAT IS RADIOTHERAPY?
Radiation therapy, or radiotherapy, uses low- and high-energy radiation to destroy cancer cells and shrink tumors. High-energy radiation may come from inside or outside the body. It can be used as a single treatment or in combination with surgery, chemotherapy, and other treatments.

WHEN IS RADIOTHERAPY USED?
Radiotherapy is used in many forms of cancer, and we know more about how to use it and when it is best for a patient’s cancer. We know that sometimes, radiotherapy is combined with other therapies, such as chemotherapy. Radiotherapy is used to treat just about every type of cancer, as well as certain disorders in the brain, including:

1. Brain
2. Breast
3. Brain tumors
4. Gynecological
5. Liver
6. Lung
7. Kidney
8. Leukemia
9. Kidney
10. Head and Neck
11. Skin
12. Prostate
13. Rectal
14. Pancreas
15. Spinal

Most side effects of radiotherapy, including radiotherapy delivered with Accuray systems, are mild and temporary, often involving urinary or salivary function, deterioration of quality of life, permanent injury and even death. Side effects can occur during or shortly after treatment, or even in the future. You may experience symptoms during or soon after your treatment. These can include:

- Fatigue
- Nausea
- Skin irritation

Important Safety Statement:
Accuray systems are not intended to treat all types of cancer. For Accuray systems to treat a growing number of types of cancer, many factors will be considered, including:

- Relative to the radiation source prior to each treatment delivery — providing even more accurate targeting of the tumor and software to create treatment plans that further reduce the risk of delivering radiation to healthy tissue and organs.

A SHORT HISTORY OF RADIOTHERAPY
External Beam Radiotherapy
- 1917-1919: First linear accelerator (MegaVolt) was developed.
- 1937: Cobalt 60 was discovered.

Types of Radiotherapy
- External-Beam Radiotherapy
- Brachytherapy
- Surgery
- Stereotactic radiotherapy
- Other radiotherapy

Improving External Photon Beam Treatment Delivery Accuracy
Four key innovations have improved the precision of radiotherapy delivery:

- IGRT
- IMRT
- Stereotactic Body Radiation Therapy (SBRT)
- CyberKnife

The Future of Radiotherapy
Many factors are considered when determining the future of radiotherapy technology. The current system of radiotherapy is not the correct method for treating all types of cancer. New technologies and advancements in technology will be considered and evaluated to determine which systems and advancements are the most appropriate for treating a growing number of types of cancer.

Learn more about how Accuray is shaping the future of radiotherapy — the radiology advance possible in the treatment of cancer.