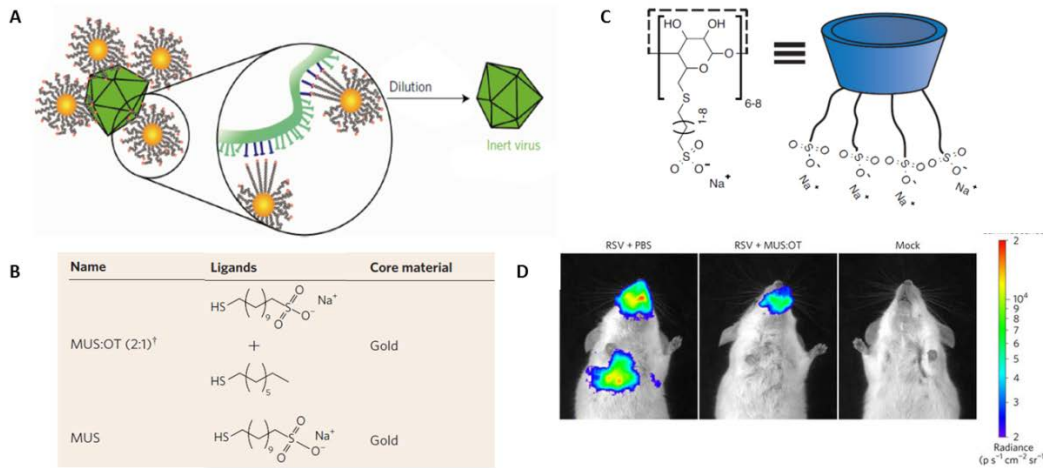


# Broad spectrum antivirals



Ref. Nr

6.1514

Keywords

Virucidal, cyclodextrin, biocompatible

Intellectual Property

WO 2018/015465 A1, WO 2018/015466 A1

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**A.** Cartoon of the virucidal activity of a representative nanoparticle (NP) coated with ligands mimicking HSPG; virucidal activity is not affected by dilution. **B** Virucidal NPs with a metal core and some representative "HSPG-like" ligands; **C.** virucidal NPs based on a cyclodextrin core for increased biocompatibility; **C.** treatment of mice with MUS:OT-NPs followed by inoculation with Respiratory syncytial virus (RSV) dramatically reduces lung infection as visualized using a luciferase reporter.

## Description

Biocompatible anti-viral nanoparticles with broad-spectrum virucidal effect;

The designed antiviral nanoparticles have long and flexible linkers mimicking Heparan Sulfate Proteoglycans (HSPG), allowing for effective viral association that leads to irreversible viral inactivation.

## Advantages

- Broad spectrum and irreversible effect
- Not affected by dilutive effects
- Not affected by virus resistance
- Bio- and food compatible

## Status

Proof of principle in cellular models and rodent for: HSV, HPV, RSV, dengue and lenti virus.

Focus on topical applications (respiratory disease, skin)

## Applications

- Therapeutic/prophylactic
- Food packaging
- Sterilization and disinfection

## Offering

Opportunity for licensing and/or collaborating