

# IRLAB nominates new candidate drug, IRL757, to treat apathy in neurological disorders

IRLAB (Nasdaq Stockholm: IRLAB A) takes important steps expanding the development pipeline and nominates a new drug candidate, IRL757, from the Poo1 discovery program. IRL757 will be developed for the treatment of apathy in people with neurological conditions. Apathy affects between 20 and 80 per cent of people with neurological conditions and currently there is no approved treatment. Only in the US, apathy is estimated to affect more than 10 million people and their families.

"IRL757 has potential to be the first treatment in a new class of drugs designed to treat apathy in people living with neurological disorders," said Nicholas Waters, CEO at IRLAB. "We deliver on our promise to use the financial and operational momentum, since the out licensing of mesdopetam, to broaden the scope and strengthen IRLABs pipeline, with a novel innovative development program. Our research organization has once again demonstrated the efficiency of the ISP platform."

"There are no approved treatments for apathy even though it is one of the most common and troublesome symptoms in most neurodegenerative disorders, both for the patient and their caregivers. We believe IRL757 could have a profound impact on the treatment of people living with apathy and neurological conditions," added Joakim Tedroff, CMO at IRLAB

IRL757, discovered with IRLAB's discovery platform, ISP, is designed to improve the function of brain areas and neuronal pathways which in many neurological disorders are known to be dysfunctional, leading to apathy and impaired quality of life. IRLAB has initiated studies in preparations of Phase I, including large scale synthesis of the active ingredient which are followed by safety, tolerability and regulatory toxicity studies. Phase I clinical studies are planned to begin early Q3, 2023.

## For more information

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## About IRL757

IRL757 is a development candidate designed to treat apathy in neurological disorders such as Parkinson's disease, Alzheimers disease and frontotemporal dementia.

IRL757 has a unique ability to specifically activate nerve signaling and gene expression involved in synaptic activity and plasticity, strengthening weakened nerve connections, in the frontal cortex. This activation is specific to the brain regions and nerve signaling pathways believed to be weakened in neurological disorders which lead to apathy.

# **About Apathy**

Apathy is a debilitating syndrome associated with many neurological disorders, including several common neurodegenerative diseases such as Parkinson's disease, Alzheimer's disease and frontotemporal dementia. Apathy is defined as a loss of initiative, interest and emotional expression /responsiveness and is commonly found in people with neurological disorders.

Currently there are no approved treatments available and thus apathy represents a huge unmet medical need across neurological indications.

Its reported frequency in various conditions varies, from ca 10 to over 80 per cent. Apathy occurs in 20-70 per cent in people with Parkinson's disease and in 20-90 per cent of people with Alzheimer's disease. Epidemiologic estimations suggest over 10 million people in the US may be affected.

Clinical, neuropathologic, and neuroimaging studies suggest that apathy reflects a dysfunction of frontal-subcortical circuits in the brain, especially those linking the ventromedial prefrontal cortex to related regions in the basal ganglia.



#### About the research platform ISP

The Integrative Screening Process, ISP, combines a uniquely efficient systems pharmacology approach coupled with advanced machine learning methodology. Applying ISP to drug discovery increases drug development success.

The ISP discovery platform is designed for discovery of novel treatment strategies for neurological and neuropsychiatric disorders. The ISP technology emanates from an integrative view on brain function, brain disorders and their treatments effects. Based on a systems level perspective, in ISP, the design and evaluation of new chemical entities is focused primarily on a comprehensive, phenotypic characterization.

To support discovery IRLAB has built a large proprietary database on drug response profiles (effects) and by means of advanced machine learning techniques including AI methodology, linking the response profiles both to chemical properties of the molecules, and to predictions of clinical effects in humans.

#### About IRLAB

IRLAB discovers and develops novel treatments of Parkinson's disease and other disorders of the brain. The company's most advanced drug candidates, mesdopetam (IRL790) and pirepemat (IRL752), are in Phase IIb and are designed to treat some of the most difficult symptoms related to Parkinson's disease. In 2021, IRLAB entered an exclusive and worldwide license with Ipsen for the development and marketing of mesdopetam.

Through ISP, its proprietary research platform, IRLAB has discovered and developed all its experimental drug candidates and continues to discover innovative drug candidates for the treatment of disorders of the brain. In addition to IRLAB's strong clinical pipeline, IRLAB runs several preclinical programs with IRL942 and IRL757 currently in development towards Phase I. IRLAB is listed on Nasdaq Stockholm. More information on www.irlab.se.

## Attachments

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