



Welcome to S.U.R.E

Reg Charity Number 1102299

Website:- www.surecharity.org.uk

Who are we, and what do we do?

When patients require Radiotherapy treatment at The Beacon Centre they will have the tumour accurately located on the C.T. Scanner/Simulator, provided by S.U.R.E. at a cost of £500,000 (including the first 3 years maintenance).

The treatment will be planned using a Wacom Tablet (a special computer screen), and then delivered using one of the three linear accelerators (linacs). The treatment can be checked on the Linac, using a Synergy Imaging System (this works as a C.T. scanner)

They will have just used five pieces of equipment supplied by the local charity S.U.R.E.

- Firstly, the C.T. Scanner/Simulator was purchased by S.U.R.E. at a cost of £500,000 (which included the first three years maintenance).
- They will have been held in place on both the Scanner and the Linac by an immobilisation system, which means that each time they receive treatment, they are held in the same position, no matter which machine they are on. This was purchased by S.U.R.E. at a cost of £72,000.
- To ensure that the planned treatment will not be harmful to the patient, a similar dose to that planned is given to a device known as a "Phantom". S.U.R.E. has funded the provision of four of these that allow the effect of treatment to be calculated for every part of the human body. This at a cost to S.U.R.E. of £25,000
- The 6 Wacom Tablets at a cost of £7,000
- S.U.R.E contributed £250,000 to The Synergy Imaging System.

Over and above this, S.U.R.E. continues to provide additional items to help keep the Cancer Centre at the forefront of Cancer Treatment, including Quality Assurance equipment to always ensure not only the equipment itself is kept to the optimum status, but that patient care is also always catered for. S.U.R.E. are proud that audited accounts show expenses are less than 0.5p in every pound donated.

S.U.R.E. has already donated over £1.8M worth of equipment to the Beacon Centre.

The Beacon Centre has now been recognised as providing high quality cancer care to internationally recognised standards.

S.U.R.E. October 2014

Items donated to The Beacon Centre by S.U.R.E.

1	Philips Big Bore Billiance Scanner	This CT Simulator locates the tumour
2	I.C. Profiler Beam Scanning System	Quality device to check radiation beams
3	Beam Evo Couch Top	Enables radiotherapy to pinpoint accuracy on Item 1
4-7	Gillian Q.A. Phantom	Verifies image alignment and distortion on MR scanner
8	Gammex 467 Electron Density Phantom	Allows for radiotherapy treatment plans to be corrected for the different types of tissue found in the human
9	Med Rad Injector	Delivers a dye to provide greater accuracy during CT scan
10	Acquisim 3 Virtual Simulation Software and Licenses	Computer terminal that allows highly complex tasks of radiotherapy treatment beams
11-13	I.R.M.T. Phantoms 3 off (1 each Homogeneous, Pelvic 3D, Thorax)	Above items replicate human anatomy, thus allowing verification of patient planning
14	PIPSpro Comprehensive Software	For image quality assurance tasks
15	Rad-Calc Platinum Software	Enables dose calculations to be made as part of checking process and independent of treatment planning system
16	Kirby Phantom	Device which confirms the correct size of radiotherapy beams
17	MT-TG66 Phantom	Ensures all setup movements on machines are correct
18	SA70-000 Build-up Cup	A device which helps confirm that the correct dose has been delivered to patients
19	Mini-Phantom Holder	Specific dose measuring device for accurate delivery
20	Specialist tools	For installation of above equipment
21-24	Patient Immobilisation Systems 4 off	Carbon Fibre immobilisation kit
25	Special Bracket for Beam Scanning System	
26-27	1 year maintenance contracts	For Beam Scanner
28	3 year maintenance contract	For the C.T.Scanner/Simulator
29	Repairs to original Skin Cancer Treatment Machine	Whilst waiting for item 30
30	Low Energy Skin Cancer Machine	Provides treatment to patients with skin cancer
31	Accommodation for mould Room also 32	Makes masks, and lead block
32	Mask Making Equipment	Shielding for patients with head and neck cancer
33	I.M.R.T. Software	Allows for complex IMRT (Bendy X-rays) radiotherapy plans
34	Synergy Imaging System	Works as a CT scanner used on the Lineac
35	4D/CT Imaging for Synergy	Takes account of tumour and breathing cycle, for lung cancer
36-41	6 Wacom Tablets	Connected to the radiotherapy treatment planning, allows doctors to clearly see parts of the body to accurately define treatment of tumour
42	VMAT (Volumetric Modulated Arc Therapy) for Beacon Linear Accelerator	The next step on from IMRT allows IMRT type treatments to be delivered in a shorter time.
43	4D/CT Imaging for CT-Simulator	Takes into account both patient breathing and tumour movement when treating lung cancer, thus less damage to healthy tissue.
44	4 Wing Step Boards	Allow patients to be set up for treatment in exactly the same position daily, ensuring accurate treatment
45	Phantom and Dosimetry Equipment	To ensure the quality of images produced by the CT-SIM and Synergy units
46	CCTV, Intercom & Music System	Provides improved communication to the patient during treatment on the Phoenix Linac.
47	P.C.M. Application Server	Increased capacity for Pinnacle planning system, speeds up calculation of VMAT treatment plans.