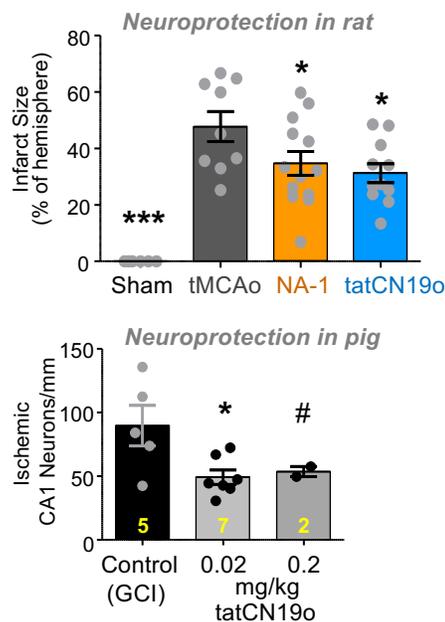


**Overview:** Neurexis Therapeutics was formed in early 2020 to develop a new medication for the prevention of brain damage following ischemic events such as stroke and cardiac arrest. Licensed from the University of Colorado Anschutz Medical Campus, this drug has the potential to significantly improve clinical outcomes for these patients, reduce total healthcare costs, and address a multibillion-dollar market opportunity.

**The Problem:** Cerebral ischemia is the loss of blood flow to the brain and can be caused by stroke, cardiac arrest, sickle cell anemia, congenital heart defects, high-risk vascular surgery, coronary disease, and other issues. The absence of circulation results in extensive nerve cell death, as well as in impaired function of the surviving nerve cells. Strokes alone cost the United States an estimated \$34B each year and greatly reduce the quality of life for many patients.

**The Solution:** An FDA-approved neuroprotective peptide therapeutic administered as a single bolus within 12 hours following restoration of circulation will have a tremendous impact on global healthcare. CSO Ulli Bayer and his team have developed an optimized peptide, tatCN19o, which dramatically reduces both the loss of neurons and behavioral impacts caused by lack of blood flow to the brain.

- Animal proof-of-concept studies (right): Neuroprotective efficacy in rat model of ischemic stroke and pig model of global cerebral ischemia
- No acute adverse effects in mice at 1,000x therapeutic dose or in pigs at 20x therapeutic dose
- Expected therapeutic dose in humans is 0.02 mg/kg
- Peptide is resistant to cleavage by plasminogen and tPA
- Excellent stability lyophilized and reconstituted



### Key Features

- Novel therapeutic approach for preventing brain damage caused by loss of blood flow due to stroke and cardiac arrest
- Small and large animal proof-of-concept data in place; FDA-required preclinical studies in progress
- Four granted US patents with opportunities for new intellectual property based on formulation improvements
- Substantial unmet market opportunity across multiple large, global healthcare settings

**Market Opportunity:** Assuming an average price of approximately \$10K per dose based on the closest comparable (Genentech's clot-busting tissue Plasminogen Activator or tPA) and utility in stroke, cardiac arrest, and other applications, the sales potential easily exceeds the billion dollar per year threshold for blockbuster status.

Neurexis Therapeutics, Inc.

A  Portfolio Company

### Contact

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### Company Profile

- Industry: Therapeutics
- Products: Peptide drug candidate for the prevention of brain damage following stroke and cardiac arrest; Secondary opportunities in traumatic brain injury and neurodegenerative diseases

### Financial Information

- \$600K initial private capital raised
- Currently seeking \$10M Series A

### Use of Proceeds

- Accelerate IND-enabling preclinical studies
- Complete Phase I study
- Expand patent portfolio
- General operations

### Intellectual Property

- Four issued US patents
- New IP opportunities for improved formulations

### Milestones Achieved

- Optimized lead identified
- Stability studies in engineering batch initiated
- Proof-of-concept results obtained in small and large animal models
- Preliminary cardiopulmonary safety data in place
- PK in safety species completed
- Additional IND-enabling preclinical studies in progress
- Awarded \$750K in non-dilutive Federal and State funding

### Key Management

- Dr. Michael Artinger, CEO
- Dr. Ulli Bayer, CSO
- Dr. Robyn Goforth, VP R&D
- Dr. Olivia Asfaha, Director R&D

### Competitive Landscape:

- In the US, there is only one approved treatment for stroke: tPA
- No approved neuroprotective drugs
- Majority of treatments in development for stroke are thrombotic agents, regenerative treatments, or those that drive neuronal repair
- tatCN19o is compatible with tPA therapy and potentially more potent than the phase III candidate, Nerinetide (NA-1)

### Key Milestones:

Year	Description
2020	Proof-of-concept efficacy and preliminary safety studies in small and large animal models of global cerebral ischemia
2021	Initiated IND-enabling preclinical development
2022	Proof-of-concept efficacy studies in rodent model of ischemic stroke
2023	Anticipated pre-IND meeting with FDA
2024	Phase I human clinical trials
2025	Phase IIa efficacy study in ischemic patients
2026	Potential exit via acquisition

### Team:



**[Michael Artinger](#), PhD – Chief Executive Officer.** Over 25 years of operational experience in life science industry; involved in pre-clinical and clinical development of therapeutics and vaccines across multiple therapeutic areas; Raised tens of millions of dollars in seed, Series A and B funding, and 3 successful exits



**[Ulli Bayer](#), PhD – Chief Scientific Officer.** Inventor of tatCN19o peptide; Professor, Department of Pharmacology at University of Colorado Anschutz Medical Campus; Recipient of significant NIH and State of Colorado translationally focused research funding



**[Robyn Goforth](#), PhD – Vice President of Research and Development.** 15+ years functional protein design and protein production; Principal investigator and co-principal investigator on \$10M+ NIH, DOE, and SBIR/STTR grants; Extensive experience in drug development across multiple indications for peptide and protein therapeutics



**[Olivia Asfaha](#), PhD – Director of Research and Development.** Neuroscientist and biochemist with 10 years' experience investigating kinase signaling pathways underlying memory; 14 peer-reviewed scientific papers and 2 NIH National Research Service Awards as principal investigator

**Summary:** Although drug development in the neurology space is difficult, the multibillion-dollar sales potential of a successful product merit entering this arena. The risk for Neurexis is mitigated by having a technology with extensive underlying basic research made possible by over \$4M in prior grant funding from Federal, State, and University sources, as well as a portfolio of issued US patents. Furthermore, peptides are an established and accepted therapeutic modality with a lower cost of manufacture than other biologics such as antibodies. Significant non-dilutive government funding is accessible as was the case in the heavy involvement of the National Institute of Neurological Disorders and Stroke in the clinical trials of Genentech's tPA due to the critical unmet need for stroke interventions. The primary exit strategy for Neurexis is acquisition by a large pharmaceutical or biotechnology company, most likely following a Phase IIa efficacy study in ischemic patients.