Artificial blood vessel developed to help in cancer research
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SINGAPORE, 24 June 2004 (Deutsche Presse-Agentur) – An artificial blood vessel created in a petri dish will enable researchers to study how cancer cells migrate and the effectiveness of potential drugs, scientists said on Thursday.

A team from the Institute of Bioengineering and Nanotechnology in Singapore unveiled the device made from polymers, which mimic the inside of a blood vessel's wall.

"Cancer spreads from a primary site all over the body via the blood vessels," Dr. M.M. Maran, the project's lead scientist, told The Straits Times. Cancer invades blood vessels by squeezing through tiny gaps in the cells, he explained.

Although the cancer cells are about 10 times larger than these gaps, he said they are "intelligent" enough to sense the size of the gaps, and change shape to fit through them.

Maran told the newspaper he hopes the device, which can keep the cells alive in an incubator, can be used to test drugs used to fight cancer. Researchers using it would also be able to see if potential drugs affect how the cells move, or, if they decrease the size of the gap so the cancer cells no longer fit.