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### Introduction

The behavioral phenotype of subjects with Prader Willi Syndrome (PWS) is characterized by tantrums, stubbornness, oppositional and manipulative behavior, obsessive-compulsive characteristics, emotional lability, aggression, low tolerance to frustration, impatience, impulsiveness, withdrawal, and difficulties in competencies social and interpersonal relationships. Atypical antipsychotic drugs have revolutionized the treatment of schizophrenia and related disorders; being aripiprazole among these. Previous studies suggested that aripiprazole might be a promising treatment of PWS patients with psychosis.

### Methods

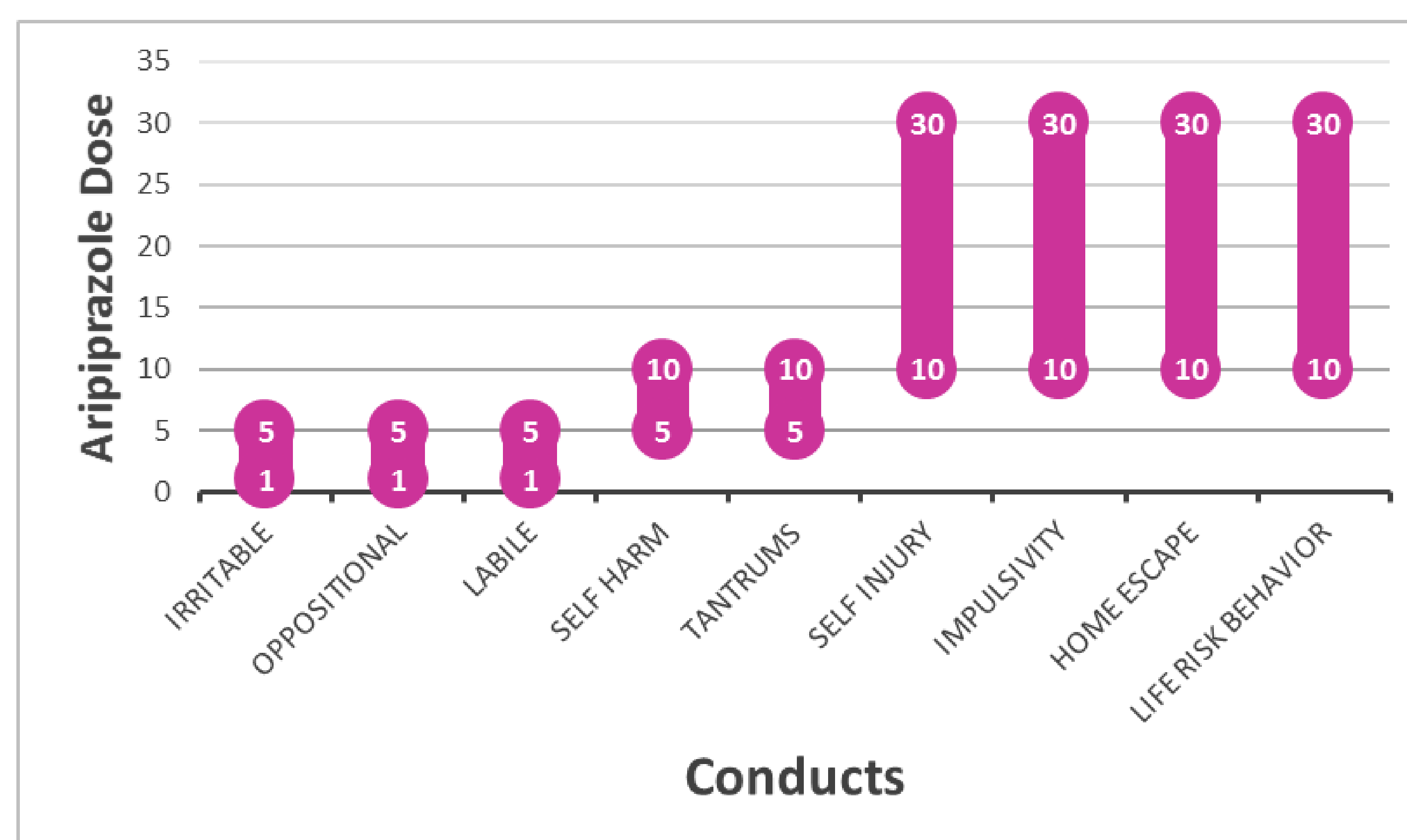
This is a non-experimental, descriptive, longitudinal design study. The study population comprised individuals with PWS who attend transdisciplinary treatment at the SPINE (Socio-Psycho-Immuno-Neuroendocrinology) Foundation. Final sample was composed of 11 people with PWS, between 10 and 40 years. Half of the patients had previous indication of Aripiprazole, and half of the sample received this pharmacological indication while they assisted to treatment at SPINE Foundation. Aripiprazole is an atypical antipsychotic of third generation that reduces the adverse effects on the metabolism. Most of the patient regularly attended to transdisciplinary treatment at the SPINE Socio-Psycho-Immuno-Neuroendocrinology Foundation.

### Results

A total of 11 patients between 10 and 40 years who attend or have attended transdisciplinary treatment at the SPINE foundation, medicated with Aripiprazole, showing lack of favorable therapeutic response to this antipsychotic. On the basis of the evaluation of the mental health department of the SPINE Foundation, pharmacological activation effects related to aripiprazole were registered in all patients.

### Results (cont)

The typical behavioral phenotype of subjects with PWS including irritability, opposition, affective lability, impulsiveness, aggressiveness, and low tolerance to frustration, were significantly exacerbated upon treatment onset with aripiprazole. Patients who started at low dosage (1 to 5 mg/d) were more irritable, oppositional, labile and promoting crisis. Those patients with medium doses (between 5 to 10mg/d) increase self harms and tantrums. When the dose was increased to 10 mg/d or higher (some patients received up to 20 or 30 mg/d), serious behavioral episodes were documented, including disorganization, aggressiveness, self-injury, impulsivity with behaviors like home escape and other life risk behavior. We identified a direct relationship between the medication dose and adverse behaviors.



### Conclusions

In this study, Aripiprazole was related to exaggerated pharmacological activation effects in subjects with PWS. Further studies are required to confirm this hypothesis in order to improve and anticipate the therapeutic approach of subjects with PWS and their families.

Undoubtedly, a transdisciplinary approach was of the utmost importance in order to be able to assess the behavioral aspects of these patients among the different disciplines involved.

#### References:

- Arberas, et al., 2005; Dykens, 2004; Dykens, et al., 1996; Dykens, & Rosner, 1999; Rosner, et al., 2004; Travieso Tellez, et al., 2014.
- Sinnema, Boer, Collin, Maaskant, van Roozendaal, Schrandt-Stumpel & Curfs, 2011.
- Shapiro, Renock, Arrington, Chiodo, Liu, Sibley, ... & Mailman, 2003; Benabarre, Campos, Russo, Cerveri, Prestia, González, ... & Gutiérrez-Rojas, 2018
- Briegel, 2018; Akça & Yilmaz, 2016.