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□ POSTER presentation

**The construction and the immune effect evaluation of gIgE gene deletion strain of Feline Herpesvirus type I**

Zhang jingjing1\*, Bao endong2

\*lead presenter

11193425637@qq.com, Master, China

2 Professor, China

**Abstract:**

**Background/Objective:** It is difficult to completely cure FHV-1 infection because FHV-1 can be latent in the trigeminal nerve, and it is the key to develop a attenuated vaccine which can prevent infection and the incubation period.

**Methods:** A recombinant virus was constructed using homologous recombination and CRISPR/Cas9 technology to replace the key virulence gene in FHV-1 genome with RFP, and its biological characteristics in vitro and in vivo were evaluated.

**Results:** The replication capacity of recombinant virus is decreased, compared with the parent strain, the pathogenic effect on cats is decreased, and the body can stimulate the production of a certain level of neutralizing antibodies.

**Conclusion:** gIgE gene is the key virulence gene of FHV-1, and its pathogenic effect on cats is weakened after its deletion, and it can play a certain protective effect on cats.

**Keywords:** FHV-1; Recombinant virus; Pathogenicity; Immunogenicity