




Joan Genescà

## NANOSIM

### Biodegradable Nanoparticles of Simvastatin as New Therapeutic Tool for Chronic Liver Disease

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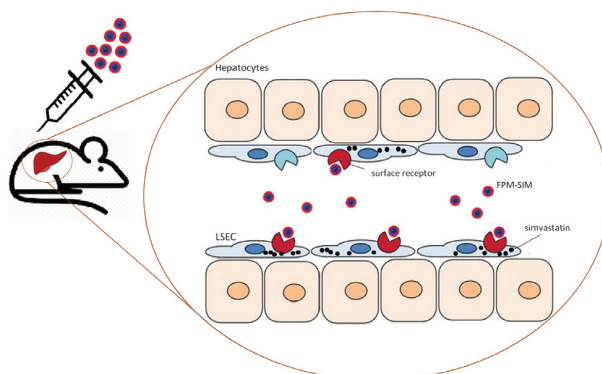
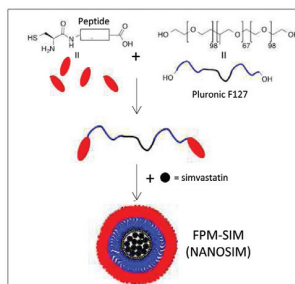
 Mig Wei, Cellvax, SAS, Romainville, France

 Norman Metanis, The Hebrew University of Jerusalem, Jerusalem, Israel

Liver cirrhosis is the fifth cause of death in adults aged 50 to 70 years. Unfortunately, there is no treatment available to stop or slow the progression of this chronic disease.

Statins are drugs known by their effect on cholesterol synthesis and widely used in cardiovascular diseases. Likewise, they additionally have multiple beneficial intrahepatic effects. However, their main side effects of muscle and liver toxicity limit the doses to be used, conditioning the effectiveness of the treatment.

With this in mind, we propose the development of biodegradable nanoparticles carrying statins and directed specifically to the liver sinusoidal endothelial cells (first inducers of liver damage) allowing to increase the concentration of the drug to maximize its efficacy and safety, thus becoming a useful therapeutic tool for liver diseases.



#### NANOSIM Flowchart

