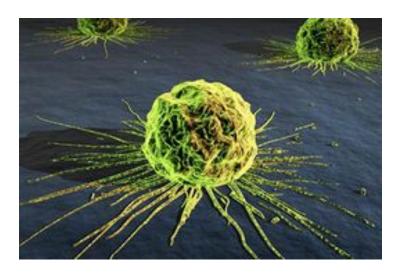


Dendrimers improve anticancer efficacy of drugs

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Singapore: Starpharma Holdings announced the results of an animal study which shows that a dendrimer-based formulation of doxorubicin was substantially more efficacious in treating secondary tumours of breast cancer (metastases) in lungs than the drug alone.

The study involved a dendrimer formulation of the widely used cancer drug doxorubicin delivered via intra-tracheal administration, and was substantially more efficacious than doxorubicin alone in treating lung metastases of breast cancer. Starpharma recently filed a new patent based on these results as a precursor to further discussions with commercial partners.

The study was conducted as part of an ARC (Australian Research Council) funded collaboration with Monash Institute of Pharmaceutical Sciences (MIPS). It utilized a rat model which uses lung-resident secondary tumours (or metastases) derived from breast cancer cells. Lung metastases are particularly difficult to treat with conventional chemotherapeutic drugs, leading to a mortality rate of approximately 85 percent within five years, and existing treatments may often be considered palliative in nature. Commonly used treatments include doxorubicin, either alone or in combination with other agents.

In addition to the improvement in efficacy, the study also found that the dendrimer-doxorubicin formulation tended to remain in the lungs rather than passing into the body of the animal. This distribution pattern also creates the potential for reduced side effects, which are a significant problem with many cancer drugs, including doxorubicin.

Dr Jackie Fairley, CEO, Starpharma, said that, "The combination of Starpharma's dendrimers, an existing cancer drug and direct lung administration appears to yield a substantially more efficacious agent for treating lung metastases than the drug alone. Given the clinical management of lung metastases is an area of significant medical need, and current drugs often provide poor results, this finding has the potential to create a valuable and important application for Starpharma's proprietary dendrimer formulations."