

Influenza virus infection:

Influenza is a highly contagious respiratory virus, which has been responsible for widespread morbidity and mortality. To date, vaccines that generate influenza strain-specific antibodies have proved effective in neutralizing this infectious agent; however, antigenic drift and shift preclude the long-term effectiveness of such vaccines. Protective immunity against a primary infection with lethal type A influenza virus is to a large degree mediated by a specific antibody responses although T cell and granulocytes responses also play an important role in lysis of infected cells and production of the appropriate cytokines and chemokines.

Experimental readouts:

- Viral load in lung tissue
- Weight loss, fever
- Histology; disease severity score
- Morbidity and mortality
- Influenza-specific antibody production
- Quantitative PCR of chemokine and cytokine levels in tissue
- Number and effector function of inflammatory cell infiltrates

Duration:

7-20 days dependent upon experimental readouts

Service Package I is available alone, or in combination with Service Packages II and III

Service Package I

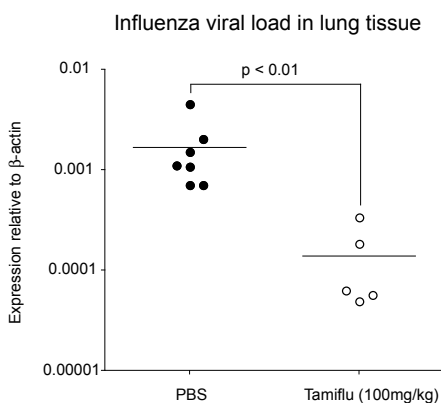
- Administration of test compounds
- Intranasal infection with influenza virus
- Determination of viral load in lung tissue

Service Package II

- Daily measurement of weight and fever
- Differential cell counts of airway lymphocytes
- Histological analysis of lung tissue

Service Package III

- Measurement of virus specific antibody response
- Cytokine and chemokine analysis
- Lymphocyte effector function analysis



BALB/c mice were infected with a sub-lethal dose of Influenza virus strain A/PR8/34 via intranasal inoculation. Viral load in lung tissue was determined on day 4 post infection by quantitative PCR.

Our scientific project managers can provide expert advice and guidance for all of your efficacy studies.

Please contact us for customized Service Packages
info@preclinbiosystems.com