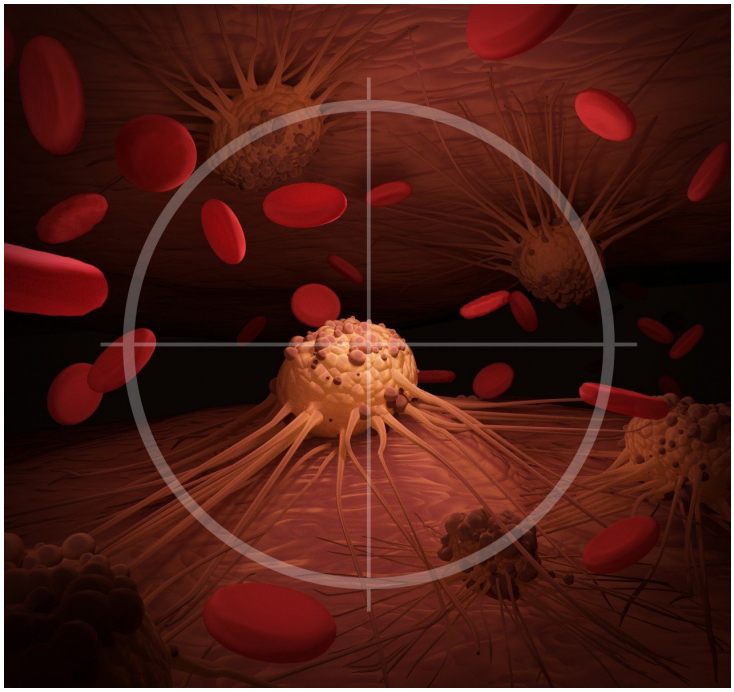
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Bengaluru scientist develops a novel cancer therapy

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The patented system is contained in a whole-body device called Cellular Focused Resonance Nano-Permeabilisation or Cellforn.



Dr. R V Kumar at Bengaluru's Centre for Advanced Research and Development (CARD) has created a drug delivery system that will target only cancer cells and leave healthy cells unharmed. This breakthrough system has been developed to reduce the side-effects of chemotherapy.

The patented system is contained in a whole-body device called Cellular Focused Resonance Nano-Permeabilisation or Cellforn.

Cellforn creates temporary nano pores that can receive drugs, allowing delivery to the cell membrane of the cancer tissue, identified with pretreatment proton density evaluations. The system creates temporary receptors or holes induced by fast radio bursts that is timed and delivered to target lesions. Concentrations of target drugs are delivered based on their molecular weight.

Cellforn also prevents the cancer tissue from developing immunity to the drugs. The system could make drugs 10 to 70 times more effective as they can be highly localised and used on tissues and organs inside the body, non-invasively.

After getting a US patent in April this year, Kumar claims his precision-targeted drug delivery system is market-ready.