

Pharmaceutical Firm Biogen and Correspondence Related to the Applications of Aduhelm with Adults with Down Syndrome Diagnosed with MCI or Early-Stage Alzheimer's Disease

1. Biogen's commentary on the application of Aduhelm to people with Down syndrome (provided in response to a query by the NTG) (June 24, 2021)

In informal correspondence with Dr. Seth Keller, co-President of the NTG, Biogen's representative noted that Aducanumab has not been studied in patients with Down Syndrome associated Alzheimer's disease (DS-AD), and there are no data on the efficacy and safety in this special population. ADUHELM has been approved under accelerated approval for the treatment of Alzheimer's disease (AD) based on reduction in amyloid beta plaques observed in patients treated with aducanumab. Continued approval for this indication may be contingent upon verification of clinical benefit in confirmatory trial(s).

Biogen has been involved with the research community in discussions around the supplemental evidence needed in DS-AD should a drug be approved for sporadic AD (most recently in the Critical Path Innovation Meeting (CPIM) organized by the Lumind IDSC Foundation)

Biogen welcomes input from experts in DS-AD as well as from the FDA and other Regulatory Agencies to advance research and potential treatments for people with DS-AD

2. Biogen Medical Information Notice RE ADUHELM™ (aducanumab-avwa): Use in Persons with Down Syndrome (Trisomy 21) (August 4, 2021)

Biogen's notice is offered as an educational resource for healthcare providers in response to an unsolicited request by Dr. Seth Keller, co-President of the NTG. The notice indicates that *aducanumab-avwa* has not been studied in persons with Down Syndrome associated Alzheimer's disease (DS AD), and that there are no data on the efficacy and safety in this population. The notice cites the work of Cummings et al (2021)* which acknowledges as that there are many differences between Down syndrome and late onset AD and as such, it is recommended against treating persons with Down syndrome with aducanumab-avwa until more data are available. According to Cummings et al., persons with Down syndrome may eventually become eligible for treatment after additional studies have been conducted and additional data are accrued for this group of individuals. It also cites various sources, including the NTG, recommending the generation of more applicability and use protocols.

* Cummings J, Aisen P, Apostolova LG, Atri A, Salloway S, Weiner M. Aducanumab: Appropriate Use Recommendations. *J Prev Alzheimers Dis.* 2021;8(4):398-410. doi: 10.14283/jpad.2021.41.