

## P01-124

### RILUZOLE FOR AFFECTIVE AND BEHAVIORAL DISTURBANCE IN AUTISM

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**Objective:** This paper reviews the novel usage of riluzole, an antiglutamatergic and neuroprotective agent, for affective and behavioral stabilization in autism.

**Method:** A review of the English-language literature on riluzole usage for pediatric and adult psychopathology, combined with the author's experience with two autistic patients who demonstrated prominent affective stabilization and reduction in self-injury with riluzole.

**Results:** Riluzole was developed for usage in amyotrophic lateral sclerosis, and is the only drug to slow the progression of this devastating neurological disease. Riluzole inhibits release of glutamate, the primary excitatory amino acid in the brain, and enhances GABA-A receptor function. Riluzole has demonstrated efficacy in open-label trials of adult unipolar and bipolar depression as well as pediatric and adult obsessive-compulsive disorder. Case reports have additionally documented benefit in trichotillomania and self-injury. There is not yet published literature on riluzole usage in autism, but the following cases are presented:

Pt 1: A 20 year-old male with autism, depression with suicidality and self-injury who demonstrated a partial response to electroconvulsive therapy and traditional adjunctive psychopharmacology. Riluzole addition provided sustained remission of residual symptoms.

Pt 2: A 9 year-old male with autism, cyclical mood disturbance and extreme self-injury towards the head requiring extensive protective equipment for safety. Riluzole conferred both affective stabilization and prominent reduction in self-injury.

**Conclusion:** Riluzole is a new psychopharmacological agent. Efficacy has been demonstrated for mood and anxiety disorders in the typically-developing population. Similar positive benefit may be seen for psychopathology in autism, and merits further investigation.