

Sea4Us



Clinical Validation of a Novel Non-Opioid Analgesic Derived from the Portuguese Sea for Treating Chronic Pain

The Challenge – The Growing Global Problem of Chronic Pain

Chronic pain (defined as pain persisting beyond 3 months) affects 1 in 5 individuals globally (1.6 billion people) and 100 million in Europe. It is a source of enormous social and economic burden, costing Europe alone over 500 billion Euros each year. Current treatments are largely ineffective against most types of chronic pain. Opioid drugs, whilst effective, also inflict drug addiction, habituation and other noxious side-effects. There is a critically unmet need for drugs that match the efficacy of opioids without the potential for habituation and addiction.

The Solution – Sea4MARKET

A chance encounter with a marine sponge led to the answer. The numbing effect of *Spongia agaricina* was the catalyst for Sea4Us, an innovative Portuguese SME, to develop a first-in-class novel analgesic drug (Sea4Pain). Their unique compound exerts its therapeutic effect via a novel mode of action, specifically targeting hyperactive voltage-gated potassium channels expressed in peripheral pain-sensing neurons located outside of the spinal cord and brain. Unlike current drugs on the market, it is highly effective at treating chronic pain and has no serious side effects.

The Funding

The Neon Innovation team successfully secured €2.5m grant funding for Sea4Us from Horizon Europe's EIC Accelerator programme, securing the scale-up funding needed to accelerate the final steps to market. The Sea4MARKET project will enable Sea4Us to clinically validate their novel analgesic through completion of First-in-Human trials.



The Impact

The team also helped secure a further €3.5m in equity investment, enabling rapid entry into the multi-billion Euro chronic pain market. By out-licensing the technology, Sea4Pain will revolutionise the pain treatment market, not only easing the suffering of billions of patients worldwide, but also saving the lives of thousands of people currently dying from opioid overdoses each year.



24 months



€2.5M Grant

€3.5M Equity



Sea4Us
(Portugal)

neon
innovation