



## Precision Cancer Care

### INVESTMENT OPPORTUNITY

#### MRI-Guided Linear Accelerator

Radiation is an important therapeutic tool to treat many kinds of cancer. However, patients are often fearful about both short-term side effects and the well-documented potential for late effects, including organ damage and secondary cancers.

Now, a new device offers an unprecedented level of precision in the delivery of radiation, resulting in fewer side effects and sparing nearby organs and non-cancerous tissue: the Magnetic Resonance Imaging Guided Linear Accelerator, also known as MRI-LINAC.

MRI and LINAC are instruments that have been used separately in cancer treatment for many years. Using them simultaneously in one machine offers the most precise delivery available—with specific advantages for soft-tissue tumors in the chest or abdomen (pancreas, liver, kidney, cervical, uterine, colorectal, prostate, and more).

As the MRI machine produces high-definition, diagnostic-quality images of a tumor in real time, the linear accelerator maintains a sharp focus on the tumor while targeting it with high-energy beams. The MRI-LINAC monitors the movement of a tumor—even slight movement due to patient breathing—and continually adjusts the radiation delivery to compensate for any shift in position. The device also monitors the positioning of a tumor and the surrounding soft tissues from one treatment session to the next, modifying radiation delivery as necessary to account for any changes.

Only a handful of cancer centers around the country offer this game-changing technology; currently, the closest for Arizona patients is located in California. Philanthropic investment will bring this advanced treatment option to Tucson to benefit patients in Southern Arizona, the entire state, and across the desert southwest. And, it will allow our teaching institution to teach medical residents and students the latest care methods using the state-of-the-art technology to prepare them for careers in modern medicine.

### Banner Health Foundation

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“Those battling cancer in Arizona deserve access to this game-changing technology to give them the very best chance for a cure with the lowest amount of collateral damage possible.”

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