



新型基因編輯血液系統 -疾病預防/治療與健康長壽

主要領域 神經退化性疾病及癌症治療

■ 產品/技術簡介

- 神經退化疾病與癌症的新穎血液治療研發

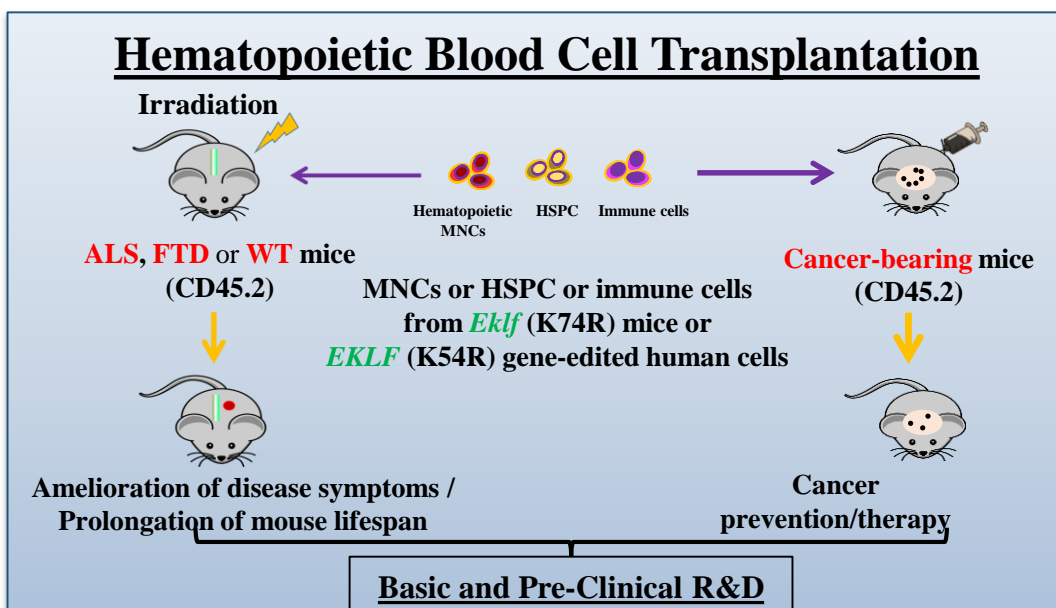
■ 應用: 神經退化疾病與癌症的預防、延緩與治療

■ 優勢

- 使用受專利保護的小鼠模特殊型和病症療法，研發一種新的基因編輯血液系統，用以預防/治療目前無法治癒的神經退化性疾病與癌症
- 擁有專利保護的三個品系疾病模式小鼠

■ 專利現況

- 藉移植特殊血液系統以增加壽命與預防/治療疾病的方法 (台, 2019; 澳, 2020; 日, 2021; 韓, 2021; 美, 2022; 加, 申請中)
- 延長壽命與抑制腫瘤發生的動物模型(澳, 2018; 美, 2019; 台, 2020; 加, 2021; 歐, 2022; 中, 申請中)
- 額顳葉退化症(FTD)之小鼠動物模式 (美, 2012; 台, 2013; 英/德/法, 2015)
- 一個具TDP-43 N390D突變的漸凍人小鼠模式 (美, 申請中)
- 神經退化性疾病的新穎醫藥研發 (美, 申請中)
- 使用一種新穎基因工程造血系統治療疾病和延長壽命 (美, 申請中)

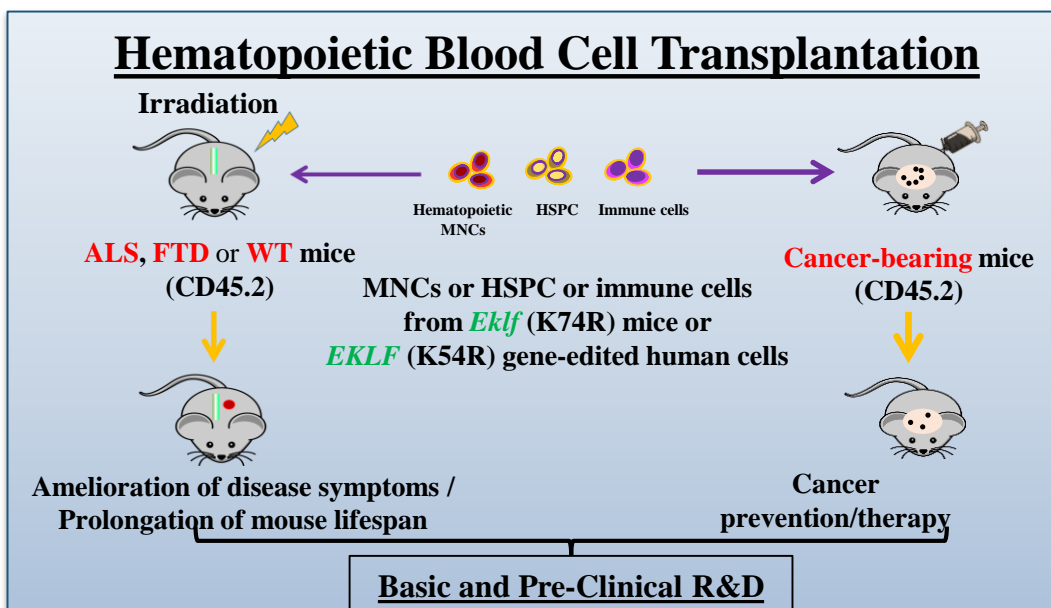




Novel Genome-edited Blood System for Disease Prevention/Therapy and Healthy Longevity

Research Area Neurodegenerative Disease And Cancer

- **Technical statement**
 - Development of novel hematopoietic/blood system and compound therapeutics for ALS/Cancer
- **Applications: *Prevention and/or Therapy of Neurodegenerative Diseases and Cancer.***
- **Advantages**
 - Therapeutic development of a novel genome-edited blood system for currently incurable neurodegenerative diseases and cancer with use of patent-protected novel approaches and mouse models
- **Patent status**
 - Methods for enhancing lifespan and/or treating cellular proliferative disorders by transplantation (TW, 2019; AU, 2020; JP, 2021; KR, 2021; US, 2022; CA, filed)
 - Animal model of longevity and related methods for increasing longevity and inhibiting tumorigenesis (AU, 2018; US, 2019; TW, 2020; CA, 2021; EU, 2022; CN, filed)
 - Transgenic mouse model of frontotemporal lobar degeneration (USA, 2012; Taiwan, 2013; UK/Germany/France, 2015)
 - A TDP-43 Knock-in mouse model of amyotrophic lateral sclerosis (ALS) (US, filed)
 - Methods of treating neurodegenerative diseases background of the invention (US, filed)
 - Use of A Novel Genetically Engineered Hematopoietic/ Blood System for Disease Therapy and Extension of Life Span (US, filed)



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