



# Use of sulfanegen and its analogs for prevention and treatment for neurodegenerative disorders

**A 3-mercaptopyruvate prodrug, sulfanegen, that reduces neuroinflammation and oxidative stress for therapeutic use in neurodegenerative diseases.**

**IP Status:** Provisional Patent Application Filed; **Application #:** 63/054,631

## Applications

- Alzheimer's Disease
- Parkinson's Disease
- Huntington's Disease
- Cognitive Impairment
- Non-Alcoholic Fatty Liver Disease/Non-alcoholic steatohepatitis (NAFLD/NASH)
- Tylenol (acetaminophen) toxicity

## Technology Overview

Sulfanegen is a prodrug of 3-mercaptopyruvic acid. Sulfanegen was studied for potential therapeutic benefit in Alzheimer's mouse models. In mice, sulfanegen at both doses 50 and 100 mg/kg showed a marked improvement in Alzheimer's pathology and cognitive behavior pattern as determined by the T-maze spontaneous alternation.

## Phase of Development

### TRL: 3-4

In vitro neuroprotection studies and in vivo studies with biochemical and T-maze cognitive assessment tests have been conducted for sulfanegen. The researchers are currently evaluating the brain tissues of these mice for detailed mechanistic understanding of sulfanegen's neuroprotective action.

## Desired Partnerships

This technology is now available for:

- License
- Sponsored research
- Co-development

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## Researchers

- [Robert Vince](#) Professor and Director, Center for Drug Design
- [Swati Sudhakar More](#) Associate Professor, Center for Drug Design

## References

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## Technology ID

2020-331

## Category

Life Sciences/Biochemicals &  
Small Molecules

Life Sciences/Human Health

Life Sciences/Neuroscience

Life Sciences/Therapeutics

## Learn more



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