Recherche UCL

UCL tests new molecule to prevent cancer metastasis in mice

Three years ago, Pierre Sonveaux, a researcher at the UCL Institute of Experimental and Clinical Research, and his team discovered that when the mitochondria (the power plants) of tumour cells are impaired, they promote the formation of metastases. Subsequently, the researchers verified a molecule, MitoQ, as capable of preventing these impairments and thus tumour metastases. Recently, Dr Sonveaux verified a second molecule, catechin:lysine 1:2, whose source is a plant native to Indonesia, and that experiments demonstrated was capable of preventing metastases in mice. The findings were published in the journal *Frontiers in Pharmacology*.

These advances are the fruit of extensive collaboration between UCL researchers and Paul Niebes, who discovered catechin’s properties, and Henri May of the Wallonia SME **VALORE** (Seneffe), which supplied its molecule to UCL for the purpose of advancing the research. Trials carried out on mice were conclusive: catechin:lysine 1:2 clearly prevented melanoma metastases, and a patent application was submitted. A second collaboration, with the Belgian (Walloon Region) pharmaceutical company **BePharBel**, aims to develop this molecule and its large-scale production in order to produce a drug, as long as trials on mice and humans prove conclusive. Trials and production are made possible by **BePharBel**.

*Why* pursue research on a second molecule rather than concentrating fully on the first? ‘In research,’ Dr Sonveaux explains, ‘there are many discoveries but not all lead to conclusive human trials. Our goal is to double the chance of success.’

*What next?* Continuing trials with the second molecule on mice to see if it is effective against all types of cancer, then combining its molecular action with other anticancer treatments to ensure they are compatible (and show no signs of toxicity or interference).


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