

Experimental Autoimmune Encephalomyelitis

Multiple sclerosis (MS), a demyelinating disease of the central nervous system (CNS), presents as a complex disease with variable clinical and pathological manifestations, involving different pathogenic pathways.

Since the first experimental autoimmune encephalomyelitis (EAE) model was introduced decades ago, multiple classic (induced), spontaneous, and humanized EAE models have been developed, each recapitulating particular aspects of MS pathogenesis.

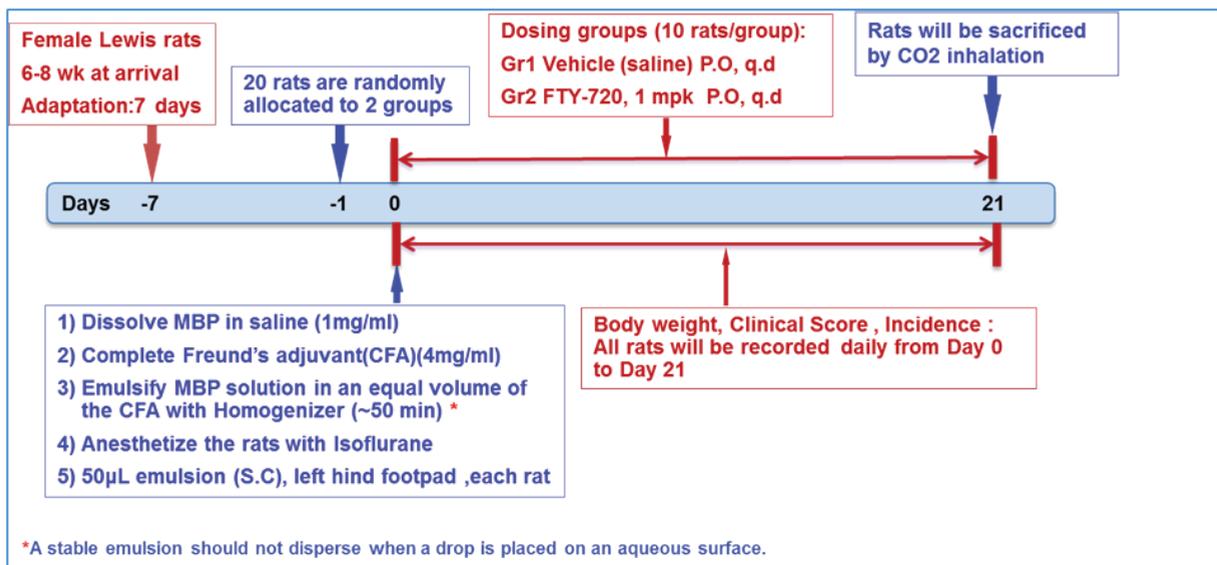
Collectively, the numerous studies on the different EAE models contributed immensely to our basic understanding of cellular and molecular pathways in MS pathogenesis as well as to the development of therapeutic agents: several drugs available today as disease modifying treatments were developed from direct studies on EAE models, and many others were tested or validated in EAE.

Models Available:

- MBP-induced EAE in Lewis rats
- MOG35-55 Induced EAE Mice
- PLP-induced EAE in SJL/J mice

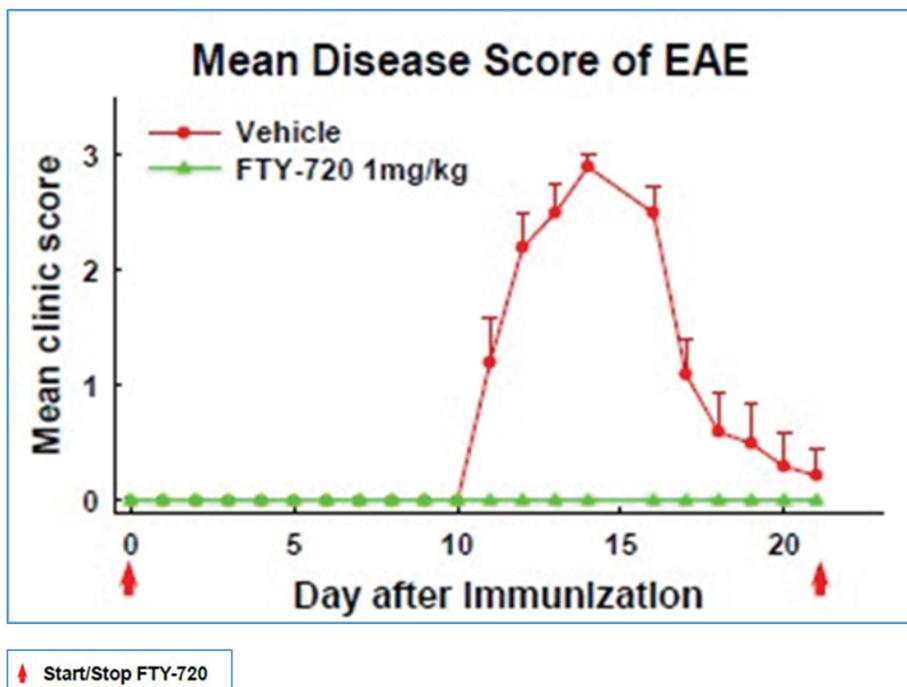
Validation Data: MBP-induced EAE in Lewis rats

Study Protocol

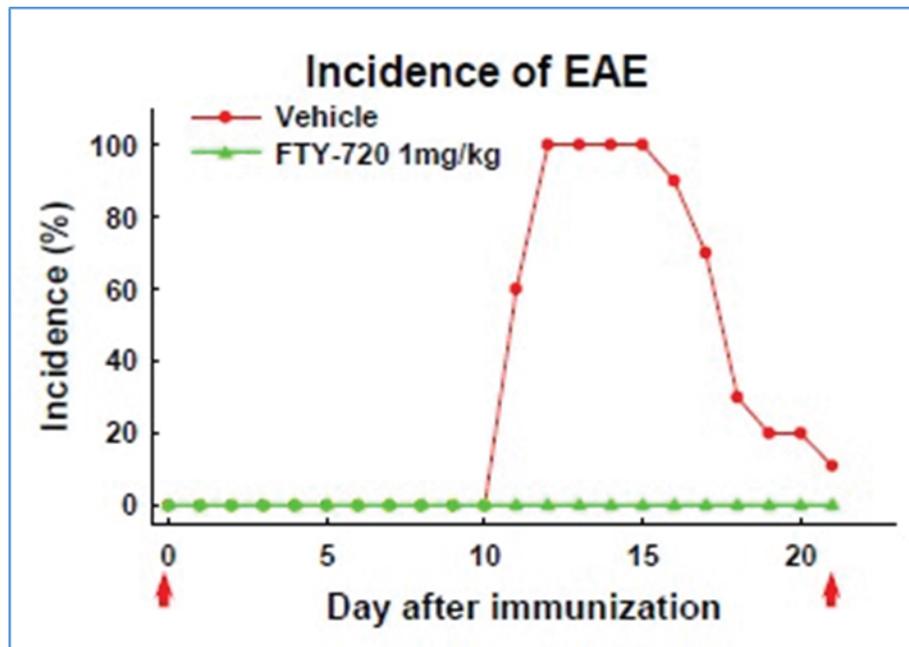


Results

i. Disease Score

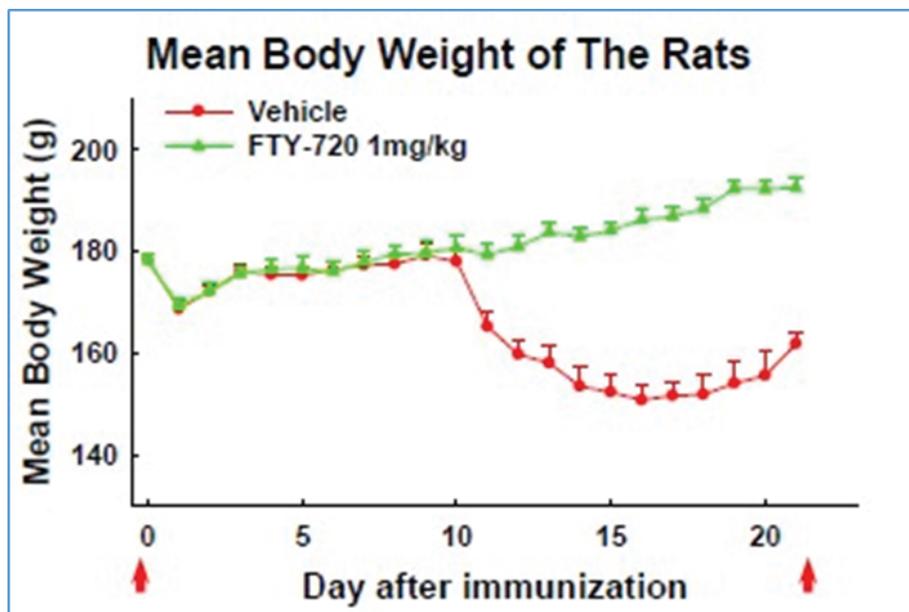


ii. Incidence



Start/Stop FTY-720

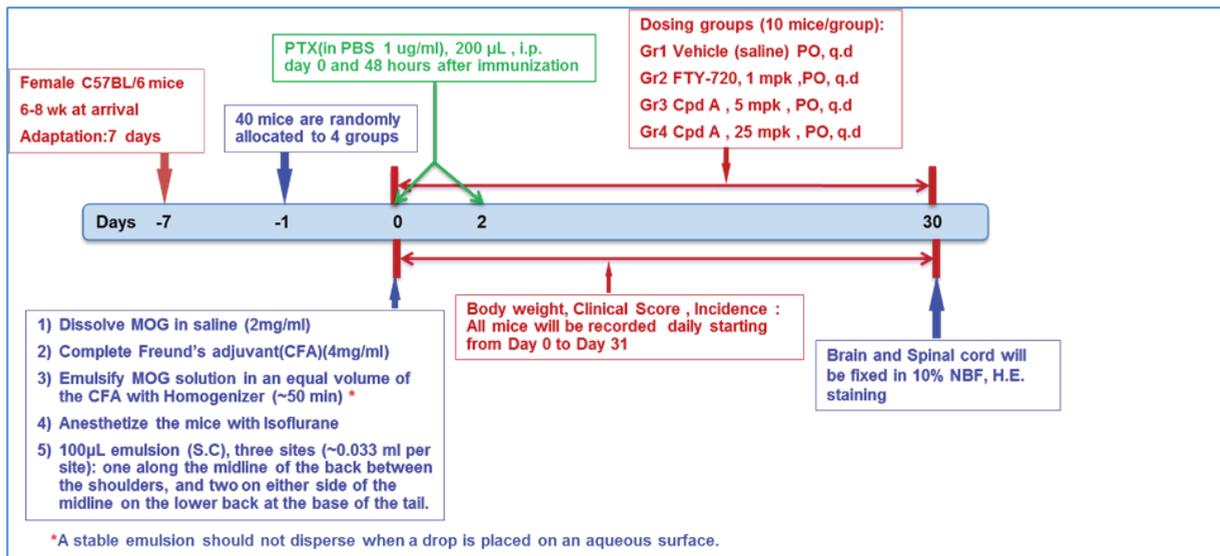
iii. Body Weight



Start/Stop FTY-720

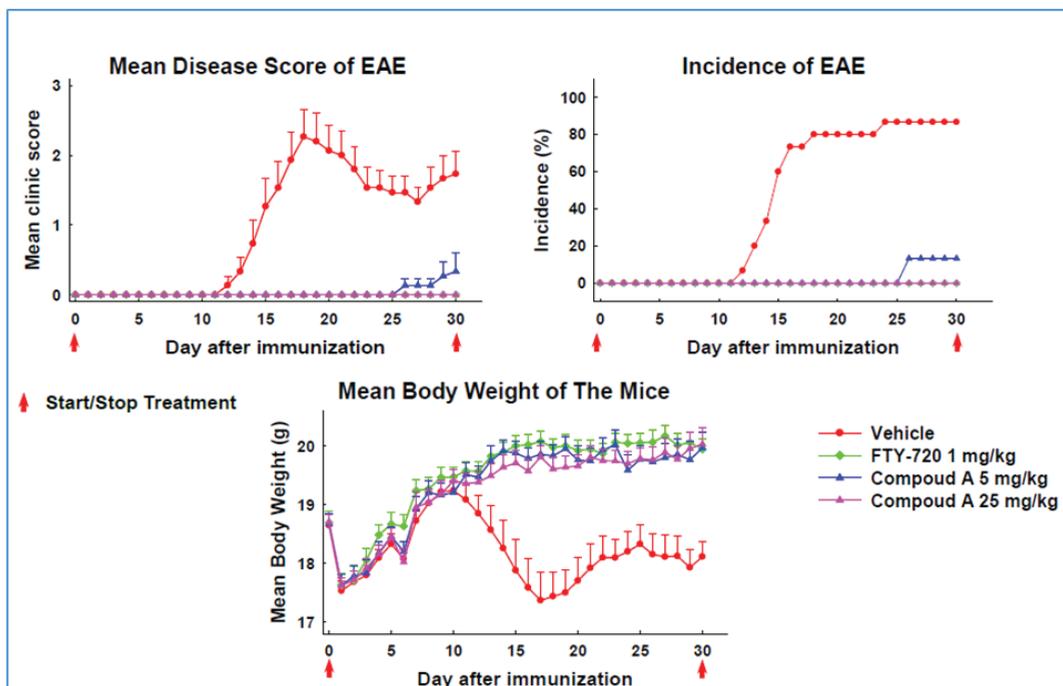
Validation Data: MOG35-55 Induced EAE Mice

Study Protocol



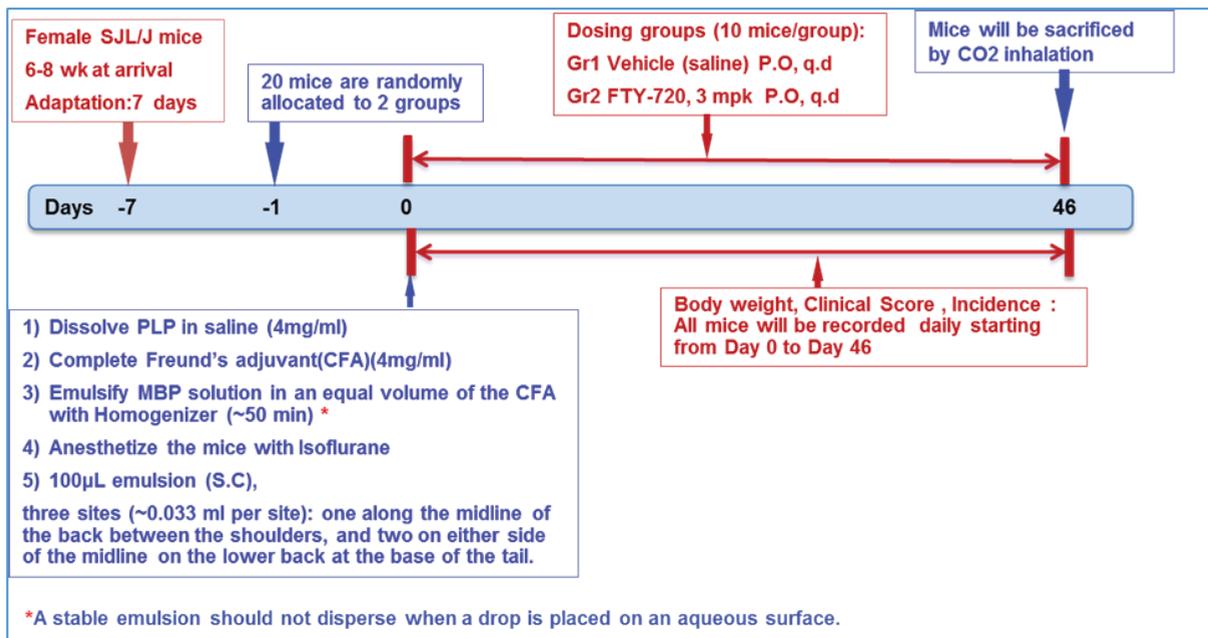
Results

i. Disease Score, Incidence and Body weight in Mice



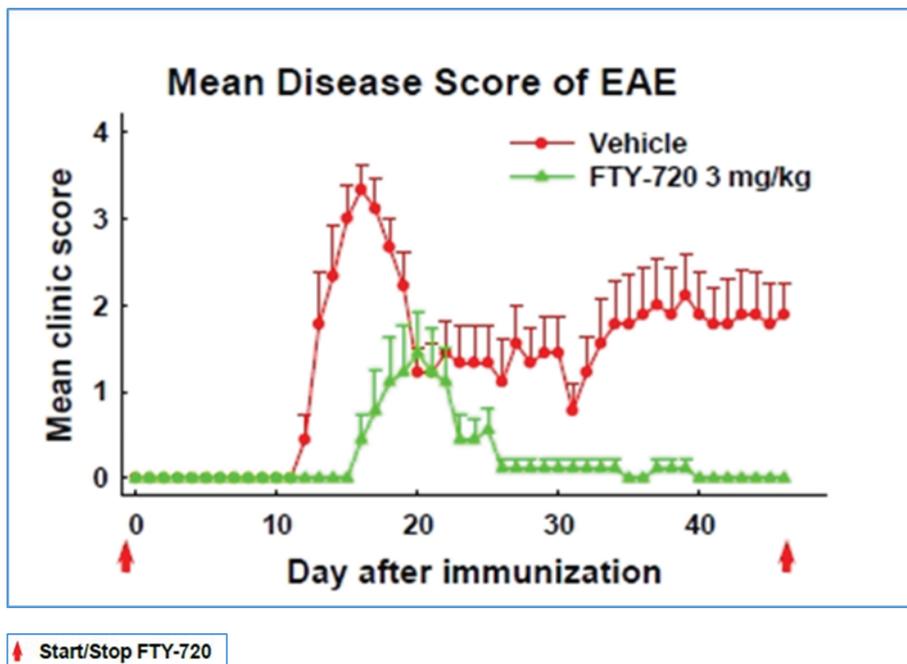
Validation Data: PLP Induced EAE Mice

Study Protocol

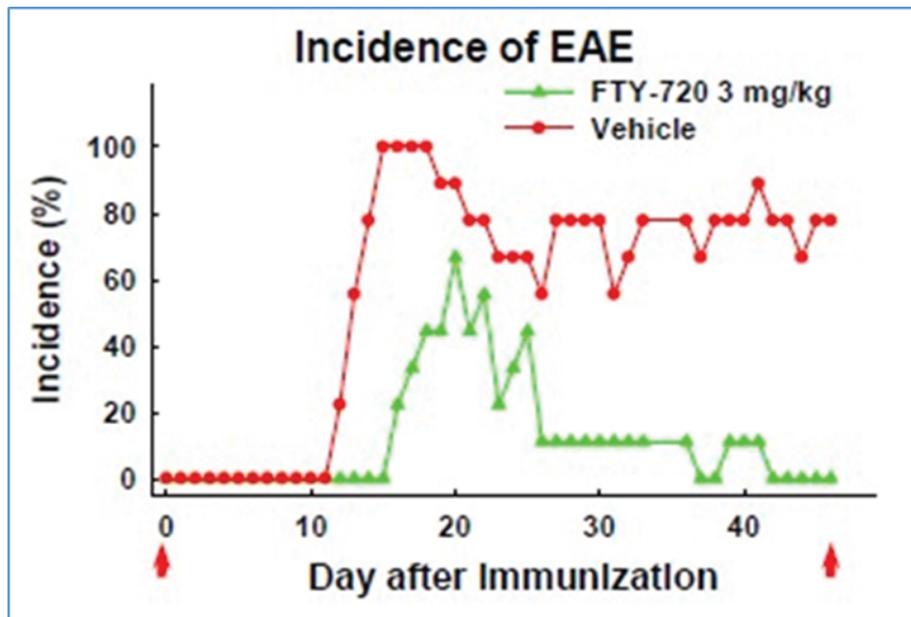


Results

i. Disease Score, Incidence and Body weight in Mice

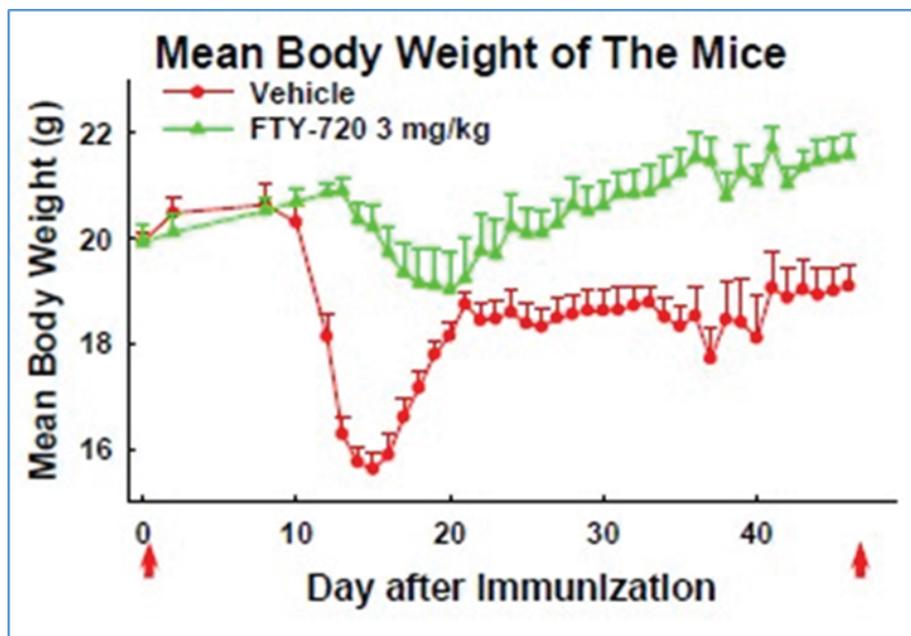


ii. Incidence



▲ Start/Stop FTY-720

iii. Body Weight



▲ Start/Stop FTY-720

BioDuro Pharmacology

The BioDuro Advantage

BioDuro's pharmacology team has extensive drug discovery and development experience in the pharmaceutical industry enabling us to support fully integrated programs, including study design and data interpretation. Special expertise in metabolic and inflammatory diseases is coupled with a commitment to working with clients to develop customized models for rare diseases.

Our team has successfully collaborated with 9 of the top 20 large pharmaceutical companies and numerous small companies. The success of these collaborations is highlighted by the quality data provided that have informed key project decisions and regulatory filings. Beyond providing analysis, our senior team's expertise allows for the development of a consulting relationship with client partners.

Services

- Translational research
- Biomarker discovery & development
- Compound efficacy evaluation
- Consultation

The Pharmacology Team

- **Dr. Yong Qi**, Directory of Pharmacology, has over 16 years of experience in leading and advancing drug discovery projects in metabolic and other disease areas at several pharmaceutical companies, including GlaxoSmithKline
- Group leader-level scientists with strong background and training in metabolic diseases
- A team of 20 well-trained bench scientists focused on in vitro and in vivo metabolic disease drug discovery services. They are skilled in different animal models/assays and excel in problem-solving and trouble-shooting

Therapeutic Focus

- CNS
- Inflammation and Immunology Disease
- Metabolic Disease