Minihepcidins improve ineffective erythropoiesis and splenomegaly in a new mouse model of adult β-thalassemia major

**Hbb\textsuperscript{th1/th2} BMC mice**
New transfusion dependent thalassemia (TDT) model

Severe anemia

**Minihepcidins**

**RBC transfusion**

**Minihepcidins**

**Improved ineffective erythropoiesis**

- ↑ RBC and Hb; ↓ Ret; ↓ ERFE
- ↓ hemicromes and ROS

**Further improved ineffective erythropoiesis**

- ↑ RBC and Hb; ↓ Ret; ↓ ERFE
- ↓ hemicromes and ROS

**Improved splenomegaly to average spleen weight similar to WT mice**

**Reduced parenchymal iron overload**
- ↓ iron content in liver, spleen and heart

- Drugs like Minihepcidins have therapeutic potential for transfusion dependent thalassemia patients
- The Hbb\textsuperscript{th1/th2} mouse model of TDT can be used to test drugs with the potential to improve ineffective erythropoiesis and anemia

Casu et al., Haematologica, 2020