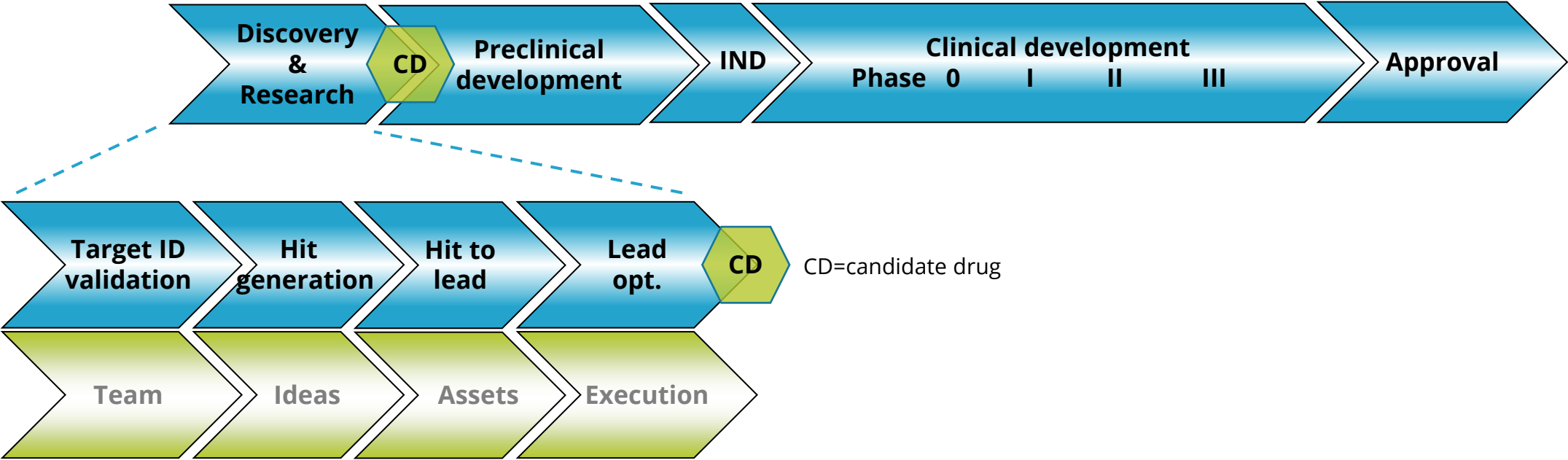




NeuroRestore - Background and evolution

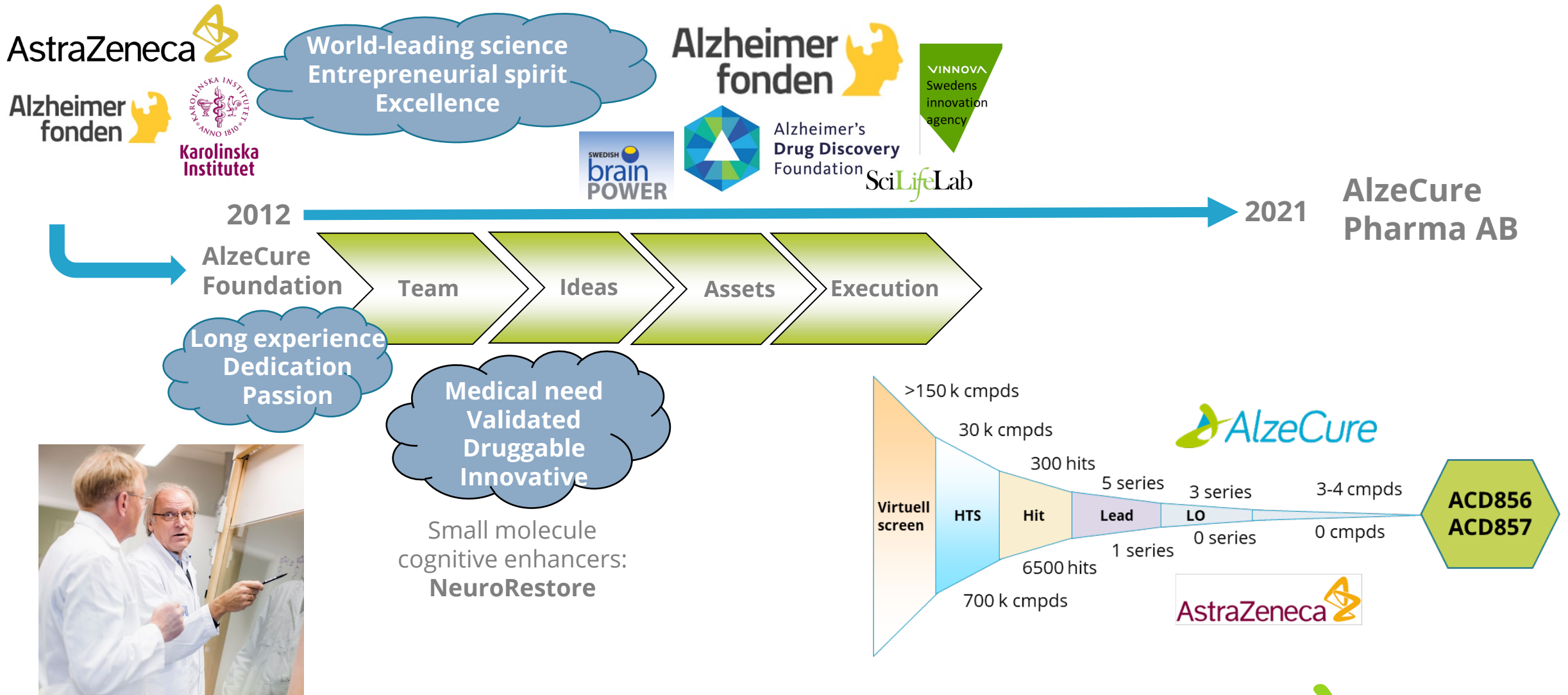
Dr Pontus Forsell, PhD
Head of Discovery & Research

History of AlzeCure and the NeuroRestore platform



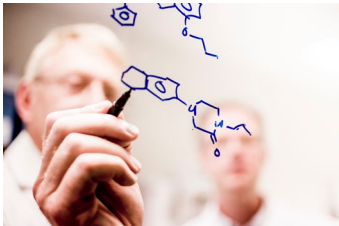
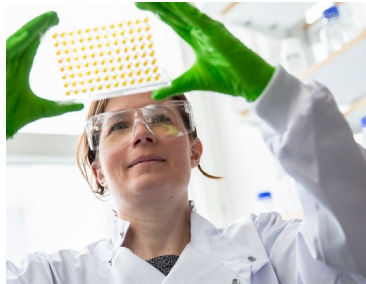
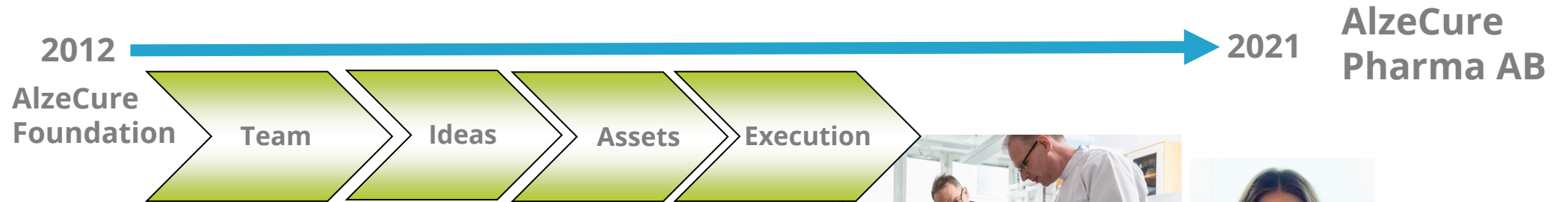
The history

Started in 2012, but the journey has only just begun!



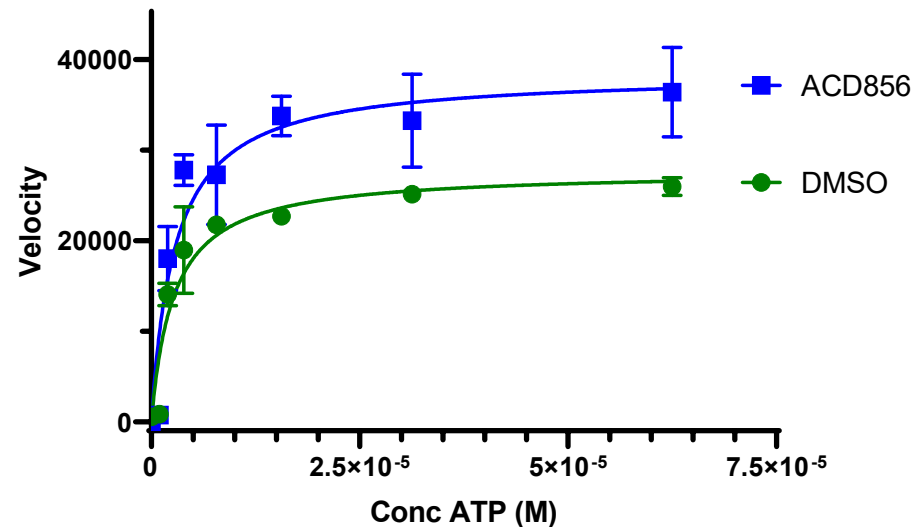
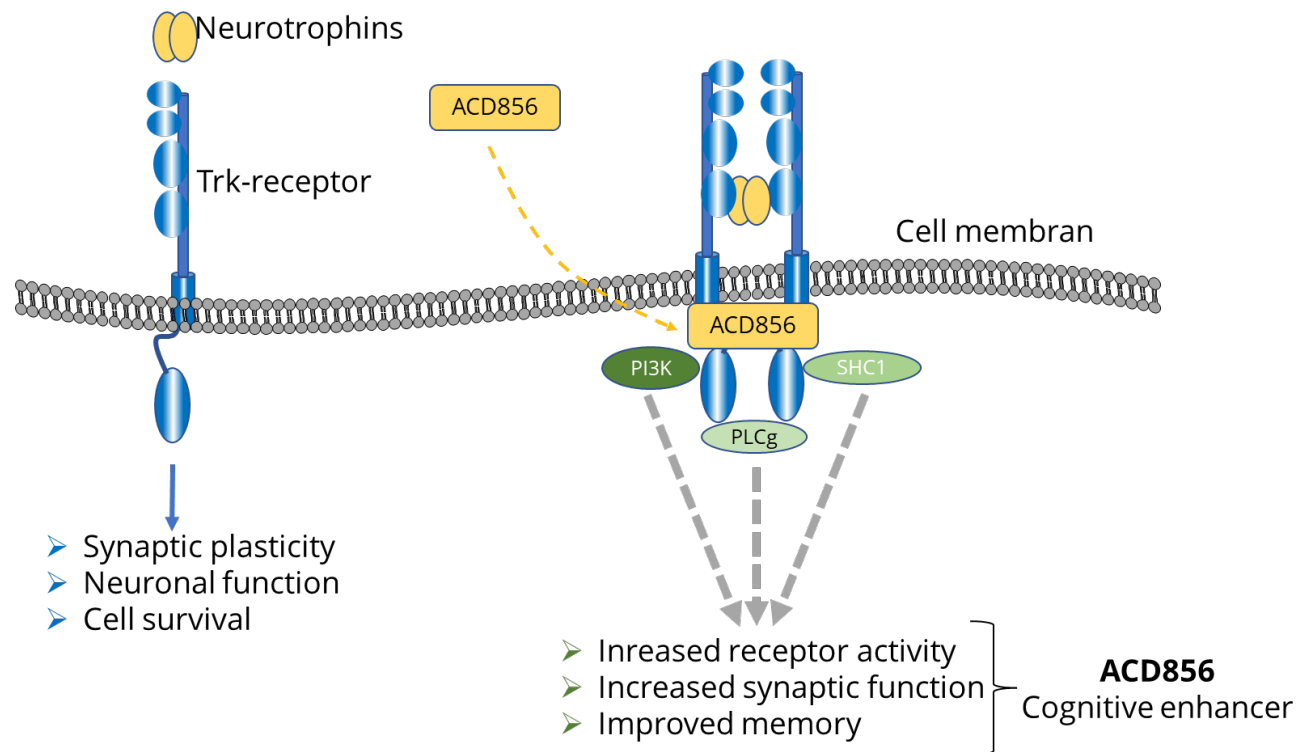
The history

Started in 2012, but the journey has only just begun!



The NeuroRestore project

The compounds are positive allosteric modulators of neurotrophin receptors

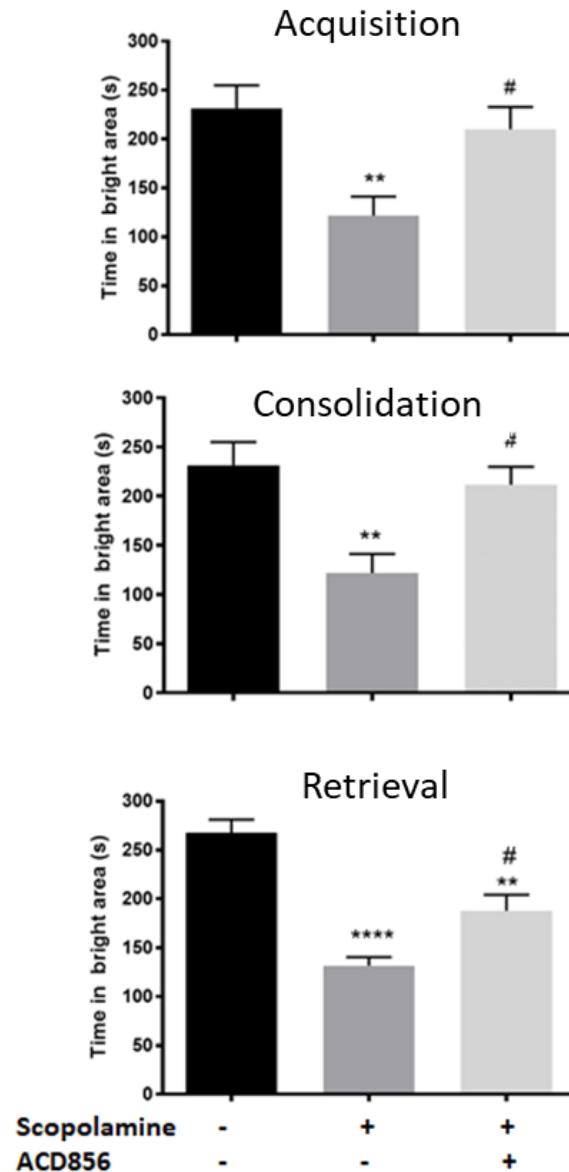


Identification of Novel Positive Allosteric Modulators of Neurotrophin Receptors for the Treatment of Cognitive Dysfunction

Märta Dahlström; Nather Madjid; Gunnar Nordvall; Magnus M. Halldin; Erika Vazquez-Juarez; Maria Lindskog; Johan Sandin; Bengt Winblad; Maria Eriksdotter; Pontus Forsell
Cells, 2021, July, Volume 10, Issue 8, 1871

ACD856 is a cognitive enhancer and improves memory

- This model is based upon scopolamine-induced memory impairment and two similar test that are separated in time by 24 hours.
- ACD856 improves both acquisition, consolidation and retrieval of memories



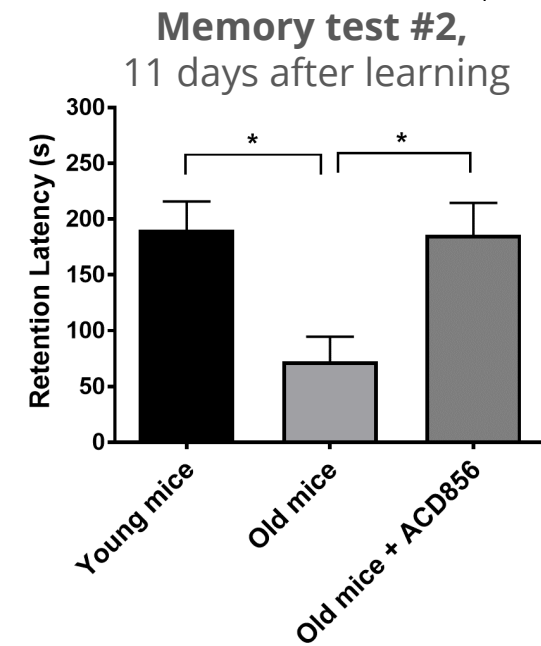
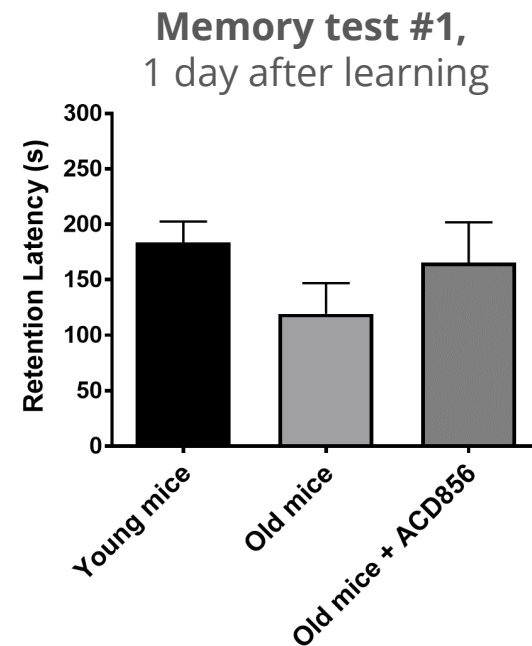
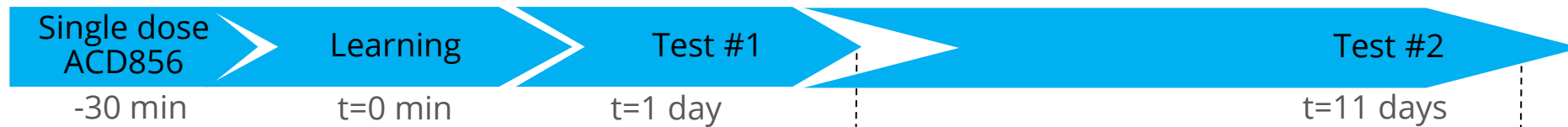
1. Acquisition: the animals are subjected to a situation where they learn a specific task or situation. ACD856 was given before the learning task.

2. Consolidation; the memory is stored in the brain. ACD856 was given after the learning task.

3. Retrieval; the memory is retrieved from the storage, i.e. the animals remember the specific situation. This test is performed 24 hours after acquisition of a memory.

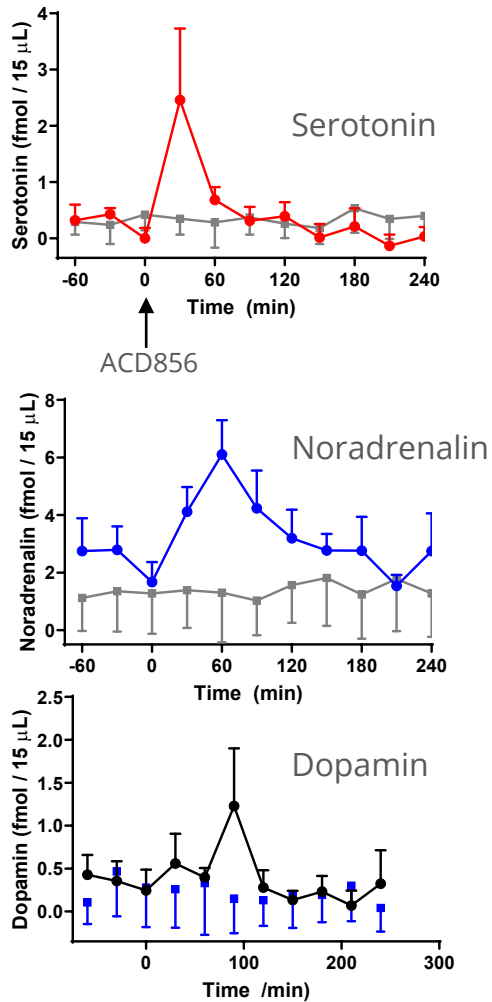
ACD856 improves aged-induced memory impairment

- 18-months old animals were used to study effects on age-induced memory impairment and compared to young animals
- Two memory tests were performed 1 or 11 days after learning
- **ACD856 could fully revert the memory impairment in old animals to a level found in young animals**

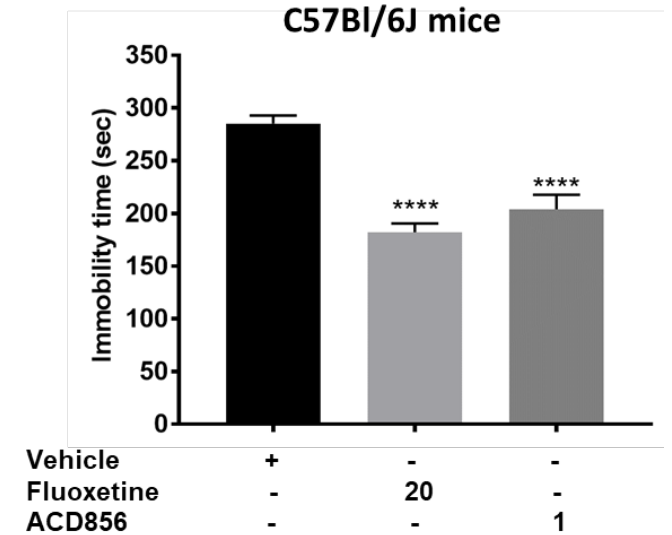
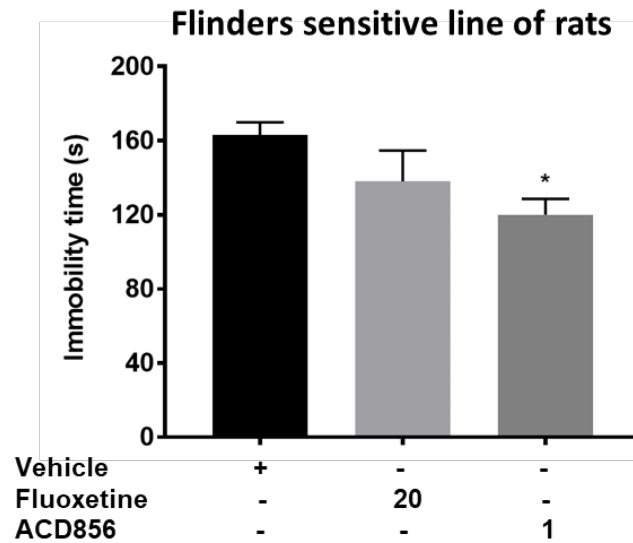


ACD856, effects on neurotransmitters and in a depression-like model

ACD856 increases the levels of important neurotransmitters in the ventral hippocampus

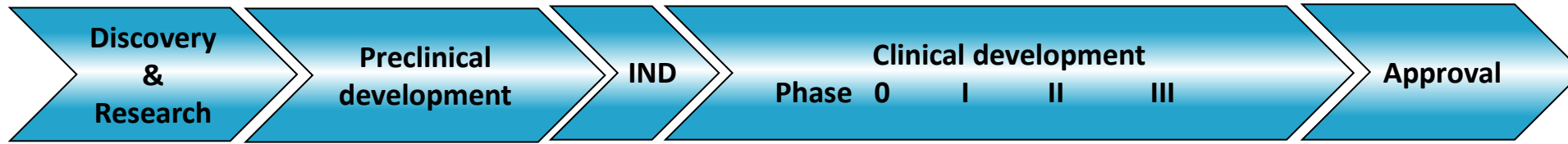


Antidepressant-like effects of ACD856 are similar to the effects of Fluoxetine (Prozac)



➤ These findings support the use of ACD856 for additional indications, including depression

Summary




- AlzeCure has managed to progress NeuroRestore from idea to clinical phase 1
- ACD856 has the potential to act as a cognitive enhancer in several diseases characterized by cognitive dysfunction.
- ACD856 can potentially be used to treat other diseases such as depression



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A composite image featuring a brain model, a neuron, and laboratory equipment. In the center, a pair of hands holds a realistic anatomical model of a human brain, showing the cerebral cortex and internal structures. To the left, a translucent blue neuron with multiple branching processes is superimposed over the background. The background itself is a blurred laboratory setting with various glassware and equipment, including a blue-capped bottle and a beaker.

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