



DOGWOOD
THERAPEUTICS

**Deepening our Commitment to Patients
Suffering from Chemotherapy Induced
Peripheral Neuropathy**

September 29th, 2025

NASDAQ: DWTX

- Great Progress on Ongoing Halneuron[®] Phase 2b Chemotherapy Induced Pain Study
- Exciting New SP16 Cancer Related Pain Global License Overview
- Q&A

Na_v1.7 Research Pipeline Targeting Chronic and Acute Pain, Includes FDA Fast Track Designation for Treating CINP



Target Indication	Candidate/Target	Preclinical	Phase 1	Phase 2	Phase 3
Chemotherapy-Induced Neuropathic Pain (CINP)	Halneuron® Na _v 1.7	Phase 2b Ongoing: FDA Fast Track Designation			
Cancer Related Pain (CRP)	Halneuron® Na _v 1.7	Phase 2 Complete			
Acute pain	Halneuron® Na _v 1.7				

Halneuron® – Fulfills Many Requirements Of An Ideal Analgesic



Halneuron® Reduced CRP and CINP Pain In Previous Phase 2 Studies



Responders Demonstrate Mean Pain Relief of ~ 2 Months



No evidence of addiction, euphoria or tolerance



Demonstrated Acceptable Safety in Testing Including Over 700 Patients



Composition of Matter IP Complemented by Manufacturing Know-How and Trade Secrets



There are no drugs approved to treat CINP, highlighting a very large commercial opportunity

80 Patients Have Currently Been Randomized To Treatment In The Halneuron® 4-Week Phase 2b CINP Study



Baseline	Week 1	Week 2	Week 3	Week 4
Run-in Period Avg. of Days -7 to -1	8 Halneuron® treatment injections spaced over 2 weeks			Primary Endpoint End of Study

- **Primary Objective of the 4-Week Phase 2b study**
 - To explore the safety and efficacy of Halneuron® in the treatment of patients with moderate-to-severe CINP
- **Primary Efficacy Endpoint**
 - Change from baseline at Week 4 in the weekly average of daily 24-hour recall pain intensity scores, comparing Halneuron® to placebo
 - Based on entries in e-diary implemented on personal smartphone
- **Secondary Efficacy Endpoints**
 - Patient Global Impression of Change (PGIC), PROMIS Fatigue, PROMIS Sleep, PROMIS-29, Pain Interference, Hospital Anxiety and Depression Scale (HADS), Neuropathic Pain Symptom Inventory (NPSI)
- **Target enrollment of 200 patients, subject to modification post Phase 2b interim analysis (projected in Q4 2025)**

Key Features of the SP16 IV Transaction



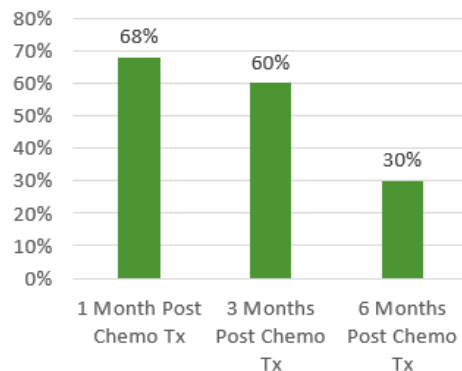
- Royalty free, global license to develop and commercialize Serpin Pharma's IV formulation of SP16 as a treatment for neuropathy and potentially to repair and/or prevent nerve damage associated with off target effects of chemotherapy
 - SP16 provides alpha-1-antitrypsin activity via low-density lipoprotein receptor-related protein-1 (LRP1) agonism
 - Consistent with alpha-1-antitrypsin anti-inflammatory and immunomodulatory actions, SP16 preclinically demonstrates:
 - Anti-inflammatory and analgesic action via reduction in IL-6, IL-8, IL-1 β and TNF-alpha levels
 - Potential to repair damaged tissue via increases in pAKT and pERK, signaling proteins that regulate fundamental processes such as growth, proliferation, and survival
- SP16 is a clinical stage development candidate poised to enter Phase 1b research as a treatment for chemotherapy induced peripheral neuropathy (CIPN) symptoms
 - Reduced inflammation at the site of nerve injury, exhibiting potential to reduce numbness, tingling and pain associated with chemotherapy induced neuropathy
 - LRP1 agonism might offer pain reduction synergy when used with our Halneuron[®] Nav 1.7 inhibitor
 - Improved nerve survival and regenerative signaling may offer nerve restorative potential
- The Phase 1b trial is endorsed by and fully funded by the National Cancer Institute
 - NCI grant proceeds received
 - Study to be run in collaboration with University of VA to determine best doses for Phase 2a, also eligible for NCI funding
 - Phase 2a is also eligible for NCI funding
- Currently planning to file IND Q4 2025, dosing patients 1H 2026

Exclusive Global License for Serpin Pharma's IV formulation of SP16 Complements Halneuron®

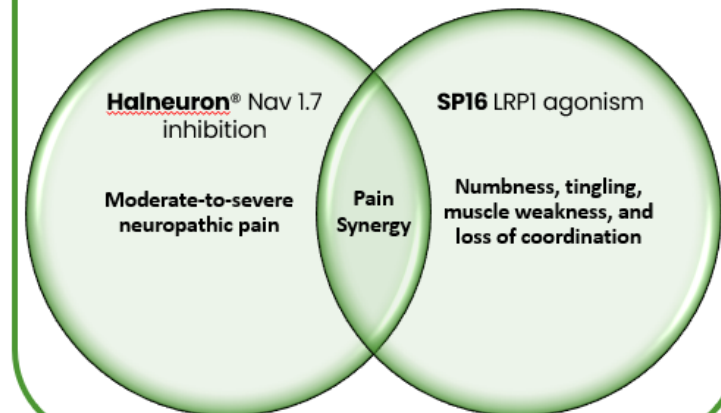


- Serpin benefits from DWTX experience in late-stage development, including pain related conditions
- Serpin consideration for the royalty-free, global development and commercialization license has been provided in DWTX stock
 - Consideration via a combination of ~382,000 common shares and ~ 179 preferred (A-2) shares representing Serpin ownership of DWTX stock projected to be 7.31% on a fully diluted basis, predicated on a shareholder vote to convert the preferred shares to common
- License includes a mutual support agreement between Serpin Pharma and CK-Life Sciences to convert respective preferred shares to common shares at a forthcoming special meeting
 - CKLS ownership projected to be ~ 83.00% on a fully diluted basis
 - Special meeting contemplated for Q4 of 2025
- Expands DWTX pipeline and deepens our commitment to addressing multiple domains of CIPN/CINP

**CIPN Prevalence Post
Chemotherapy Treatment**

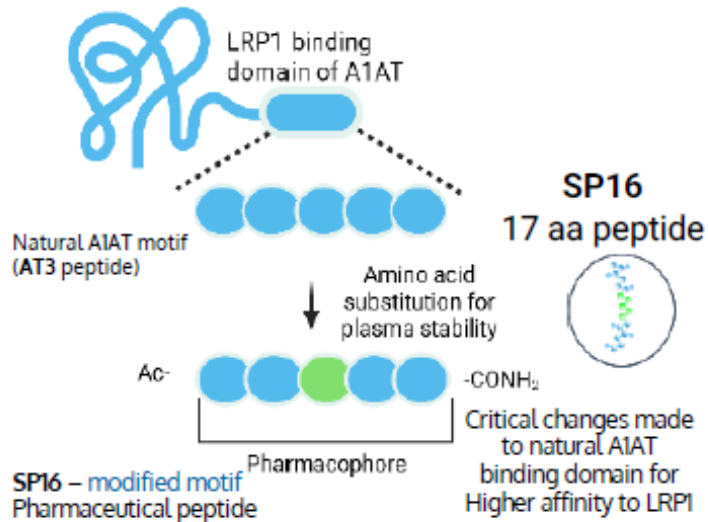


**Two Potential Solutions to Address Significant
Unmet CIPN Medical Need**



SP16 Target Background

SP16 is a safe and natural solution to inflammatory disease



- Alpha 1 antitrypsin (A1AT) is a member of the serpin (serine protease inhibitor family) that plays a critical role in protecting the body from the damaging effects of powerful enzyme proteases, including neutrophil elastase
- Neutrophil elastase is released by white blood cells, particularly during infection and inflammation, to help fight off pathogens and remove damaged cells
 - A1AT acts as an "off switch" or inhibitor for proteases including neutrophil elastase, preventing them from damaging healthy tissue
- Serpin the company has discovered the active portion of A1AT responsible for this activity
 - SP16 is a 17 amino acid peptide containing the active portion of A1AT activating LRP1
 - Isolated only the anti-inflammatory portion of A1AT (removed pro-inflammatory sequences) for higher potency (300x)
- SP16 administered via IV formulation with two hypothesized actions:
 - Anti-inflammatory (analgesic) action via reduction of IL-6, IL-8, IL-1 β and TNF-alpha
 - Repairs tissue via increases in pAKT and pERK that regulate fundamental processes like growth, proliferation, and survival
- Human PoC is the next stage of SP16 development

SP16 LRP1 Mechanism of Action

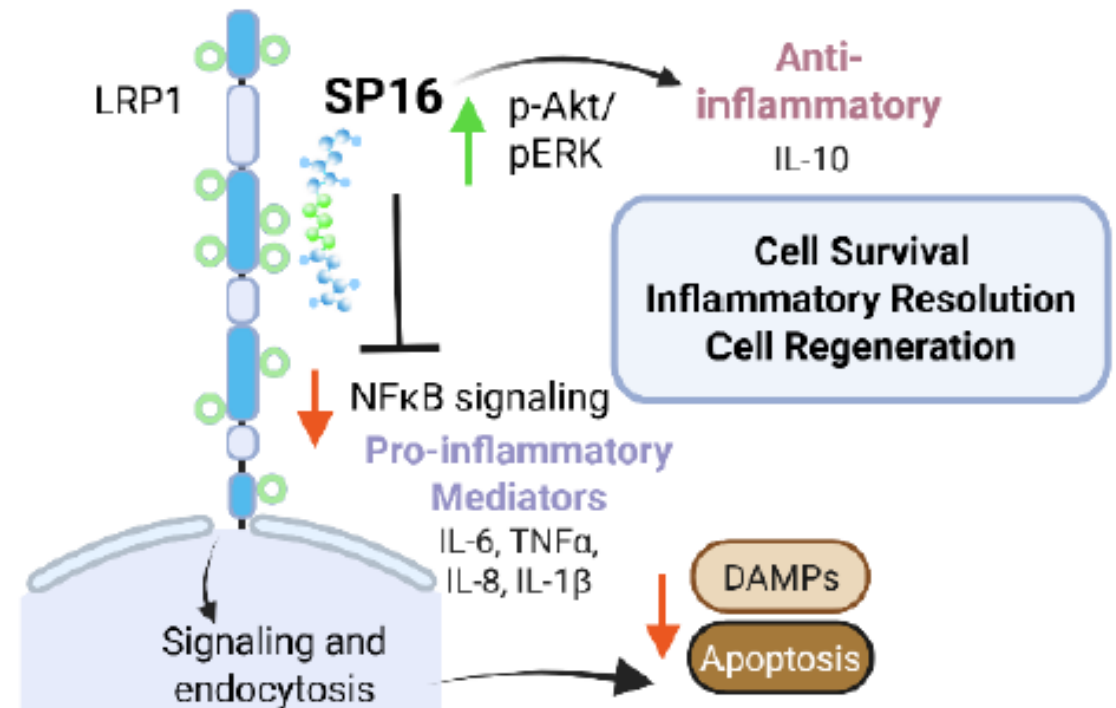
SP16 is a potent LRP1 agonist

- LRP1 (LDL-receptor related protein-1) is a signaling and endocytic receptor critical in controlling the immune response
- Expressed on virtually all cell types (critical for maintaining cell health)

SP16 Mechanism of Action

- Activates specific anti-inflammatory and reparative signaling to restore immune balance
- Endocytic function clears inflammatory triggers (DAMPs/PAMPS) from the cell environment; upstream inflammasome regulation
- Cell signaling reduces inflammatory (NFκB) pathways while initiating regenerative tissue repair pathways (Akt/ERK)
- Harmful inflammatory mediators are reduced while resolving mediators are increased to help restore cell health

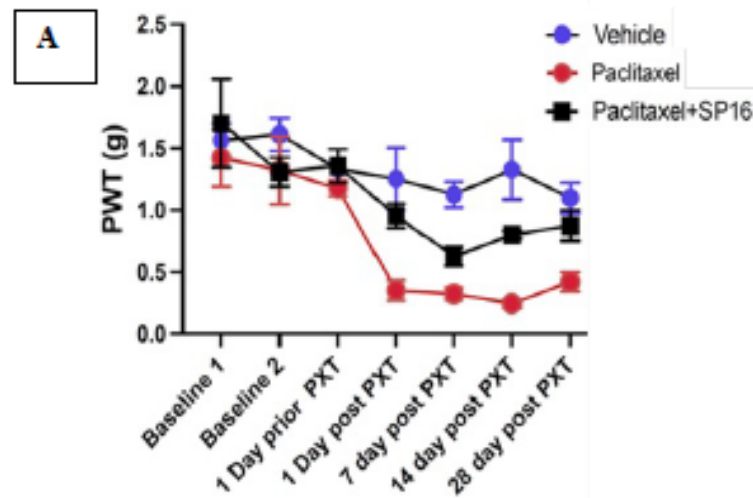
SP16's non-immunosuppressive mechanism maintains the body's natural ability to heal during inflammation



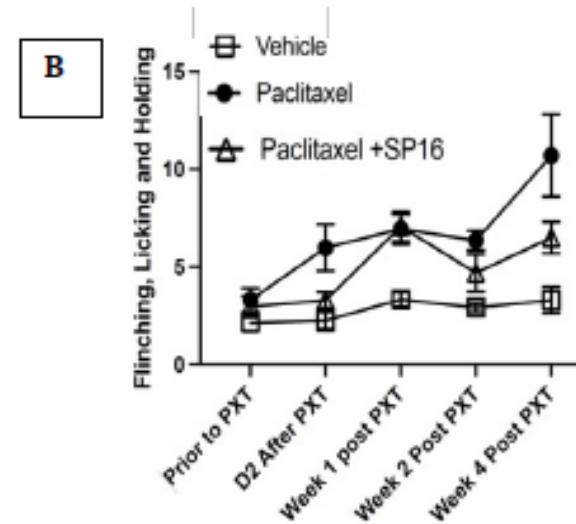
Preclinical Research Demonstrates SP16 Analgesic Effects

- SP16 reduced both mechanical and cold hypersensitivity in a murine model of paclitaxel induced neuropathy

Von Frey mechanical hypersensitivity



Thermal allodynia

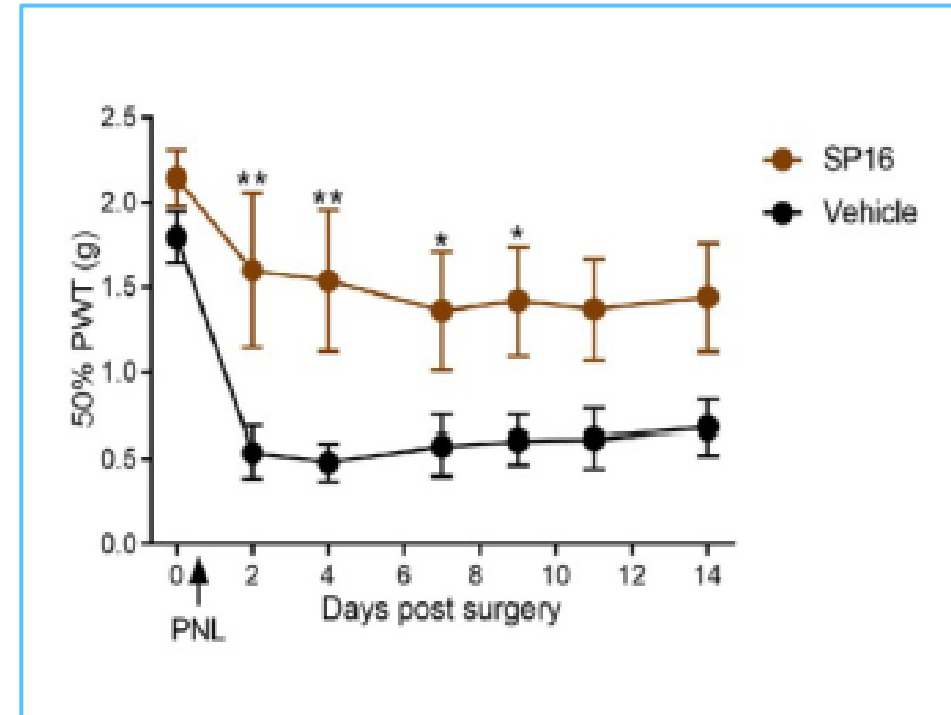


SP16 reduces sensory hypersensitivity in taxane induced model. C57BL/6 mice were administered PXT (4 mg/kg, IP) every other day for 8 days. Mice were treated with SP16 (2mg/kg, SC) or vehicle control at the start of PXT treatment and 3x/week for 3 weeks, dropping to 1x/week at the start of the 4th week. **A) mechanical hypersensitivity (von Frey)** and **B) Cold allodynia (acetone test)** was evaluated every week for 4 weeks. n=6 mice

SP16 Inhibits Pain Responses and Inflammation in Peripheral Nerve Injury Model

Systemically administered SP16 treatment blocks the development of mechanical hypersensitivity

- Tactile allodynia develops after peripheral nerve ligation and are sustained for 14 days
- SP16(2μg/g) delivered daily (S.C.) significantly prevented the development of tactile allodynia for 9 days post-injury (**p<0.01)

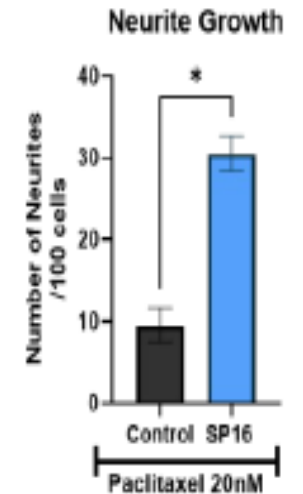
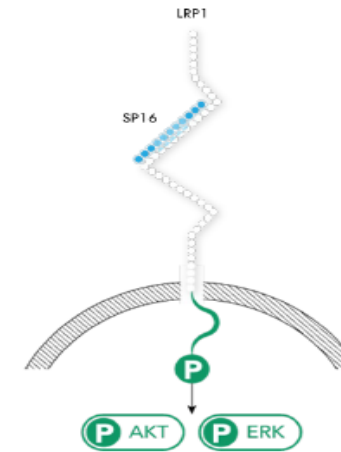


SP16 LRP1 Agonism Exhibits Potential to Prevent and/or Repair Nerve Damage Associated Chemotherapy

- In collaboration with Dr. Wendy Campana at the University of California San Diego, SP16 was tested for its regenerative effects on neurons
- Neurotrophic effects of SP16 and associated increase in regenerative genes in neurons [Wang, 2022]
- SP16 was neuroprotective, activating neurite survival and growth, pro-regenerative genes and proteins, and protective signaling pathways
- SP16 significantly increased neurite growth in the presence of paclitaxel

Reparative Function of SP16

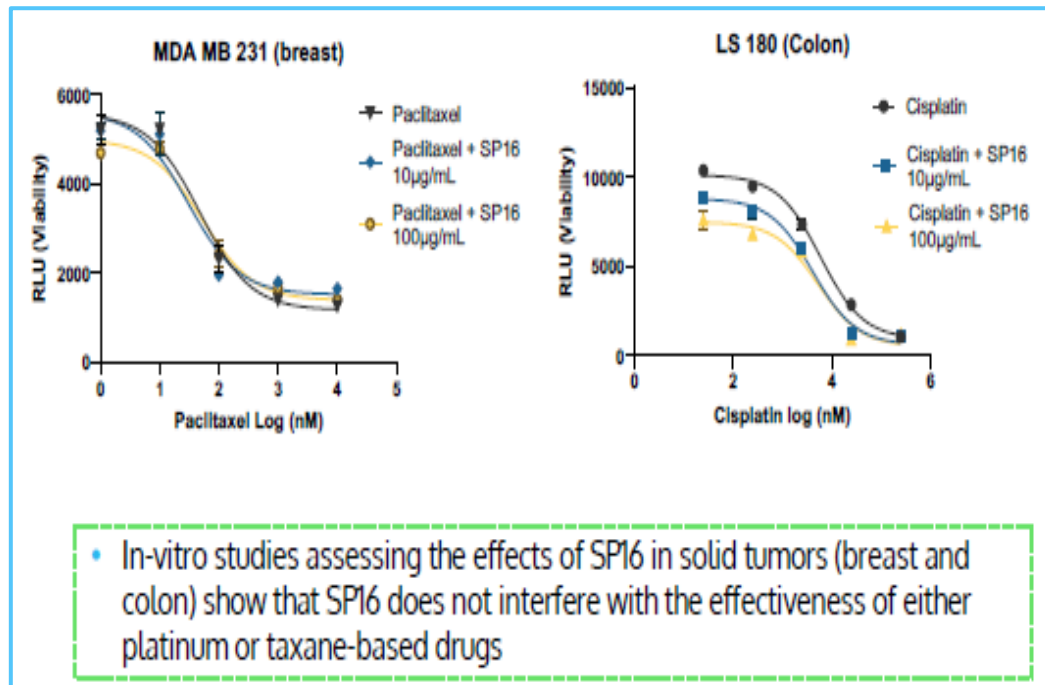
By activation of LRP1 dependent pathways (pAkt and pERK), SP16 treatment induces neurite survival and growth



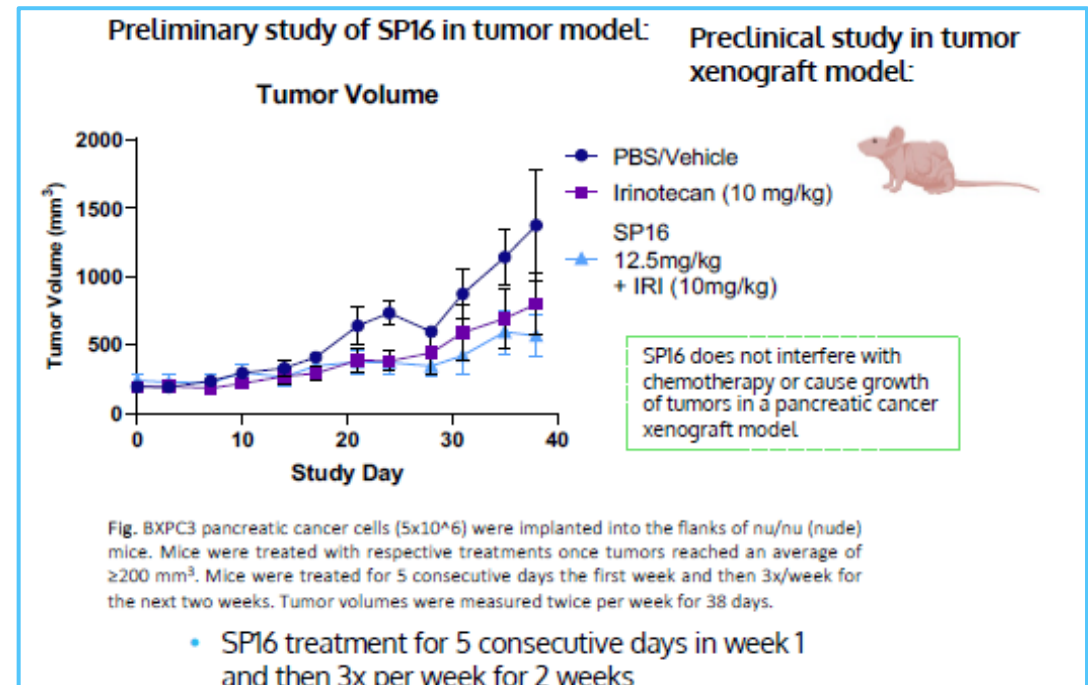
Source: Wang et al., 2021 FASEB J

In-vitro Assays in Several Cancer Types Shows SP16 Does Not Interfere with Common Chemotherapy Regimes

In-vitro assays in breast and colon cancer shows SP16 does not interfere with the effectiveness of either platinum or taxane drugs



In-vitro assays in pancreatic cancer cells shows SP16 does not interfere with the effectiveness of a topoisomerase 1 inhibitor

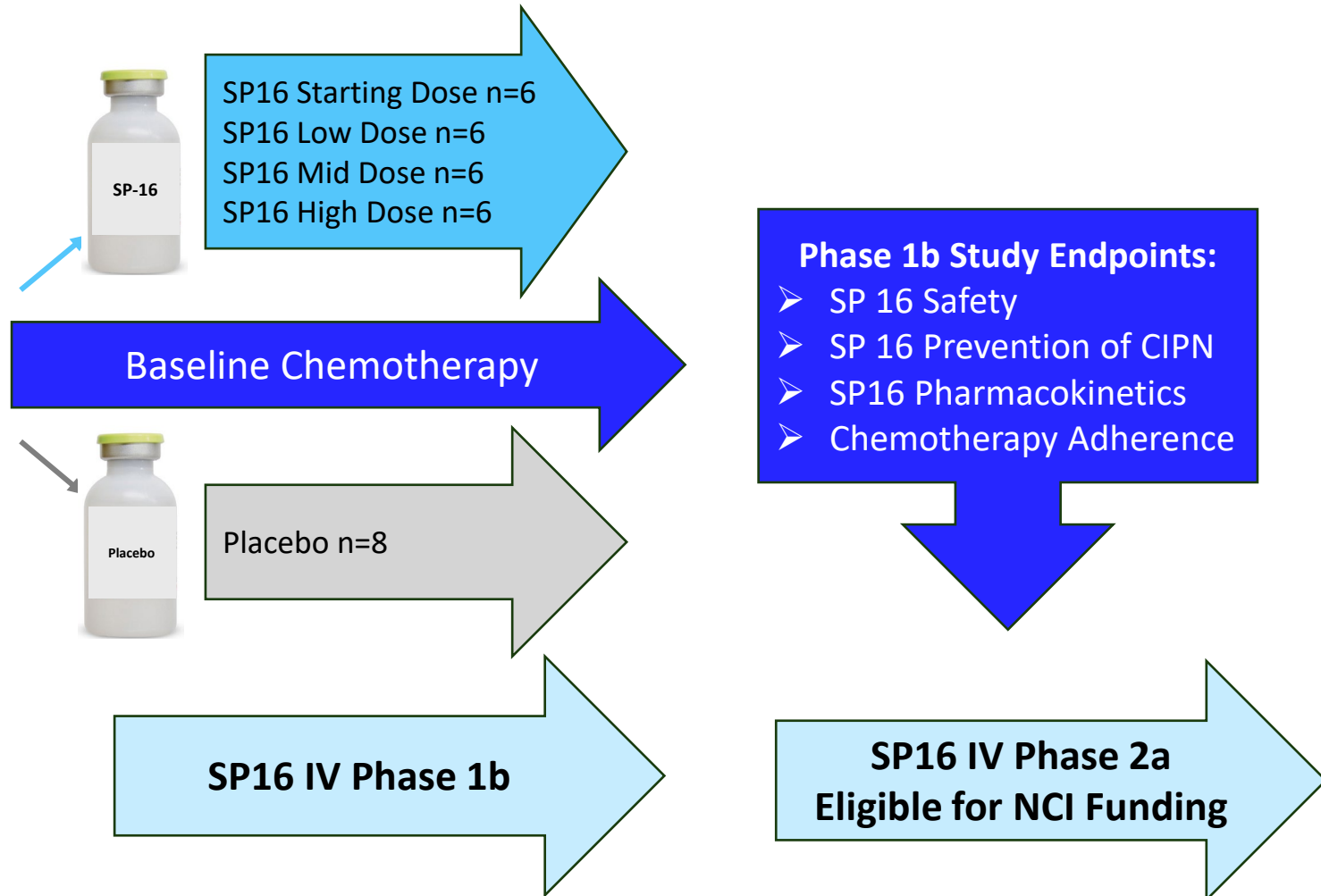


NCI Funded SP16 Research Plan to be Finalized with FDA and Executed at University of VA

NCI Funded Trial in collaboration with UVA

Patient Population

Up to 32 Metastatic Cancer Patients Experiencing Neuropathy from their Concurrent Chemotherapy



Halneuron® Fit with SP16 for CINP and More Broadly for Cancer Related Pain



Deal Rationale:

- Halneuron® (TTX) = Nav1.7 channel blocker, analgesic → best for treating established CINP pain
 - Halneuron® is in later-stage development for CINP
- SP16 = LRP1-agonist, anti-inflammatory, neuroprotection → best for attenuation of CIPN during chemo;
 - SP16 is in early clinical stage development and may enable neuroprotection, may preserve full chemo regimen and potential to synergistically complement Halneuron® in treating pain post chemotherapy
- Common commercial call Points (oncology and pain Centers) and potential partners
 - Bundled protocols/formularies with major cancer centers/providers
 - Co-promotion targeting infusion suites and pain clinics
 - Together deeper penetration into the global CINP treatment opportunity ~\$1.5B market
 - Ability to expand into larger Cancer Related Pain market
- Increased “shots on goal” by doubling down on the channel into CIPN/ CINP
 - Independent endpoints (prevention/regeneration vs treatment) allow parallel development
 - Positive readouts in either arm create unique revenue pathways, while combination studies are designed

2025/2026 CIMP/ CIPN Research Program Milestones and Catalysts



Candidate/Target	Target Indication	Next Key Milestone
Halneuron® Na_v1.7	FDA Fast Track Designation for Treatment of CIMP	Q4 '25: New Synthetic Halneuron® IP Filed to Support P3 & Commercialization Q4 '25: Recruitment of 100 Patients in Phase 2b Q4 '25: Phase 2b Interim Data Readout Q2/Q3 '26: Final data for 200 Patient Phase 2b CIMP
SP16 LRP1 agonist	Novel New Treatment for CIPN	Q4: Filed SP16 IND to Advance to Phase 1b Safety Study 1H '26: Patient Enrollment Begins in Fully Funded Phase 1b CIPN Study*

*Subject to be review with FDA

Expanding Commitment to Patients Suffering from Neuropathy, with Goal to Expand to General Cancer and Post Surgical Pain



Target Indication	Candidate/Target	Preclinical	Phase 1	Phase 2	Phase 3
Phase 2b CINP	Halneuron® Na_v1.7	FDA Fast Track Designation: Ongoing Phase 2b			
General Cancer Pain	Halneuron® Na_v1.7	Phase 2a Complete			
Acute Surgical Pain	Halneuron® Na_v1.7				
Phase 1b CIPN	SP16 IV	NCI Funded			