

## **SELECTIVE SEROTONIN 2A/2C RECEPTOR INVERSE AGONISTS AS THERAPEUTICS FOR NEURODEGENERATIVE DISEASES**

### **ABSTRACT**

Behavioral pharmacological data with the compound of formula (I), a novel and selective 5HT<sub>2A/2C</sub> receptor inverse agonist, demonstrate in vivo efficacy in models of psychosis and dyskinesias. This includes activity in reversing MK-801 induced locomotor behaviours, suggesting that this compound may be an efficacious anti-psychotic, and activity in an MPTP primate model of dyskinesias, suggesting efficacy as an anti-dyskinesia agent. These data support the hypothesis that 5HT<sub>2A/2C</sub> receptor inverse agonism may confer antipsychotic and anti-dyskinetic efficacy in humans, and indicate a use of the compound of formula (I) and related agents as novel therapeutics for Parkinson's Disease, related human neurodegenerative diseases, and psychosis.

Figure 3