PROJECT NUMBER

18117

Injectable vaccine compositions

Specialised sub-micron vaccine particles with an antigen shell and adjuvant core boost immune response while lowering patient dosage.

These specialised sub-micron vaccine particles consist of a variable antigen shell surrounding an adjuvant core, designed to enhance immunogenicity while reducing the required vaccine dosage per patient. They hold potential for use in both traditional vaccines and tumour lysate-based cancer vaccines.

Applications: Vaccines, Prophylactic treatment



Features	Benefits
Ability to quickly incorporate any protein-derived antigen into the nanoparticle shell	Rapid adjustment of vaccine particle to pathogen of interest
A wide array of adjuvants or adjuvant combinations can be loaded into the nanoparticle core	Enhanced immune response, reducing the dose of vaccine per patient required
Antigen and adjuvant remain co-located post injection	Promotion of optimal immunogenicity
Particles have a similar size and morphology to a virus	Further enhancement of immune response
Established synthesis is a high yielding, two-step process that is compatible with scaling to a cGMP level	Rapid go-to-market and reduced manufacturing costs

Patented and Available for

- Co-development
- Consulting
- Licensing

To find out more, contact enquiries@innovation.ox.ac.uk and quote the project number.

The above information is provided ‘as is’ without conditions or warranties. Oxford University Innovation makes no representation and gives no warranty that it is the owner of the intellectual property rights in the technology described. © Oxford University Innovation Ltd 2026, Buxton Court, 3 West Way, Oxford, OX2 0JB.