

Infinity FAQ

- **What is the Infinity?** The Infinity is the world's most advanced linear accelerator available on the market today. It incorporates best in class computerized medical imaging technology to treat people with radiation therapy. Elekta is the name of the company that manufactures the Infinity machine.
- **What is VMAT?** The Infinity also brings the promise of a technology called VMAT (Volumetric Intensity Modulated Arc Therapy), a new and developing tool in the field of radiation therapy.
- **How is VMAT helpful?** VMAT is intended to shorten treatment time without compromising quality of care. Elekta believes VMAT's shorter treatment times will translate into increased patient comfort and improved accuracy by reducing time spent during treatment
- **Is VMAT unique to the Infinity?** Only Elekta Infinity has the ability to perform VMAT treatments with multiple arcs, offering clinicians the ability to choose single or multiple arcs depending upon a patient's unique treatment plan. Other types of treatments require the linear accelerator to deliver a small amount of radiation, and then stop to rotate to a new position. Elekta's VMAT enables the radiation to remain on while the linear accelerator movements occur. The result is treatments that can be shorter and more closely focused on the tumor.
- **How does the patient benefit?** Through VMAT, Infinity continuously irradiates the targeted area while the source of the beam rotates around the patient. This allows for more tightly focused treatments to a tumor in a significantly shorter time. This increases patient comfort and improves accuracy by reducing time spent during treatment.
- **What else makes the Infinity next-generation technology?** Because of the integrated 3D visualization capabilities of the Infinity, meaning real time imaging occurs at the time of treatment, uncertainties due to organ motion and slight differences in patient set-up can be eliminated. The result is unmatched clinical confidence, enabling more aggressive treatment of tumors while minimizing damage to surrounding healthy tissue.
- **What tumor types are best suited for VMAT treatments?** Because of its superior image guidance capabilities, Infinity can be very useful in treating, as an example, prostate cancer, as well as cancers of the head and neck.
- **Where is Elekta technology available?** This advanced radiotherapy accelerator has been installed at Mary Bird Perkins Cancer Center in Baton Rouge located on the campus of Our Lady of the Lake Regional Medical Center. When Mary Bird Perkins opened its fifth location in Gonzales, LA in partnership with St. Elizabeth Hospital earlier this year, the first of Mary Bird Perkins' \$20 million investment in Elekta Systems was installed at the new facility. VMAT was under development at the time and now that it is available, it will be a part of the Elekta machine in Gonzales as well.