

'Off the shelf heart pump's a life saver'

A TOP cardiac surgeon has pioneered the world's smallest heart pump which he hopes will save thousands of lives as an "off the shelf heart transplant".

Professor Stephen Westaby, formerly of the John Radcliffe Hospital in Oxford, has helped to develop the device for almost a decade.

By the end of 2018, his team plan to implant the pump into their first patients as part of a trial which he hopes will lead to the device becoming available on the NHS.

His company, Calon-Cardio Technology, has been working on a prototype of the new pump in its laboratory in Swansea.

Professor Westaby said: "Heart transplants are great for patients but there are so few of them that it can only address the needs of a tiny number of patients.

"I hope this device will be used as the equivalent of an off the shelf heart transplant for patients with severe heart failure." He added: "There needs to be a sea change in the way we deal with heart failure. We have thousands dying unnecessarily who could be saved."

There are about 200 donor hearts transplanted a year but there are 2,000 patients under 65 in the UK who could benefit from one. About

EXCLUSIVE

By **Lucy Johnston** HEALTH EDITOR

1,300 people die every year waiting for a heart transplant.

Heart pumps are mechanical devices which can be used as an alternative to a full transplant. They are not widely used in the UK as the older versions are linked to a substantial risk of stroke or bleeding from the blood thinning drugs which the patients have to take.

Experts believe that the new pump should greatly reduce the risks as it is less damaging to the blood. This is because designers used advances in technology and specialised mathematical modelling of the way blood flows through

the pump to perfect the design. Professor Westaby said: "A mechanical heart pump is the way forward and I'm confident within a few years we will see more people being fitted with these pumps than those having transplants." The 68-year-old retired last year after 30 years working as a cardiac surgeon at John Radcliffe Hospital.

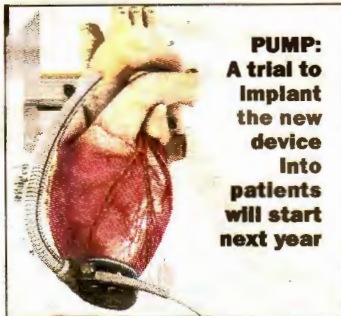
He made his name in 2000 by implanting an electric heart pump into Peter Houghton, then 58, who was dying from heart failure but was too sick to have a transplant.

He lived for eight years before the psychologist from Birmingham died from kidney failure. At the time he was the longest survivor with a pump.

Artificial heart pumps cost around £100,000, roughly the same cost as a transplant procedure. Professor Westaby is hoping his pump will be cheaper.

Stuart McConchie, chief executive at Calon-Cardio Technology, said: "The artificial heart is expensive but you have to set its cost against the years of caring for a patient in heart failure who often require hospitalisation."

The British Heart Foundation, says that heart disease affects 500,000 people a year in the UK.



PUMP:
A trial to
implant
the new
device
into
patients
will start
next year