#20V-18
VHH mono and multivalent nanobodies to control Type A Influenza infection

Type A Influenza constitutes **a public health threat ,** which causes seasonal epidemics and occasional pandemics. Worldwide, an estimated 250,000-500,000 people die from influenza virus infection every year.

Although vaccination has been adopted, it does not prevent infection circulation and dissemination. The use of **neutralizing monoclonal antibodies** enables to control infection, significantly reducing the number of hospitalized patients and the risk of death due to secondary bacterial infection, or by complications in high-risk patients.

The INTA Virology Institute has developed **VHH nanobodies** against H1N1 Influenza. The proposed formulation is intranasal administration, useful as a **prophylaxis and/or treatment tool for immediate application, which would enable to reduce dissemination of the influenza virus infection**.

ADVANTAGES:

- Production does not require handling live virus.
- Industrial scale production is feasible.
- Substantial market potential.

TECHNOLOGY READINESS LEVEL:

Laboratory-validated technology; proof-of-concept in the experimental phase. The technology is available for therapeutic and prophylactic efficacy testing in laboratory animals.

INTELLECTUAL PROPERTY RIGHTS STATUS: This formula may qualify for invention patent protection.

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