

Artificial womb could help premature babies

Scientists have designed an artificial womb to keep premature lambs alive in a breakthrough that could dramatically increase the survival chances of critically preterm human babies

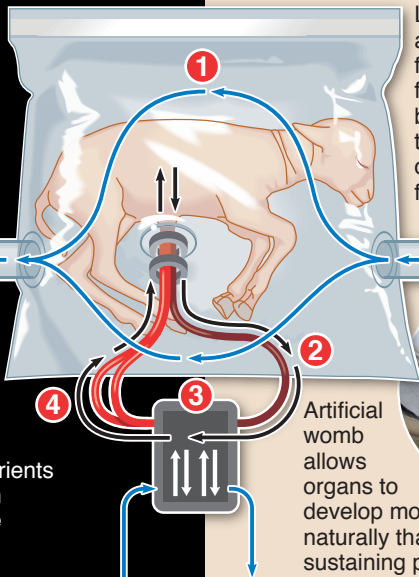
1 Lamb contained in protective bag filled with mixture of warm water and added salts similar to amniotic fluid. Foetus "breathes" as it would in normal womb

Litres of amniotic-like fluid steadily flushed through bag each day to ensure continuous fresh supply

2 Foetal heart pumps blood through umbilical cord linked to artificial placenta

3 Oxygen and nutrients supplied to blood in placenta and waste products removed

4 Blood returned to heart



Artificial womb allows organs to develop more naturally than in incubator, sustaining premature lamb for four weeks – **equivalent in age to 23-week-old human infant**

