# SCREENING AND TREATMENT OF NEUROLOGICAL DISORDERS CHARACTERIZED BY A KIDINS220 DYSFUNCTION

**A research group from CIBER, CSIC and Universidad Autónoma de Madrid has identified a new way to treat and prevent disorders related to Kidins220 dysfunction that could improve the development of some neurodegenerative disorders.**

## The Need

Several neurological and psychiatric disorders are characterized by a dysfunction of Kinase D-interacting substrate of 220 kDa (Kidins220). There is a strong need to identify molecular signatures involved in Kidins220 dysfunction disorders to design novel screening methods and therapies to improve diagnosis, treatment and prognosis of neurological diseases like Alzheimer or Huntigton.

## The Solution

This technology provides a method for prevention and treatment of subjects at risk of or suffering from a neurological and psychiatric disorder related to Kidins220 dysfunction. The method is based on the retromer complex and its regulation, and improves the excitotoxicity and ventriculomegaly commonly showed in this disorders.

## Innovative Aspects

- This is a novel method for a wide range of neurological and psychiatric disorders, including some of the most prevalent like cerebral ischemia, Alzheimer's disease or Huntington disease, which are related to Kidins220 dysfunction.

- The novel screening method is carried out by the study of different biomarkers related to the retromer complex that causes Kidins220 dysfunction.

- The treatment consist of different molecules capable of enhancing the retromer complex activity offering a new way to improve the excitotoxicity and ventriculomegaly symptoms condition by improving Kidins220 functioning.

## Stage of Development:
Proved on murine model.
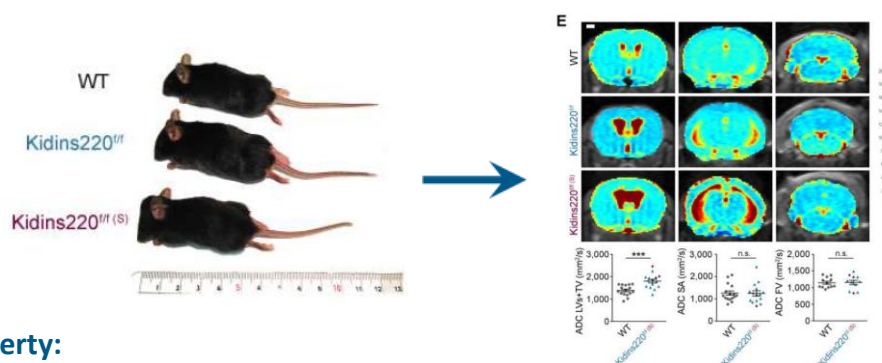


## Intellectual Property:

- Priority European patent application filed.
- International extension (PCT application) filed.

Del Puerto, A. *et al.* (2021). Kidins220 deficiency causes ventriculomegaly via SNX27-retromer-dependent AQP4 degradation. *Molecular psychiatry.* DOI: https://doi.org/10.1038/s41380-021-01127-9

## Aims

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

## Contact details