



**The Christie**  
NHS Foundation Trust



Delivering the  
Uk's first NHS  
high energy  
proton beam  
therapy centre

## Contacts

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**2012-2013**

Early  
international  
Research

**7 March 2014**

PSCP appointed

**2 July 2015**

Start on site

**10 June 2015**

GMP agreed

**June 2017**

Ready for  
equipment

**April 2018**

Completion

**August 2018**

First proton  
treatment

## Fully Integrated Supply Chain

- Early engagement with designers and specialist suppliers.
- Design developed in conjunction with the proton equipment provider.
- Full BIM Level 2 coordinated design.
- Training and upskilling for supply chain.
- Solving major engineering challenges together.

# ProCure 21+ Framework fast-tracks the first NHS high-energy Proton Beam Facility

The Christie is Europe's largest single site cancer centre, and serves a population of 3.2million.



The national proton beam therapy (PBT) service is being developed with two centres under construction, one at The Christie NHS Foundation Trust and the other at University College London Hospitals NHS Foundation Trust. They are both funded by a £250 million government investment. Interserve was appointed through P21+ Framework to design and deliver the Manchester PBT centre through a rigorous public procurement process.

The state of the art five storey building will provide: 3 treatment gantries and a research room; a patient reception; consultation rooms and public space. The building is designed to be future proofed – the research room can be equipped with a treatment gantry if required.

A key component of the UK's first NHS high-energy proton beam facility was successfully delivered to its new home in Manchester on 22nd June. The Christie took delivery of "Emmeline" its cyclotron named after local suffragette, Emmaline Pankhurst. The cyclotron will produce the cancer treating proton beam to transform treatment for up to 750 patients a year. The cyclotron arrived from Germany and was lifted into position by a 92m tall crane – the largest of its kind in the UK. This was celebrated with an event attended by representatives from The Christie, NHS England, Varian Medical Systems and the project team. The successful crane lift of the 90 ton cyclotron was started by two eleven year old girls who have both received proton beam therapy in the United States.

After its installation and testing, the cyclotron will start to deliver the first patient treatment in 2018.

In achieving this critical Ready for Equipment date, Interserve Construction and its supply chain had to:

- Build the new facility adjacent to a live acute oncology site, within a residential area.
- Fully collaborate with the client team and major equipment vendor to ensure delivery.
- Pour and place 17,000m<sup>3</sup> concrete, 1,700 tonnes of reinforcement in walls over 6m thick in places.
- Develop specialist reinforced concrete mixes for radiation protection with the ability for it to be pumped.
- Use BIM to model radiation protection; first time used in the UK.

## Facts and figures

- **Project**  
Proton Beam Therapy
- **Location**  
Manchester
- **NHS Trust**  
The Christie NHS Foundation Trust
- **Principal Supply Chain Partner**  
Interserve
- **Contract value**  
£125 million
- **Building size**  
12,232 m<sup>2</sup>
- **Start on site**  
June 2015
- **Completion**  
Mid 2018

"I am a firm advocate of ProCure21+. Its benefits – clearly seen on this project – include early engagement and speed to site, effective risk management and cost control, plus access to a select band of contractors with specific expertise"

**Jason Dawson,**  
**Director of Capital,**  
**Estates and Facilities**  
**at The Christie**