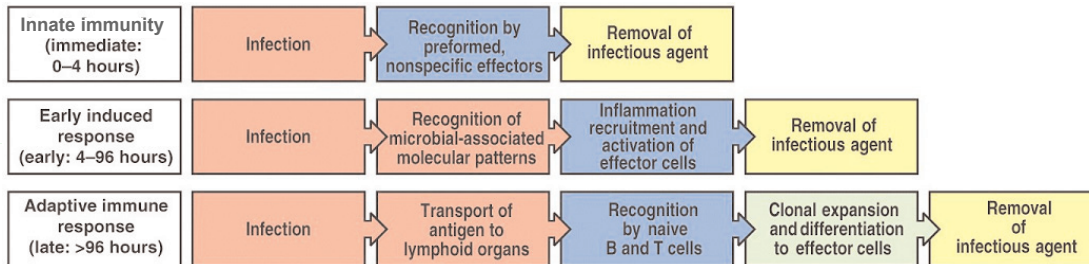


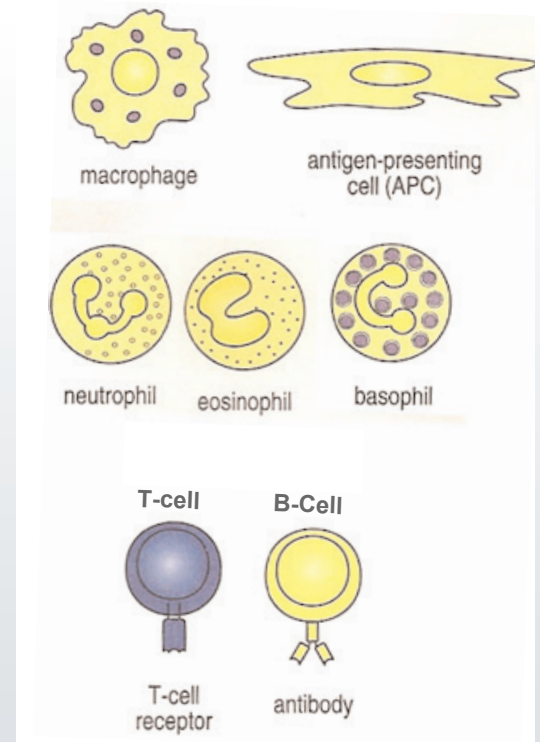
# INFECTIOUS DISEASE

## BACKGROUND



## MECHANISM

Homspera® is an immunomodulator that specifically enhances production of precursor cells that become granulocytes, macrophages, T cells and B cells. Activation of the **Neurokinin-1 Receptor (NK1-R)** by Homspera activates antigen presenting cells and stimulates T cell proliferation. All of these cells are key players of the innate and adaptive immune responses which contribute to Homspera's ability to boost the immune system.



## FINDINGS

### INFLUENZA

#### H5N1 Infection in Ferrets:

- Homspera decreased severity of H5N1-induced disease in ferrets.
- All test (treated) animals were more active than corresponding controls throughout the study period, and all treated animals had decreased magnitude of weight loss and hypothermia compared to their corresponding controls.
- None of the animals treated with Viprovex showed neck stiffness, hind-limb paralysis, diarrhea, or labored breathing.

#### H3N2 Infection in Cotton Rats:

- Homspera reduced virus particles in the lung and nasal passage as well as illness-related symptoms resulting in increased survival of animals
- Greater efficacy than Tamiflu®
- Lower levels of lung inflammation with Homspera compared to Tamiflu treatment
- Homspera alone is safe AND effective
- Homspera co-therapy reduced Tamiflu dose-related deaths

### ANTHRAX

Prophylactic activity – increased survival in animals pre-treated with Homspera and then exposed to anthrax

Post-exposure prophylactic activity – increased survival in animals exposed to anthrax and then given Homspera 4 or 24 hours after exposure