

Equipment

Investing in state-of-the-art equipment to provide patients with more treatment options

Taking radiotherapy to the next level

With help from our supporters, we installed the UK's first MR Linac machine at our Sutton hospital, ensuring The Royal Marsden's patients will benefit from groundbreaking equipment that's set to revolutionise the treatment of many cancers.



The Royal Marsden is part of a worldwide MR Linac Research Consortium



To test the image quality of the £10 million MR Linac machine, researchers from The Royal Marsden chose to scan something rather unusual: a dead crab which had been bought for £10 from a farmers' market in Wimbledon. The researchers selected a crab because it symbolises cancer in astrology and features in The Royal Marsden's crest

The MR Linac was officially opened by Sadiq Khan, Mayor of London, in November 2016, alongside senior Royal Marsden and ICR staff, stakeholders and charity trustees.

It is the only technology in the world which combines magnetic resonance imaging (MRI) with a state-of-the-art radiotherapy delivery system. For the first time, this allows our radiographers to view a patient's tumour in real time as they treat it with a radiation beam. This means they can adjust and shape the beam during active treatment to precisely target the tumour, resulting in a more effective treatment and fewer side effects because a patient's healthy tissue is less affected.

Together with our academic partner, The Institute of Cancer Research, The Royal Marsden is a member of the international MR Linac Research Consortium.

Led by Elekta, the manufacturer of the machine, and a research team at the University Medical Centre Utrecht in the Netherlands, the consortium includes seven centres from around the world that have an MR Linac. They are collaborating to ensure that work with this groundbreaking machine is not duplicated and research is advanced to benefit cancer patients across the globe. The installation of the MR Linac was made possible by a £10 million grant from the Medical Research Council to the ICR, with additional support from The Royal Marsden Cancer Charity.