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Company Report

June 5, 2017

Therapix Biosciences (TRPX - $7.16)

Healthcare / Biotechnology

Initiating Coverage – Repurposing an Approved Cannabinoid to Fulfill Large Unmet Medical Needs

Ticker:	TRPX
Rating:	**Buy**
Price Target:	**$18.00**

We are initiating coverage of Therapix Biosciences (TRPX) with a Buy rating and an $18 price target. TRPX's lead product candidate is THX-TS01, an orally available pill consisting of FDA approved dronabinol (biosynthetic THC) and palmitoylethanolamide (PEA) for the treatment of symptoms related to Tourette Syndrome (TS). While clinical evidence suggests THC may be effective in reducing tic disorders, concerns with high dose psychoactive side effects have prevented THC from becoming a viable treatment option for TS. To enhance safety and efficacy, TRPX resorted to their proprietary combination with PEA to trigger the "Entourage Effect," which is backed by strong pre-clinical data, in our opinion. TRPX has filed for Orphan Drug Designation (ODD) and we expect their Phase 2a data in 4Q17 to satisfy the FDA for ODD. With only a few drugs currently approved with limited efficacy and severe side effects, we see TS as a significant unmet medical need. TRPX's second product candidate consists of THX-ULD01 for Mild Cognitive Impairment (MCI) and uses approved dronabinol in an ultra-low dose delivery formulation (nasal or sublingual) in order to delay memory loss and progression to early stages of Alzheimer's disease and dementia. With encouraging pre-clinical data, a very large and growing target market, and a short Phase 1 PK trial starting in 3Q17; we see real potential for the ultra-low dose platform at TRPX in the years to come. As the tides are changing in regards to cannabinoid research and development, we view TRPX as an exciting undiscovered story at these levels and are initiating coverage with a Buy rating and an $18 price target based on $11.75/share for THX-TS01 for US sales and EU royalties; $1.75/share for THX-ULD01 for US sales and EU royalties and $4.50/share for cash (end'18) and technology value.

- **THX-TS01 in TS, large market opportunity with a relatively de-risked asset.** With no current efficacious and safe treatments for TS, we see little competition for THX-TS01 and are encouraged by clinical data demonstrating THC's potential to reduce TS symptoms as well as preclinical entourage effect data to date. We believe 4Q17 Phase 2a data should suffice for the FDA to grant TRPX ODD for TS and see indication expansion in the future.
- **THX-ULD01 in MCI, hard to overstate the size of the market.** While early, prevention of MCI progression to dementia represents a very large market and we are encouraged by the strong pre-clinical ultra-low dose THC data.
- **Initiate with a Buy rating, $18PT.** Our price target is based on a THX-TS01 US sales and EU royalties at $11.75/share, THX-ULD01 US sales and EU royalties at $1.75/share and Cash (end'18) & tech value at $4.50/share.

Trading Data:

Last Price (06/02/2017)	$7.16
52–Week High (03/23/2017)	$10.95
52–Week Low (05/25/2017)	$6.00
Market Cap. (MM)	$23.7
Shares Out. (MM)	3.46

Earnings Estimates: (per share)

(Dec)	1Q	2Q	3Q	4Q	FY	P/E
FY19E	(0.69)	(0.67)	(0.63)	(0.60)	(2.57)	NA
FY18E	(0.67)	(0.65)	(0.62)	(0.59)	(2.52)	NA
FY17E	(0.20)	(0.61)	(0.74)	(0.57)	(2.17)	NA
FY16A	NA	NA	NA	NA	(2.14)	NA

Source: Laidlaw & Company estimates

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5 Key Reasons to Own Therapix Biosciences

1. **TS represents a disease with high unmet medical need, ODD potentially a near-term event.** There are currently only three drugs approved by the FDA for TS and their efficacy is limited to treating only parts of TS. Additionally, these drugs are associated with severe AEs (black box warnings). As pharmacological treatment is usually reserved for moderate to severe patients with TS (~37% of TS patients) we see the target market population in the US at ~35,000 patients, which is well below the 200,000 patient ODD threshold. We believe ODD filing should be resolved following the Phase 2a data (4Q17). We also view this program as de-risked as TRPX is repurposing already approved dronabinol.

2. **Encouraging THC for TS clinical data, time has come for entourage effect (THC + PEA) to gain clinical recognition.** While there are only two controlled trials that demonstrated the effect of THC in the treatment of TS, they both showed significant tic reduction vs placebo. As high dose THC has been known to cause unwanted psychoactive consequences, TRPX believes that its combination with PEA (entourage effect) can harness the therapeutic potential of THC while minimizing its AEs. We are very encouraged by the pre-clinical data so far and believe this platform can be expanded to many other indications such as pain and antimicrobial therapies.

3. **Ultra-low dose THC platform to prevent MCI progression to dementia, hard to overstate the size of the market opportunity.** While THX-ULD01 is early in development (start of Phase 1 in 3Q17), the addressable market is huge as ~46.8M people worldwide had dementia in 2015 and growth projections estimate ~74.7M people worldwide by 2030. Additionally, the societal economic cost of dementia in 2015 was ~825B with estimated projections reaching $1T in 2018. With very encouraging pre-clinical data, TRPX expects to begin a Phase 1 PK trial in 3Q17 (data 4Q17) and we see ph2a data in cognitive impairment from traumatic brain injury (TBI/concussions) to start in 1Q18 with data expected in 1H19.

4. **We see TRPX as a potential take-out target.** TRPX's differentiated platforms (entourage effect: THC+PEA and ultralow-dose) and de-risked profile (repurposing already approved dronabinol), in our view, make it a likely take-out candidate. As the cannabinoid field is rapidly growing, we see other companies in the field such as AbbVie (ABBV, Mkt. Cap.: $105B), GW Pharmaceuticals (GWPH, Mkt. Cap.: $2.58B), INSYS Therapeutics (INSY, Mkt. Cap.: $1B) and Zynerba Pharmaceuticals (ZYNE Mkt. Cap.: $244M) as potential acquirers.

5. **Management recent changes and uplisting to NASDAQ, renewed focus at TRPX could represent an interesting opportunity.** After recently uplisting to NASDAQ, TRPX announced the appointment of Josh Blacher as CFO and the stepping down of their CEO Dr. Elran Haber (to be replaced with US-based CEO). These moves attest to the shift in focus to bring awareness to the US capital markets and to monetize assets globally, which we view as a real positive for TRPX.

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Figure 1: Upcoming Potential Catalysts

Event	Expecting Timing
Phase 2a trial (Germany) start for THX-TS01	3Q17
Phase 2a poc trial (Yale) data for THX-TS01	4Q17
Phase 2a poc trial (Germany) data for THX-TS01	2H18
Phase 1 PK trial start for THX-ULD01	3Q17
Phase 1 PK trial data for THX-ULD01	4Q17
Phase 2a poc trial start for THX-ULD01	1Q18
Phase 2a poc trial data for THX-ULD01	1H19

Source: Company Reports; Laidlaw and Company estimates

Valuation

We value TRPX at $18/share based on a sum-of-the-parts valuation. THX-TS01 US sales are valued at $10/share based on a 3x multiple of 2025 US sales of $316, discounted back 7 years at a 50% discount rate (no human data to date). THX-TS01 EU royalties are valued at $1.75/share based on a 7.5x multiple of 2025 EU royalties of $21M, discounted back 7 years at a 50% discount rate. THX-ULD01 US sales is valued at $1.50/share based on a 3x multiple of 2025 US sales of $98M, discounted back 7 years at a 65% discount rate (only pre-clinical data in a heterogeneous difficult indication). THX-ULD01 EU royalties are valued at $0.25/share based on a 7.5x multiple of 2025 EU royalties of $5M, discounted back 7 years at a 65% discount rate. We value net cash (end 2018) and technology value at $4.50/share.

Figure 2: Sum-of-the-Parts Analysis

Sum-of-the-parts valuation		
Segment	Valuation (000's)	Per share value
THX-TS01 US sales	$55,553	$10.00
THX-TS01 EU sales	$9,303	$1.75
THX-ULD01 US sales	$8,785	$1.50
THX-ULD01 EU royalties	$1,183	$0.25
Cash (end of '18E)	$25,857	$4.50
	$100,681	**$18.00**
2018 fully diluted shares out (000)		5,681

Source: Company Reports; Laidlaw and Company estimates

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Company Description

Therapix Biosciences (TRPX) is an Israel-headquartered emerging specialty pharmaceutical company developing unique cannabinoid technologies in treatment of central nervous system (CNS) disorders. TRPX is engaged in two development programs based on repurposing an FDA approved synthetic cannabinoid Marinol (dronabinol). The first program is THX-TS01 for the treatment of symptoms related to Tourette Syndrome (TS), and the second is THX-ULD01 and targets the underserved market of mild cognitive impairment (MCI).

TRPX has filed for Orphan Drug Designation (ODD) for its THX-TS01 formulation for TS, and intends to pursue ODD in Europe. For both development programs, TRPX is pursuing a 505(b)(2) regulatory strategy for FDA approval. TRPX is also developing unique cannabinoid delivery technologies to improve drug administration, including nasal and sublingual delivery methods for THC with formulations designed to increase efficacy compared with standard oral administration. Approvals for indications such as TS and MCI may lead to applications in several additional therapeutic indications, including pain, cancer, anti-inflammatory, dermatology, and psychiatric disorders.

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Cannabis and Cannabinoid

The medicinal use of cannabis and derivatives is well known. Its most known agents are Tetrhydrocannabinol (THC) and Cannabidiol (CBD). Its potential benefits have been shown in many indications such as antispastic, analgesic, antiemetic, neuroprotective, anti-inflammatory, and in certain psychiatric diseases. It is either sourced botanically (complex) or synthetically (simpler and pure). TRPX uses FDA approved Dronabinol, which is synthetic THC. While medical marijuana has variable doses, therapeutic and psychoactive effects, poor compliance, abuse potential and political issues; FDA-regulated drugs have rigorous GMP manufacturing, clinical efficacy/safety studies, and controlled dosing.

Figure 3: Landscape of Drugs Approved and in Development

Company	Drug	Indication	Status
ABBV	Marinol capsules (synthetic THC)	CINV (Schedule 3)	Approved
GWPH	Sativex sublingual spray (botanical THC and CBD)	MS spasticity	Not approved in US
GWPH	Epidiolex sublingual spray (botanical CBD)	Epilepsy	In Development
INSY	Syndros synthetic THC oral solution	CINV	In Development
INSY	Syndros synthetic THC oral solution	Anorexia in AIDS patients	Approved
INSY	Synthetic CBD oral	Epilepsy	In Development
ZYNE	Transdermal gel cannabinoid treatments (synthetic) ZYN002	Refractory epilepsy, Osteoarthritis and Fragile X Syndrome	In Development

Source: Laidlaw estimates and Company 20F

The medicinal cannabis market is an important and evolving segment in global medical therapy. The growing awareness of the medicinal benefits of the active cannabinoids in the plant and its use for improving the quality of life of patients with numerous and diverse indications (oncological patients and chronic pain conditions), as well as the global trends of regulatory changes relating to the use of the plant and of cannabinoids, have all led to rapid growth in this market. The recent changes in the perception of medicinal cannabis and the scientific and medical acknowledgement of its benefits have created a growing need for more efficient drugs with an improved tolerance profile. In 2016, North American marijuana sales grew by 30% to $6.7B as a result of expansion of the legal market (Arcview Market Research, 2016).

As one of the fastest growing sectors of the economy, projections indicate that legal marijuana could hit $20.6B in sales by 2020, which would be up from $5.4B in 2015. Revenues are projected to top $20.2B by 2021, which would represent a CAGR of 25% (Arcview Market Research, 2016).

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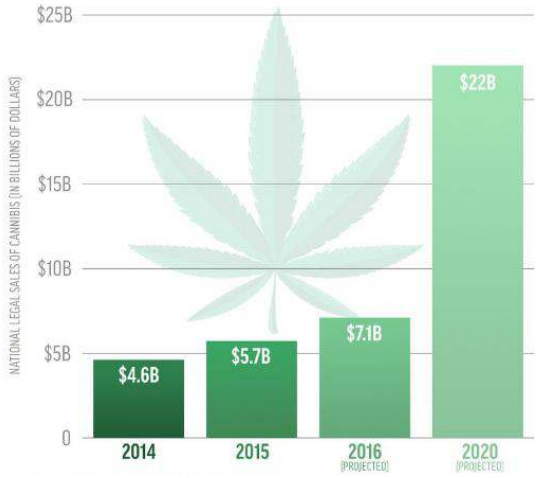
Figure 4: Growth of National Legal Sales of Cannabis



Source: Archview Market Research, 2016

TRPX's strategy is to build a leading specialty pharmaceutical company focused around the repurposing, repositioning and improvement of FDA approved cannabinoid molecules for various indications, including TS and MCI. The key benefits of this strategy include a relatively low scientific-technological risk (compared to the risk of developing drugs based on new molecular entities) and with relatively low costs and fast time to market achieved through fast-track regulatory paths.

As TRPX intends to use either the same or a lower dose of dronabinol compared to other FDA approved drugs, they should be able to rely upon the general safety findings of these other approved dronabinol products. They expect to use ABBV's Marinol (dronabinol) as the reference drug for 505(b)(2) regulatory path purposes. Marinol is a registered trademark of Unimed Pharmaceuticals, and was initially approved by the FDA in 1985 for use in nausea and vomiting associated with cancer chemotherapy in patients who have failed to respond adequately to conventional antiemetic treatments and in 1992 for anorexia associated with weight loss in patients with acquired immune deficiency syndrome (AIDS).

Additionally, as mentioned previously, they have submitted a request for Orphan Drug designation (ODD) to the FDA for their THX-TS01 program. This request hasn't yet been accepted. They also intend to pursue orphan designation in the EU.

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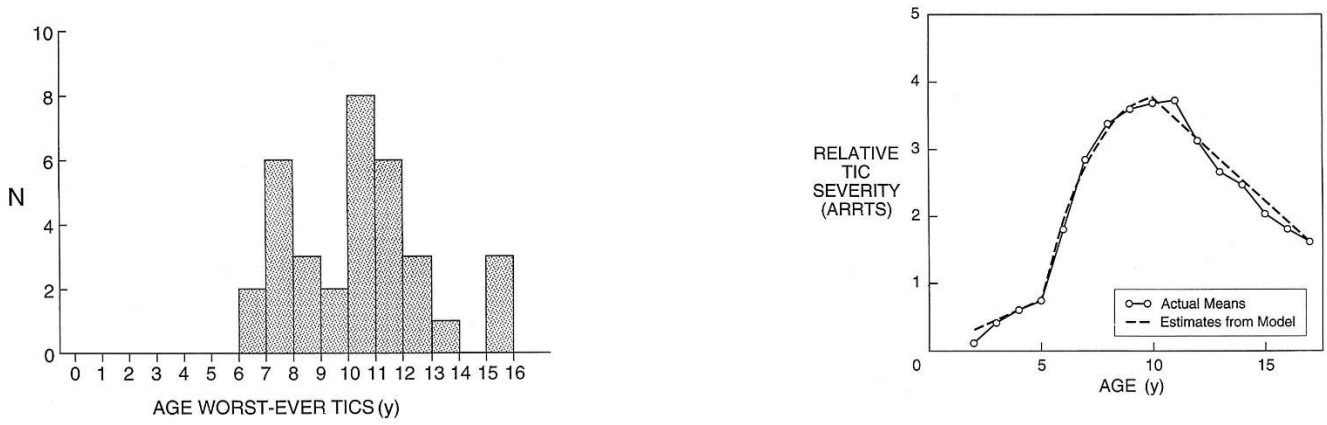
THX-TS01 for Tourette Syndrome (TS)

TRPX's TS program is dedicated to developing a cannabinoid based drug for the treatment of TS, which is an inherited neuropsychiatric disorder usually onset in childhood. TS is characterized by multiple physical (motor) tics and at least one vocal (phonic) tic. Motor tics may range from simple tics, including eye blinking, nose twitching, facial grimacing, shoulder shrugging, neck stretching and head jerking, to more complex tics, including throwing, hitting, or making rude gestures. Phonic tics include sniffling, grunting, throat clearing, blowing or coughing but can develop into words or parts of words including coprolalia (uttering swear words). According to a paper published in 2009 by researchers affiliated with the Yale University School of Medicine, tic symptoms of TS typically manifest between 4 and 6 years of age, and peak in severity between the ages of 10 and 12 years. However, they often improve over the course of adolescence. Motor tics generally precede the development of phonic tics in TS, and the onset of simple tics usually predates that of complex tics.

Figure 5: Age distribution of tic severity in TS patients



Source: Pediatrics, 1998

TS appears in a wide range of tics severity, from mild symptoms that do not cause serious impairment and often go unnoticed, to loud noises and forceful movements that can result in self-injury. The most dramatic and disabling tics are those that result in self-harm such as punching oneself in the face, or vocal tics including echolalia (repeating other people's words), or coprolalia. Many with TS experience additional neurobehavioral problems and comorbidities including inattention, hyperactivity and impulsivity, anger control problems, sleep difficulties (including motor and vocal tics during all stages of sleep, sleep apnea, abnormal arousal pattern, and other sleep disturbances) and obsessive-compulsive symptoms, such as intrusive thoughts/worries and repetitive behaviors. Due to the potentially disabling nature of the physical symptoms, some patients face problems with daily activities, beyond those caused by the social stigma associated with the disorder.

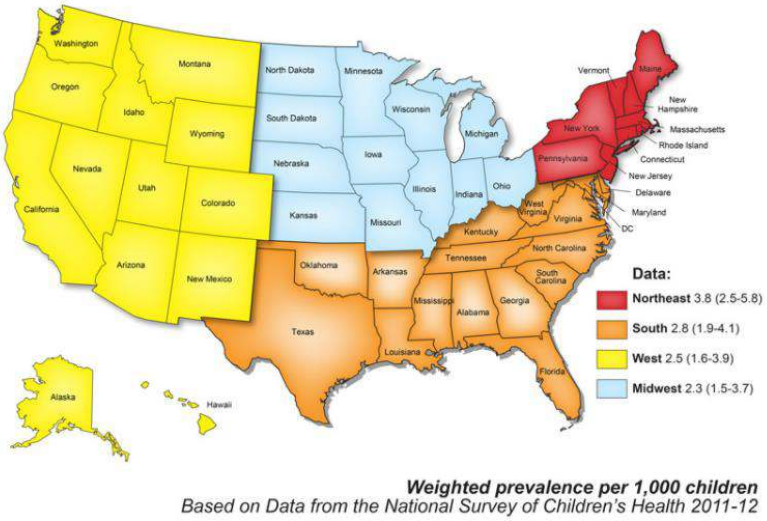
Pharmacotherapy is used when symptoms are more severe and interfere with the ability to function. Since the prevalence of tics decreases during adolescence and early adulthood, and sometimes disappears entirely; adults with TS are very

limited in numbers and usually manifest mainly moderate to severe TS symptoms.

Most cases of TS are mild and do not require pharmacological treatment. According to the 2011-2012 NSCH data, among children with current TS, 63% were reported to have mild TS and 37% were reported as having moderate or severe forms of the condition. Thus, ~35,000 of the ~138,000 children in the U.S. had moderate or severe TS in 2011-2012 (CDC, 2012).

To date, only three drugs have been approved by the FDA to treat TS, most of which are limited to treating only a narrow range of TS symptoms (mainly tics). Additionally, the usefulness of these drugs is also limited, since they are associated with severe AEs that have resulted in the need for a black box warning. In many cases off-label use of prescription medications not approved for the indication are associated with unwanted severe side effects that, are also detrimental. Therefore, we believe there continues to be a great need for more effective, safer medications targeted at treating tics as well as other features of TS.

Figure 6: Prevalence of TS in 6-17 years of Age by region



Source: CDC, 2012

Investigation of pharmacological therapies in TS started with the work of Arthur Shapiro and his colleagues in the 1960s and 1970s, which showed that the dopamine activity blocker, haloperidol, reduces tic severity. Today, many drugs that interact with dopamine and non-dopamine systems in the brain are used in the treatment of TS symptoms.

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Figure 7: Current TS treatment – Limited Efficacy with severe AEs

Type	Description
Antipsychotic Medications	Class primarily used to manage psychosis. Haloperidol and pimozide are approved for use in TS and aripiprazole is approved for pediatric TS. Fluphenazine is also used off label for TS. Effective of these is limited to reducing tics. Severe side effect: weight gain, sedation, akathisia, nausea and tardive dyskinesia. Other side effects could lead to lethal consequences. Some side effects persist after medication discontinuation.
Alpha2 Adrenergic Agonists	Class primarily used to manage hypertension and migraine headaches prevention. Clonidine and guanfacine are used off-label for reduction of tics in TS. Usefullness limited and modest favorable effects in children with ADHD. Improved tolerability in TS vs antipsychotics but some like clonidine may be lethal.
Benzodiazepines	Anticonvulsant or antiepileptic drug that belong to a class of drugs primarily used to manage seizures, panic disorder and movement disorders. Cloazepam is used off-label for reduction in tics in TS. Associate with series of negative side effects.

Source: Company's 20F

As the currently used medications are managing only a small number of disease symptoms with limited efficacy and questionable safety, there is a clear unmet medical need for the management of TS.

THX-TS01 – The Entourage Effect

TRPX's proprietary THX-TS01 drug candidate takes a unique approach to the treatment of TS. THX-TS01 is a combination drug candidate based on two components: dronabinol, the active ingredient in an FDA approved synthetic analog of THC and palmitoylethanolamide (PEA), which is an endogenous fatty acid amide that belongs to the class of nuclear factor agonists (proteins that regulate the expression of genes). TRPX believes that the combination of THC and PEA may induce a reaction known as the entourage effect.

The logic of the entourage effect is that cannabinoids work together and affect the body in a mechanism similar to the body's own cannabinoid system, which is a group of molecules and receptors in the brain that mediates the psychoactive effects of cannabis. This entourage effect may account for the pharmacological actions of PEA. Based on an activity enhancement of other physiological compounds, PEA may indirectly stimulate the cannabinoid receptors by potentiating their affinity for a receptor or by inhibiting their metabolic degradation, and by doing so, may increase the uptake of cannabinoid compounds, such as THC. Consequently, TRPX believes that the presence of

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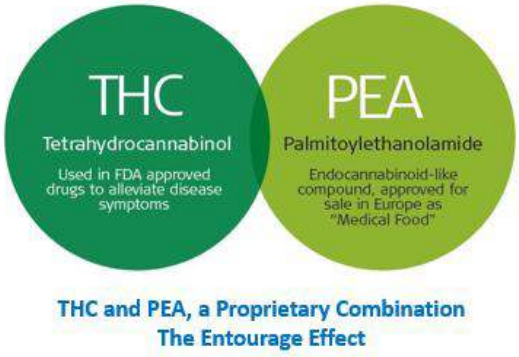
the PEA molecule likely increases the efficacy of orally administered THC, while reducing the required dosage and decreasing associated deleterious side effects.

PEA is naturally occurring in various food sources such as egg yolk, soybeans, milk and in parts of Europe, PEA derived products (Normast and Pelvilen) have been marketed as a good for special medical purposes. In 2015, Health Canada added PEA to its list of Natural Health Products, a class of health products which includes vitamins, mineral supplements, herbal preparations, traditional and homeopathic medicines, probiotics and enzymes.

Figure 8: "Entourage Effect" – THC and PEA



Source: Company Presentation

In 1998, Prof. Raphael Mechoulam, Israel Prize laureate, known for his pioneer work in the isolation, structure elucidation and total synthesis of THC, described the entourage effect. As demonstrated in Figure 9, injections of compounds on their own didn't differentiate from vehicle levels while the triple-injection of different compounds was significantly different on the tetrad of tests including ambulation, immobility on a ring, analgesia on a hot place and hypothermia. The entourage effect represents a novel endogenous cannabinoid molecular regulation route that may affect the body in a manner similar to the body's own endocannabinoid system, which may lead to a synergistic pharmacological effect, due to the ability to affect multiple targets within the body; improvement of absorption of active ingredients; ability to overcome bacterial defense mechanism; and/or minimizing adverse side effects. PEA has additional pharmacological benefits such as relieving pain and inflammation.

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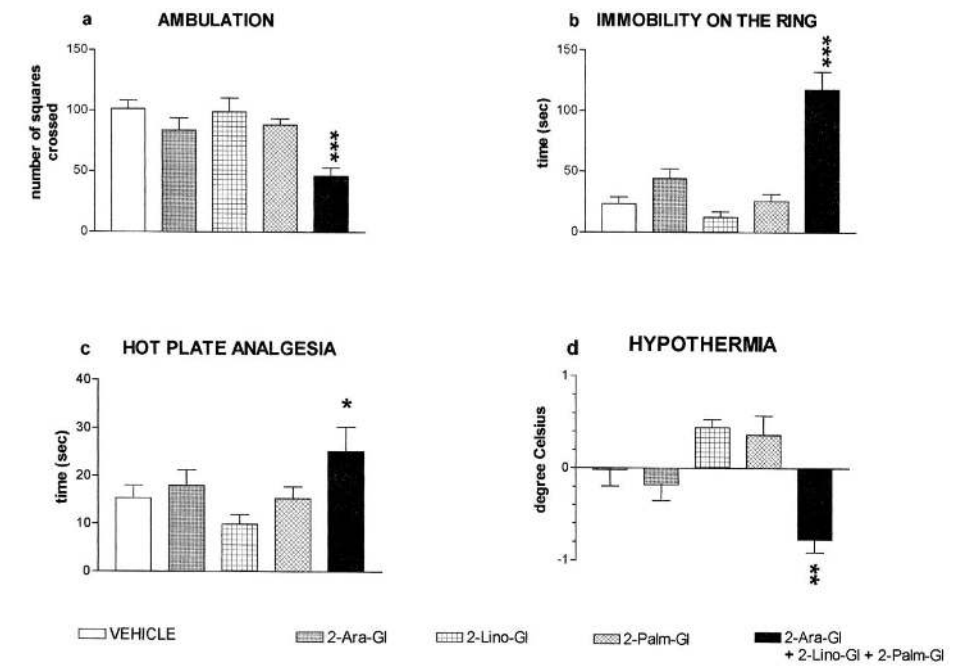
Figure 9: Entourage Effect



Source: European journal of pharmacology, I998

According to a paper published by the Italian Department of Addiction & Mental Health, PEA has been shown to possess anti-craving effects in cannabis dependent patients, is efficacious in the treatment of withdrawal symptoms, and is effective in the prevention of cannabis induced neurotoxicity and neuro-psychiatric disorders. TRPX believes that because of PEA's ability to stabilize mucosal mast cells and to prevent their degranulation, by combining THC therapy with PEA, one can overcome the over-sensitization/irritation to the respiratory tract that THC may cause.

There's evidence suggesting that cannabis and THC may be effective in the treatment of tic disorders. While there are only two controlled trials available demonstrating the effect of THC in the treatment of TS, both self and examiner rating scales in both showed a significant tic reduction in comparison to placebo with a clean AE profile. Both trials however were short in duration and only enrolled a limited number of patients. The initial trial consisted of a double-blind, placebo-controlled crossover pilot clinical study in 12 adult patients with TS and the second trial (conducted by the same research group) was a randomized double-blind, placebo-controlled trial in 24 patients.

Unfortunately, due to adverse psychoactive side effects involved with cannabis and high dosages of THC, cannabis has not become a viable treatment option for TS and other tic related disorders. TRPX believes that in order to harness the therapeutic potential of THC for the treatment of TS, there is a need to reduce the accompanied adverse effects. Through more than 30 clinical trials, PEA has

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been found to be effective, tolerable and safe as it has demonstrated no relevant side-effects and no drug-drug interactions (DDI).

Preclinical Data

TRPX has completed the preclinical phase of testing for TS. Animals were measured for the following facets of behavior as listed in Figure 10. Total distance traveled may indicate the overall change in animal behavior, where increased values indicate agitation, while decreased values may indicate calmness. Results showed that THC alone did not affect the total distance traveled but PEA in combination with THC reduced the total distance traveled, which could attest to PEA's effect on stress reduction. With respect to velocity, an increase in average animal velocity may indicate uncontrolled movement. Results showed that high doses of THC led to an increase in average animal velocity in treated mice whereas addition of PEA to high dose THC treatment resulted in a slight reduction and normalization of this effect. Low dose THC did not affect animal velocity and was comparable to control, while the addition of PEA was found to further reduce this value. Reduction in time spent in the arena may indicate increased anxiety of the animal. A high dose of THC significantly reduced the value of time spent in the center of the arena, as compared to the control group, suggesting that a high dosage of THC increased anxiety in the test subject. Co-administration of PEA with high dose THC markedly increased this value, bringing it back, close to the value observed in control mice. These results could indicate that PEA prevents high dose THC-induced anxiety.

Figure 10: Pre-clinical Entourage Effect Data

Facet of Behavior	Results
Distance travelled	THC alone didn't affect tot. dist. traveled but PEA + THC reduced tot. distance traveled.
Velocity	High doses of THC (50mg/kg) led to increase in average animal velocity in treated mice but PEA+High Dose THC resulted in slight reduction and normalization effect. Low Dose THC (12.5mg/kg) did not affect animal velocity and was comparable to control and PEA +THC further reduced
Time spent in center of arena	High dose THC significantly reduced time spent in the center of the arena vs control while PEA+THC significantly increased this value (close to value in control).

Source: Company Reports

Clinical Trials

The TRPX THX-TS01 drug development program began a proof of concept (POC) Phase 2a clinical trial in the US on 12/23/16. In addition, they expect to initiate another Phase 2a clinical trial in Hannover, Germany in 3Q17. The proposed US trial will evaluate the safety, tolerability and efficacy of THX-

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TS01 in treating approximately 18 TS subjects aged 18 to 60 that meet Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition criteria for the diagnosis of TS. Severity of tics and disease, common comorbid symptoms such as Obsessive Compulsive Disorder (OCD), ADHD, depression and anxiety severity will also be measured. Study patients will receive oral THX-TS01 once daily for the duration of the study. The overall estimated study duration is ~12 months.

Figure 11: POC Phase 2a Safety, Tolerability and Efficacy of THX-TS01 in treating TS patients

Phase 2a POC	Safety, Tolerability and Efficacy of THX-TS01 in treating TS patients
Aim	Evaluate safety, tolerability and efficacy of THX-TS01 in treting TS patients
Design	Single-arm, open label in TS patients aged 18-60 that meet Diagnostic and Statistical Manual and Mental Disorders-Fifth Edition Criteria
Dosing	once daily with 12 weeks follow-up. Overall study duration is 10-12 months
Endpoints	1) change from baseline to end of 12 weeks treatment in the Yale Global Tic Severity Scale Total Tic Score; 2) Safety and tolerability and benefit on premonitory urges, quality of life, disease severity, and comorbidities like ADHD, OCD, depression and anxiety
Patients	n=18
Safety	NA
Results	4Q17

Source: Company Reports and Laidlaw Estimates

TRPX also expects to initiate a similar 13-week Phase 2a trial in Hannover, Germany in the 3Q17. The investigator initiated study will include ~20 patients. The overall estimated study duration is also 10-12 months. They may also conduct further preclinical studies in parallel to their clinical plans as part of registration process.

Figure 12: Phase 2b Safety, Tolerability and Efficacy of THX-TS01 in Treating TS Patients

Phase 2b	Safety, Tolerability and Efficacy of THX-TS01 in treating TS patients
Aim	Evaluate safety, tolerability and efficacy of THX-TS01 in treating TS patients
Design	Randomized, double-blind, crossover, placebo-controlled study; oral THX-TS01 or placebo 1:1 ratio.
Dosing	up to twice daily oral THX-TS01 for 13 weeks then crossover and additional 13 weeks
Endpoints	1) Yale Global Tic Severity Scale Total Tic Score 2) additional scales for measuring tics severity and other mental disorders like OCD and ADHD.
Patients	n=20
Safety	NA
Results	2H18

Company Reports and Laidlaw Estimates

Based on these studies, they intend to conduct a Phase III, multinational placebo controlled study to evaluate the safety, tolerability and efficacy of up to twice daily oral THX-TS01 in treating TS (n=100-150).

Additional Therapeutic Indications

In November 2016, TRPX signed a memorandum with Rafa Laboratories, to conduct a POC clinical trial for a cannabinoid based product candidate to treat various medical indications characterized by lower abdominal pain. Similar to their THX-TS01 program for the treatment of TS, they plan to make use of the

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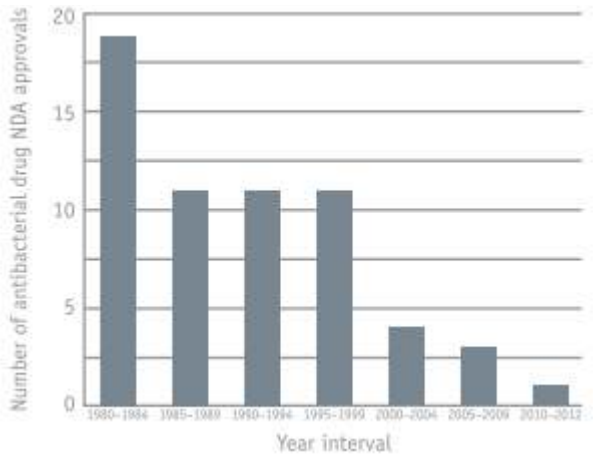
entourage effect for the purpose of integrating PEA with dronabinol. Rafa will supply TRPX with dronabinol for conducting the clinical trial, and will bear the costs of, and manage the logistical and regulatory aspects related to the clinical trial, and TRPX will bear all costs and expenses associated with the performance of the trial and the development and manufacturing of the PEA, and provide Rafa with an exclusive worldwide (excluding North America) right to manufacture the product candidate, and the right to market the product candidate in Israel, with respect to medical indications characterized by lower abdominal pain. In terms of treating severe pain, cannabinoids may represent an interesting alternative to opioids as they seem to act synergistically to opioids.

In January 2017, TRPX announced that they intend to initiate an additional program in the area of antimicrobial therapies. Their objective is again to use their entourage technology with THC to increase the efficacy of existing antibiotic drugs especially in antibiotic-resistant bacteria strains. The resistance to antimicrobials has become a global hazard and THC has been shown to have a wide range of important biological activities, including potential antibacterial activity. This antimicrobial program is currently in a preliminary stage.

Figure 13: Number of Antibacterial New Drug Applications (NDAs) with the years



Source: CDC, 2013

THX-ULD01 for Mild Cognitive Impairment (MCI)

Mild Cognitive Impairment (MCI)

MCI is a brain function syndrome involving the onset and evolution of cognitive impairments. It can involve problems with memory, language, thinking and judgment that are greater than normal age-related changes. MCI has been proposed as a condition of intermediate symptomatology between the cognitive changes of aging and fully developed symptoms of dementia, such as those seen in Alzheimer's disease. While difficult to characterize due to lack of standardized diagnostic criteria and variations in sample characteristics between studies, MCI prevalence for adults over 65 years old is estimated to be ~10%-

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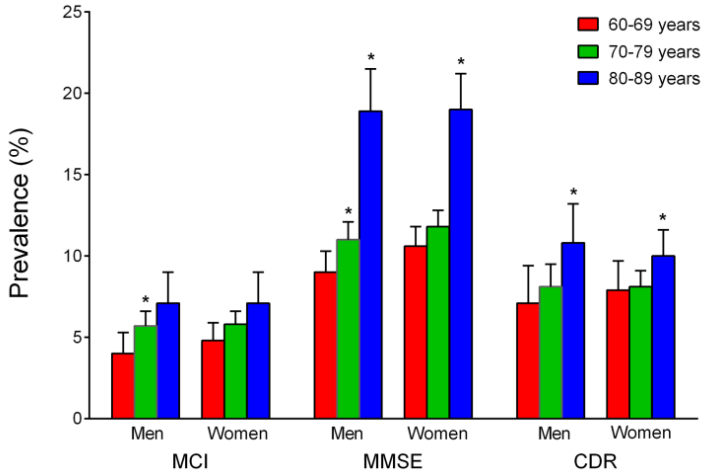
20%. It is clear however that MCI progresses with time (JAMA, 2014). In the following figure, different classification approaches were used for both men and women of different age groups. The objective cognitive impairment criteria were mild cognitive impairment (MCI), mini-mental state examination (MMSE) score or a clinical dementia rating (CDR).

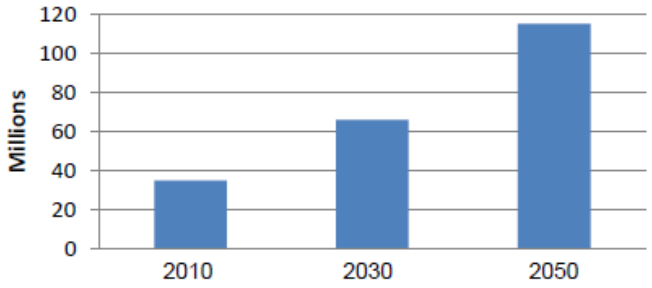
Figure 14: MCI Prevalence in men and women in different age groups



Source: PLOS one, 2015

As of 2015, there were ~46.8M people with dementia worldwide and this number is estimated to increase by 2030 to ~74.7M (World Alzheimer Report, 2015). Delaying or preventing the transition between MCI and dementia could potentially affect the prevalence of dementia in the general population.

Figure 15: Projected dementia rates worldwide



Source: ADI Report, 2010

The global societal economic cost of dementia for 2015 was ~$820B, (35% increase from the cost estimate for 2010). Projecting this trend forwards, the estimation is that the global cost of dementia will reach $1T in 2018 (World Alzheimer Report, 2015). Around half of this increase can be attributed to growth in the numbers of people with dementia, and half to increases in per capita costs, particularly in low and middle-income countries.

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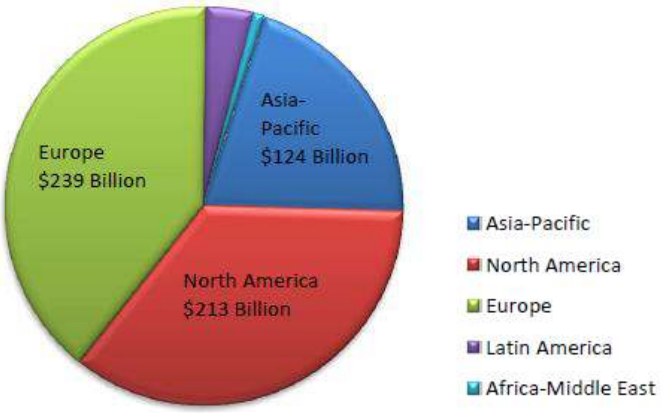
Figure 16: Annual Cost of Dementia



Source: ADI, 2010

There is no FDA approved treatment or therapy for MCI. As MCI may represent an early state of Alzheimer's disease, several treatments proposed for Alzheimer's, such as cholinesterase inhibitors, have been proposed for MCI. However, clinical trials have failed to demonstrate that any of these drugs delay or prevent the progression of MCI.

TRPX's THX-ULD01 program takes a unique approach to developing a treatment for MCI. Their proprietary THX-ULD01 drug candidate is based on an ultra-low dose of FDA approved dronabinol. While the safety and efficacy of drug delivery methods are solely FDA determinations, TRPX believes that both sublingual and nasal administration of dronabinol present several advantages over alternative administration routes, such as oral administration, and may enhance the bioavailability, or the rate and extent of the drug when it reaches the site of action. In fact, sublingual administration has certain advantages over oral administration. For instance, it is often faster and it ensures that the substance will risk degradation only by salivary enzymes before entering the bloodstream, whereas orally administered drugs must survive passage through the hostile environment of the gastrointestinal (GI) tract, which risks degrading them, either by stomach acid or bile. Also, after absorption from the GI tract, such drugs must pass to the liver, where they may be extensively altered. Similar advantages can be found in nasal drug administration as the nasal cavity is covered by a thin well vascularized mucosa and therefore, a drug molecule can be transferred quickly across the single epithelial cell layer directly to the systemic blood circulation without first-pass hepatic and intestinal metabolism.

Cannabis has been shown to cause long-term cognitive deficits in chronic users manifested as impairment in attention, memory or executive functions.

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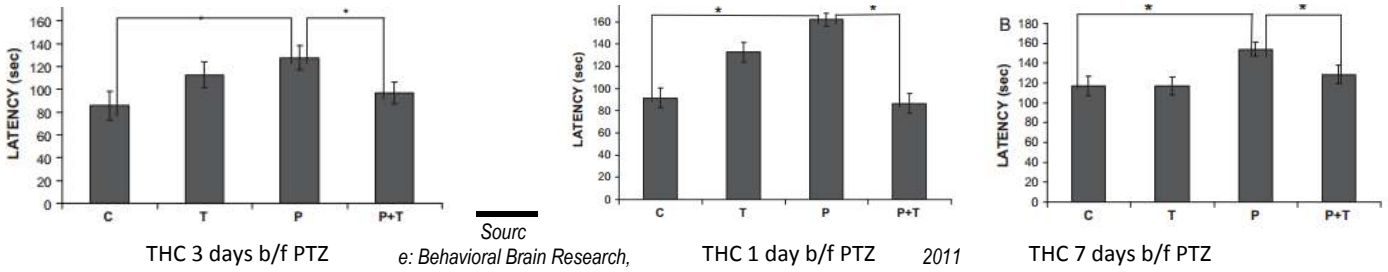
However, ultra-low doses of THC have been shown to prevent and reverse cognitive decline in preclinical trials.

Preclinical Data

TRPX is relying on interesting preclinical animal data demonstrating ultra-low dose dronabinol improves cognitive abilities. Recent studies have found that an ultra-low dose of THC protects the brain from long-term cognitive impairment which may be caused by lack of oxygen supply, seizures or use of drugs. Studies also suggest that ultra-low doses of THC cause animals to improve performance in behavioral tests that measure learning and memory.

These experiments and preclinical studies have shown that an ultra-low dose of THC may protect mice's brains from a variety of brain insults. A single injection of an ultra-low dose of THC prevented the cognitive damage that was induced by either hypoxia (oxygen deficiency), deep anesthesia, methylenedioxy-methamphetamine-toxicity, epileptic seizures or neuroinflammation. THC was applied either 1-3 days before or 1-7 days after the insult. The protective effect of the single injection of ultra-low THC lasted for at least 7 weeks. In fact, in Figure 17, results demonstrate that preconditioning attenuated epileptogenic drug pentylenetrazole (PTZ) - induced cognitive deficits following insult as mice with both THC and PTZ displayed latency (time necessary to reach a well filled with water and drink in an oasis maze test) comparable to control and significantly lower than mice with PTZ.

Figure 17: Cognitive deficit measured by latency in oasis maze

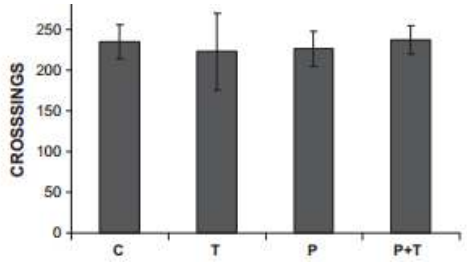


Source: *Behavioral Brain Research, 2011*

C: Control; T: THC; P: PTZ; P+T: PTZ + THC

It was especially encouraging that neither PTZ nor THC, nor the combination of both had any significant impact on motor activity of the mice as it indicates that the differences in the performance in terms of behavior demonstrated true differences in cognitive ability.

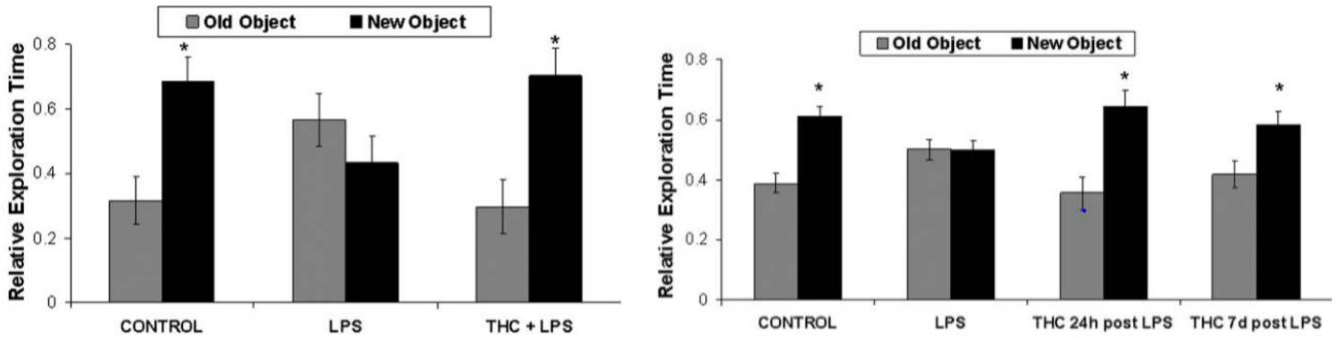
Figure 18: Motor activity between groups



Source: Behavioral Brain Research, 2011

Since many insults may trigger brain damage as a result of neuro-inflammation, ultralow doses of THC were measured in mice exposed to neuro-inflammatory damage. Results from the study seemed to demonstrate that ultralow dose of THC lacking psychotropic activity protects the brain from neuroinflammation-induced cognitive damage. As shown in the following figure, mice treated with LPS and THC behaved similarly (exploration of new object) to the control group while the LPS group didn't explore the new object any more than the old object.

Figure 19: Ultralow doses of cannabinoids to protect mouse brain from inflammation-induced cognitive damage



Source: Journal of Neuroscience Research, 2014

Recently an article was published demonstrating that a chronic low dose of THC restored cognitive function in old mice. In fact, treatment with THC restored hippocampal gene transcription patterns so that the expression profiles of mice treated with THC aged 12 months resembled those aged 2 months (Nature Medicine, 2017).

After demonstrating THC's ability to protect the brain from PTZ induced cognitive deficits when treated pre-or-post insult, researchers went on to

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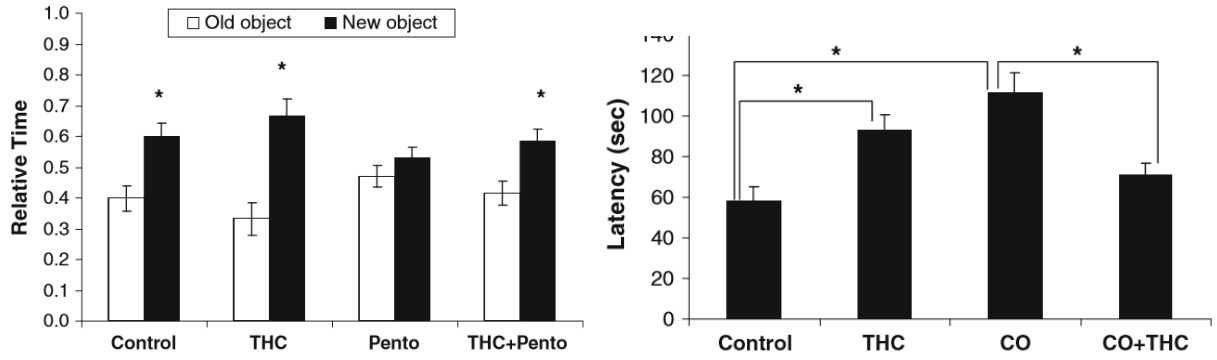
examine neuro protection in cognitive deficit models induced by other insults, including pentobarbital-induced deep anesthesia, repeated treatment with MDMA (ecstasy) and exposure to carbon monoxide (CO). We were especially encouraged by the length of neuroprotection as ultralow dose THC treatment displayed neuroprotection for at least 7 weeks. In Figure 20, the object recognition test show recovery of cognitive recognition functions following administration of ultra-low dose of THC 24h before pentobarbital. The Figure also depicts how administration of an ultralow dose of THC 48h before exposure to CO protects mice from CO-induced cognitive damage in a dry maze experience.

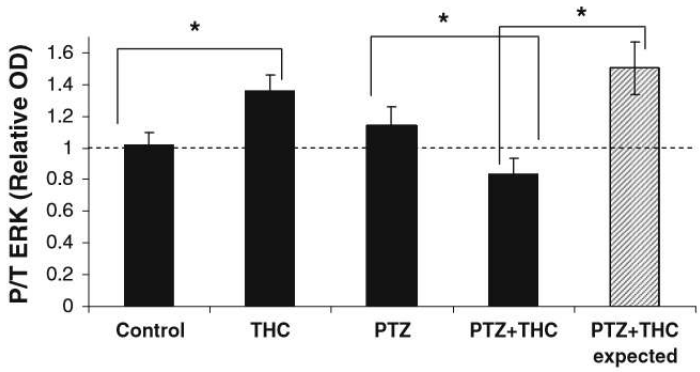
Figure 20: Pentobarbital object recognition and CO dry maze trials for cognitive functions



Source: Exp Brain Res, 2012

The following figure depicts the interactive effect of THC and PTZ on ERK2 in the hippocampus 7 weeks after treatment with ultralow dose THC. The results suggest once again that treatment with ultralow dose THC could provide safe, long-term neuroprotection without AEs of normal THC doses.

Figure 21: THC and PTZ interaction in hippocampus 7 weeks post treatment



Source: Exp Brain Res, 2012

Clinical Trials

In 3Q17, they intend to conduct a Phase 1 clinical trial to document the PK parameters of THX-ULD01 and to evaluate drug safety. During the 1H18, TRPX expects to initiate a POC Phase 2a clinical trial to evaluate safety, tolerability and efficacy of THX-ULD01 in treating patients with cognitive impairment due to TBI/concussions. In addition, they may conduct further preclinical studies in parallel to their clinical plans as part of the development of our innovative pipeline and for registration purposes.

Figure 22: Phase 2a Safety, Tolerability and Efficacy of THX-ULD01 for treating patients with cognitive impairment

Phase 2a	Safety, Tolerability and Efficacy of THX-ULD01 in treating patients with cognitive impairment
Aim	To evaluate Safety, Tolerability and Efficacy of THX-ULD01 in treating patients with cognitive impairment, including cognitive impairment brought on by traumatic brain injury
Design	Prospective, open-label
Dosing	once daily sublingual tablet and once weekly. 0.4mg THC/tablet
Endpoints	1) Change from baseline to end of 6-weeks in the Computerized Neurocognitive Battery (CNB) 2) Safety and tolerability of THX-ULD01 and evaluate benfit of THX-ULD01 on the patient's mood, anxiety and overall quality of life with Hamilton scale.
Patients	n=30-45
Safety	NA
Results	1H19

Source: Company Report

Competition

The first THC-based pharmaceutical, a pill sold under the commercial name of Marinol, was developed by a company called Unimed Pharmaceuticals, with funding provided by the National Cancer Institute. In 1985, Marinol received FDA approval as a treatment for chemotherapy-related nausea and vomiting. Today, Marinol is marketed by AbbVie (ABBV). Since the introduction of Marinol into the market, other pharmaceuticals containing THC have also been developed.

Figure 23: Competitive Companies and their Products

Company	Product
Abbvie (ABBV)	Marinol (dronabinol) oral capsule
SVC Pharma	Generic dronabinol oral capsule
Akorn Inc (AKRX)	Generic dronabinol oral capsule
Insys Therapeutics (INSY)	Syndros oral liquid formulation of dronabinol; Seeking FDA approval of oral liquid formulation of its synthetic CBD for treatment of Dravet's Syndrome, Lennos Gastaut Syndrome and other childhood epilepsy syndromes
Meda AB (MYL)	Cesamet (nabilone), a synthetic derivative of THC; Sativex (nabiximols) a whole cannabis extract oral spray
GW Pharma (GWPH)	Sativex (botannical CBD) oral mucosal for treatment of MS spasticity (seeking approval in US); Developing epidiolex (liquid formulation of highly purified CBD extract as treatment for Dravet's Syndrome, Lennox Gastaut Syndrome, and other childhood epilepsy syndromes
Zynerba Pharmaceuticals (ZYNE)	Developing transdermal formulation of CBD
Nemus Bioscience (NMUS)	Development of cannabis therapeutics

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Source: Company Reports and Laidlaw Estimates

Major Risks

Exogenous events could impact our outlook. We believe pharmaceutical companies have the least control over competitive, political, and regulatory risks. Although we have incorporated competitive assumptions into our forecasts, there may be other risks beyond the scope of our analysis. Changes in the drug reimbursement system, as well as any political or regulatory amendments, may significantly influence the earnings power of these companies.

Actual clinical results and the FDA's conclusions may deviate from expectations. Many of our assumptions are based on a review of incomplete clinical trial data available in the public domain. Often, our conclusions are drawn from early stage data, which may not be reflected by pivotal studies. Furthermore, the FDA's conclusions may not coincide with our own, materially changing our revenue and earnings assumptions.

Compliance issues, product recalls, and other mandates by regulatory authorities could materially change our expectations. Regulatory compliance issues, ranging from accounting irregularities to defective manufacturing practices, could materially change our assumptions and earnings outlook. Unanticipated product recalls and labeling changes could also have adverse consequences on our earnings assumptions.

Legal risks could lead to additional liabilities and revenue loss. In addition to the expenses incurred by patent challenges, product liability and other legal suits could occur and lead to additional liabilities and revenue loss, which could substantially change our financial assumptions.

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Management

Josh Blacher, CFO. Josh Blacher joins TRPX with ten years of experience in senior financial and business development related positions at publicly-traded biotechnology and pharmaceutical companies, as well as 14 years in capital markets in the US. Prior to joining TRPX, he served as CFO at Galmed Pharmaceuticals (GLMD). Previously, he also held senior positions in licensing and investing at Teva Pharmaceuticals, portfolio management at Deutsche Asset Management and equity research at Morgan Stanley, as well as mergers and acquisitions at Lehman Brothers. He holds an MBA in Finance from Columbia Business School.

Doron Ben Ami, Chief Strategy Officer. A seasoned executive with more than 20 years of management experience holding various leadership roles in the multinational pharmaceutical industry. Among Doron's roles were Associate VP of the Eastern Europe and Israel region at Merck and the GM of Lundbeck, Israel. Holds a Master of Health Systems Administration (M.H.A.) from Tel Aviv University.

Adi Zuloff-Shani, CTO. Has more than 15 years of experience as an R&D executive. Prior to joining TRPX she served as VP Development at Macrocure. Holds a PhD in human biology and immunology from Bar-Ilan University.

Ascher Shmulewitz, Chairman. A prolific inventor and serial entrepreneur in biomedical technologies. He has originated over two dozen life science companies and has led 14 of these companies to successful exits, mostly through M&A transactions. Ascher is the founder of Medgenesis Partners, a private investment firm and incubator based in Israel. Holds an MD from Technion Medical School and PhD in Engineering from Tel Aviv University.

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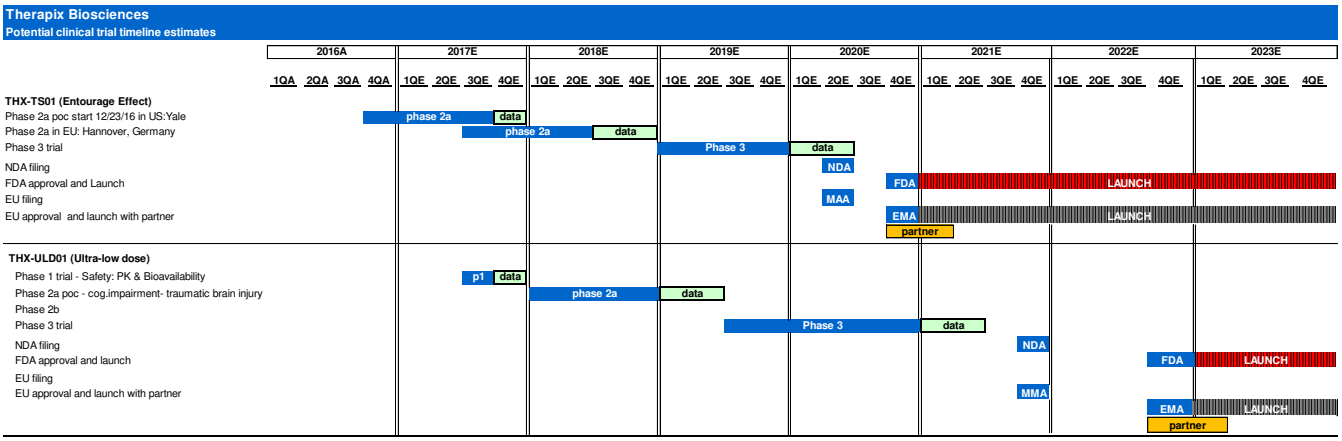
Figure 24: Potential Clinical Trial Timeline



Source: Company Reports; Laidlaw & Company estimates

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Figure 25: Quarterly Income Statement

Therapix Biosciences
Quarterly income statement

($000's except per share)	2016A 1QA	2016A 2QA	2016A 3QA	2016A 4QA	2016A Year	2017E 1QE	2017E 2QE	2017E 3QE	2017E 4QE	2017E Year
Total Revenues					**$0**					
COGS					0					
Gross margin					**0**					
SG&A	336	299	362	270	1,267	350	500	750	750	2,350
R&D	150	227	231	132	739	250	1,500	1,750	1,750	5,250
Other exp (inc), net	0	26	(33)	0	(7)	10	10	10	10	40
Operating income/(loss)	**(486)**	**(551)**	**(560)**	**(402)**	**(1,999)**	**(610)**	**(2,010)**	**(2,510)**	**(2,510)**	**(7,640)**
Finance income		9	(8)	0	1	1	1	1	1	4
Finance expense	(14)		(3)	10	(7)	(1)	(1)	(1)	(1)	(4)
Company's share of losses of an ass	0	0		0						
(Loss) income before income tax	**(499)**	**(542)**	**(571)**	**(392)**	**(2,005)**	**(610)**	**(2,010)**	**(2,510)**	**(2,510)**	**(7,640)**
NI/(loss) adj	**(496)**	**(532)**	**(599)**	**(364)**	**(1,991)**	**(610)**	**(2,010)**	**(2,510)**	**(2,510)**	**(7,640)**
Equity holders of the company non-controlling int.	4	10	(28)	28	14					
EPS as reported	**(499)**	**(542)**	**(571)**	**(392)**	**(2,005)**					
Adj-EPS ex-non-cash					**($2.13)**	**($0.20)**	**($0.61)**	**($0.74)**	**($0.57)**	**($2.17)**
EPS as reported					**($2.14)**					
Shares out (000)					936	3,000	3,300	3,400	4,400	3,525
Fully diluted shares (000)					1,400	3,400	3,700	3,800	4,800	3,925

Source: Company Reports; Laidlaw & Company estimates

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Figure 26: Annual Income Statement

Therapix Biosciences
Annual income statement

($000's except per share)	2016A	2017E	2018E	2019E	2020E	2021E	Comments
Revenues							
US THX-TS01						$55,178	THX-TS01 launch 2021
EU THX-TS01 royalty						$2,205	THX-ULD01 launch 2023
US THX-ULD01						$0	
EU THX-ULD01 royalty						$0	
Total Revenues						**$57,383**	
COGS						8,607	
Gross margin						**48,776**	
SG&A	1,267	2,350	4,500	7,500	9,500	12,750	
R&D	739	5,250	8,500	11,000	14,500	16,500	
Other expense (inc) net	**(7)**	**40**	40	40	40	40	
Operating income/(loss)	**(1,999)**	**(7,640)**	**(13,040)**	**(18,540)**	**19,486**	**19,486**	
Finance Income	**1**	**4**	**4**	**4**	**4**	**4**	
Finance Expense	(7)	(4)	(4)	(4)	(4)	(4)	
Company's shares of losses							
(Loss) income before tax	**(2,005)**	**(7,640)**	**(13,040)**	**(18,540)**	**(24,040)**	**19,486**	
Adj-Net income/(loss)	**(1,991)**	**(7,640)**	**(13,040)**	**(18,540)**	**(24,040)**	**19,486**	
Equity holders of the company	**0**						
NC interests	14						
NI/(loss) as reported	**(2,005)**						
Adj-EPS ex-non-cash	**($2.13)**	**($2.17)**	**($2.52)**	**($2.57)**	**($2.39)**	**$1.34**	
EPS as reported	**($2.14)**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	
Shares out (000)	936	3,525	5,181	7,213	10,050	13,700	
Fully diluted shares (000)	1,400	3,925	5,681	7,813	10,750	14,500	

Source: Company Reports; Laidlaw & Company estimates

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Figure 27: Balance Sheet

Therapix Biosciences
Balance sheet

($000's except per share)	1Q16A	2Q16A	3Q16A	2016A	2017E	2018E	2019E	2020E	2021E
Current Assets									
Cash and equivalent	$1,231	$823	$1,279	$676	$15,730	$18,357	$29,932	$27,205	$49,902
Restricted Cash	$11	$11	$12	$11					
Total Current Assets	**1,279**	**913**	**1,349**	**804**	**15,880**	**18,532**	**30,132**	**27,430**	**50,152**
prepaid public offering costs			266	430					
property	13	13		11	10	10	20	20	20
Investment in associate									
equipment			13						
Total Assets	**1,292**	**926**	**1,628**	**1,245**	**15,890**	**18,542**	**30,152**	**27,450**	**50,172**
Current Liabilites									
Total Current Liabilites	**562**	**597**	**661**	**672**	**750**	**1,000**	**1,250**	**1,500**	**1,750**
Total Liabilities	**562**	**597**	**661**	**672**	**750**	**1,000**	**1,250**	**1,500**	**1,750**
Shareholders' Equity									
Share cap	906	926	1,091	1,066	1,250	1,500	1,750	2,000	2,250
Share premium	24,507	24,922	26,979	26,374	48,282	63,199	92,574	113,137	115,598
share-based payment trans.	4,762	4,943	4,440	4,390	4,500	4,750	5,000	5,250	5,500
transactions with nc interest	241	245	250	245	250	275	300	325	350
accumulated deficit	(29,530)	(30,535)	(31,793)	(31,502)	(39,142)	(52,182)	(70,722)	(94,762)	(75,276)
nc interests	(159)	(172)							
foreign currency translation res	5								
Total SE (deficit)	**730**	**329**	**967**	**573**	**15,140**	**17,542**	**28,902**	**25,950**	**48,422**
Total liabilities & SE	**1,292**	**926**	**1,628**	**1,245**	**15,890**	**18,542**	**30,152**	**27,450**	**50,172**

Source: Company Reports; Laidlaw & Company estimates

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Figure 28: Cash Flow Statement

Therapix Biosciences
Statement of cash flows

($000's except per share)	2015A	1Q16A	2Q16A	3Q16A	2016A	2017E	2018E	2019E	2020E	2021E
Operating Cash Flow										
Net Income/Loss	(2,607)	(499)	(1,046)	(1,614)	(2,005)	(7,640)	(13,040)	(18,540)	(24,040)	19,486
Net Chg Assets and Liabs	129	87	72	199	233	1,400	1,725	2,225	2,725	3,225
Cash from operations	**(1,323)**	**(335)**	**(769)**	**(1,174)**	**(1,480)**	**(6,240)**	**(11,315)**	**(16,315)**	**(21,315)**	**22,711**
Investing Activities										
Cash from investing	**(1)**	**(3)**	**(4)**	**(4)**	**(4)**	**(6)**	**(8)**	**(10)**	**(12)**	**(14)**
Financing Activities										
Proceeds from issue of shares	1,452					21,300	13,950	27,900	18,600	
prepaid public offering costs				(110)	**(349)**					
proceeds from exercise of share options an	1,287			934	**913**					
Receipts from Chief Scientist										
Cash from financing	**2,739**			**824**	**564**	**21,300**	**13,950**	**27,900**	**18,600**	**0**
Change in cash	**1,415**	**(339)**	**(773)**	**(354)**	**(920)**	**15,054**	**2,627**	**11,575**	**(2,727)**	**22,697**
Cash, start of period	157	1,570	1,595	1,633	1,596	676	15,730	18,357	29,932	27,205
Cash, end of period	**1,572**	**1,231**	**822**	**1,279**	**676**	**15,730**	**18,357**	**29,932**	**27,205**	**49,902**

Source: Company Reports; Laidlaw & Company estimates

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DISCLOSURES:

ANALYST CERTIFICATION

The analyst responsible for the content of this report hereby certifies that the views expressed regarding the company or companies and their securities accurately represent his personal views and that no direct or indirect compensation is to be received by the analyst for any specific recommendation or views contained in this report. Neither the author of this report nor any member of his immediate family or household maintains a position in the securities mentioned in this report.

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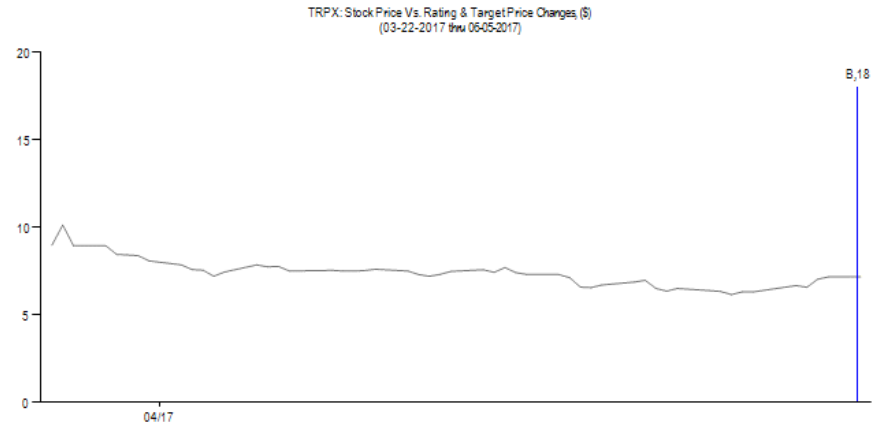
For the purpose of ratings distributions, regulatory rules require the firm to assign ratings to one of three rating categories (i.e. Strong Buy/Buy-Overweight, Hold, or Underweight/Sell) regardless of a firm's own rating categories. Although the firm's ratings of Buy/Overweight, Hold, or Underweight/Sell most closely correspond to Buy, Hold and Sell, respectively, the meanings are not the same because our ratings are determined on a relative basis against the analyst sector universe of stocks. An analyst's coverage sector is comprised of companies that are engaged in similar business or share similar operating characteristics as the subject company. The analysis sector universe is a sub-sector to the analyst's coverage sector, and is compiled to assist the analyst in determining relative valuations of subject companies. The composition of an analyst's sector universe is subject to change over time as various factors, including changing market conditions occur. Accordingly, the rating assigned to a particular stock represents solely the analyst's view of how that stock will perform over the next 12-months relative to the analyst's sector universe.

Additional information available upon request.

‡ Laidlaw & Company has received compensation from the subject company for investment banking services in the past 12 months and expects to receive or intends to seek compensation for investment banking services from the company in the next three months.

RATINGS INFORMATION

Rating and Price Target Change History



3 Year Rating Change History

Date	Rating	Closing Price ($)
06/05/2...	Buy (B)	7.16*

3 Year Price Change History

Date	Target Price ($)	Closing Price, ($)
06/05/2...	18.00	7.16*

** Previous Close6/2/2017*

Source: Laidlaw & Company **Created by: Blue-Compass.net**

Laidlaw & Company Rating System*		% of Companies Under Coverage With This Rating	% of Companies for which Laidlaw & Company has performed services for in the last 12 months	
			Investment Banking	Brokerage
Strong Buy (SB)	Expected to significantly outperform the sector over 12 months.	0.00%	0.00%	0.00%
Buy (B)	Expected to outperform the sector average over 12 months.	64.44%	31.11%	2.22%
Hold (H)	Expected returns to be in line with the sector average over 12 months.	2.22%	0.00%	0.00%
Sell (S)	Returns expected to significantly underperform the sector average over 12 months.	0.00%	0.00%	0.00%

ADDITIONAL COMPANIES MENTIONED

AbbVie (ABBV – Not Rated)
GW Pharmaceuticals (GWPH – Not Rated)
INSYS Therapeutics (INSY – Not Rated)
Zynerba Pharmaceuticals (ZYNE – Not Rated)

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