DIAGNOSTIC METHOD FOR DEMENTIA WITH LEWY BODIES

Genetic biomarkers for the differential diagnosis of dementia with Lewy bodies from Alzheimer's disease

OVERVIEW

Dementia with Lewy bodies (DLB) is the result of **abnormal α-synuclein aggregation and accumulation** in form of Lewy bodies causing neuronal cell death.

DLB is the **second most common neurodegenerative dementia after Alzheimer's Disease (AD)** in people older than 65 years. In these populations, the incidence of DLB is reported between 0.5-1.6/1.000 person/year accounting for at least 5% of dementias cases.

DLB is an aggressive disease with a reported **average survival of 4.7-year** but is frequently mistaken for other degenerative dementias, most often AD.

PROJECT

Sector: Central Nervous system

R&D direction:
Diagnosis of DLB
Patient stratification

Stage of development: TRL2-3

Scientific leader: Dr. Katrin Beyer

Clinical Advisor: Dr. Ramiro Álvarez

PRODUCT

Potential indications:
Correct AD/DLB diagnosis
Adequate dementia treatments

Mechanism of action:
Circulating biomarkers test

Market size: 185K tests per year

Market value: €19M per year

IP PROTECTION

Patent at National Phase

OPPORTUNITY

License out

Spin-off

NEEDS

DLB is widely underdiagnosed and misdiagnosed due to its similarity to other types of dementia. Recent reports state that up to **20% of patients with diagnosed AD actually have DLB.**

DLB is associated with a **poorer prognosis** when compared with AD. Up to **50% of DLB patients** are **extremely sensitive to neuroleptics and antipsychotics.** If DLB is mistaken for AD, patients are at high risk of developing Neuroleptic Malignant Syndrome if given antipsychotics.

Therefore, there is an urgent need to develop **reliable, easily available diagnostic biomarkers for their use in the clinical practice.**

SOLUTION

Our project proposes to create a **7-miRNA platelet signature**:

- for the **diagnosis and stratification** of dementia patients
- to distinguish DLB and AD patients, enabling adequate and faster **treatment management**.

Furthermore, if AD and DLB patients are correctly included in clinical trials, this new method may also contribute to **accelerate drug development, and promote and advance DLB research .**

KEY ADVANTATGES

- Easily accessible and minimally invasive: from blood samples
- Quick and non-expensive
- Allows disease confirmation: high accuracy and less uncertainty
- Ensures adequate DLB treatment
- Shortens time to diagnosis
- Correct patient selection for Clinical Trials

CONTACT US!

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