

## **Breakthrough Therapies for Veteran Mental Health and Suicide Prevention**

When it comes to Veteran mental health and suicide prevention, our nation has fallen woefully short of its moral obligation to care for those who selflessly served in our military. We lose around **40 Veterans** every day to suicide or other forms of self-injury. Combat Veterans are not only more likely to have suicidal ideation, often associated with post-traumatic stress disorder (PTSD) and depression, but they are more likely to act on a suicidal plan. Further, Veterans with comorbid major depressive disorder and PTSD are more than twice as likely as those with PTSD only to have attempted suicide.

Fortunately, in recent years, studies from premier academic institutions across the globe have found that MDMA (an entactogen) and psilocybin (a classic psychedelic) – used as an adjunct to psychotherapy – offer rapid and robust improvement in treating these serious psychiatric conditions. Indeed, due to the incredible results achieved in well-controlled clinical trials, the U.S. Food and Drug Administration (FDA) granted a **Breakthrough Therapy Designation** to MDMA for the treatment of PTSD (2017) and to *two different* psilocybin therapies, one for treatment-resistant depression in 2018, and a second for major depressive disorder in 2019. The Breakthrough Therapy designation is a process designed to expedite the development and review of drugs where *preliminary clinical evidence has indicated that the drug may demonstrate substantial improvement over available therapies.*

### **Research Findings**

#### *MDMA-Assisted Therapy (“MDMA-AT”)*

- The first FDA Phase 3 trial using MDMA to treat PTSD found that after three MDMA-AT sessions, **67% of participants no longer qualified for a PTSD diagnosis, and 88% experienced a clinically significant reduction in symptoms.** A second Phase 3 trial, soon to be published, reportedly found similarly impressive results.
- Long-term follow-up (LTFU) outcomes of trials investigating MDMA-AT for treating PTSD showed that the percentage of **participants that no longer qualified for PTSD diagnoses increased from 56% to 67%** between treatment exit and follow-up over a year later, suggesting this therapy has not only persistent but compounding effects.
- As conducted in the Phase 3 trial, compared to the standard of care for 1,000 patients, MDMA-AT generates discounted net healthcare savings of **\$132.9 million over 30 years**, accruing 4,856 quality-adjusted life years, and averting 61.4 premature deaths.

#### *Psilocybin-AT*

- A Phase 2 trial assessing the effect of psilocybin therapy for patients with cancer and major depression disorder (MDD) found a **sustained reduction in 80% of patients and full remission in 50% of patients** with depressive symptoms.
- Multiple studies found **at least 70% of participants** with cancer-related psychiatric distress showed clinically significant reductions in symptoms following two psilocybin-AT sessions.
- A Phase 2 trial found psilocybin was efficacious in treating MDD, with a **clinically significant response in 71% of participants and remission from depression in 54%** at four weeks post treatment.

### **Why These Therapies Have Unique Potential to Combat Mental Health Disorders and Prevent Suicide**

- **Addressing the “Root Cause” and Breaking Rigid Patterns:** MDMA and psilocybin are often described as triggering a “rewiring of the brain,” which is believed to occur by inducing neuroplasticity at the cellular and network levels, allowing the brain to form and reorganize or repair neuronal connections. This “rewiring,” particularly when paired with psychotherapy, can help produce durable changes in symptoms, behavior, and functioning which may occur via reductions in experiential avoidance and heightened psychological flexibility.
- **Rapid Acting Effects:** Unlike SSRIs, which are slow-acting antidepressants that can take weeks to months for any potential (and uncertain) benefit, MDMA and psilocybin are rapid acting antidepressants that can produce both an immediate and durable clinical reduction in symptoms.
- **Transdiagnostic Treatment Potential:** MDMA and psilocybin show preliminary efficacy in treating numerous psychiatric conditions, including PTSD for Veterans, major depression and anxiety, treatment-resistant depression, substance use disorders, and eating disorders.