INTRODUCTION
Following a terminal diagnosis, individuals can experience a wide range of psychological distress with depression as the most common psychiatric diagnosis. Depression is commonly not recognized in terminal illness (TI) patients because of its overlap with grief. Psilocybin may decrease symptoms of depression and anxiety in the context of cancer-related psychiatric distress for at least six months following a single acute administration.

DEPRESSION
- Depression can increase physical symptoms such as pain, interfere with treatment adherence, and shorten survival in some illnesses.
- Individuals with a TI and depression are 4.1 times higher to request for euthanasia compared to individuals without depression and a TI.
- 13% of palliative care patients have a diagnosis of major depression, and 44% had a diagnosis of depression, dysthymia, and other depressive disorders.
- It is estimated that untreated depression, a chronic illness, may increase the cost of care by 50%.
- Traditional SSRIs take several weeks for effective results.

SCREENING DEPRESSION
- Grief is a universal, highly personalized response to loss and is an expected part of living with a terminal diagnosis. Depression shares some common features with grief but are distinctly different.
- Depression includes feelings of pervasive hopelessness, helplessness, worthlessness, guilt, lack of pleasure and suicidal ideation, which distinguish depression from grief.
- Due to overlap in symptoms, many providers do not take the time to distinguish between grief and depression.

PSilocybin
- Psilocybin is a naturally occurring substance and has been used by humans for religious and spiritual ceremonies for many millennia.
- Serotonergic drugs interact with serotonin receptors (5-HT2A, 5-HT2C, 5-HT1A, 5-HT3, and 5-HT7) and the corresponding subtypes densely localized in the brain and various other organs.
- These receptors mediate emotions and moods such as anxiety and aggression, cognition, sex, learning, memory, appetite, and other biological, neurological, and neuropsychiatric processes.

Carhart-Harris et al.
- Double-blind, randomized control trial involving patients with long-standing moderate to severe major depressive disorder and the intervention of psilocybin compared to escitalopram.
- Decrease in depressive scores of 70% among the psilocybin group and 48% in the escitalopram group at six weeks.
- Remission scores were met in 57% of the psilocybin group and 28% in the escitalopram group post six weeks.

Griffiths et al.
- Blind control study of 51 participants with a life-threatening diagnosis of depression.
- Groups were given either low or high first-doses of psilocybin. Sessions were accompanied by a psychologist.
- Five weeks after session one, 92% of the high-dose participants showed clinically significant responses compared to 32% of the low-dose first group.
- At six-month follow-up, 80% of participants continuing to show clinically significant decreases in depressed mood and anxiety.

SIDE EFFECTS
- Anxiety (17%)
- Psychologic Discomfort (7%)
- Elevation in BP & HR (75%)
- Nausea & Vomiting (14%)
- Headache (28%)
- Elevation in BP & HR (67%)
- Nausea & Vomiting (17%)
- Headache (72%)

Psychologic Discomfort (20%)
- Anxiety (24%)
- Elevation in BP & HR (59%)
- Nausea & Vomiting (15%)
- Headache (11%)

Griffiths et al.
- 1mg or 2mg/70kg psilocybin

CONCLUSION
- Effectively treating depression can lead to less physical suffering, optimal communication with family, providers, and prolong the remaining quality of life.
- Psilocybin shows promising and even favorable results and side effects profiles for individuals with depression following a terminal diagnosis.
- Providers must be adequately educated on the safety and effectiveness of psilocybin to change the stigma surrounding its use from an illegal substance to a power tool in medicine.