附件1

中英文资助领域描述

**1. 全球健康领域RNA 疫苗的创新**

通过优化基于RNA的疫苗技术平台，提高疫苗的保护效力和保护时间，以促进全球健康领域重点传染性疾病的预防性疫苗（包括但不限于疟疾疫苗、结核疫苗等）的研发，下列方向三选一：

Innovation of RNA vaccine for Global Health (GH)

Improving the durability and efficacy of vaccine responses with optimized RNA based delivery platforms to fight the priority diseases of GH (including but not limited to Malaria, TB, etc.), which will cover one of following areas:

（1）可预测疫苗有效性和安全性的模型技术, 例如加强mRNA修饰的技术和计算机辅助设计抗原；

Prediction model of vaccine efficacy and safety for antigen design, such as enhanced mRNA Modification Techniques, computer assisted antigen design of RNA vaccine ；

（2）新型RNA疫苗技术，例如自复制RNA疫苗（saRNA），环状RNA疫苗（cRNA），多靶点/联合疫苗;

Novel RNA vaccine techniques, such as self-amplifying RNA Vaccines, circular RNA vaccines, multi-target/combination vaccines ;

（3）新RNA疫苗递送技术，例如LNP佐剂整合的技术，2-8℃和40℃热稳定技术，非LNP mRNA 递送技术。

Novel delivery techniques of RNA vaccines, such as adjuvant LNP integration discovery, thermostable 2-8°C and 40°C formulations, non-LNP mRNA formulations.

**2. 创新的疫苗控释技术**

创新的疫苗控释技术，以适用于下列三种使用情况之一：

Innovative controlled release vaccine delivery technology to address one of three use cases:

（1）通过一次性注射后的程序式分布释放，达到初免和加强的效果；

Programmable release to enable prime and boosting doses to be delivered in one injection;

（2）疫苗注射后，在 2-3 周内缓慢持续地释放疫苗成分，以期改进免疫效果差的疫苗的免疫反应，例如HIV和疟疾；

Slow, sustained vaccine release over 2-3 weeks to improve the immune response for hard-to-immunize targets like HIV and malaria;

（3）将不同的抗原组分封装于它们各自的微环境中，做成新的联合疫苗。

The encapsulation of different antigens into their own microenvironments to enable novel combinations of vaccines.