Transfusions with laboratory-grown blood cells to begin trials

The first attempt at giving human volunteers "synthetic blood" made in a laboratory for the first time will take place within the next two years, the NHS has announced.

A long-awaited clinical trial of artificial red blood cells will occur before 2017, NHS scientists said. The blood is made from stem cells extracted from either the umbilical cord blood of newborn babies or the blood of adult donors.

The trial, thought to be a world first, will involve small transfusions of a few teaspoons of synthetic blood to test for any adverse reactions. It will allow scientists to study the time the manufactured red blood cells can survive within human recipients.

Eventually, it is hoped that the NHS will be able to make unlimited quantities of red blood cells for emergency transfusions. However, the immediate goal is to manufacture specialised donations for patients suffering from blood conditions such as sickle-cell anaemia and thalassemia, who need regular transfusions.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: <u>NHS to give volunteers 'synthetic blood' made in laboratory within two years</u>