

# Edward M. Tavel, M.D.

MRI Wellness LLC  
Charleston, SC 29406

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## Education

Davidson College, Davidson, NC Bachelor  
of Science, Pre-Med

## Residency

Medical University of South Carolina, Charleston, SC  
MD

1990 - 1993 Anesthesiology  
University of North Carolina, Chapel Hill, NC (Residency)

1992 - 1993 University of North Carolina, Chapel Hill, NC (Chief Resident)

## Professional Experience

Pain Specialists of Charleston (dba Pain Specialists of Columbia, Pain Specialists of Beaufort, Pain Specialists & Neurology Specialists of Pawley's Island)  
*Owner/Medical Director 2009 – Present*

Clinical Trials of South Carolina  
*Owner/Principal Investigator 2009 – Present*

Pain Care Physicians of Charleston  
*Managing Partner*

Medical Executive Committee

Palmetto Anesthesia of Charleston  
*Managing Partner*

Trident Anesthesia Group  
*Member: 1993-2009, Partner: 1996-2009, Managing Partner*

## Posters and Publications

Tavel, E “A Randomized, Placebo-Controlled Trial of Long-Acting Dexamethasone Viscous Gel Delivered by Transforaminal Injection for Sciatica” Abstract Author 2023 – pending publication

Tavel E. “Treatment of refractory low back pain using passive recharge burst in patients without options for corrective surgery; findings and results from the DISTINCT study, a prospective randomized multicenter controlled trial” Abstract Author 2023 -

Tavel E. “Efficacy and Safety of Allogeneic Mesenchymal Precursor Cells With and Without Hyaluronic Acid for Treatment of Chronic Low Back Pain: A Prospective, Randomized, Double Blind, Concurrent-Controlled 36-Month Study.” Abstract Author 2023 – pending publication

Tavel, E (5) Deer, T(1) Wilson, D(2), Schultz, D(3), Falowski, S(4), Moore, G(6), Heros R(7), Patterson, D(8), Fahey, M(9), Capobianco, R(9), Anitescu, M(10) “Intermittent BurstDR SCS in Pain, Function, and Affect -Ultra-Low Energy Cycled Burst Spinal Cord Stimulation Yields Robust Outcomes in Pain, Function, and Affective Domains: A sub-analysis from two prospective, multi-center, international clinical trials” Abstract Author 2021

Tavel, E (8), Falowski, S (1), Moore, G (2); Hutcheson J.K. (3), Candido, K (4), Dolores Rodrigo, M (5), Blomme, B (6); Peña, I (7), “Intermittent Dosing with Burst Stimulation Therapy Optimizes Patient Reported Outcomes at 24 Months after Implant” Abstract Author, NANS 2021

Tavel, E (8), Falowski, S (1), Moore, G (2); Hutcheson J.K. (3), Candido, K (4), Dolores Rodrigo, M (5), Blomme, B (6); Peña, I (7), “Burst Stimulation Therapy Improves Psychosocial Function in Chronic Pain Patients up to 24-months after Implant” Abstract Author, NANS 2021

Tavel, E., Falowski, S (2), Cornidez, E, Fahey M, Hutchenson, K. “Non-linear burst spinal cord stimulation is able to attenuate pain catastrophizing and improve quality of life in chronic pain patients” Abstract Author, NANS 2020

Tavel, E “Burst DR™ Programming Optimization Further Improves Pain Relief In The Sunburst Study” Author, Abbott Case Study, May 2018

Tavel, E. “Success Using Neuromodulation with BURST (SUNBURST) Study: Results from a Prospective, Randomized Controlled Trial Using a Novel Burst Waveform” Article Author, Neuromodulation NER12698. August 2017

Tavel, E. “Programming Optimization Strategies for Burst may Improve Outcomes” Poster session presented 2017 NANS Annual Meeting; 2017 January 19-22; Las Vegas Nevada

Tavel, E, Kim, C., Amirdelfan, T., Yearwood, T., McLeod, C., Phillips, G., Houden, T., Fabi, A., Justiz, R., Wilson, D., Falowski, S., Davis, K., Diaz, R.  
“Therapy-Related Healthcare Utilization was Lower during Burst than during Traditional Tonic SCS: SUNBURST Sub-Analysis,” Abstract author. December 2016

Tavel, E, Kim, C., Amirdelfan, T., Yearwood, T., McLeod, C., Phillips, G., Houden, T., Fabi, A., Justiz, R., Wilson, D., Falowski, S., Davis, K., Diaz, R.  
“Lower Amplitudes for Burst SCS Programming Associated with Improved Outcomes: SUNBURST Sub-Analysis,” Abstract author. December 2016

Tavel, E, Slavin, K., North, R., Deer, T., Staats, P., Kim, C., Amirdelfan, T., Yearwood, T., McLeod, C., Phillips, G., Houden, T., Fabi, A., Justiz, R., Wilson, D., Falowski, S., Davis, K., Diaz, R.  
“Burst Provided Sustained Pain Relief through 1 year: Long-term Outcomes from the SUNBURST Study,” Abstract author. December 2016

### **Posters and Publications (continued)**

Tavel E, Amirdelfan K, Phillips G, McLeod C, Fabi A, Justiz R, Falowski S, Fontenot H. Burst Spinal Cord Stimulation Programming Optimization: Interim Clinical Outcomes for Subjects Programmed with a Burst-specific Programming Strategy. Presented at the Annual Meeting of the American Society of Regional Anesthesiologists, November 2016, San Diego CA.

Tavel, E., K. Slavin, K. Amirdelfan, T. Yearwood, C. Kim, G. Phillips, J. Pope, C. McLeod, A. Fabi, T. Houden, R. Justiz, P. Staats, R. North, S. Falowski, D. Wilson, B. Edmiston, A. Taghva, D. Paicius, T. Deer  
Understanding Burst Stimulation: Insights into Mechanism of Action and Programming Optimization from the SUNBURST Study

Tavel, E., Rosenberg, J., Jackson, A., Ghodsi, A., Saranita, J., Davis, M.  
Comparison of SCS Treatment With and Without Prior Surgery. Poster – to be presented at World Institute of Pain (WIP) Congress; 2014 May 7-10; Maastricht, Netherlands

Tavel, E. Dunteman, D. Sweeney, M.

Safety and Efficacy of Gastroretentive Gabapentin in Real-World Clinical Practice for Treatment of Patients with Postherpetic Neuralgia (PHN). Poster session presented at: The American Academy of Pain Medicine's 29<sup>th</sup> Annual Conference; 2013 April 9-14; Ft. Lauderdale, Florida

Tavel, E. Brownlow, C. Howes, G. Haley, T. Creamer, M. Ghodsi, A. Rosenberg, J. Washburn, S.

The validation of a multi sensor on-body monitoring system to objectively measure changes in physical function and sleep, in patients undergoing a spinal cord stimulation trial; Interim results. Poster session presented at: From Innovation to Reality. 16th Annual North American Neuromodulation Society; 2012 December 6-9; Las Vegas Nevada

### **Clinical Research Experience**

- A Phase 3, Prospective, Multicenter, Randomized, Double-blind, Sham-controlled Study of the Efficacy and Safety of XXX in the Treatment of Pain Associated with Lumbosacral Radiculopathy, July 2023- Present  
Sub Investigator
- A Phase 2B, Prospective, Double-Blind, Randomized Controlled Trial of the Micronized XXX Injectable Product Compared to Saline Placebo Injection for the Treatment of Osteoarthritis of the Knee, March 2023  
Principal Investigator
- A Phase 3, 16-Week, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of a Single Injection of XXX Dose in the Target Knee Joint of Subjects with Moderate to Severe Osteoarthritis Pain of the Knee, January 2023 - Present  
Principal Investigator
- A Phase 3, Randomized, Observer-Blinded Study To Evaluate The Efficacy, Safety, Tolerability, And Immunogenicity Of A Modified XXX Vaccine Against Influenza Compared To Licensed Inactivated Influenza Vaccine In Healthy Adults 18 Years Of Age Or Older, October 2022 – Present  
Sub Investigator
- A Phase 2, Randomized, Double-blind, Active-controlled, Dose-ranging, Parallel-design Study of the Efficacy and Safety of XXX in Subjects With Painful Diabetic Peripheral Neuropathy, Feb 2023 - Present  
Sub Investigator
- A Randomized, Double-Blind, Placebo-Controlled, Multi-Center, Phase 3 Study to Determine the Efficacy of XXX in Subjects with Kellgren and Lawrence Grade 2 or 3 Osteoarthritis of the Knee, May 2022 – Present  
Principal Investigator
- A Phase 2, Randomized, Double-blind, Placebo-controlled, Parallel Group, Multicenter Study to Evaluate the Safety and Efficacy of XXX in Subjects with Moderate to Severe Acute Lower Back Pain, May 2022 – Present  
Principal Investigator

- A Randomized, Double-Blind, Placebo-Controlled, Multi-Center, Phase 3 Study to Determine the Efficacy and Effectiveness of XXX in Subjects with Kellgren and Lawrence Grade 2 or 3 Osteoarthritis of the Knee, December 2021 - Present  
Principal Investigator
- A Phase IIb, Randomized, Double-Blind, Placebo-Controlled, Single-administration, Multiple-Dose Study to Demonstrate the Efficacy and Safety of XXX for Treatment of Knee Pain in Subjects with Symptomatic Knee Osteoarthritis, April 2021 – August 2022  
Principal Investigator
- “A Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study to Evaluate the Efficacy and Safety of XXX in Subjects with Lumbosacral Radicular Pain” February 2021 - Present  
Principal Investigator
- “Dorsal Spinal Cord Stimulation vs Medical Management for the Treatment of Low Back Pain” September 2020 – Present  
Principal Investigator
- A Phase 2, Open-label, Pharmacokinetic Study of a Single Intra Articular Administration of XXX in Subjects with Mild to Moderate Osteoarthritis of the Knee” October 2020 - 2022  
Principal Investigator
- A Phase III Randomized, Double-blind, Placebo-controlled Multicenter Study in Adults to Determine the Safety, Efficacy, and Immunogenicity of XXX a Non-replicating ChAdOx1 Vector Vaccine, for the Prevention of COVID-19” August 2020 - Present  
Sub-Investigator  
*Number ONE enrolling independent site in North America*
- “A Phase 3, Randomized, Double-Blind, Placebo-Controlled Study Assessing the Efficacy and Safety of XXX Monoclonal Antibodies in Preventing SARS-Cov-2 Infection in Household Contacts of Individuals Infected with SARS-CoV-2” August 2020 – May 2021  
Sub-Investigator
- “A Multicenter, Randomized, Double-Blind, Placebo-Controlled Phase III Study to Assess the Efficacy of XXX in Relieving Symptoms of Gastroparesis” June 2020 – February 2021  
Sub-Investigator
- “A Phase 2, Randomized, Double-Blind, Two-Phase, Multicenter Study to Evaluate the Efficacy and Safety of XXX Compared to XXX for Healing in Patients with Erosive Esophagitis and to Evaluate the Efficacy and Safety of XXX Compared to XXX for the Maintenance of Healing in Patients with Healed Erosive Esophagitis” June 2020 – March 2021  
Principal Investigator
- “A phase 3 Randomized Multicenter Study to Evaluate the Efficacy and Safety of Open-Label Dual Therapy with Oral XXX or Double-Blind Triple Therapy with Oral XXX Compared to Double-Blind Triple Therapy with Oral XXX Daily in Patients with Helicobacter Pylori Infection” June 2020 – March 2021  
Principal Investigator
- “A Phase 3 Study to Support the Radiographic Eligibility Screening Process of XXX Studies in Symptomatic Knee Osteoarthritis Subjects” Sept 2019 – March 2021

## Principal Investigator

- “A Phase 2, Multi-Center, Randomized, Double-Blind, Placebo-Controlled Parallel-Group Study to Evaluate the Safety, Tolerability, and Efficacy of XXX in Subjects with Irritable Bowel Syndrome Experiencing Abdominal Pain” September 2019-Present  
Sub-Investigator
- “A randomized, double-blind, multi-dose, placebo-controlled study to evaluate the efficacy and safety of XXX in patients with pain due to osteoarthritis of the knee” August 2019 – December 2020  
Principal Investigator
- “A Phase 3, 28-Week, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of a Single Injection of XXX Injected in the Target Knee Joint of Moderately to Severely Symptomatic Osteoarthritis Subjects” September 2020 - November 2021  
Principal Investigator
- “A Phase 3 multicenter, randomized, double-blind, placebo-controlled, clinical study to assess the efficacy and safety of XXX in subjects with moderate to severe endometriosis-associated pain” July 2019 - March 2021  
Principal Investigator
- “A Phase 3, Randomized, Placebo-controlled, 12-week Double-blind Study, followed by a Non-Controlled Extension Treatment Period, to Assess the Efficacy and Safety of XXX in Women Suffering from Moderate to Severe Vasomotor Symptoms (Hot Flashes) Associated with Menopause” August 2019-March 2021  
Sub-Investigator
- “A Randomized, Placebo-Controlled, Double-Blind Phase 3 Clinical Study to Investigate the Long-Term Safety of XXX in Women Suffering From Vasomotor Symptoms (Hot Flashes) Associated with Menopause” August 2019-June 2021  
Sub-Investigator
- “A prospective Phase 3, randomized, multi-center, double-blind study of the efficacy, tolerability, and safety of oral XXX versus oral ciprofloxacin for treatment of uncomplicated urinary tract infections in adult women” July 2019-January 2020  
Sub-Investigator
- “A Phase 3, Multicenter, randomized, double-blind, placebo-controlled single attack study to evaluate the efficacy, safety, and tolerability of oral XXX in the Acute Treatment of Migraine” November 2016- January 2018  
Sub-Investigator
- “A multicenter, randomized, open-label extension study to evaluate with long-term safety and tolerability of oral XXX in the acute treatment of migraine with or without aura” May 2017-May 2018  
Sub-Investigator
- “Multi-center Respective Study determining the sustainability of Pain relief and psychosocial and functional responses when utilizing a multiple waveform enabled neurostimulator” March 2017-present  
Principal Investigator
- “A Prospective, Randomized, Double-Blinded, Vehicle-and Placebo-Controlled, Multicenter Study to Evaluate the Safety and Preliminary Efficacy of XXX in Subjects with Single-Level, Symptomatic Lumbar Intervertebral Disc Degeneration” August 2018-present  
Principal Investigator

- “A Randomized, Double-blind, Placebo-controlled, Parallel-group Study to Evaluate the Efficacy and Safety of XXX in Patients with Hip Osteoarthritis” January 2019-December 2019  
Principal Investigator
- “A Phase 3, Multicenter, Randomized, Double-Blind, Placebo-controlled, Parallel-group Study to Evaluate the Efficacy, Durability, Safety, and Tolerability of XXX in Patients with Lactose Intolerance” December 2018-August 2019  
Principal Investigator
- “A Phase 2, 52-Week, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study Evaluating the Safety, Tolerability, and Efficacy of Two Injections of XXX Injected in the Target Knee Joint of Moderately to Severely Symptomatic Osteoarthritis Subjects” November 2018-November 2021  
Principal Investigator
- “Phase 3, multicenter, randomized, double-blind, placebo-controlled, parallel-group study to evaluate the efficacy, safety, and tolerability of multiple dosing regimens of XXX for the prevention of migraine in patients with episodic migraine” January 2019-July 2020  
Sub-Investigator
- “A Phase 3, Randomized, Double-blind, Placebo-controlled, Parallel-group, Trial of XXX Administered Orally for 8 Weeks to Patients with Symptomatic Gastroesophageal Reflux Disease Not Completely Responsive to Proton Pump Inhibitors” July 2018-March 2021  
Principal Investigator
- “A Phase 2 Randomized, Double-Blind, Placebo-Controlled Study of the Safety and Efficacy of XXX in Subjects with Moderate to Severe Crohn's Disease” July 2018-May 2021  
Principal Investigator
- “A Phase 2b, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study to Evaluate the Efficacy and Safety of XXX Modified Release Tablets in the Treatment of Overactive Bladder (OAB) in Adult Female Subjects” June 2018-April 2019  
Principal Investigator
- “A double-blind, placebo-controlled, randomized dose ranging trial to determine the safety and efficacy of three dose levels of XXX in reducing 24-hour average pain intensity score in patients with post-herpetic neuralgia” pending start  
Principal Investigator
- “A 12-week, Randomized, Double-blind, Placebo-controlled, Phase 3 Study to Evaluate the Safety and Efficacy of XXX in Patients with Diabetic Gastroparesis” January 2018- January 2021  
Principal Investigator
- “A 46-week, Double-blind, Placebo-controlled, Phase 3 Study with a 6-week Randomized-withdrawal Period to Evaluate the Safety and Efficacy of XXX in Patients with Diabetic Gastroparesis” January 2018- January 2021  
Principal Investigator
- “A 52-week, Randomized, Double-blind, Placebo-controlled, Phase 3 Study to Evaluate the Safety and Efficacy of XXX in Patients with Diabetic Gastroparesis” January 2018- Present  
Principal Investigator
- “A phase 2, multicenter, randomized, double-blind, placebo-controlled, dose-finding study to evaluate the efficacy and safety of XXX for induction and maintenance therapy in moderate-to-severe ulcerative colitis” January 2018-Present

### Sub-Investigator

- “A Multicenter, Randomized, Double-blind, Sham-controlled, Comparative Study of XXX in Subjects with Lumbar Disc Herniation (Phase 3)” July 2018- Present  
Principal Investigator
- “A double-blind, randomized, placebo-controlled, multicenter study in subjects with lumbosacral radicular pain evaluating the safety and efficacy of a single XXX injection compared to a single placebo IM injection, followed by an open-label (OL) safety extension, evaluating an optional repeat XXX injection, if indicated, administered 4 to 20 weeks later” May 2018- January 2022  
Principal Investigator
- “An International Phase 3, Randomized, Double-Blind, Placebo- and Active (Tolterodine)-Controlled Multicenter Study to Evaluate the Safety and Efficacy of XXX in Patients with Symptoms of Overactive Bladder” March 2018- August 2018  
Principal Investigator
- “An International Phase 3, Randomized, Double-Blind, Active (Tolterodine)-Controlled Multicenter Extension Study to Evaluate the Long-Term Safety and Efficacy of XXX in Patients with Symptoms of Overactive Bladder” August 2018-September 2019  
Principal Investigator
- “A Double-blind, Placebo-controlled, Crossover Study to Evaluate the Efficacy and Tolerability of XXX Cream for the Treatment of Pain Associated with Post-Herpetic Neuralgia: A Proof of Concept Study” November 2017- December 2017  
Principal Investigator
- “A Phase 3, Multicenter, Observational Long-term Study Evaluating the Safety, Tolerability, and Efficacy of Treatment of XXX or Placebo Previously Injected in the Target Knee Joint of Subjects with Moderately to Severely Symptomatic Osteoarthritis” November 2017- February 2020  
Principal Investigator
- “A Phase 1, Open-label Study of the Safety, Tolerability, and Pharmacokinetics of XXX Following Single Intradiscal Injection in Subjects with Degenerative Disc Disease” May 2017- Nov 2018  
Principal Investigator  
*Recognized as top screening and enrollment*
- “A Double-blind, Placebo-controlled, Randomized Study to Assess the Safety and Efficacy of XXX Cream for the Treatment of Chronic Pain caused by Osteoarthritis of the Knee: A Dose-Ranging Study” 2015-2016  
Principal Investigator  
*Recognized as top screening and enrollment*
- A Phase 2, 24-Week, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study Evaluating the Safety and Efficacy of XXX for the Treatment of Moderately to Severely Symptomatic Knee Osteoarthritis” April 2017- Nov 2018  
Principal Investigator
- “Multi-center, open-label, uncontrolled study to assess contraceptive efficacy and safety of XXX during extended use beyond 5 years in women 18 to 35 years of age including a subgroup evaluation of treatment effect on heavy menstrual bleeding” Study awarded, but did not start enrollment  
Sub-Investigator

- “Open-label safety trial of intravenous XXX in subjects with complex regional pain syndrome (CRPS)” January 2017- March 2019  
Principal Investigator
- “A Phase 3, Multicenter, Randomized, Double-blind Study of a Single Dose of XXX Compared with Placebo or YYY Twice Daily for 5 Days in Otherwise Healthy Patients with Influenza” January 2017- 2017  
Principal Investigator
- “A Randomized, Placebo-controlled, Double-blinded, Multicenter Study of the Efficacy and Safety of a Sprinkle Formulation of XXX in Adult Subjects with Chronic Idiopathic Constipation” 2016- 2017  
Principal Investigator
- “A Randomized, Double-Blind, Placebo-Controlled, Titration-to-Effect Study of Orally Administered XXX in Patients with Osteoarthritis of the Hip or Knee” September 2016 -2018  
Principal Investigator  
*Screened two patients on the day of initiation*
- “A Study of Three Doses of XXX Compared to Placebo in the Acute Treatment of Migraine: A randomized, double-blind, placebo-controlled parallel group study” August 2016- 2017  
Principal Investigator  
*Surpassed enrollment goal*
- “An Open-label, Long-term, Safety Study of XXX in the Acute Treatment Of Migraine” September 2016- 2017  
Sub-Investigator
- “A 12-Week, Randomized, Double-Blind, Placebo-Controlled Study with a 4-Week Randomized Withdrawal Period to Evaluate the Efficacy and Safety of XXX for the Treatment of Constipation-Predominant Irritable Bowel Syndrome (IBS-C)” June 2016- 2018  
Sub-Investigator
- “Multicenter, randomized, double-blind, placebo-controlled, Phase 2 study comparing 3 mg and 12 mg of XXX with placebo over 52 weeks in approximately 500 patients with mild Alzheimer’s disease dementia.” September 2016- Nov 2018  
Sub-Investigator
- “A Safety and Efficacy Evaluation of BLI801 Laxative in Adults Experiencing Non-Idiopathic Constipation” May 2016-2017  
Sub-Investigator
- “A Randomized Withdrawal, Double-blind, Placebo-controlled Phase 3 Trial to Evaluate the Efficacy and Safety of XXX in Patients with Moderate-to-Severe Chronic Low Back Pain” May 2016- 2017  
Principal Investigator  
*Top screening and enrolling site.  
The first site to randomize a patient.*
- “A Double-blind Placebo-controlled, Randomized Study to Assess to Safety and Efficacy of XXXX Cream for the Treatment of Chronic Pain caused by Osteoarthritis of the Knee: A Proof of Concept Study” December 2015- May 2016  
Principal Investigator  
*Screened 47 patients and randomized 29 patients in 5 weeks.*

- “A Phase 3, multisite, randomized, double-blind, placebo-controlled, 6-month study to compare the efficacy and safety of two doses of XXX with placebo in preventing migraine headaches in patients with episodic migraine (with or without aura)” November 2015-2018  
Sub-Investigator  
*The 6th enrolling site in the United States – contracted enrollment goal exceeded*
- “A Phase 3, multisite, double-blind, randomized, placebo-controlled, 3-month study to compare the efficacy and safety of two doses of XXX in preventing migraine headaches in patients suffering from chronic migraine. Patients may continue into a 9-month open-label extension following the double-blind treatment period” November 2015-2018  
Sub-Investigator  
*The 1st enrolling site in the United States  
Exceeded our contract Goal*
- “A Phase 2, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Safety and Efficacy of Topically Applied XXX in Patients with Post-herpetic Neuralgia” November 2015-2017  
Principal Investigator
- “A Randomized, Placebo-Controlled, Double-Blind Study to Evaluate The Efficacy and Safety of an Intra-Articular Injection of XXX in Adults With Pain Due to Osteoarthritis of the Knee” October 2015-January 2016  
Principal Investigator  
*Top Enroller and we exceeded our contract Goal. Our original contract had 35 patients and we randomized 53 patients*
- “Long-term, prospective, multinational, parallel-cohort study monitoring safety in patients with MS newly started on XXX once daily or treated with another approved disease-modifying therapy. August 2015-Present  
Sub-Investigator
- “A Multicenter, Open-label Study of XXXX in Patients with Lumbar Disc Herniation” July 2015-2017  
Principal Investigator
- “Randomized, 16-Week, Multi-Phase, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy, Safety, and Tolerability of XXX as Monotherapy in Subjects with Signs and Symptoms of Osteoarthritis of the Hip or Knee” August 2015-2016  
Principal Investigator
- “A Multicenter, Randomized, Double-Blind, Placebo-Controlled Study of the Efficacy and Safety of a Single Dose of XXX in Women Undergoing Transvaginal Pipelle-Directed Endometrial Biopsy” May 2015-2016  
Principal Investigator
- “A phase 3, Randomized, Double-Blind, Placebo-Controlled, Multicenter Study to Evaluate the Efficacy and Safety of XXX as an Induction and Maintenance Treatment for Patients with Moderately to Severely Active Crohn’s Disease” May 2015- 2016  
Principal Investigator
- “A Phase 3 Randomized, Double-Blind, Placebo-Controlled Study of XXXX in Patients with Episodic Cluster Headaches” February 2015-2018  
Sub-Investigator
- “A Prospective, Multicenter, Randomized, Double-blind, Placebo-controlled Study to Evaluate the Efficacy and Safety of a Single Injection of XXX or Combined with YYY in Subjects with Chronic Discogenic Lumbar Back Pain Through 12 Months” February 2015- Present  
Principal Investigator

- “Phase 3, Randomized, Double-Blind, Placebo-Controlled, Multicenter Study to Evaluate the Efficacy and Safety of XXX Compared with Adalimumab and Placebo in Patients with Moderate to Severe Ulcerative Colitis Who Are Naïve to TNF Inhibitors” January 2015-2016  
Principal Investigator
- “A Randomized Double-blind, Placebo-controlled, Parallel-group, Multicenter, Phase 3 Study to Evaluate the Long-term Safety of XXX for the Treatment of Opioid-induced Constipation in Subjects with Nonmalignant Chronic Pain Receiving Opioid Therapy” October 2014 – 2015  
Principal Investigator
- “A Phase 3 Multi-Center Actual-Use Study on the Safety of XXX for the Treatment of Moderate to Severe Acute Pain Associated with Osteoarthritis of the Knee or Hip” September 2014-2015  
Principal Investigator
- “A Phase 2 Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel Group Trial of XXX Administered Orally for 8 Weeks to Adult Outpatients with Opioid-Induced Constipation Receiving Chronic Opioid Treatment for Non-Cancer Pain” September 2014 - 2015  
Principal Investigator
- “An interventional Phase II/III randomized, double-blind trial investigating the efficacy and safety of intravenous XXX in subjects with complex regional pain syndrome type I (CRPS-I)” August 2014-2017  
Principal Investigator
- “A Phase 2, Randomized, Double-Blind, Placebo and Active-Controlled Trial of XXX In Patients with Mild to Moderate Osteoarthritis Pain of the Knee” June 2014 – 2015  
Principal Investigator
- “A Phase 3 Multicenter, Randomized, Double-blind, Controlled, Comparative Study of XXX in Patients with Lumbar Disc Herniation (Phase III)” January 2014-2017  
Principal Investigator
- “A Prospective, Randomized, Multi-Center, Controlled Clinical Trial to Assess the Safety and Efficacy of the Spinal Modulation XXX Neurostimulator System in the Treatment of Chronic Pain.” January 2014-2016  
Principal Investigator
- “A Phase 2b Randomized, Double-Blind, Vehicle-Controlled, Repeat-Dose, Multi-Center, Efficacy and Safety Clinical Trial of Topically Applied XXX Gel in Subjects with Moderate to Severe Pain associated with Osteoarthritis of the Knee following Cessation of Pain Therapy.” December 2013-2014  
Principal Investigator
- “A Phase 3, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of XXX Compared to Placebo as Add-on to Preexisting Antihyperglycemic Therapy over 16 Weeks with 36-week Extension in Type 2 Diabetic Subjects with Chronic Kidney Disease Stage 4 or Stage 5 on Dialysis” December 2013  
Principal Investigator
- “The XXX Study is a Randomized, Prospective, Multicenter, Clinical Study Designed to Demonstrate the Safety and Efficacy of the XXX Neurostimulation System Using YYY and ZZZ Stimulation Therapy to Manage Patients with Chronic Intractable Pain” November 2013-2016  
Principal Investigator
- “A Randomized, Double-blind, Placebo-controlled, Parallel-group Study of XXX in the Treatment of Opioid-induced Constipation in Subjects with Non-malignant Chronic Pain Receiving Opioid Therapy” September 2013- 2015

### Principal Investigator

- “A Phase 3b, Randomized, Double-Blind, Placebocontrolled, Parallel-Treatment Group, Multicenter Efficacy And Safety Study Of XXX In Subjects With Anal Fissure,” May 2013 - 2014  
Principal Investigator
- “Cardiovascular Safety & Renal Microvascular Outcome with XXX in Patients with Type 2 Diabetes Mellitus at High Cardiovascular Risk” April 2013 – May 2018  
Principal Investigator
- “A Phase 3, Open-Label, Long-Term Study to Evaluate the Safety, Tolerability and Analgesic Efficacy of XXX in Subjects with Moderate to Severe Chronic Pain Requiring Continuous Around-the-Clock Opioid Analgesia for an Extended Period of Time,” January 2013  
Principal Investigator
- “A Phase 2, A Multicenter, Randomized, Double-blind, Placebo-controlled, Parallel-group Study of the Safety and Efficacy of a Single Treatment of XXX in Patients With Postherpetic Neuralgia,” January 2013  
Principal Investigator
- “A Phase 2, Double-Blind, Randomized, Placebo-Controlled, Parallel Group Study to Evaluate the Efficacy, Tolerability, and Safety of XXX in Patients with Post-Herpetic Neuralgia (PHN)” January 2013-2014  
Principal Investigator
- “A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Phase 3 Study to Evaluate the Long-term Safety and Tolerability of XXX for the Treatment of Opioid-induced Constipation in Adults Taking Opioid Therapy for Chronic Non-Cancer Pain,” January 2013 – 2014  
Principal Investigator
- “A Randomized, Double-blind, Double-dummy, Placebo-controlled, Active-controlled, Parallel-group, Multicenter Trial of XXX to Assess the Analgesic Efficacy and the Management of Opioid-induced Constipation in Opioid-experienced Subjects with Controlled Moderate to Severe Chronic Low Back Pain and a History of Opioid-induced Constipation who Require Around-the-clock Opioid Therapy” October 2012-2015  
Principal Investigator
- “A Multicenter, 12-Week, Double-Blind, Placebo-Controlled, Randomized Withdrawal Study To Determine The Efficacy And Safety Of XXX Extended-Release Capsules In Subjects With Moderate To Severe Chronic Low Back Pain” June 2012- 2014  
Principal Investigator
- “A Phase 3 , Multi-Center, Randomized, Double-Blind, Placebo-Controlled, Safety, Tolerability and Efficacy Study of XXX Versus Placebo in Opioid-Experienced and Opioid-Naïve Subjects with Moderate-to-Severe Chronic Low Bank Pain,” August 2012 – 2014  
Principal Investigator
- “A Phase 3, Open Label Safety Study of XXX in Subjects with Osteoarthritis or Chronic Low Back Pain,” May 2012 –2013  
Principal Investigator
- “A Phase 2 Enriched Enrollment, Randomized-Withdrawal, Double-Blind, Placebo-Controlled, Multi-Center Study to Assess the Efficacy, Tolerability and Safety of XXX in Opioid-Naïve Subjects with Moderate to Severe Chronic Pain Due to Osteoarthritis of the Knee” June 2012 -2013  
Principal Investigator

- “An Open-Label 52-week Study to Assess the Long-Term Safety of XXX in Patients with Opioid-Induced Constipation” May 2011- January 2013  
Principal Investigator
- “A Phase 3, Multicenter, Randomized, Double-blind, Placebo-controlled Study with an Open-label Run to Assess the Efficacy and Safety of XXX Tablets 20 to 120 mg Once-daily in Subjects with Moderate to Severe Chronic Low Back Pain” 2011-2013  
Principal Investigator
- “A Phase 4, Open Label, Study of Safety and Effectiveness of XXX Tablets in the Treatment of Patients with Post-herpetic Neuralgia in Clinical Practice” 2011-2012  
Principal Investigator
- A Phase 2b, Double-Blind, Randomized, Placebo-Controlled, Parallel-Group Study to Assess the Safety and Efficacy of XXX in Subjects With Opioid-Induced Constipation” December 2011-2012  
Principal Investigator
- “A Multi-Centered Evaluation of Patients with Chronic Pain of the Trunk and/or Limbs using XXX” November 2011 – 2014  
Principal Investigator
- “A Multi-Centered Evaluation of Patients with Chronic Pain of the Trunk and/or Limbs using Paddle Lead(s); Validation of a Multi-Sensor On-Body Monitoring System to Objectively Measure Changes in Physical Function and Sleep in Patients Undergoing XXX” June 2012 - 2014  
Principal Investigator
- “A Randomized, Double-Blind, Placebo-Controlled Study to Assess the Efficacy and Safety of XXX in Patients with Non-Cancer-Related Pain and Opioid-Induced Constipation (OIC)” 2012  
Principal Investigator
- “A Randomized, Double-Blind, Placebo-Controlled Study to Assess the Efficacy and Safety of XXX in Patients with Non-Cancer-Related Pain and Opioid-Induced Constipation (OIC)” 2011-December 2012  
Principal Investigator
- “An Evaluation of the Burden of Illness among Adults in the United States with Peripheral and Central Neuropathic Pain” Oct. 2011  
Principal Investigator
- “A Multi-center, Randomized, Placebo-controlled, Double-blinded Study of the Efficacy and Safety of XXX in Subjects with Opioid-Induced Bowel Dysfunction” 2010-2011  
Principal Investigator  
*Recognized as high enroller*
- “A Multicenter, Randomized, Double Blind, Parallel-Group Study of Cardiovascular Safety in Osteoarthritis or Rheumatoid Arthritis Patients With or at High Risk for Cardiovascular Disease Comparing Three Non-Steroidal Medications” 2010 - 2017  
Principal Investigator
- “A Multi-center, Randomized, Double-blind, Placebo-controlled Study an Open-label Run-in to Assess the Efficacy, Tolerability, and Safety XXX or YYY Compared to Placebo in Opioid-Naïve Subjects with Moderate to Severe Chronic Pain due to Osteoarthritis of the Knee” 2008-2009  
Principal Investigator