Chorea in Huntington Disease
Fact Sheet

OVERVIEW

Huntington disease (HD) is a hereditary progressive neurodegenerative disorder, in which neurons within the brain break down, resulting in motor, cognitive and psychiatric symptoms.[1,2]

HD usually causes movement, cognitive and psychiatric disorders with a wide spectrum of signs and symptoms.[3] Symptoms generally appear between the ages of 30 to 50 and worsen over a 10-to 25-year period.[4] HD is estimated to affect approximately 30,000 adults in the United States, with more than 200,000 at risk of inheriting the disease.[2]

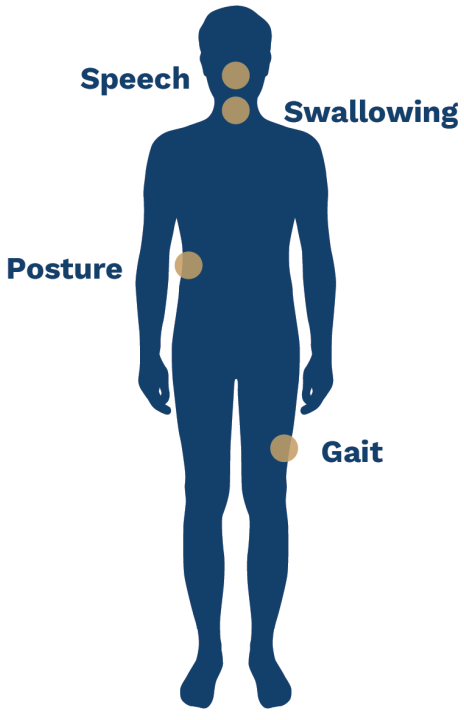
Huntington Disease FAST FACTS

- **HD affects approximately 30,000 adults in the U.S.**[2]
- **~90% of the approximate 30,000 adults with HD in the U.S. also have chorea**[2,5]

Many people with HD experience chorea, a troublesome involuntary movement disorder.[1]

Chorea in HD

- People with chorea develop abnormal, abrupt or irregular movements that can involve various parts of the body.[1]
- Chorea can interfere with one's speech, swallowing, posture and gait.[1,2] Chorea can make it difficult, and in some cases impossible, for a person to perform what may seem like the most mundane activities of daily life, such as speaking, eating or taking a shower.[6]
- Some people have reported facing a social stigma; both physical and psychological aspects of chorea symptoms may make them experience low confidence and restrict them from participating in social or leisure activities.[7]
- Current treatments available for chorea are associated with increased risk of depression and suicidality.[2]



VALBENAZINE OVERVIEW

To address the unmet medical needs of people suffering from hyperkinetic movement disorders, Neurocrine Biosciences developed valbenazine.*

Valbenazine is an investigational treatment for chorea in patients with HD and not approved in the U.S. Valbenazine is a selective, potent, orally active vesicular monoamine transporter 2 (VMAT2) inhibitor believed to cause reversible reduction of dopamine release by selectively inhibiting VMAT2, a transporter which plays a key role in dopamine signaling.

Neurocrine Biosciences has designed this novel compound to provide sustained plasma and brain concentrations of the active drug to allow for once-daily dosing.

* Valbenazine has been approved by the U.S. Food and Drug Administration in April 2017 for the treatment of adults with tardive dyskinesia.

Neurocrine Biosciences is conducting a Phase III clinical study to investigate the use of valbenazine for the treatment of chorea in people with HD.

KINECT-HD STUDY OVERVIEW

The KINECT-HD study, conducted in collaboration with the Huntington Study Group, is a multi-center randomized, double-blind, placebo-controlled Phase III study to evaluate the efficacy, safety and tolerability of valbenazine for the treatment of chorea in people with HD.[8] For more information on this Phase III study of valbenazine for the treatment of chorea in HD, please visit HuntingtonStudyGroup.org or clinicaltrials.gov.

KINECT HD

References:

1. Kumar H, Jog M. Missing Huntington's disease for tardive dyskinesia: a preventable error. Can J Neurol Sci. 2011;38:762-764 **2.** Frank S. Treatment of Huntington's disease. Neurotherapeutics. 2014;11(1):153-160. doi: 10.1007/s13311-013-0244-z **3.** Mayo Clinic. Huntington's disease. Accessed on January 7, 2021. https://www.mayoclinic.org/diseases-conditions/huntingtons-disease/symptoms-causes/syc-20356117 **4.** Huntington's Disease Society of America. Overview of Huntington's disease. Accessed January 14, 2021. https://hdsa.org/what-is-hd/overview-of-huntingtons-disease **5.** Caron NS, Wright GEB, Hayden MR. Huntington disease. In: Adam MP, Ardinger HH, Pagon RA, et al, eds. GeneReviews®. University of Washington, Seattle; 1993-2020. Updated June 11, 2020. https://www.ncbi.nlm.nih.gov/books/NBK1305 **6.** Cleveland Clinic. What is chorea? Accessed on March 22, 2021. https://my.clevelandclinic.org/health/diseases/21192-chorea **7.** Thorley EM, Iyer RG, Wicks P, et al. Understanding how chorea affects health-related quality of life in Huntington disease: an online survey of patients and caregivers in the United States. Patient. 2018;11(5):547-559. doi:10.1007/s40271-018-0312-x **8.** Clinicaltrials.gov. Efficacy, safety, and tolerability of valbenazine for the treatment of chorea associated with Huntington disease (KINECT-HD). Accessed on January 7, 2021. https://clinicaltrials.gov/ct2/show/NCT04102579

Neurocrine BIOSCIENCES