

## Dean Petkanas, CEO

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## Kannalife Sciences, Inc., a pioneering biotech company dedicated to developing small molecule therapeutics targeting inflammation

- Peripheral Nervous Systems (PNS) & Central Nervous System (CNS) disorders to prevent and reverse neuropathic pain
- Targets G protein-coupled receptor (GPCR), GPR55 and NLRP3 thru mNCX-1
- GPCRs are #1 targets for approved drugs

### Highlights:

Awarded \$3.3M in NIH Grants NINDS / NIDA - HEAL Initiative  
Strong preclinical results solving Unmet Medical Needs With

Treatment Platform:

*Prevention and Reversal of neuropathic pain*

*Protection of sensory and hippocampal neurons*

*Reduction of oxidative stress and ROS*

Advancing to IND in Q1 2025 and Ph 1a in Q3 2025

Full patent protection & freedom to operate

Experienced team of entrepreneurs, medicine experts, and clinical/business advisors

### Key Professionals:

Dean Petkanas, CEO –

Xechem, Neuropathix

William Kinney, PhD CSO –

Wyeth, J&J, Magainin

Doug Brenneman, PhD Chief Bio –

Pfizer, J&J, NIH (Section Chief)

Mark McDonnell, PhD Chief Chem –

Fox Chase, J&J, PDDI

Tage Honoré, PhD, Dsc – Chm SAB

Novartis, Novo Nordisk

Charles Loprinzi, MD – Senior SAB

Mayo Clinic, FDA Clinic Expert

Strong candidate for accelerated FDA approval via breakthrough, fast track and orphan drug designations available for CIPN and other opportunities.



# kannalife™

breakthrough therapeutics targeting inflammation

## First-in-class small molecule therapeutic targeting GPCR & mitochondria to treat inflammation and peripheral neuropathy

### Company Overview

Our lead therapeutic KLS-13019, is a first-in-class, novel synthetic cannabinoid that has been validated through IND-enabling studies to prevent and reverse chemotherapy-induced peripheral neuropathy (CIPN).

### Market & Commercialization Strategy

CIPN market: ~\$810M/yr, driven by refractory cancer patients in third-line chemo (e.g., paclitaxel, oxaliplatin, cisplatin). Once KLS-13019 clears safety trials, we can target US based opportunities such as \$10.3B market for irritable bowel disease (IBD) and others including diabetic neuropathy (\$4.3B).

### Technical & Competitive Advantage

KLS-13019, features pioneering first-in-class chemistry and a small molecule drug (SMD) advantage and targets GPR55, a prime area for drug discovery. Its dual mechanism of action within synaptic mitochondria, engaging with both GPR55 and mNCX-1, underscores its comprehensive control over neuronal function and shows promise in neurological disorders. It is orally bioavailable, able to break the blood-brain barrier, and has a clean CNS safety profile. Strong preclinical data validated efficacy in both peripheral and central nervous systems, indicating broad therapeutic potential.

### Regulatory Strategy

NDA pathway is advancing to IND in Q1 2025 and Ph 1a in Q3 2025. Strong candidate for accelerated FDA approval. Open to an out-license partnership for co-development. Completed Pre-IND briefing book, covers among other things, product profile, Q&A, regulatory interaction, issue management and endpoints.

### Intellectual Property – Freedom to Operate to 2039

- WIPO/PCT Patent WO2015/106108A2** – Composition & Method – Treat Oxidative Stress
- WIPO/PCT Patent WO2021/097351A1** – Method – Radiation Dermatitis & Other Disorders
- WIPO/PCT Patent WO2022/165332A1** – Method – Treat Inflammation and Pain

### Capitalization History

		Total to Date	\$10.2M
2013	Equity	VC Initial Seed	\$1.5M
2017-2020	Equity	VC Seed Follow	\$3.4M
2017-2020	Debt	VC Follow-On	\$2.0M
2017-2023	Federal Grant	NIH	\$3.3M
*Future Commitment	Equity	Prevail Partners	\$1.5M

### Funding Needs

- \$30M to Fund Human Clinical Trials Ph 1a thru Ph 2a

### Near-Term Milestones

- Completing IND Enabling Studies
- Pre-IND Briefing with FDA – Q3 2024
- First in Human Trials Begin – Q3 2025

**Seeking dynamic & strategic life sciences partner to join forces to seize multiple market opportunities.**