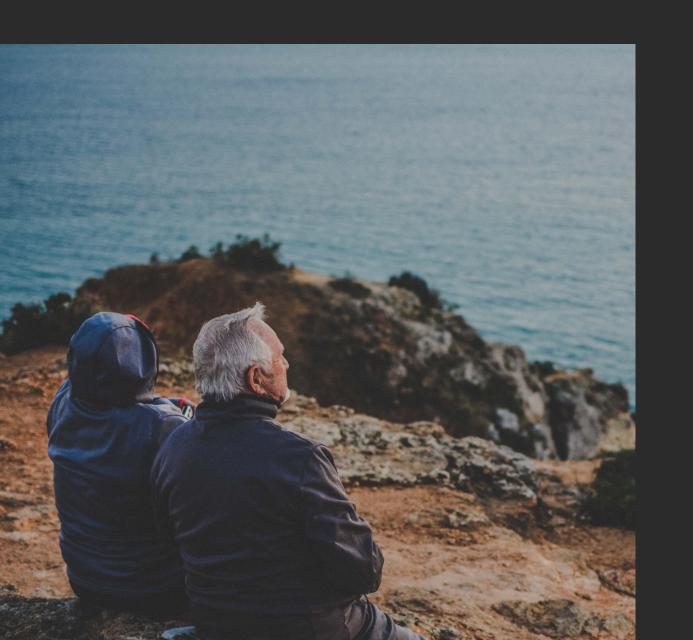


Elixie is a clinicalstage biotech company enhancing cannabinoids for symptomatic relief of neurological disorders



# **Milestones** Bootstrapped a commercially viable product Clinically validated technology Broad exclusivity & IP protection Approved for Phase 1 in humans Key partners & collaborators CANNASOUL **PROCAPS** THE HEBREW UNIVERSITY OF JERUSALEM



# 30 countries

approved cannabinoid-based drugs for treatment of MS-related Spasticity & rare forms of Epilepsy:

- Dravet Syndrome
- Lennox Gastaut
- Tuberous Sclerosis

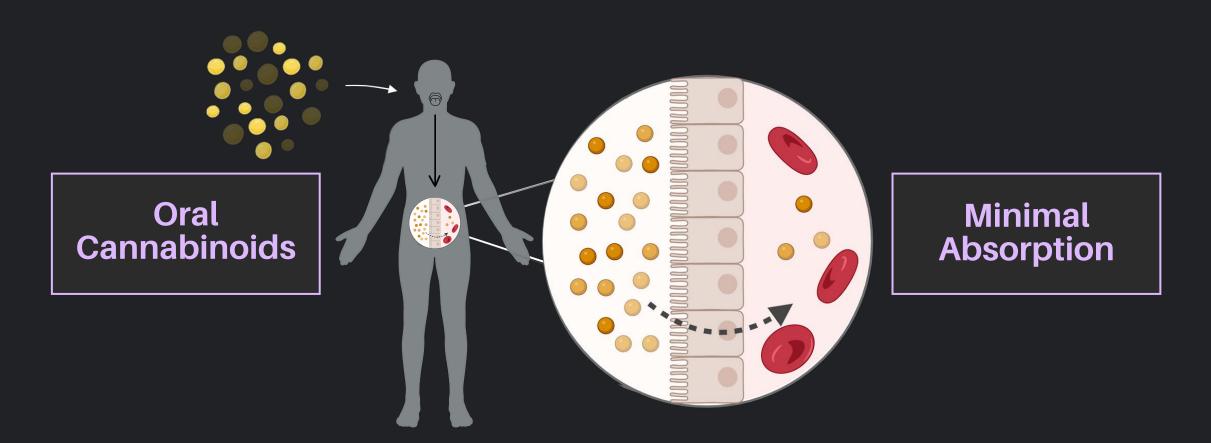
# \$800 million

of revenue generated in **2022** for approved cannabinoid-based medicines

#### PROBLEM



# Existing oral cannabinoid-based medicines have limited efficacy due to poor absorption



**Slow Onset** 

45 - 90 min

**Poor Bioavailability** 

Low efficacy

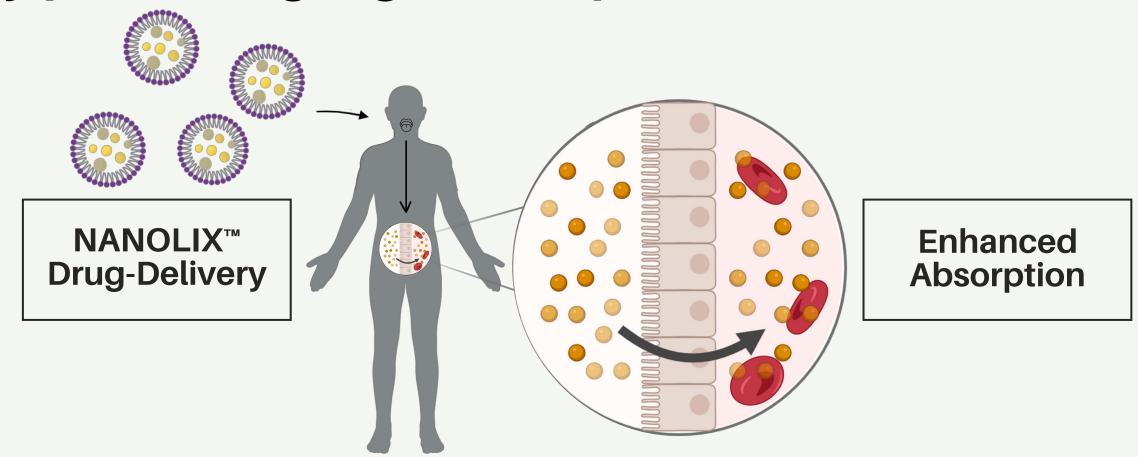
**Inconsistent Absorption** 

Unpredictable response

#### **SOLUTION**



# NANOLIX™ drug-delivery technology maximizes efficacy by promoting high absorption of cannabinoids



### **Instant Relief**

5-15 min | 4x times faster

### **Higher Bioavailability**

Higher rate of efficacy

### **Consistent Absorption**

Predictable effect

THE TECH

# NANOLIXTM

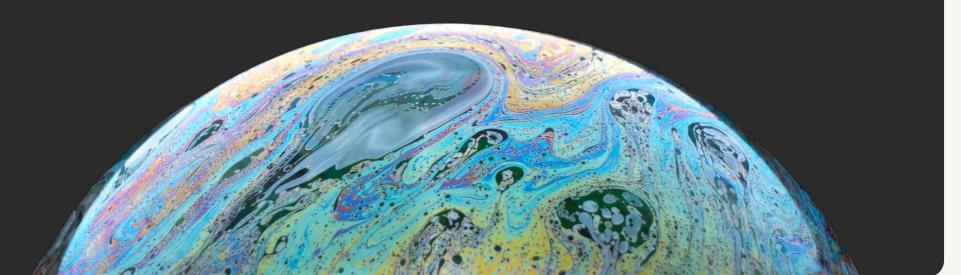
**Self-Emulsifying Drug Delivery System (SNEDDS)** 



Granted: EU

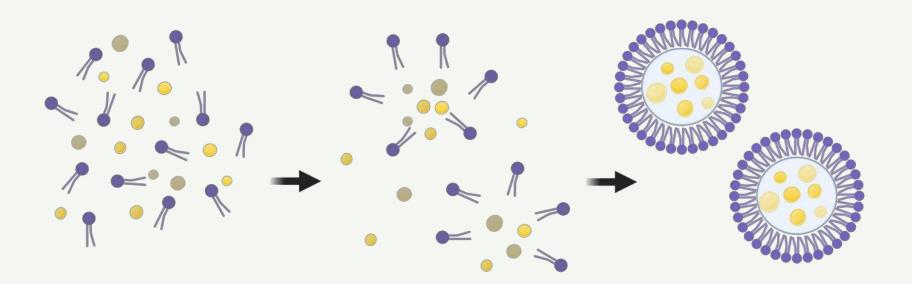
Pending: US | Canada | AUS

Clinically Validated & Published in 6 peer-reviewed scientific publications



#### **HOW IT WORKS**

NANOLIX™ encapsulates hydrophobic drugs, creating nanoemulsions that improve the drug's absorption, stability, and solubility



NANOLIX™, our preconcentrated composition of cannabinoids and Pro-Nano liposphere formulation In contact with water, NANOLIX™ spheres are spontaneously formed around the cannabinoids The cannabinoids are encapsulated in NANOLIX™ nanoparticles



### Product Development Pipeline

We enhance clinically proven API's with our Nanolix Technology to create highly soluble and affective cannabinoid-based medicines

### **Drug Candidate**



Elidiol™

NANOLIX™ + Cannabidiol (Purified CBD)

Elinol<sup>™</sup>
NANOLIX<sup>™</sup> + Cannabinoids
(THC+CBD)



Elidiol is eligible for FDA orphan disease designation.

Spasticity relief drug



# Regulatory Strategy - Orphan Drug Designation (ODD)

# Orphan drugs are 56% more likely to be approved than other medicines

#### **Faster**

We plan to target subpopulations (e.g. orphan diseases) to benefit a short time to market

### More Leverage

After approval for a lean indication, we will scale by targeting indications with comparable symptoms

#### **Better Benefits**

ODD grants exclusive marketing rights for 7 years in the US and 10 years in the UK & EU + R&D costs benefits to cover rare disease treatment



Anticonvulsant medication NANOLIX<sup>™</sup> + Cannabidiol (Purified CBD)

Elidiol™ Oral emulsion is created to provide rapid symptomatic relief for rare epilepsy

# 50 million

People worldwide have epilepsy, making it one of the most common neurological diseases globally



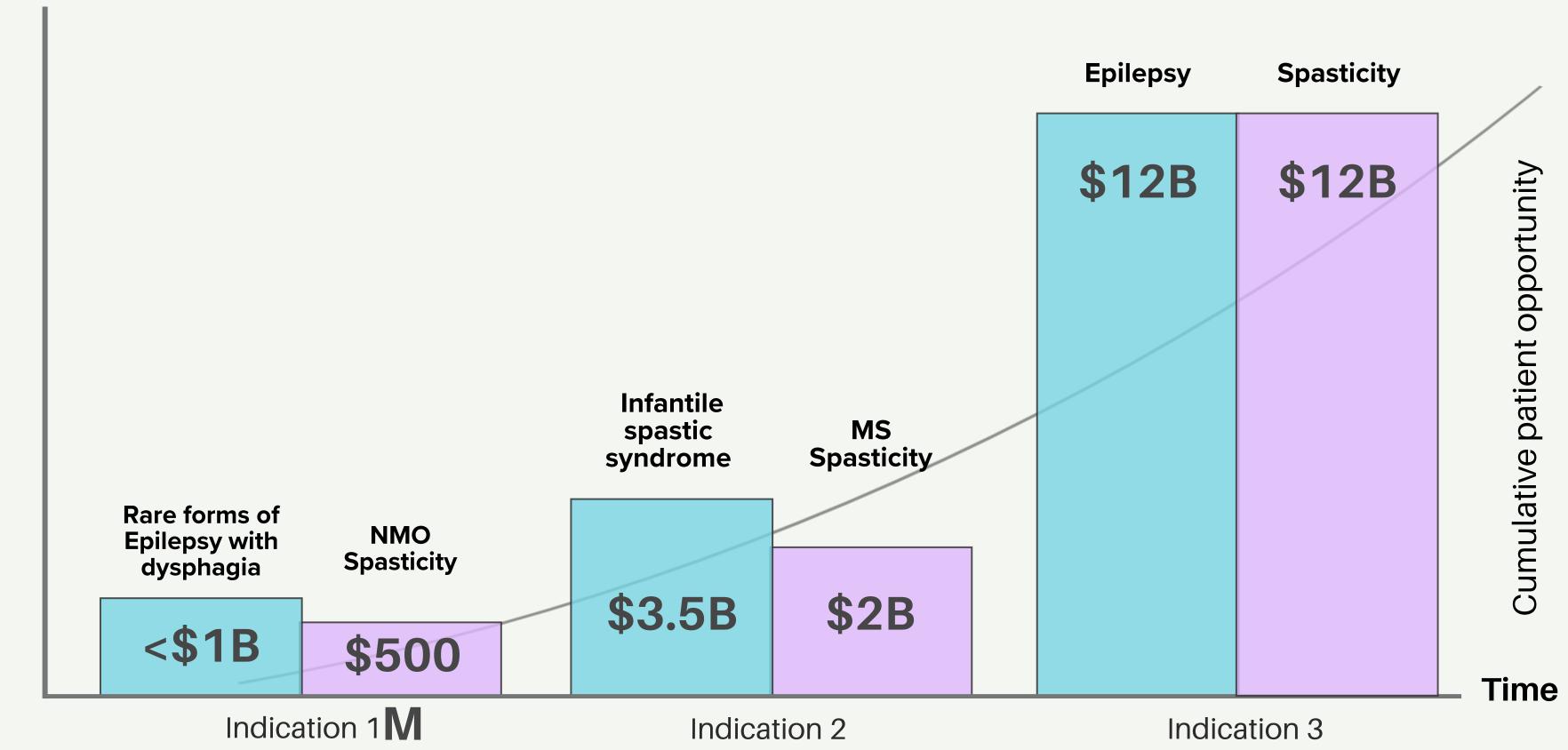
Elinol™ Oral emulsion relieves spasticity for people with neurodegenerative diseases like multiple sclerosis (MS)

# 12 million

People suffer from **spasticity** - debilitating muscle contractions and stiffness due to neurological disorders



### Multi-Indication Strategy and Market Size



# Competitive landscape

	Elidiol™& Elinol™	Sativex Epidiolex®	syqe
Fast onset			
High Bioavailability			
Prolong effect			
Inclusive administration			



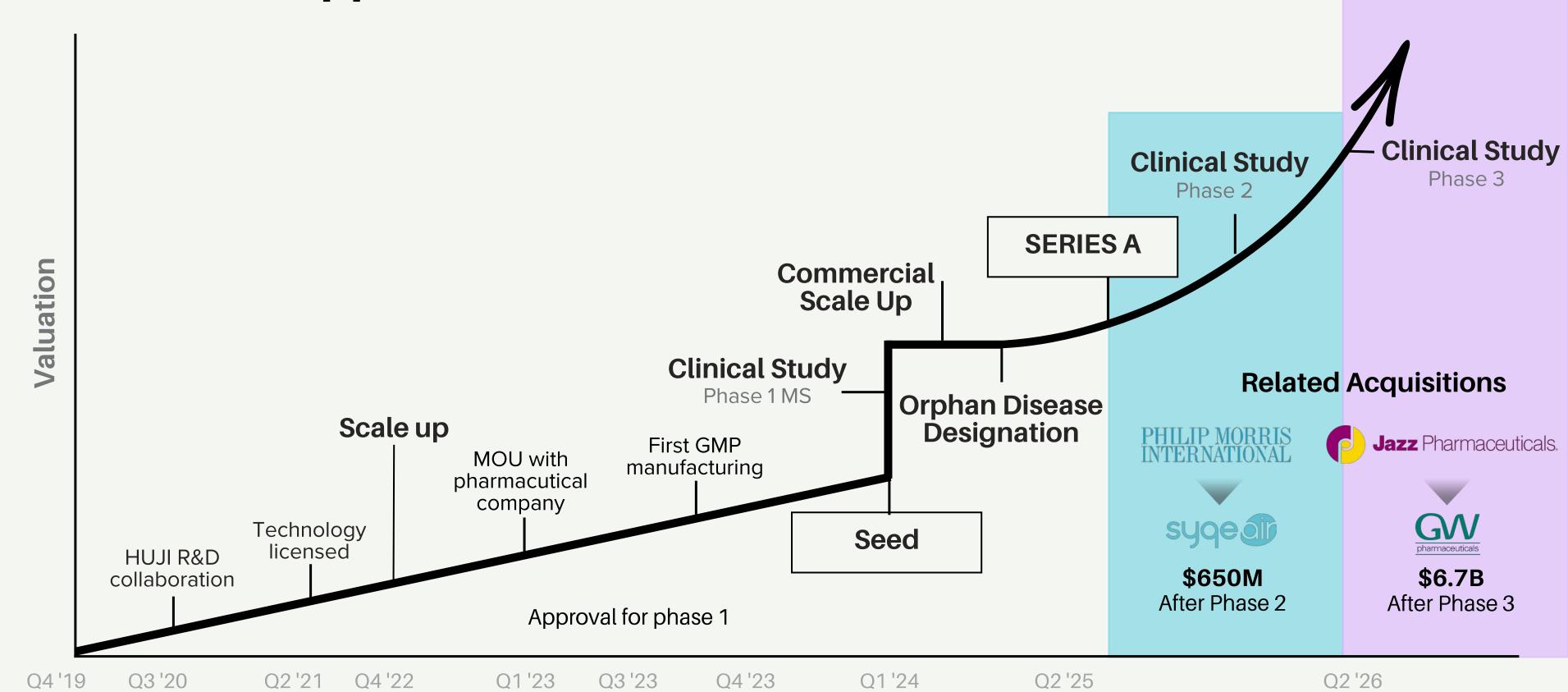
Syqe medical cannabis Inhaler enter a phase 3 study for FDA approval for neuropathic chronic pain



Epidiolex cannabinoid oral solution of GW pharmaceuticals is approved to treat rare forms of epilepsy

### **Exit Point Opportunities**





#### THE TEAM

### Elixie's team boasts a proven record from top pharma & cannabis firms















Dr. Mohammad Alyan **VP R&D & Engineering** 

**David Cohen VP Product** 

**Andrew Rosen VP Strategy** 





Thermo Fisher SCIENTIFIC

Breath Of Life

Pharma



THE HEBREW UNIVERSITY OF JERUSALEM









M.Sc. Nir Treves **VP Clinical &** Regulation



M.Sc. Oded Lahmish **VP Tech Transfer** 



Cheli Gonnen **CRO** 



Maya Hershko **Head of Regulatory Affairs** 



**Anna Permyakova Research Assistant** 

Scientific Advisory Board





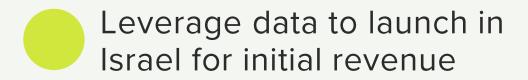






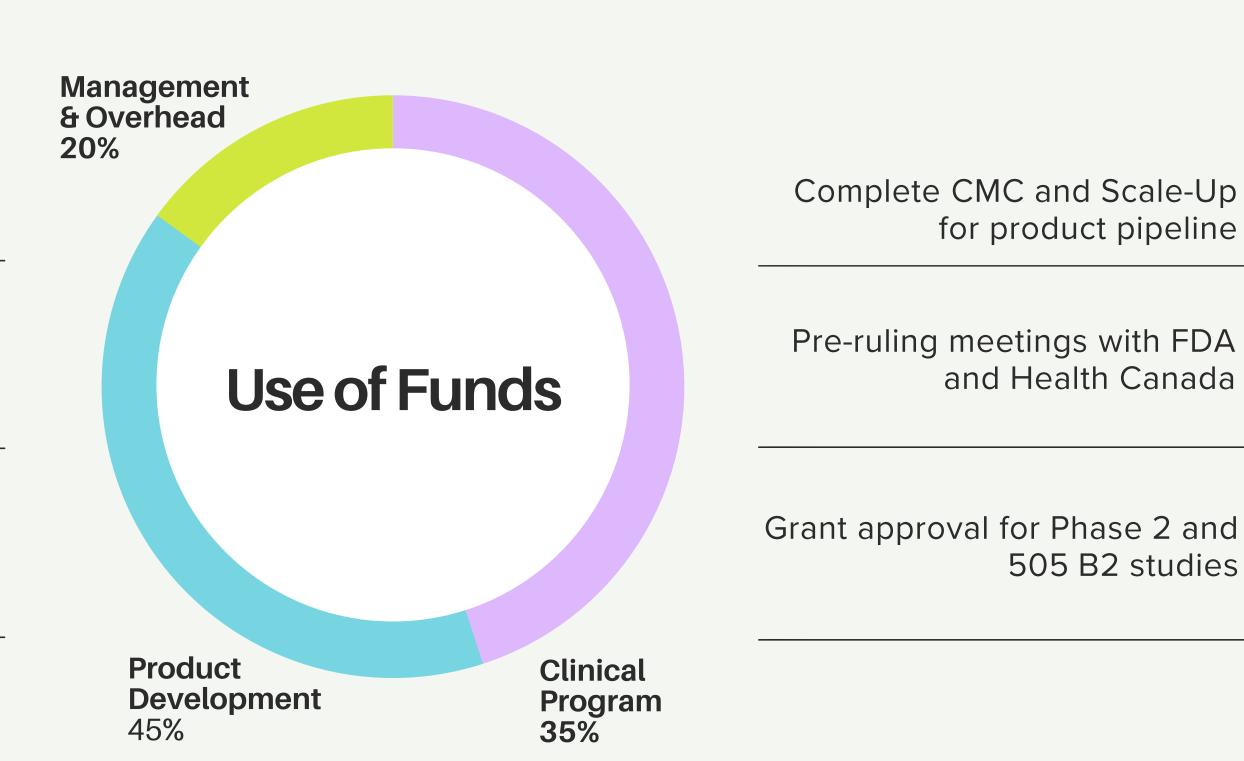


### Elixie seeks to raise a USD 2.5M SAFE Round



Phase 1 clinical trial in Israel

Execute Elinol's POC drug efficacy study





# Appendix

# Clinically Validated & Published in 6 peer-reviewed scientific publications

In human

# **European Journal of Pharmaceutics & Biopharmeceutics**

Pharmacokinetic investigation of synthetic cannabidiol oral formulations in healthy volunteers

Dvora Izgelov <sup>1</sup>, Elyad Davidson <sup>2</sup>, Dinorah Barasch <sup>1</sup>, Aviva Regev <sup>3</sup>, Abraham J Domb <sup>1</sup>, Amnon Hoffman <sup>4</sup>

### Journal of Pharmaceutical Sciences

PTL401, a New Formulation Based on Pro-Nano Dispersion Technology, Improves Oral Cannabinoids Bioavailability in Healthy Volunteers

Jacob Atsmon <sup>1</sup>, Irina Cherniakov <sup>2</sup>, Dvora Izgelov <sup>2</sup>, Amnon Hoffman <sup>2</sup>, Abraham J Domb <sup>2</sup>, Lisa Deutsch <sup>3</sup>, Frederic Deutsch <sup>3</sup>, Daphna Heffetz <sup>4</sup>, Hagit Sacks <sup>4</sup>



Piperine-pro-nanolipospheres as a novel oral delivery system of cannabinoids:
Pharmacokinetic evaluation in healthy volunteers in comparison to buccal spray administration

Irina Cherniakov <sup>1</sup>, Dvora Izgelov <sup>1</sup>, Dinorah Barasch <sup>1</sup>, Elyad Davidson <sup>2</sup>, Abraham J Domb <sup>1</sup>, Amnon Hoffman <sup>3</sup>

#### INTERNATIONAL JOURNAL OF

#### **PHARMACEUTICS**

Pre-clinical - Animal model

The effect of medium chain and long chain triglycerides incorporated in self-nano emulsifying drug delivery systems on oral absorption of cannabinoids in rats

Dvora Izgelov <sup>1</sup>, Eliyahu Shmoeli <sup>1</sup>, Abraham J Domb <sup>1</sup>, Amnon Hoffman <sup>2</sup>

# **European Journal of Pharmaceutics & Biopharmeceutics**

The effect of piperine on oral absorption of cannabidiol following acute vs. chronic administration

Dvora Izgelov <sup>1</sup>, Abraham J Domb <sup>1</sup>, Amnon Hoffman <sup>2</sup>

# **European Journal of Pharmaceutics & Biopharmeceutics**

The effect of Pro NanoLipospheres (PNL) formulation containing natural absorption enhancers on the oral bioavailability of delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD) in a rat model

Irina Cherniakov <sup>1</sup>, Dvora Izgelov <sup>1</sup>, Abraham J Domb <sup>1</sup>, Amnon Hoffman <sup>2</sup>