# Clinically Meaningful Long-Term Improvements With Valbenazine 40 mg in Adults With Tardive Dyskinesia

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## **ABSTRACT DESCRIPTION**

Valbenazine, available in 3 once-daily doses (40, 60, and 80 mg) and 2 formulations (capsule, sprinkle capsule), is approved for tardive dyskinesia (TD) and Huntington's disease (HD) chorea. Data from 3 long-term TD studies, which included patients who took valbenazine for >2 years, indicate substantial improvements with valbenazine 40 mg.

## INTRODUCTION

- TD is a persistent and often debilitating hyperkinetic movement disorder associated with prolonged exposure to antipsychotics<sup>1</sup>
- Once-daily valbenazine, approved for the treatment of TD and chorea associated with HD, is available in 3 doses (40 mg, 60 mg, and 80 mg) and 2 formulations (capsule and sprinkle capsule)<sup>2</sup>
- For TD patients starting valbenazine, treatment with 40 mg is recommended for the first week, after which patients can remain on 40 mg or increase to 60 or 80 mg
- In the 6-week, double-blind, placebo-controlled phase of KINECT® 3 (K3, NCT02274558), a significantly greater mean improvement in the Abnormal Involuntary Movement Scale (AIMS) total score (sum of items 1-7) was found with valbenazine 80 mg versus placebo (the primary endpoint)<sup>3</sup>; treatment with valbenazine 40 mg also showed greater improvement in AIMS total score compared with placebo (nominal *P*<0.05 per fixed-sequence testing procedure)
- The long-term effects of once-daily valbenazine (40 and 80 mg) have been assessed in two phase 3 studies (K3 extension and KINECT® 4 [K4, NCT02405091]) in which participants received up to 48 weeks of treatment<sup>4,5</sup> and in a rollover study (1506, NCT02736955) in which completers from prior valbenazine studies received additional treatment<sup>6</sup>
- In K4, a mean 10-point improvement was found at end of the 48-week treatment period<sup>5</sup>
- To assess the long-term effectiveness of the lowest approved dose (40 mg) in patients with TD, pooled AIMS and Clinical Global Impression of Change-Tardive Dyskinesia (CGI-TD) data from K3 and K4, as well as Clinical Global Impression of Severity-Tardive Dyskinesia (CGIS-TD) data from 1506, were analyzed post hoc in participants who received valbenazine 40 mg or had a dose reduction from 80 to 40 mg

### **OBJECTIVES**

- Recognize that all 3 available doses of valbenazine (40, 60, and 80 mg once-daily) can be safe and effective
- Communicate to patients that valbenazine 40 mg is an effective dose and that reduction to 40 mg can be tried if they are unable to tolerate a higher dose (60 or 80 mg)

### **METHODS**

- Data from 3 long-term valbenazine studies were analyzed (Figure 1)
- Few participants in 1506 had reached Week 60 (n=4) and none reached the final planned visit (Week 72) when the study was terminated due to commercial availability of valbenazine
- Analyses focused on valbenazine 40 mg in 2 populations:
  - K3/K4: participants who received valbenazine 40 mg throughout K3 or K4 (40 mg group) or had a dose reduction from 80 mg to 40 mg during K3 extension or after Week 4 in K4 (80/40 mg group)
- 1506: participants who received valbenazine 40 mg from beginning of K3 or K4 to their last study visit in 1506 (40 mg group) or had a dose reduction during K3 extension after Week 4 in K4 or after Week 4 in 1506 (80/40 mg group)
- Participants who initially received placebo in K3 were not included in either population

#### Week 6 Week 48 Week 52 Baseline KINECT 3 (NCT02274558) Drug-Free DBPC Washout DB Extension (N=198) VBZ 40 mg VBZ 40 mg VBZ 80 mg VBZ 80 mg<sup>a</sup> Placebo VBZ 40 or 80 mg<sup>a</sup> Variable VBZ-Free Period Drug-Free (0-324 days) KINECT 4 (NCT02405091) Open-Label (N=167) VBZ 40 mg VBZ 40 mg (4 weeks) VBZ 80 mg<sup>a</sup>

**Figure 1. Study Designs** 

<sup>a</sup>Participants could have a dose reduction from 80 mg to 40 mg based on tolerability. DB, double-blind; DBPC, double-blind placebo-controlled; VBZ, valbenazine



- The following outcomes were assessed at Week 48 for the K3/K4 population:
- Percentage of participants who met the protocol-defined AIMS response threshold ( $\geq$ 50% total score improvement from baseline); scored by blinded central video raters (K3) or site raters (K4)
- Percentage of participants who had a CGI-TD score of 1 ("very much improved") or 2 ("much improved")
- In addition, the percentage of participants who had a CGIS-TD score of 1 ("normal/not at all ill") or 2 ("borderline ill") was assessed by study visit in the 1506 population

### RESULTS

A majority of participants in the K3/K4 population met the  $\geq$ 50% AIMS response threshold or had a CGI-TD score  $\leq 2$  at Week 48 (Figure 2)

### Figure 2. Participants With ≥50% AIMS Response or CGI-TD Score ≤2 ("Very Much Improved" or "Much Improved") at Week 48 (K3/K4 **Population**)



- In the 1506 population, a majority of participants who had received valbenazine 40 mg throughout their prior study (K3 or K4) and continued to receive valbenazine 40 mg in 1506 had a CGIS-TD score  $\leq 2$  during 1506 (**Figure 3**)
- At time of study termination (due to commercial availability of valbenazine), few participants in the 40 mg group had reached the Week 48 visit and none had reached Week 60





## REFERENCES

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### Figure 3. Participants With CGIS-TD Score ≤2 ("Normal/ Not at all III" or "Borderline III") by Study Visit (1506 Population)



## CONCLUSIONS

- Results from published long-term studies demonstrated clinically meaningful improvements in TD with valbenazine 40 mg
- Dose reductions from 80 to 40 mg did not appear to reduce long-term benefit
- Patients can be educated that valbenazine 40 mg is an effective dose, and reduction to 40 mg can be offered based on clinician judgment

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