

China with space technology develops artificial heart

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This technology used can reduce damage to the blood and enable the blood pump to work longer



Chinese scientists have developed an artificial heart using rocket technology and it is currently undergoing testing after thorough experiments on animals.

The heart was developed jointly by the China Academy of Launch Vehicle Technology (CALT) and the Teda International Cardiovascular Hospital in North China's Tianjin.

The artificial heart uses magnetic and fluid levitation from a rocket system, and the "aerospace heart" is expected to move to clinical trials during the 13th Five-Year Plan (2016-20).

The magnetic and fluid levitation technology can reduce the friction in the device to increase the working efficiency and extend the life span of the power generator. This technology can reduce damage to the blood and enable the blood pump to work longer.

Fuwai Cardiovascular Hospital also developed an artificial heart using magnetic levitation, and the man-made hearts have been planted in three of the patients from June to October 2017, state-run Xinhua News Agency reported on March 9.

Sun said artificial hearts were typically used while waiting for a heart transplant, or to permanently replace the heart in case heart transplants are not possible.

In 2013, scientists planted a man-made heart in a sheep, which survived for 120 days in good health.

The hearts were then placed in six other sheep and all survived 100 days or longer, which proved that the heart is qualified

for batch production.

If China could produce its own artificial heart at a lower cost than it will helpful to 16 million people in China with failing hearts, as many patients are waiting for heart transplants.