COMPOUNDS FOR THE USE IN THE TREATMENT OF ANEMIAS

A research group from CIBER, Universidad de Murcia and IMIB has identified several compounds as potential candidates for treatment of anemias

The Need

Anemias are blood disorders considered to be a cause of severe deterioration of quality of life, morbidity and decline in physical function and a risk factor for death.

Although there are several treatments for anemias, there is a need of identifying new compounds that can minimize the use of transfusions.

The Solution

Identification of compounds regulating and inhibiting a specific inflammasome pathway that is involved in the regulation of haematopoiesis.

Innovative Aspects

- Identification of different compounds that have in common the regulation by inhibition of a specific metabolic pathway involved in inflammation and tightly related to haematopoiesis.
- Potential compounds for treatment of rare anemias that have no effective therapeutic options yet.

Stage of Development:

Pre-clinical assays have been performed with zebrafish models, cellular models and also in hematopoietic stem cells from Diamond-Blackfan anemia patients, with promising results.

Control

Compound 1
  Dose 1

Compound 1
  Dose 2

Compound 2
  Dose 1

Compound 2
  Dose 2

Fig 1. Significant increment of the number of erythrocytes in zebrafish model after treatment with identified compounds at increasing doses

Intellectual Property:

- European patent application was submitted 25 of May 2023.
- Suitable for international extension (PCT application)

Aims

Looking for a partner interested in a license and/or a collaboration agreement to develop and exploit this asset.

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