VIRGINIA COMMONWEALTH UNIVERSITY

Selective Sigma Receptor Drug for the Treatment of CNS-related Disorders VCU #15-073

Applications

- Novel therapeutic for CNS related disorders
- Possible applications include: psychiatric disorders, schizophrenia, anxiety disorders, attention disorders (ADHD), amyotrophic lateral sclerosis (ALS) and substance use disorder
- Research tool to identify the role of sigma receptors in diseases

Advantages

- Selective sigma receptor ligand
- Single-targeted approach to treat CNS disorders

Inventors

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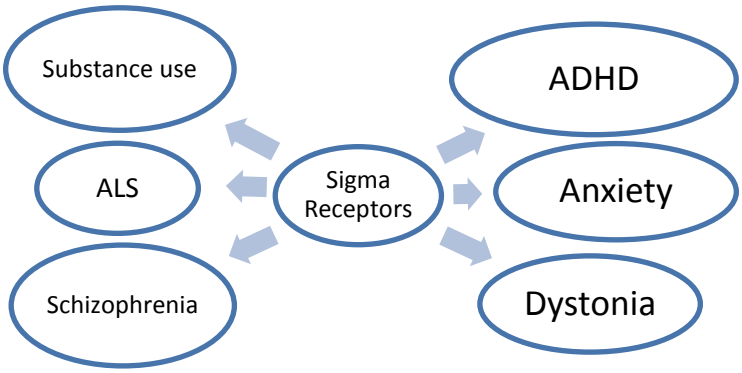

Technology Summary

This is a unique ligand that could be used to treat a variety of psychiatric conditions. The ligand displays antidepressant-like effects in pre-clinical studies, and high selectivity for Sigma1 and Sigma2 receptors. *In vitro* receptor binding data of 44 targets shows specific and potent binding affinity at Sigma1 and Sigma 2 receptors with no appreciable affinity at any other site. Therefore, this drug is a potential candidate for a variety of CNS disorders that may involve sigma receptors including schizophrenia, amyotrophic lateral sclerosis (ALS), anxiety and personality disorders, autism spectrum disorder, dystonia, attention disorders, and learning/memory dysfunctions.

Technology Status

Patent pending: U.S. and foreign rights are available.

This technology is available for licensing to industry for further development and commercialization.