

Transforming mental health care

COMPASS Pathways plc
January 2021



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COMPASS's leadership team



George Goldsmith
Chairman, CEO and Co-founder



Ekaterina Malievskaia, MD
Chief Innovation Officer, Co-founder



Lars Wilde
President, Chief Business Officer, Co-founder



Piers Morgan
Chief Financial Officer



Nate Poulsen
General Counsel and Head of Legal, IP, and Licensing



Marco Mohwinckel
Chief Commercial Officer



Trevor Mill
Chief Development Officer



Tracy Cheung
Chief Communications Officer



Sue Stansfield, PhD
Senior Vice President of Clinical Operations



Stephen Schultz
Senior Vice President, Investor Relations



Greg Ryslik, PhD
Senior Vice President, Data Science, Machine Learning and Digital Health Research



Gary Gilmour, DPhil
Director of Preclinical Research



Steven Levine, MD
Vice President of Patient Access



Sarah Bateup
Head of Therapy Research and Training



Dr Stephen Wright
Senior Scientific Advisor



Emilio Arbe, MD
Interim Clinical Sciences Director



A collage of five vertical portrait strips of diverse people. From left to right: a man with a beard and mustache, a young woman with long dark hair, a young woman with dark skin and short hair, an older man with glasses and wrinkles, and a young woman with light skin and long dark hair. The text "Everyone has a STORY" is overlaid in the center.

Everyone has a
STORY

We are a mental health care company



Dedicated to accelerating patient access to evidence-based innovation in mental health care

- Significant unmet need: 100m people¹ with treatment-resistant depression (TRD)
- Committed to transforming the patient experience



Developing COMP360 psilocybin therapy for TRD

- COMP360 designated a FDA Breakthrough Therapy for TRD
- Completed phase I healthy volunteers trial, largest psilocybin therapy clinical trial to date
- Phase IIb ongoing, with 216 patients expected to have completed the trial by late 2021
- Planned expansion into additional indications

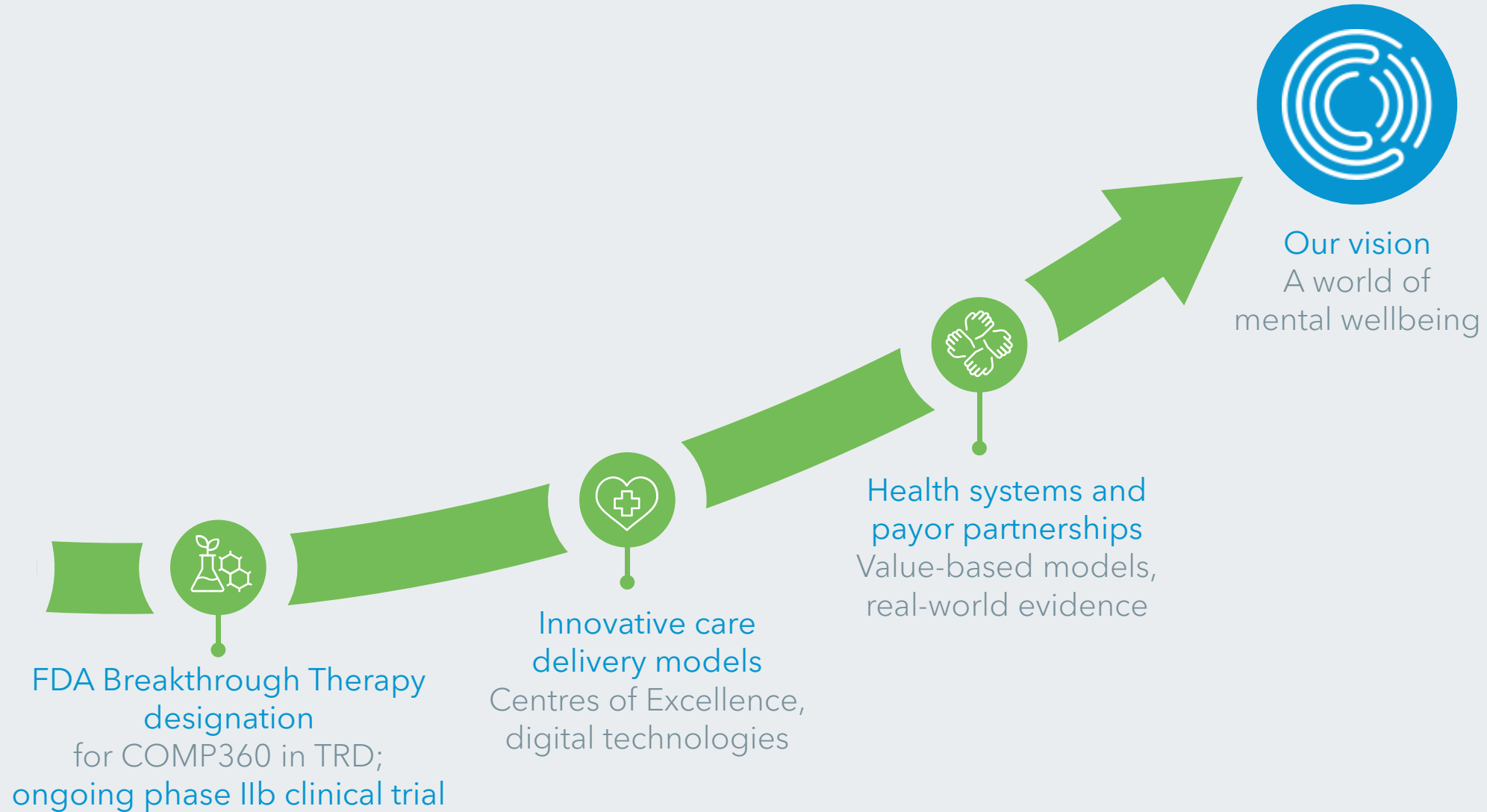


Driven by science and rigor


- COMP360 differentiated mechanism of action, activating the 5HT_{2A} receptor²
- Signals from academic studies have shown that psilocybin therapy can improve outcomes for patients
- IP strategy combining patent protection with regulatory and market exclusivity

Source: 1. Depression and Other Common Mental Disorders: Global Health Estimates and Cleare, A. et al - 2015 -Evidence-based guidelines for treating depressive disorders with antidepressants: A revision of the 2008 British Association for Psychopharmacology guidelines. These sources state that 1/3 of those suffering with major depressive disorder (MDD) are estimated to be TRD. Therefore, we approximated 100 million from 320 million people with MDD 2. Halberstadt and Geyer - 2011

Transforming the patient experience in mental health



TRD treatment pathway: significant unmet need for 100 million patients

Treatment pathway stage	New onset depression Major depressive disorder (MDD)	Persistent depression Major depressive disorder (MDD)	Treatment-resistant depression (TRD)
Line of therapy	<div> <div>First line</div> <div>Second line</div> <div>Third line + </div> </div>		
Estimated no of patients (worldwide)	320 million	200 million	100 million (~33% of total)
Available treatments	<ul style="list-style-type: none"> • Antidepressants • Psychological interventions, eg CBT* 	<ul style="list-style-type: none"> • Antidepressants • Antidepressant combinations • Psychological interventions 	<ul style="list-style-type: none"> • Antidepressants • Augmentation therapy (antidepressants, mood stabilizers, anticonvulsants, atypical antipsychotics, esketamine) • Ketamine • Somatic therapy (rTMS*, tDCS*, ECT*, DBS*) • High-intensity psychological interventions
% relapse	60-70%	50-75%	80-90%

Note: *CBT = cognitive behavioral therapy; rTMS = repetitive transcranial magnetic stimulation; tDCS=transcranial direct current stimulation; ECT=electroconvulsive therapy; DBS=deep brain stimulation

Source: Hasler et al -2004. Acute psychological and physiological effects of psilocybin in healthy humans: a double-blind, placebo-controlled dose effect study

We need a new treatment model in TRD



Depression:
leading cause of disability
worldwide

- MDD estimated to account for 7.5% of years of life lost due to disability globally, as defined by DALYs¹
- Approx sevenfold increase in suicide rate for TRD patients compared with non-TRD MDD patients



Depression:
burden on health
systems²

- US annual cost of depression: >\$200 billion³
- A large proportion can be attributed to direct costs (eg outpatient and inpatient medical services and pharmaceutical services)



TRD:
increased economic and
societal costs

- US medical costs for TRD patients are ~2-3x costs for non-TRD MDD patients
- TRD patients have ~2x inpatient visits relative to non-TRD MDD patients
- Average US annual healthcare cost between \$17-25k per TRD patient per year

Need for a new treatment paradigm

- ✓ New mechanisms of action
- ✓ Fewer side effects
- ✓ Rapid-acting and durable response

Note: 1. DALY = disability-adjusted life years; 2. Indirect costs are associated with the expenses incurred from the cessation or reduction of work productivity due to morbidity and mortality; 3. Accounting for comorbid physical and psychiatric conditions

Source: WHO (2017); Depression Therapeutics by David Thomas and Chad Wessel, Bio Industry Analysis (2019); Johnston KM, Powell LC, Anderson IM, Szabo S, Cline S (2018). The burden of treatment-resistant depression: a systematic review of the economic and quality of life literature. Journal of Affective Disorders

Our COMP360 psilocybin therapy



COMP360

- Synthetic, high-purity, polymorphic crystalline formulation of psilocybin
- Oral capsule
- Designated Breakthrough Therapy for TRD (in 2018)



Psychological support

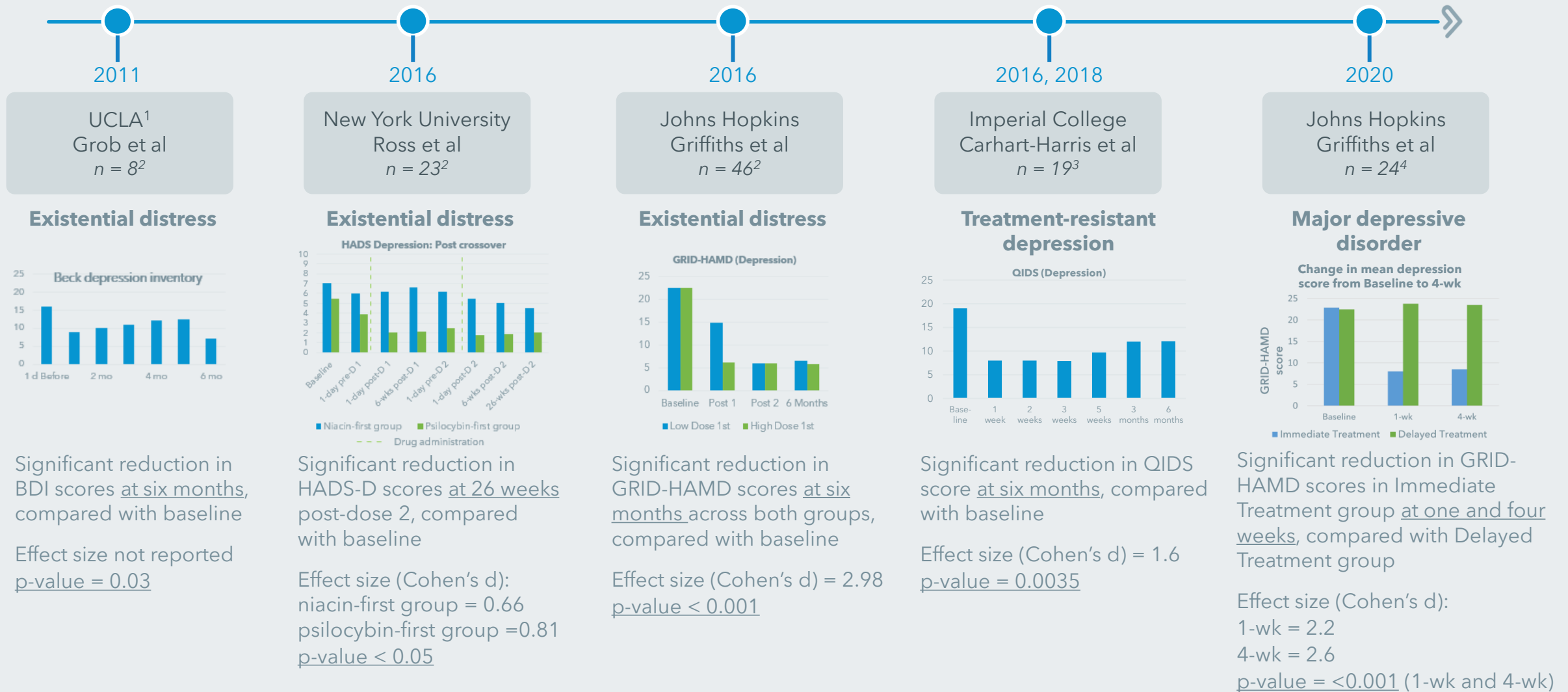
- COMP360 is combined with psychological support from specially trained therapists
- Psilocybin session is preceded by preparation and followed up with integration



COMP360 psilocybin therapy: clinical status

- Preclinical genotoxicity and cardiotoxicity studies completed
- Phase I trial completed: COMP360 generally well-tolerated in healthy participants (n=89)
- Phase IIb trial in TRD: underway in 21 sites in 10 countries (n=216)

Clinical signals: early indicators from academic-sponsored trials show rapid reductions in symptoms in TRD and other mental conditions



Note: 1. UCLA = University of California, Los Angeles; 2. n denotes the number of patients who completed the relevant disclosed timepoint; 3. Denotes the number of patients for whom data is shown in the bar graph. A total of 19 patients completed six months follow-up; 4. Denotes the number of patients who completed both administration sessions and 1-wk and 4-wk post-session visits.

All charts have been recreated from information provided in relevant papers. None of these studies used COMP360

Psilocybin therapy: potential benefits for patients, clinicians and payers

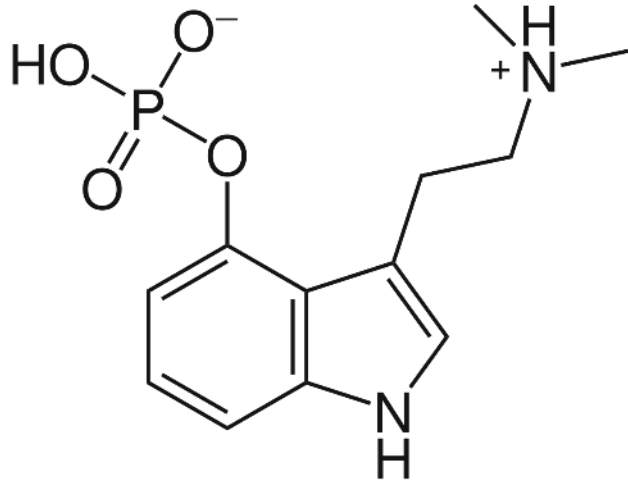
Potential patient benefits

- Rapid and sustained relief
- A meaningful patient experience
- A sense of agency and empowerment

Potential economic benefits

- Reduction in total cost of care
- Lower healthcare resource utilisation
- Increased productivity, reduced absenteeism

Psilocybin is a psychoactive substance



Psilocybin molecule



An active ingredient in some species of mushrooms

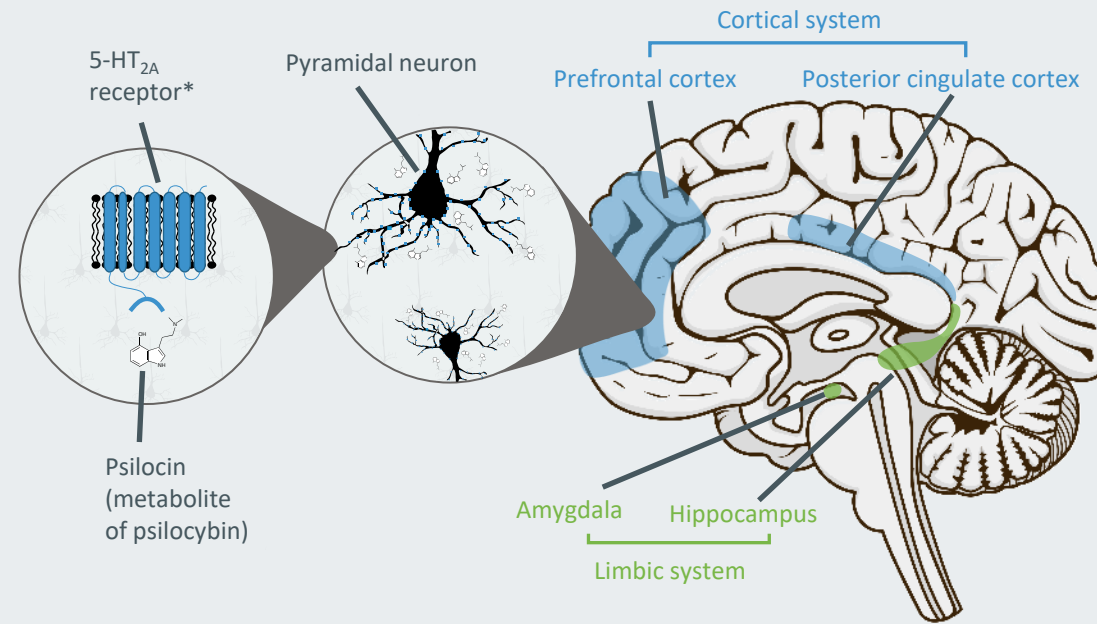


Established knowledge of subjective effects



A generally well-tolerated serotonergic psychedelic

COMP360 mechanism of action



Modulation of cortical and limbic systems via 5-HT_{2A} receptors

1. Stimulation of 5-HT_{2A} receptors¹ results in downstream cascades via G-protein signalling²

2. Altered extracellular release of dopamine^{3,4} and leading to enhanced positive mood

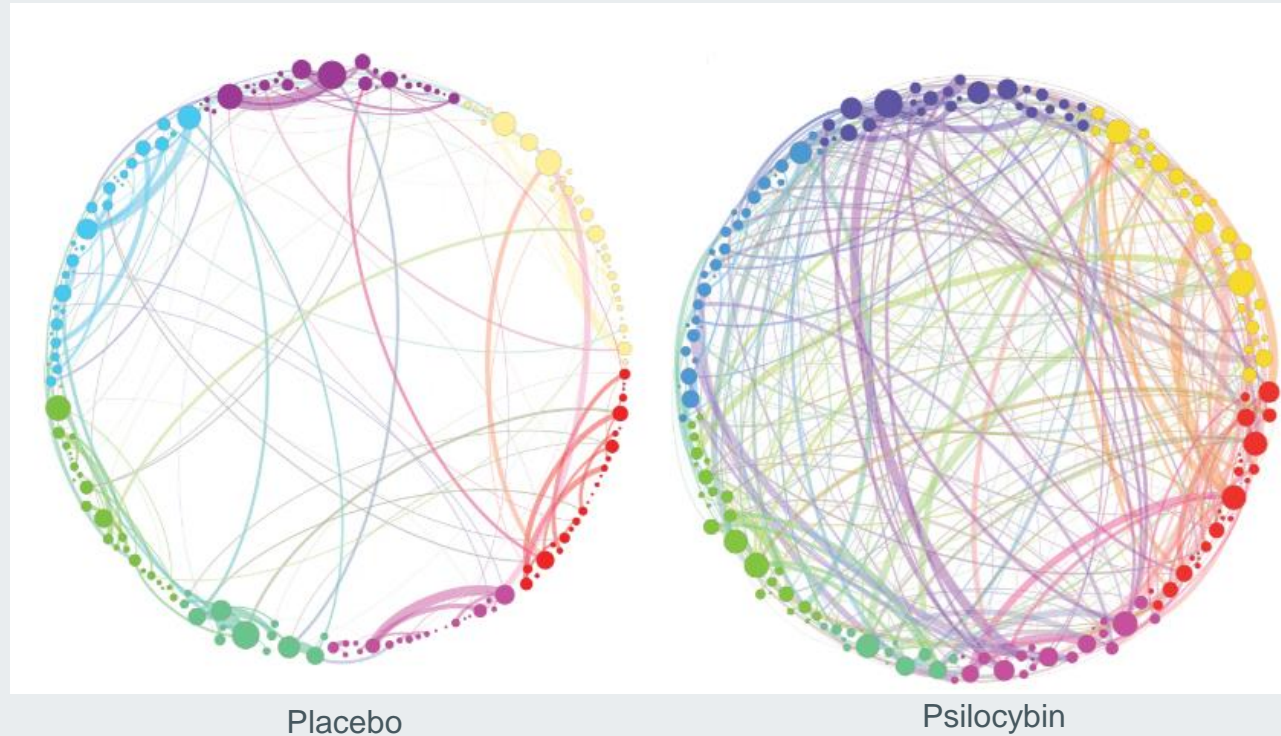
3. Downregulation of the default mode network, or DMN⁵, and de-synchronization of cortical activity as well as the emergence of new patterns of functional connectivity across the brain⁶

4. Sustained cellular changes leading to neuroplasticity⁷ and "window of opportunity" for therapy

Note: *5-HT_{2A} = 5-hydroxytryptamine 2A; DMN = default mode network; mPFC = medial prefrontal cortex

Source: 1. Halberstadt et al (2011); 2. Lopez-Gimenez et al (2018); 3. Vollenweider et al (1999); 4. Sakashita et al (2015); 5. Carhart-Harris et al (2012a); 6. Petri (2014); 7. Ly et al (2018)

Simplified visualisation of the acute changes in brain network connectivity



Brain network alterations may indicate the emergence of novel patterns of connectivity, following downregulation of the DMN

Note: Figure adapted from *Petri et al, 2014*; study analyzed fMRI (functional magnetic resonance imaging) data from healthy volunteers to compare resting-state functional brain connectivity after intravenous infusion of placebo and psilocybin

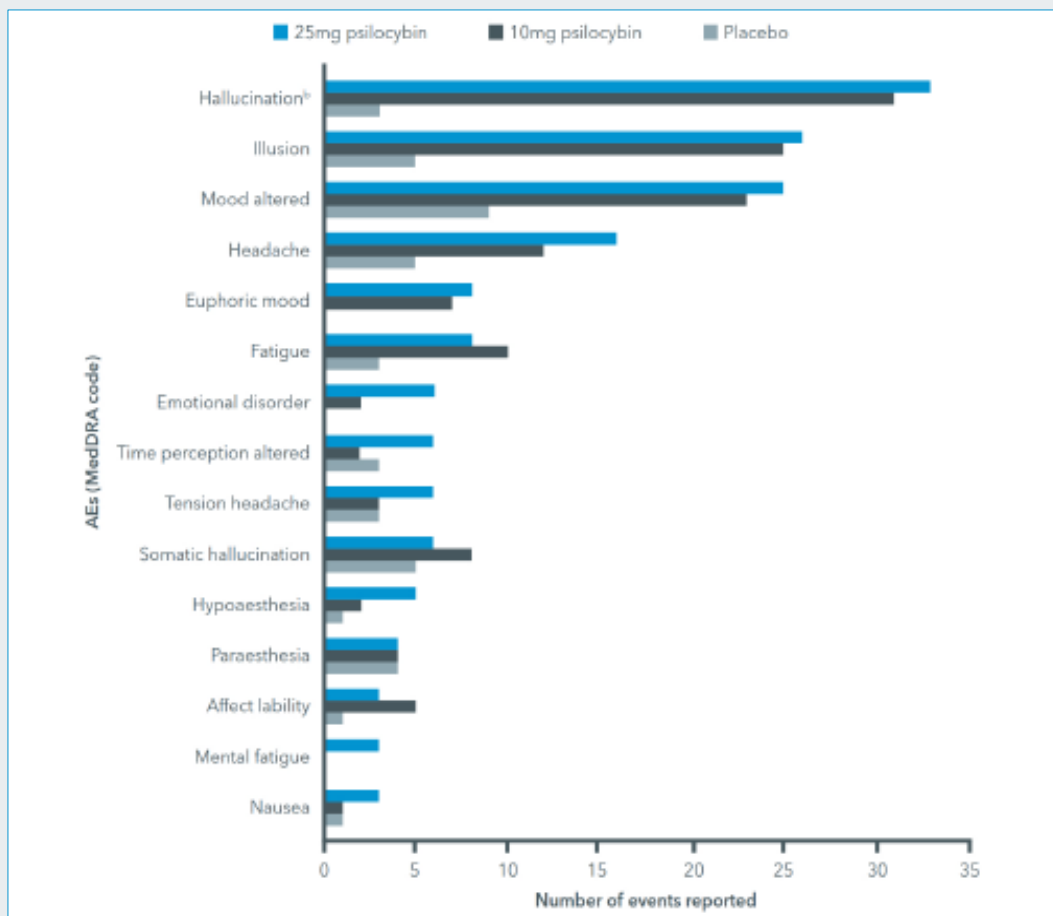
Source: Petri, 2014 - Homological scaffolds of brain functional networks

Phase I safety and feasibility trial – data published in December 2019

- Largest randomised controlled study of psilocybin completed, in 89 healthy volunteers
- COMP360 psilocybin was generally well-tolerated with no serious adverse events
- No clinically-relevant negative effects on cognitive and emotional functioning
- Feasibility of simultaneous administration to up to six people, with 1:1 support
- Clinical training for phase IIb trial therapists

COMP360 induced psychedelic experiences that correlate with therapeutic effect

Most frequently reported AEs* (MedDRA Code)^a in our phase I trial with healthy volunteers



a. Ranked by incidence in the 25mg psilocybin group

b. Includes auditory, gustatory, olfactory, tactile and visual hallucinations

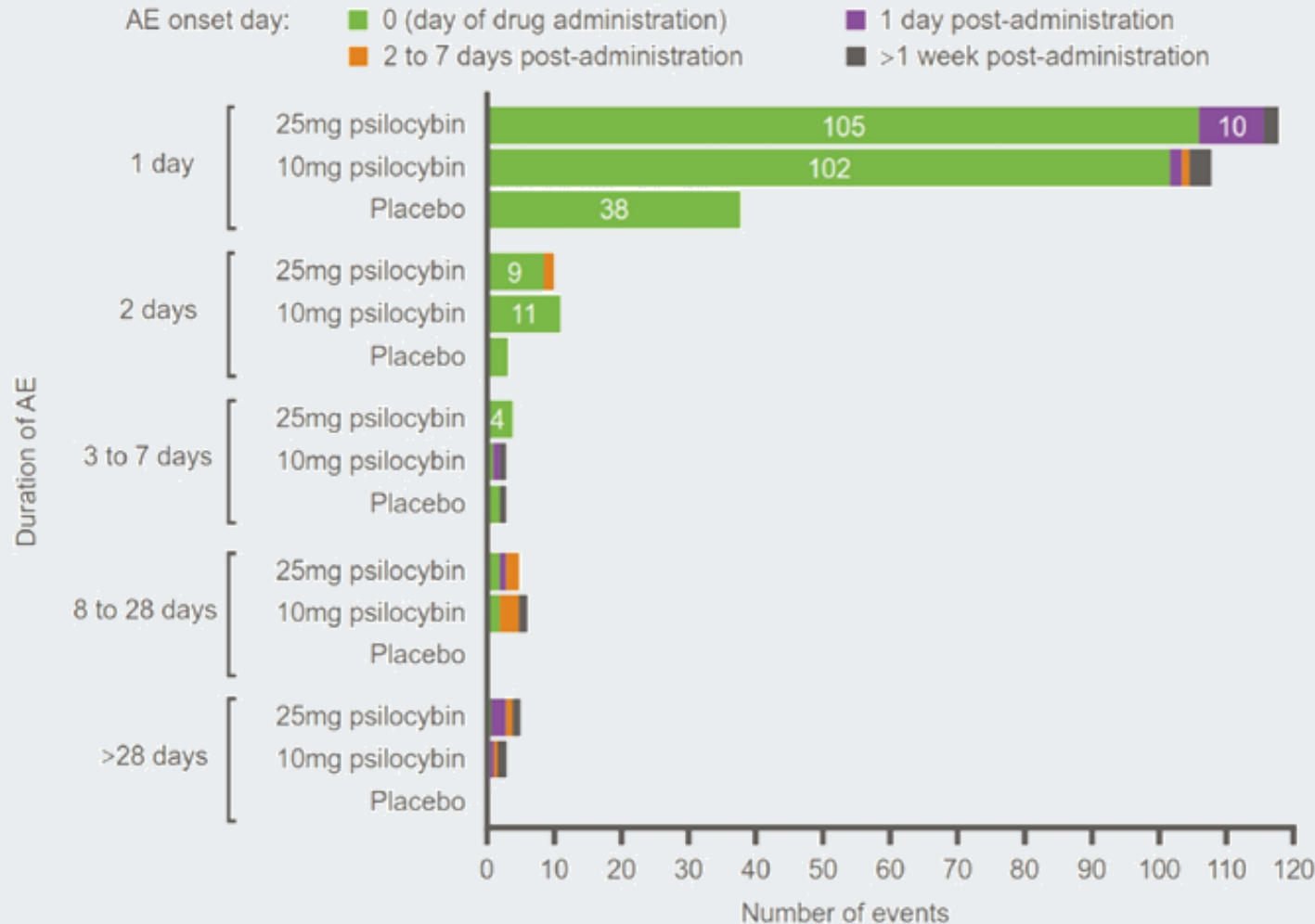
Mood altered AEs ranked by incidence in the 25mg psilocybin group

	25mg COMP360 (n=30)	10mg COMP360 (n=30)	Placebo (n=29)
Any "mood altered" AE	15 (50.0)	13 (43.3)	6 (20.7)
Introspection	7 (23.3)	5 (6.7)	1 (3.4)
Reflections	3 (10.0)	2 (6.7)	2 (6.9)
Increased empathy	2 (6.7)	3 (10.0)	0
Sense of oneness	1 (3.3)	4 (13.3)	0
Introspection/reflection	1 (3.3)	1 (3.3)	1 (3.4)
Laughter	1 (3.3)	1 (3.3)	0
New perspective	1 (3.3)	1 (3.3)	0
Awareness of importance of considering others	1 (3.3)	0	0
Clarity of thought	1 (3.3)	0	0
Contemplative state	1 (3.3)	0	1 (3.4)
Increased compassion	1 (3.3)	0	0
Increased creativity	1 (3.3)	0	0
Increased sense of connectedness	1 (3.3)	0	0
More socially upbeat	1 (3.3)	0	0
Reflections and new perspectives	1 (3.3)	0	0
Sense of oneness and connectedness	1 (3.3)	0	0
Being less judgmental	0	1 (3.3)	0
Feeling more moody/sensitive	0	1 (3.3)	0
Feeling rested	0	1 (3.3)	0
Increased wit	0	1 (3.3)	0
Reflections and new perspective on relationships and society	0	1 (3.3)	0
Sense of oneness	0	1 (3.3)	0
Calm	0	0	1 (3.4)
Feeling of adrenaline release	0	0	1 (3.4)
Negative mood	0	0	1 (3.4)
Unusual appreciation of music	0	0	1 (3.4)

Note: *AE = adverse event; MedDRA = Medical Dictionary for Regulatory Activities

Majority of adverse events resolved on day of administration, with a median duration of one day

Most frequent AEs: onset and duration by treatment arm in our phase I trial



✓ Of all AEs, 68% reported as starting and resolving on the day of administration

✓ The median duration of AEs in all treatment arms across the 12-week trial was one day

Psilocybin therapy: described by most patients in one study as being among the top five most meaningful experiences of their lives¹



Preparation

- Establish therapeutic alliance
- Demonstrate and practise self-directed inquiry and experiential processing
- Online preparation platform to remind patients what to expect and how to prepare



Psilocybin session

- Supported by therapist and assisting therapist throughout 6-8 hour session
- Room designed for non-clinical, calming atmosphere
- Specially-designed music playlist, eyeshades to help focus internally
- Patients often experience sense of connectedness, emotional breakthrough and acceptance



Integration

- Therapists help patients process the emotional and physical experiences facilitated by psilocybin
- Generate insights that can lead to cognitive and behavioural changes
- Patients often experience a sense of agency and a separation from their symptoms, and report feeling empowered to make changes in their lives

Technology applications support psilocybin therapy throughout patient journey

Preparation

Administration

Integration

Maintenance



COMPASS solutions

Patients: preparation platform

Therapists:

- Online learning platform
- Virtual training approved by FDA*

Web application



Digital partnerships

- Collection of digital phenotyping information; data will be used after the phase IIb trial to develop potential digital applications to help anticipate relapse
- AI* and NLP* (speech recognition) to characterise mechanism of change and assess therapist fidelity to our treatment protocol
- Future plans include expanding our research into additional technologies to augment and complement our therapies

Note: *AI = artificial intelligence; FDA = Food & Drug Administration; NLP = natural language processing

Phase IIb clinical trial: COMP360 psilocybin therapy for TRD

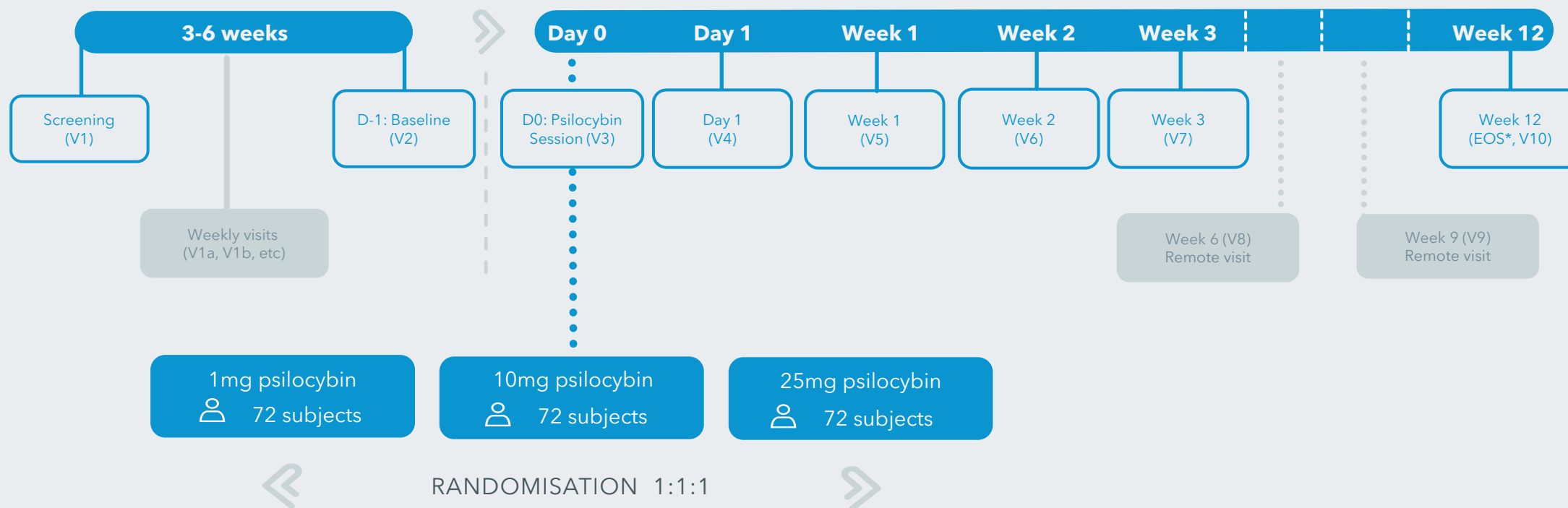
Target enrolment of 216 patients; data expected late 2021

Primary endpoint

✧ Reduction of symptoms of depression as measured by MADRS* from Baseline to 3 weeks

Secondary endpoint

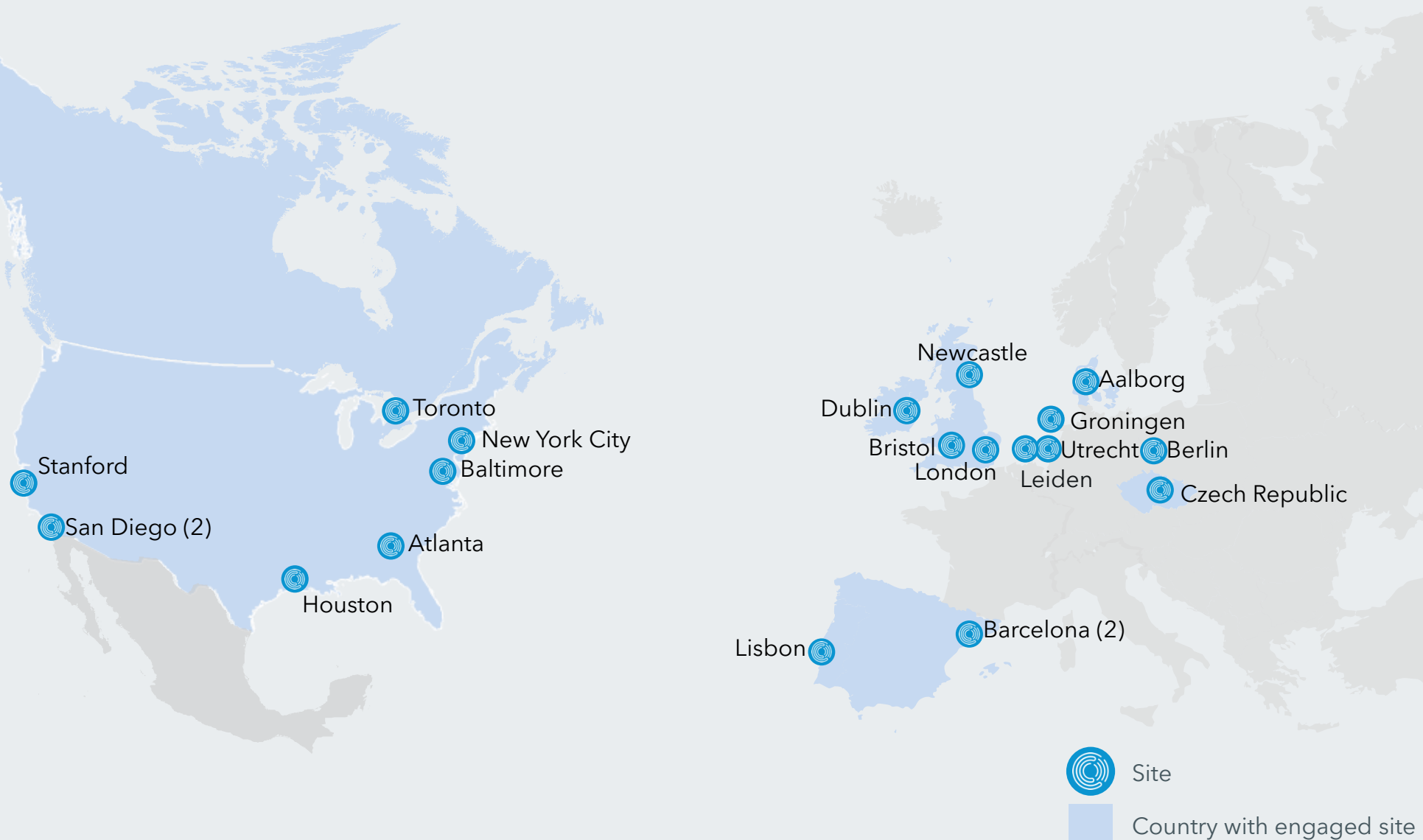
✧ Proportion of responders who maintained $\geq 50\%$ improvement in MADRS up to week 12



Note: *MADRS = Montgomery-Åsberg depression rating scale; EOS = end of study

To date, two patients have experienced suspected, unexpected serious adverse reactions (SUSARs) in our phase IIb trial for TRD patients

Sites engaged for phase IIb TRD study have the reputation and capability to recruit patients



Our clinical development programme for COMP360 psilocybin therapy in TRD

Completed clinical trial

Phase I: safety and feasibility

Completed in 2019

89 participants, King's College London

Ongoing clinical trials

Phase IIb: dose-finding study

Goal to announce results late 2021

216 patients, 21 sites in EU, US and Canada

Primary endpoint: change in MADRS

Phase II: adjunct to SSRI

Goal to complete prior to initiating phase III

Confirm COMP360 is best administered as monotherapy

Long-term follow-up study

Of participants from phase II trials

Further opportunities with COMP360

Mechanistic, preclinical and investigator-initiated studies



Mechanistic studies

- Changes in gene expression and epigenetic regulation
- Effects on affective biases
- Psychological and brain effects in healthy volunteers



Preclinical studies in other indications

- Anxiety
- Eating disorders
- Neurocognitive disorders
- Autism
- Epilepsy
- Pain
- Sleep-wake disorders



Investigator-initiated studies in other indications

- Anorexia
- Bipolar type II disorder
- Body dysmorphic disorder
- Chronic cluster headache
- Depression in cancer
- MDD*
- Severe TRD*

Imperial College
London



université
de BORDEAUX

Imperial College
London



Various CROs*



UCLA



Imperial College
London



COMPASS Drug Discovery Center



Focus on developing novel psychedelic compounds with optimized properties

- Compounds targeting 5-HT_{2A} receptor



Sponsored research agreement between COMPASS and University of the Sciences (USciences) in Philadelphia, Pennsylvania

- COMPASS joint owner (with USciences) and exclusive licensee for all new compounds generated

IP and regulatory strategy



Combine patent with regulatory strategy

COMP360 can be registered as NCE*/NAS*

- Possibility of full patent and regulatory exclusivity
- Data protection, up to
 - 8-11 years (EU)
 - 5-7.5 years (US)

Reschedule COMP360 psilocybin

- Upon approval by FDA, COMP360 psilocybin could be rescheduled by DEA



Implement patent strategy

First US patent granted in December 2019

- Claims directed to methods of treating drug-resistant depression with high-purity polymorphic crystalline psilocybin
- Petition for Post Grant Review was dismissed on merits in August 2020

European patents granted/registered

- German utility model (March 2020): covering forms of crystalline psilocybin, its use in medicine and methods of synthesis
- First UK patent (May 2020): includes two independent method of manufacture claims, and product-by-process and formulation claims
- Second UK patent (July 2020): includes claims covering crystalline psilocybin, pharmaceutical formulations, medical uses, and a method of manufacturing

Multiple related applications pending

- To expand claim scope
- To extend coverage in over 20 additional countries/regions

Three PCT applications and Taiwanese application pending

- Additional formulations, administration, therapeutic and digital supports, combination treatments, methods of treating variety additional indications
- Additional indications include: anxiety disorders, headache disorders, eating disorders, neurocognitive disorders, autism, epilepsy, inflammation, ADHD*, substance use disorders, inflammatory bowel disease, stroke, ALS*, multiple sclerosis, anti-social personality disorder, pain, sleep-wake disorders, and bipolar type II depression

Achieving broad patient access



Comprehensive and payer-relevant evidence generation plan

- Early dialogues on clinical development plan, pricing and reimbursement
- Real world evidence
- Payer-focused trials



Differentiated and modular commercial offering

- Therapist training
- Treatment center support services
- Digital solutions



Strategic partnerships with payers, health systems and clinic networks

- Centres of Excellence
- Potential franchise model

Prototype design Centre of Excellence treatment room



Prototype design Centre of Excellence post-treatment space



Financial overview

Cash and cash equivalents at 30 September 2020:

- \$196.5 million

IPO raise:

- \$146.6 million¹

Issued shares:

- 35,930,331

Covering analysts:

- Ritu Baral, Cowen
- Josh Schimmer, Evercore
- Esther Hong, Berenberg
- Sumant Kulkarni, Canaccord Genuity
- Patrick Trucchio, HC Wainwright & Co

Note:

1. IPO effective 18 September 2020; Greenshoe fully exercised

A strong and growing team



Backed by high calibre boards

Board of directors

George Goldsmith



Ekaterina Malievskaia, MD



Florian Brand



Jason Camm



Annalisa Jenkins, MBBS



Thomas Lönngren



Linda McGoldrick



Robert McQuade, PhD

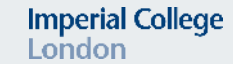


David Norton



Scientific advisory board

Prof David Nutt, MD, PhD



Gül Dölen, MD, PhD



Thomas Insel, MD



Prof Diego Pizzagalli, PhD



Prof Augustus John Rush, MD



Prof Alan Schatzberg, MD



Paul Summergrad, MD



Kirk Rutter (Patient Advisor)

Pioneering the development of a new model of psilocybin therapy

Key achievements

- ✓ \$146.6m raised in September IPO; \$80m raised in Series B
- ✓ Breakthrough Therapy designation for COMP360 in TRD
- ✓ Phase I healthy volunteers trial completed
- ✓ Phase IIb clinical trial making steady progress
- ✓ Patent awards in US, UK, Germany
- ✓ Experienced leadership team, board of directors, scientific advisory board; leadership team and board strengthened with recent hires
- ✓ Preclinical studies in new indications; Discovery Center launched
- ✓ Additional trials underway in TRD programme
- ✓ FDA approved request for 1:1 therapist patient ratio and online therapist training
- ✓ Aquilino Cancer Center launched psilocybin therapy study with simultaneous administration and 1:1 therapist support

2021 anticipated milestones

- ✓ Established first Centre of Excellence
- Phase IIb trial: data expected late 2021
- Further senior appointments
- Further partnerships and collaborations
- Data published from IISs using COMP360
- Expand current IP portfolio with additional patent grants
- Evolve data strategy

“

*I had such instant relief I could
make up my mind about things ...
it lifted the fog of depression.
The way I felt after, I have not felt
with any medicine or therapy ...
I forgot what depression was.*

”

Quote from participant in Imperial College London psilocybin therapy study conducted by Carhart-Harris et al, 2016; image is representative and not of a patient



Stephen Schultz
SVP, Investor Relations
stephen.schultz@compasspathways.com
+1 401-290-7324

