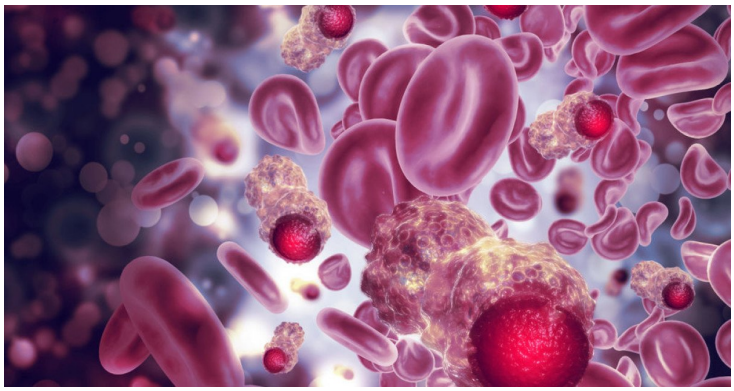
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ASIA EDITION

Korea develops artificial cancer model as tool for personalised medicine

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The researchers were able to observe the change in cancer metastasis



A research team led by South Korea-based Pohang University of Science and Technology (POSTECH), in collaboration with Pusan National University and Beijing Institute of Technology, has together developed an in situ 3D cell printing methodology that can directly print cancer spheroids that mimic the properties of metastatic melanoma within the decellularized extracellular matrix (dECM) bioink supporting bath.

In addition, using this technology, the researchers succeeded in producing cancer spheroids with various diameters with blood vessels.

“Through this research, we were able to print uniformly sized cancer spheroids at a desired location quickly. By printing cancer spheroids with in vitro blood vessels that mimic the structure of actual blood vessels, we were able to more accurately reproduce the cancer metastasis to blood vessels”, said the researchers.

The possibility of producing personalized in vitro cancer-vascular model using cells derived from various patients has been verified through this study. The platform can elevate the reliability of personalized cancer treatments in the future.