Nanovax: Engineered nanovaccines for anti-tumour immuno-therapy

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Harnessing the patient’s own immune system at recognizing and eliminating tumor and metastatic growth has emerged as a promising therapeutic strategy that avoids the side-effect of traditional chemo- and radiotherapy. However, one of the major bottlenecks is the inability to efficiently target and educate immune cells to react against cancer.

This project aims at priming the immune system through the development of a novel class of potent but safe nanovaccines. Nanovaccines will be engineered to target dendritic cells, the “working horses” of the immune system, with specific molecules that activate them to initiate an anti-tumor immune response. Promising results obtained in this project would lead to a more efficient pre- or post-operative treatment of cancer patients to reduce the risk of recurrence.

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