

## A new therapy without side effects could improve chemotherapy

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Researchers of the University of Granada and Edimbourgh have developed a new therapy for cancer based on nanotechnology that might improve significantly chemotherapy, as it has not cause side effects.

This therapy is based on the encapsulation of a catalyst (palladium) into microspheres, to synthesize artificial materials or activate drugs within human cells, thus avoiding any toxicity. This system captures palladium within its microstructure. Palladium is a metal not found naturally in human cells that allows to catalyze chemical reactions within cells without altering its basic functions such as protein synthesis and metabolism. This technique allows to "create" anti-cancer drugs within cells, which could be used for the specific treatment of tumors and would improve dramatically current chemotherapy treatments.

The results of this research -conducted in collaboration with the University of Kebangsaan (Malasia)- were recently published in the prestigious journal *Nature Chemistry*.

Researchers pointed that, given the wide range of therapeutic applications of nanotechnology, this research will be further developed by University of Granada professor Dr Sanchez Martin, who will continue her collaboration with the research group conducted by professor Mark Bradley of the University of Edimbourgh.

Provided by University of Granada

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