

The Effect of Concomitant Antipsychotic Use on Tardive Dyskinesia Outcomes in Patients Taking INGREZZA® (valbenazine) Capsules

Thank you for contacting Neurocrine Biosciences with your unsolicited Medical Information request regarding the effect of concomitant antipsychotic use on tardive dyskinesia (TD) outcomes in patients taking INGREZZA® (valbenazine) capsules.

INGREZZA is a vesicular monoamine transporter 2 (VMAT2) inhibitor indicated for the treatment of adults with tardive dyskinesia.¹

Data were pooled from two long-term valbenazine clinical trials (2 Phase 3 studies: KINECT 3 Long-Term Extension [NCT02274558] and KINECT 4 [NCT02405091]) to evaluate the effect of antipsychotic use on TD outcomes. During the study, participants were allowed to remain on stable doses of concomitant antipsychotic medications to treat psychiatric disorders. The mean change from baseline to Week 48 and Week 52 in the Abnormal Involuntary Movement Scale (AIMS) total score was used to evaluate TD improvement. Interpretation of this post-hoc analysis may be limited due to small sample size.²

The pooled population (n=304) included 267 (87.8%) who were taking an antipsychotic and 37 (12.2%) participants who were not taking an antipsychotic at baseline (**Table 1**).²

Table 1. Concomitant Antipsychotics Use^a

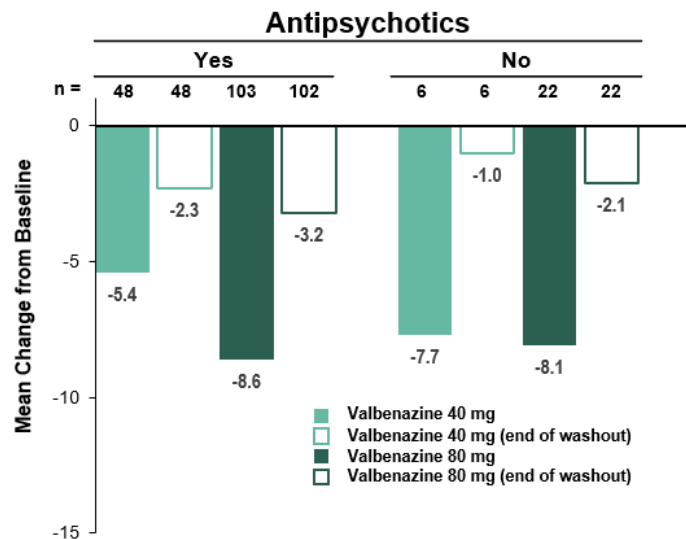
	Valbenazine 40 mg n=107	Valbenazine 80 mg n=197	All N=304
Any antipsychotic, n (%)^b	98 (91.6)	169 (85.8)	267 (87.8)
Quetiapine	29 (27.1)	50 (25.4)	79 (26.0)
Risperidone	19 (17.8)	32 (16.2)	51 (16.8)
Aripiprazole	14 (13.1)	28 (14.2)	42 (13.8)
Olanzapine	17 (15.9)	24 (12.2)	41 (13.5)
Haloperidol	14 (13.1)	20 (10.2)	34 (11.2)
Ziprasidone	6 (5.6)	13 (6.6)	19 (6.3)

^aAt baseline or at any time during the study

^bCommon medications, as reported in ≥5% of all participants, are listed.

Sustained TD improvements were found at Week 48 in the pooled population, as indicated by mean AIMS change from baseline in patients taking concomitant antipsychotics (**Figure 1**). At Week 52 (after 4-week washout), mean AIMS scores generally reverted towards baseline levels.²

Figure 1. AIMS Total Score Mean Changes from Baseline to Week 48 & Week 52



AIMS, Abnormal Involuntary Movement Scale

Adverse reactions that occurred in the three placebo-controlled studies of 6-week duration reported at an incidence of >2% and greater than placebo are presented in **Table 2**.¹

Table 2. Adverse Reactions in 3 Placebo-Controlled Studies of 6-week Treatment Duration Reported at $\geq 2\%$ and >Placebo

Adverse Reactions, %	Valbenazine (n=262)	Placebo (n=183)
Somnolence	10.9	4.2
Anticholinergic effects	5.4	4.9
Balance disorders/falls	4.1	2.2
Headache	3.4	2.7
Akathisia	2.7	0.5
Vomiting	2.6	0.6
Nausea	2.3	2.1
Arthralgia	2.3	0.5

For a more complete description of this analysis, please see attached data presentation from the 2019 Annual Meeting of the American Academy of Neurology by Comella C, et al.

References:

1. INGREZZA [package insert]. San Diego, CA: Neurocrine Biosciences, Inc.
2. Comella C, et al. Effects of concomitant medication use on tardive dyskinesia outcomes in long-term valbenazine trials. Poster presented at the 2019 Annual Meeting of the American Academy of Neurology; May 4-10, 2019; Philadelphia, PA.

Enclosures:

- A. INGREZZA [package insert]. San Diego, CA: Neurocrine Biosciences, Inc.
- B. Comella C, et al. Effects of concomitant medication use on tardive dyskinesia outcomes in long-term valbenazine trials. Poster presented at the 2019 Annual Meeting of the American Academy of Neurology; May 4-10, 2019; Philadelphia, PA.