



STRATEGIC PHARMA INC.





Outline

- **Overview of SPI**
- **Cannabis as a rich source for new medicines**
- **Analytics Data Mine (Helix)**
- **Nutraceutical Product Development**

Conclusions:

- **Cannabis has a large potential for patients with unmet medical needs**
- **Cannabis is being used as a medication, not just for recreation**
- **More research is needed to develop nutraceuticals for patients in need**



Our Mission

Develop the medical potential of cannabis plant extracts for patients with unmet needs.

2017 Goal: Improved medication for PTSD



Overview

Unique Company Approach:

- **Utilize pharmaceutical testing to optimize cannabis extracts as dietary supplements**
- **Helix database that provides unmatched ability to perform integrated data analytics**

We specialize in:

- Medical research
- Data analysis for both state governments and dispensary owners
- Clinical trial management
- Product development



Who we are

- **Christopher Meredith, Ed.D. CEO**
 - Founder of SPI
 - Former IT Director of Lincare
 - 20 + years with NSA (big data projects)
 - <http://www.linkedin.com/in/strapharminc>
- **James Baumgartner, Ph.D. COO**
 - 20 + years of exec. leadership in pharma industry
 - Former VP of MyCROSite
 - Former President of Eurofins Panlabs
 - <http://www.linkedin.com/in/jamiebaumgartner>
- **Daniel Menard, Ph.D., Psy.T. President of MyCROSite**
 - 20 + years of CNS focused research and executive leadership in pharma industry
 - Founder MyCROSite
 - <http://www.linkedin.com/in/dpmenard>



Cannabis Natural Drug Discovery

- **Over 50% of drugs approved in the last 30 years derived from Natural Products**
 - Aspirin, morphine, taxol, penicillin...
- **Cannabis extracts have been reported to treat as many as 87 different disease indications.**
 - HUGE potential for disease modification
 - ~ 550 natural components identified in cannabis, 115 cannabinoids
 - Best known are THC and CBD
 - SPI can speed the process to help determine specific combinations of components for effective disease treatment

Fewer pills prescribed in medical pot states

Difference between annual drug doses prescribed per physician in medical marijuana states, and in states without medical marijuana laws, by drug category



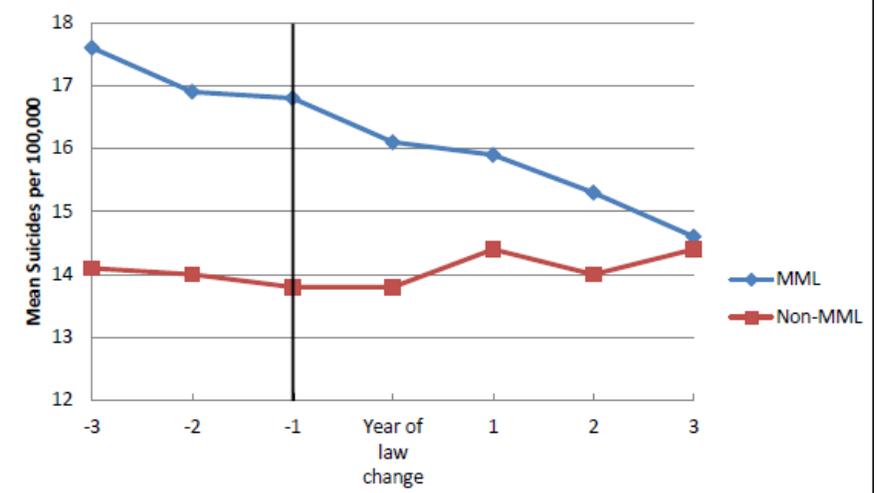
WAPO.ST/WONKBLOG

Source: Bradford and Bradford, Health Affairs, July 2016



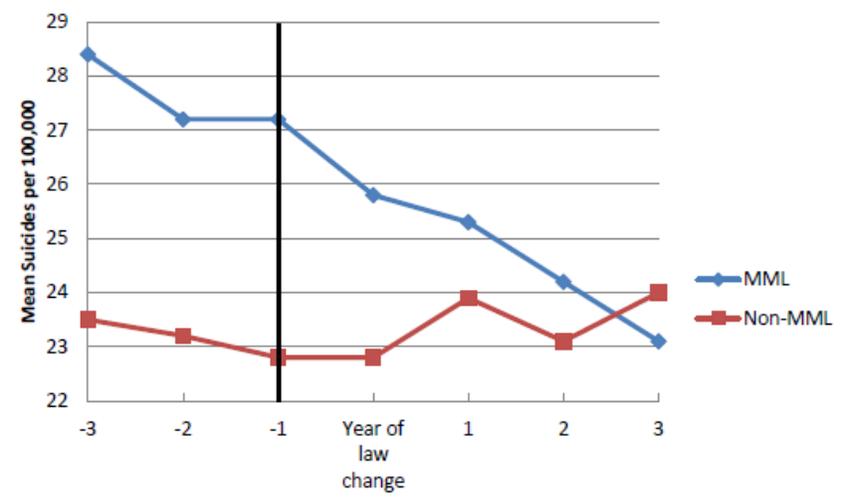
Lower suicide rates in states with legalized Cannabis

Figure 4. Pre- and Post-Legalization Trends in Suicide Rates, Total



On the horizontal axis, 0 represents the year in which medical marijuana was legalized. It was randomly assigned to states that did not legalize medical marijuana during the period under study (1990-2007).

Figure 5. Pre- and Post-Legalization Trends in Suicide Rates, Males



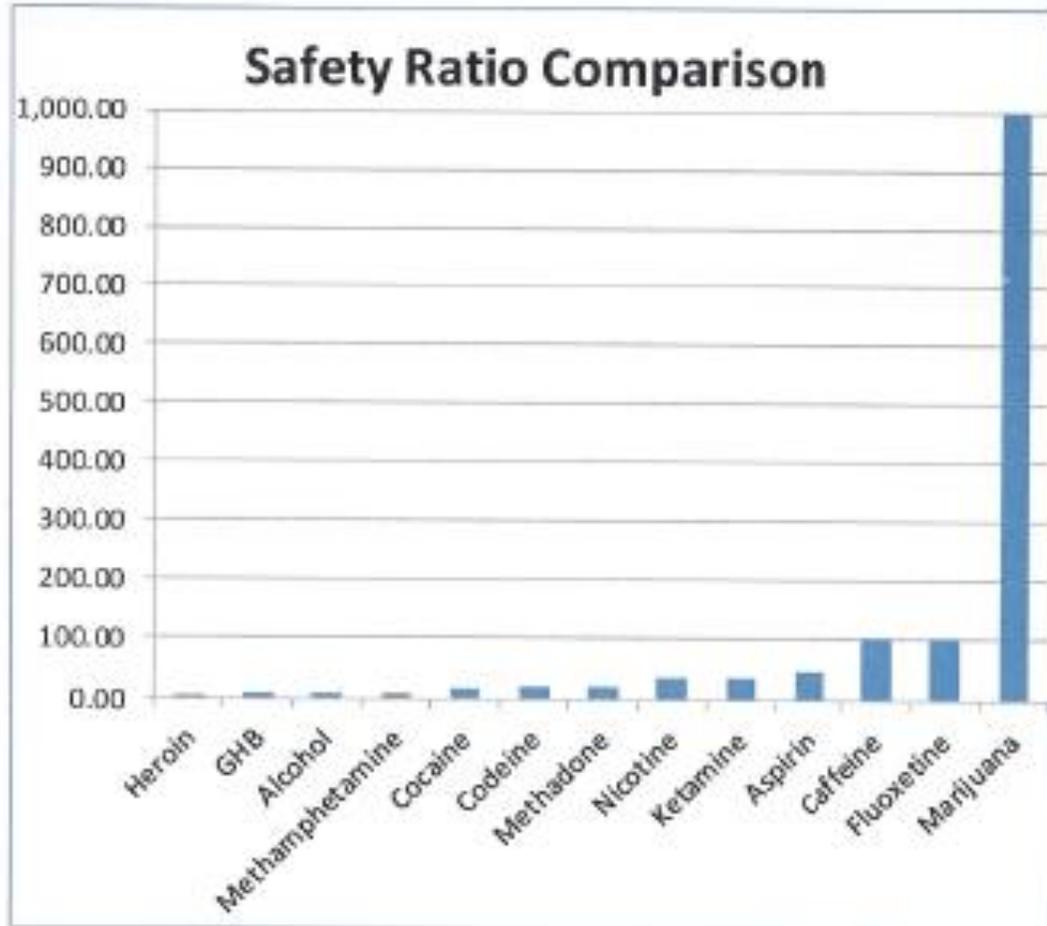
On the horizontal axis, 0 represents the year in which medical marijuana was legalized. It was randomly assigned to states that did not legalize medical marijuana during the period under study (1990-2007).

D. Mark Anderson, D.I. Rees, and Joseph J. Sabia in Discussion Paper No. 6280 Institute for Labor Study, Bonn Germany 2012

We can move quickly to patients because Cannabis is extremely safe



Figure 12: Safety ratios of commonly abused psychoactive drugs



- FDA can not designate cannabis as Generally Recognized As Safe (GRAS) until the DEA changes schedule
- Clinical studies with cannabis extracts have demonstrated compound is well tolerated with low side effects
- 300 mg per day for 135 days
Cunha et al., Pharmacology 1980; v21, pp 175-185
- 1500 mg per day for 28 days
Zuardi AW J Psychopharmacol. 2006; v20, pp. 683-6866
- In our studies, no side events have been detected with extract doses as high as 100 mg/kg (human equivalent of 7000 mg for 70 Kg person)

Medical Cannabis Primer, 2014 L. Bultman and K. Kinglsey

Nutraceutical Product Development

Synaptic OTC Sciences



- We utilize preclinical pharmaceutical drug development testing to fully characterize cannabis products (proprietary blends) as dietary supplements
- Initial focus is on extracts enriched in CBD (predicted by Helix)
 - Preclinical models determine efficacy
 - Eurofins analytics guarantee QC of products
 - Good Manufacturing Practice (GMP) manufacturing ensures product quality
- Provide indispensable products to patients in need NOW

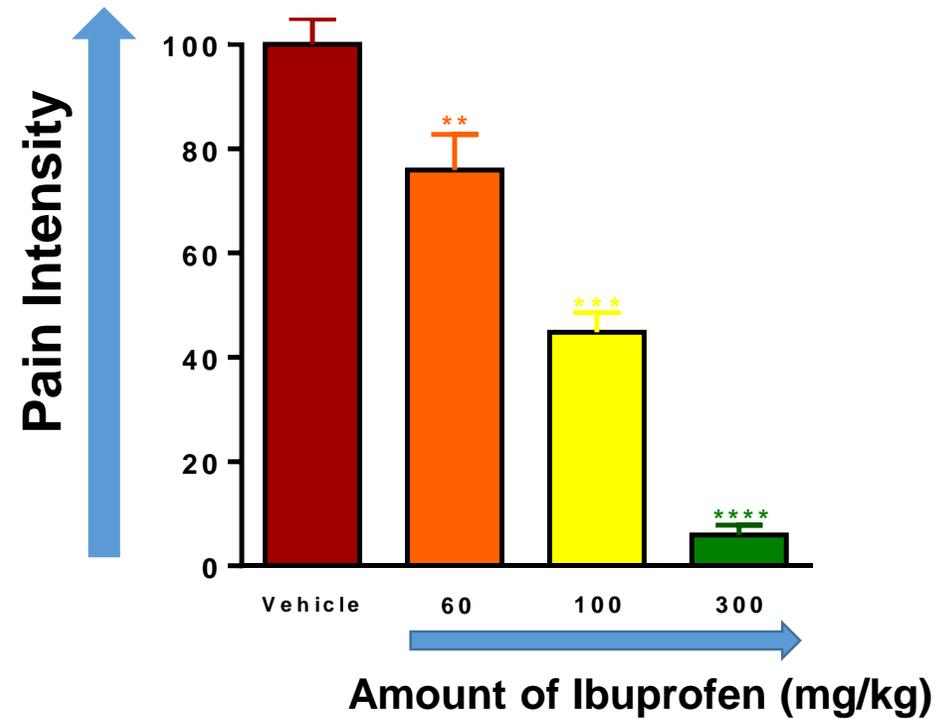
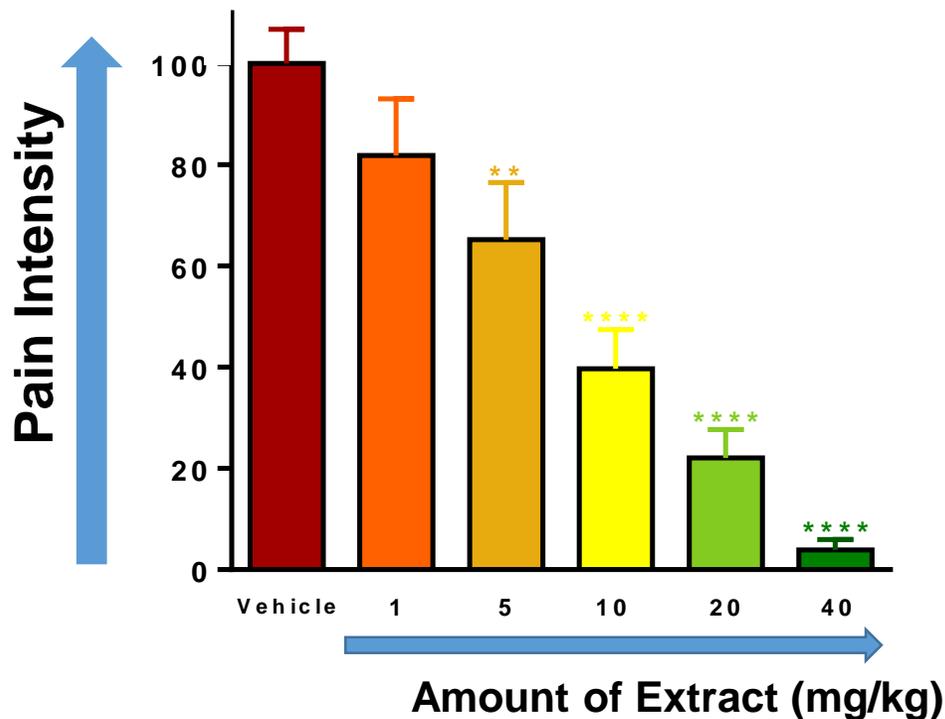
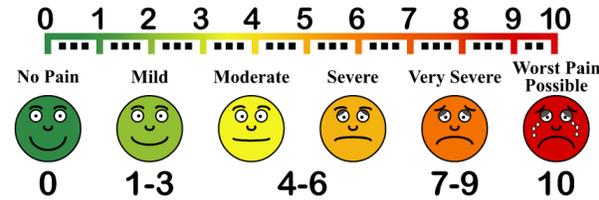


Analytics Data Mine

Helix

- Captures patient/sales information from 98% of seed-to-sale systems across all states
- Currently 8.4 million patient records and growing (US and Ireland)
- HIPAA compliant
- Current uses
 - MMJ oversight and compliance
 - Tax revenue (state agencies/dispensaries)
 - Chronic condition validation (marketing/research institutions)
 - Alignment of MMJ profile with condition
- For Pain product researched used data base to obtain strain information to use for testing 10 different strains.

SoS Pain extract is 10 fold more potent than ibuprofen in abdominal pain model





Preclinical to Human: Clinical Study September 2016

- Rodent models specifically chosen for predictive activity in human
- Confirm human activity:
 - Verify dosage of SoS Pain through human PK study
 - Chronic pain patient study
 - 2 week study to monitor effects of CBD on well being in elderly patients
 - CBD or placebo taken twice daily (morning and before bed)
 - Monitor activity and sleep patterns using biometric device (e.g. FitBit) before and after CBD treatment
 - At specific time points measure plasma pain markers
 - Clinical evaluation for pain scores before during and at the conclusion of the study.

Appendix





MyCROSite: Preclinical CRO with CNS Expertise

- Strategic Pharma relies on the expertise of MyCROsite, a preclinical pharmaceutical testing company to characterize cannabis extracts for disease modification properties
- MyCROsite works with 3 top ten pharma and numerous biotechnology companies to evaluate novel medicines
- ***Testing portfolio consists of pharmaceutical models with high prediction of human disease***
 - ***Perfectly aligned expertise to evaluate cannabis extracts using pharmaceutical science pharmaceutical science to evaluation of cannabis extracts***
 - Pain, PTSD, anxiety, sleep disorders, cognition, neurodegeneration, TBI
- MyCROsite generates comparisons of cannabis extracts vs. standard of care medicines
 - E.g. compare efficacy of cannabis extract to opioids (morphine), ibuprofen, naproxen



Eurofins

Joint Venture

World's leader in food testing services

- 2B annual revenue
- Full spectrum services to cannabis industry
- Expected launch date Q4 2016
- eurofins.com

• Services:

- Seed health
- Cannabinoid and terpenoid analysis (plant-to-product)
- Genome sequencing
- Heavy metal testing
- Pesticide testing
- Microbial testing



Synaptic OTC Products

- **Building SoS brand recognition**
 - Cannabis and hemp dietary supplements for alleviating disease symptoms
 - Unparalleled quality control
 - Comparative data to marketed compounds: opioids (morphine), ibuprofen, Naproxen
 - synapticotc.com
 - Proprietary blends that support symptom relief at doses without side effects
- **SoS PAIN**
 - Optimized for treatment of pain conditions
 - High CBD, low THC
 - Will comply with NFL substance of abuse specifications (< 35 ng/ml THC) when used as recommended
 - Tested in human patient 100 mg SoS pain per day 7 days, NO detectable THC in urine.
 - September launch, preorders now available