

# Our State-of-the-art MR Linac in Yashoda Hospitals - Hitec City



### What is the MR LINAC Technology in Cancer Care?

Magnetic Resonance Imaging Guided Linear Accelerator (MRI-LINAC) is a revolutionary technology that provides unprecedented precision in delivering radiation therapy treatments. This technology combines a radiation delivery unit (linear accelerator) with MRI (high-resolution magnetic resonance imaging), making it the most powerful tool to treat cancer.

MRI-LINAC uses magnetic resonance imaging (MRI) together with radiotherapy to treat cancers throughout the body, with specific advantages for soft-tissue tumors.



MRI-LINAC Technology at Yashoda Hospitals is provided by the Technology Partner, who is the World Leader & Pioneer in the Precision Radiation Therapy.

#### at Yashoda Hospitals

#### **Clinical Application of MR LINAC**

- Prostatic Cancer
- Pancreatic Cancer
- Bladder Cancer
- Lung Cancer
- Gynaecological Cancer
- Head & Neck Cancer
- Breast Cancer
- Cholangiocarcinoma
- Liver Cancer
- Brain Cancer

- Rectum Cancer
- Stomach Cancer
- Various other Tumors (Full list in website)



Many tumors move during treatment & between treatment sessions because of body functions or change of body composition. MR LINAC with it's fast real-time visualizing capabilities helps to re-optimize the treatment plan to account for changes.



By visualizing anatomy on the basis of position, size and shape of the tumor, MR LINAC with it's adaptive personalization helps in high-precision tumor targeting & to minimize damage to the surrounding tissues.



MR LINAC treats with pinpoint accuracy as the high field MRI provides unparalleled soft tissue contrast and real-time imaging for tumor tracking & targeting during Radiation Therapy.

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MR LINAC minimizes dose to healthy tissue and avoids toxicity to the neighboring organs-at-risk thereby improving progression for free survival & reducing complications.



With the Optimized Radiotherapy Treatment enabled by real-time visualization and adaptive personalization, MR LINAC is designed to deliver the best possible results, improved local control, Shorter treatment courses, Reduce toxicity, Increasing eligibility for radiation therapy and new possibilities.

## The advantages of MR LINAC over Conventional Radiotherapy!!

- MR Linac technology, which is considered a breakthrough in radiotherapy applications, allows to adaptively monitor the changes in the size, and the shape of the tumor, before & during the treatment and apply high doses of radiation to the tumor accurately
- As most tumors, surrounding tissue, edema and inflamation are better imaged by MRI compared to CT. The 1.5 Tesla MRI-Linac, which is a high definition device allows for precise demarcation of tumor and allowing personalised targeting only the tumor cells and avoiding normal tissue. This MRI based radiation therapy is a real revolution compared to existing CT based technologies
- Above all these advantages of MR Linac technology improves clinical outcomes dramatically with improved local control, decreased toxicity, shorter course of therapy and expanding the indications for radiotherapy



Built by Elekta & Philips, the Pioneers in the field, MR LINAC has the most powerful high-field (1.5 Tesla) MRI system &next-generation linear accelerator technology.



Yashoda Hospitals is the First and Only Hospital in India to have this Superior Revolutionary Technology.





For more details, call: 040 4567 4567 www.yashodahospitals.com/mr-linac









