

## LiteVax Adjuvant (LVA) for low-single-dose vaccines

LiteVax BV, Oss, the Netherlands

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## LiteVax BV

- Expertise: >25 years vaccine adjuvants industry/start-ups
- Mission: Better vaccines by better adjuvants
- Value chain: idea cGMP production clinical trials
- Lean & Mean: Outsourcing and collaborations

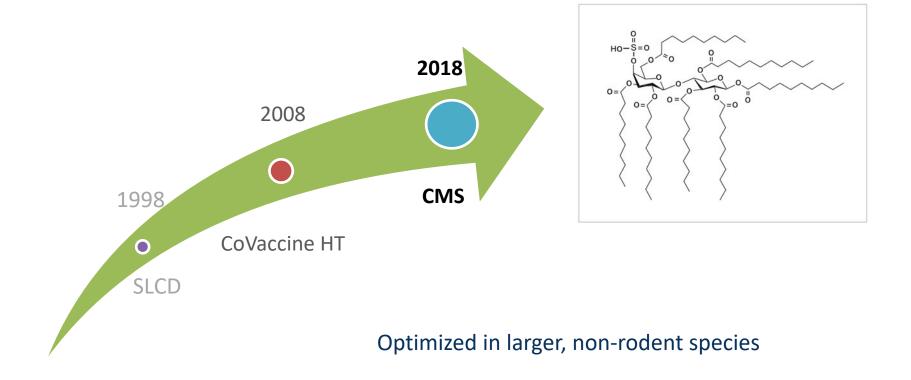


## LiteVax Adjuvant (LVA)

- Outcome lead finding/optimization pig model
- Superior efficacy, safety & quality
- Low-Single-Dose vaccine
- Fully synthetic, aqueous formulation, extremely stable
- Strong IP
- Scalable production process
- cGMP, ready-for-use, material available

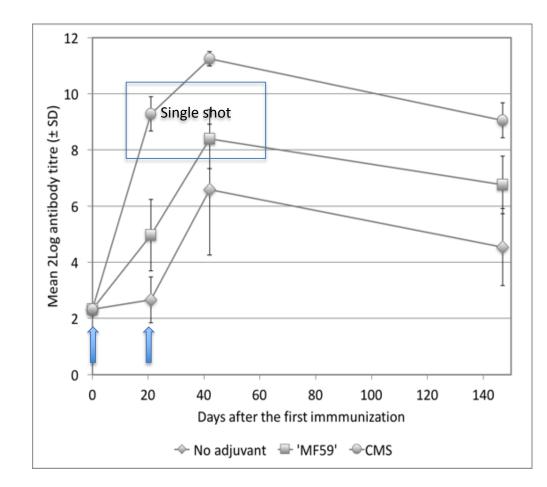


# Carbohydrate fatty acid sulphate ester (CMS)





## Single-low-dose approach



HI antibody titers to H7N9 in ferrets after one and two immunizations with low dose of H7N9 plus LVA (= CMS) or Addavax (= MF59) as adjuvant.

A single injection with LVA reveals similar responses as two injection with MF59.

Hilgers et al. 2017

#### INDIGO: higher protection against Flu at lower dose



## Status LVA adjuvant

Completed collaborative nonclinical studies

Pandemic Flu in ferrets

Seasonal Flu in ferrets

Malaria recombinant glycoprotein in rabbits

HER2-VLP in rabbits

C. difficile toxoid in rabbits and pigs

SARS-CoV-2 subunit in pigs and hamsters

Glycoprotein subunit in pigs

Planned GLP tox studies (H1-2022)

Repeated-dose study Flu in rabbits

Acute study Flu in rabbits and rats

Planned clinical studies (H2-2022)

Phase I/IIa Flu



## LiteVax Business Model

Partnering with interested parties

Non-cGMP and cGMP material for preclinical and clinical evaluation MTA

Non-exclusive license (exclusive)

Support implementation (IMPD, DMF, etc.)



## Focus on Pandemics

- Reaching out: collaboration COVID-19 vaccine development
- Single shot low dose COVID-19 vaccine
  - RNA vaccines: 2 shots, within 9 months 3<sup>rd</sup> shot needed
- LiteVax approach: single shot, low dose, protein vaccine Advantages:
  - > Low single dose, increase available vaccine doses
  - High, durable protection

### LiteVax Adjuvant – Affordable – Accessible - Available





Lack of immunity is our concern

THANK YOU for your attention