



#27B-18 Vaccine formulation to accelerate protection against Foot-and-Mouth Disease

Foot-and-Mouth Disease is a viral disease, highly contagious and with an aggressive course that affects cloven-hoofed animals. The importance of controlling and eradicating the disease resides in the economic implications arising from closures of international markets of animals, animal products, and by-products, as well as the direct damages on livestock breeding.

Presently, an inactivated vaccine is applied to control the infection. The vaccine generates protection seven days post-vaccination.

In the event of a mass infection with Foot-and-Mouth Disease (FMD) virus, there are no mechanisms enabling to curb disease dissemination, due to the unprotected period known as the window period, when conventional vaccines are applied.

The INTA Biotechnology Institute has developed a novel biotechnological short-acting product with mammalian immunostimulation capacity; it induces an early antiviral status, activates components of the innate immune system, and generates immune response three hours post-vaccination.

ADVANTAGES

- Safe recombinant vaccine; industrially reproducible.
- Protects from FMD virus in the window period.
- Innovative and unprecedented product to control and eradicate FMD virus infection.

TECHNOLOGY READINESS LEVEL:

Vaccines developed and validated in a murine model. Proof-of-concept conducted in a porcine model. Containment boxes challenge test is pending. Scaling and marketing.

INTELLECTUAL PROPERTY RIGHTS STATUS: Vaccine formulation qualifies for trade secrecy protection.

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