Triazabutadienes With Drug-Like Properties

Title: Small Molecule Drug Target for Parkinson’s disease

Invention: The present early-stage invention, a caffeinated triazabutadiene, holds great potential for combatting Parkinson’s disease (PD). By labeling or inhibiting key brain functions activated in the progression of PD, the method could be valuable for research, treatment, and diagnosis.

Background: More than 10 million people are living with PD worldwide. The number of PD patients in the United States amounts to more than the number of those with multiple sclerosis, muscular dystrophy and Lou Gehrig’s disease combined. After Alzheimer’s, it is the most common neurodegenerative disorder. Despite the amount of research and attention dedicated to it, the PD mortality rate remains unchanged. And while approaches are shifting towards a better understanding of the underlying neurodegeneration, current approaches to motor symptom management are still rife with unpleasant side effects.

Applications:

- Research, diagnosis and treatment of Parkinson’s disease

Advantages:

- Treats motor symptoms
- Dual use for labeling and inhibiting
- Provides selective drug activation
- Potential to eliminate common side effects PD patients currently face

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