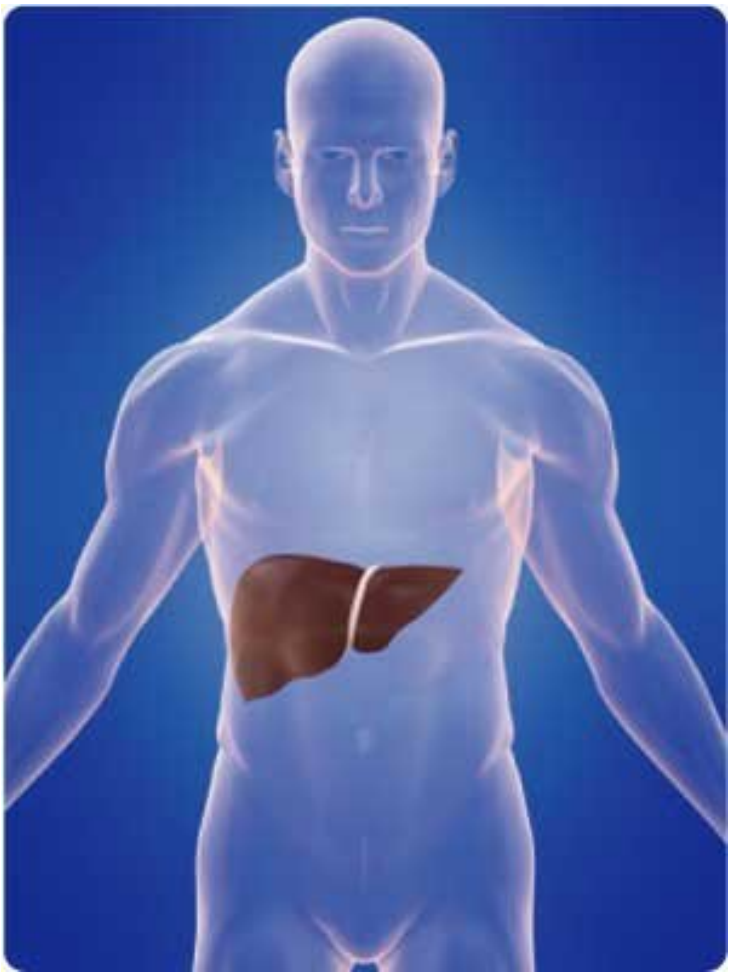
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ASIA EDITION

Japan team creates liver from stem cells

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Singapore: A team of scientists from Japan have created a functioning human liver from stem cells, raising hopes of manufacturing artificial organs for those in need of transplants. The researchers transplanted induced pluripotent stem (iPS) cells into the body of a mouse, where it grew into a small, functional, human liver.

The team, which was led by professor Hideki Taniguchi of the Yokohama City University, developed human iPS cells into precursor cells. These were then transplanted into a mouse's head to take advantage of increased blood flow. The cells grew into a human liver five millimetres (0.2 inches) in size and were capable of generating human proteins and breaking down drugs.

The research, which could be an important breakthrough for artificially creating human organs, faces various challenges before it can be put into medical practice. While stem cells are harvested from embryos, iPS cells, which have the potential to

develop into any body tissue, can be taken from adults. Two separate teams, from the US and Japan had discovered iPS cells in the year 2006.