



神經退化疾病(漸凍人症等)的新穎醫藥研發-新穎療效的血液系統與化合物

主要領域 神經退化性疾病

■ 產品/技術簡介

- 神經退化疾病的新穎血液及化合物醫藥研發

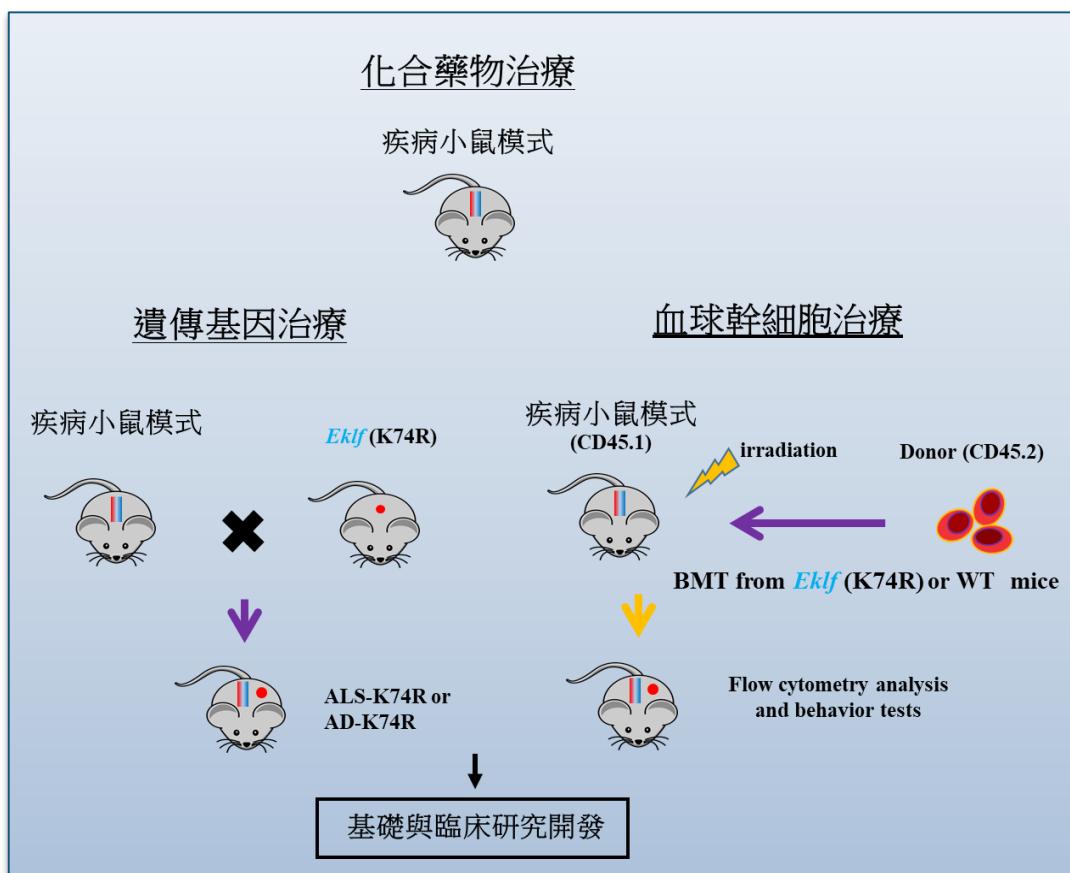
■ 應用: 神經退化疾病的預防、延緩與治癒

■ 優勢

- 擁有專利保護的兩個品系特殊疾病模式小鼠
- 一個品系的抗癌長壽小鼠及一個新穎化合藥物，應用於目前無藥可醫治之神經退化疾病的醫藥研發

■ 專利現況

- 額顫葉退化症之小鼠動物模式 (美, 2012; 台, 2013; 英/德/法, 2015)
- 具抗癌天性的長壽老鼠模式 (澳, 2018; 美, 2019; 台, 2020; 加/歐/日/中, 申請中)
- 一個具TDP-43 N390D突變的漸凍人小鼠模式 (美, 申請中)
- 化合藥物 (已獲12國17項專利, 包括美/歐/日/中等)





Treatment of Neurodegenerative Diseases (ALS/Dementia) with Novel Hematopoietic Blood System and Chemical Compounds

Research Area

Neurodegenerative Disease

▪ Technical statement

- Development of novel hematopoietic/blood and compound therapeutics for ALS/Dementia

▪ Applications

Prevention, Stop and/or Reversal of Neurodegenerative Diseases!

▪ Advantages

- Therapeutic development for currently incurable neurodegenerative diseases with use of patent-protected mouse models and chemical compounds

▪ Patent status

- Transgenic mouse model of frontotemporal lobar degeneration (USA, 2012; Taiwan, 2013; UK/Germany/France, 2015)
- A healthy longevity mouse model (Australia, 2018; USA, 2019; Taiwan, 2020; Canada/EU/Japan/China, filed)
- A TDP-43 knock-in ALS Mouse (USA, filed)
- Compound (17 patents globally from 12 countries)

Chemical Drug Treatment

Disease mouse models



Genetic Therapy

Disease mouse models



Eklf(K74R)



Hybrid mice
ALS-K74R or
AD-K74R

Hematopoietic Stem Cell Therapy

Disease mouse models



irradiation

Donor (CD45.2)

BMT from *Eklf*(K74R) or WT mice



Flow cytometry analysis
and behavior tests

Basic and Clinical R&D

計畫主持人 Project PI 沈哲鯤



計畫成員 Member



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