Update on Phase 3 Clinical Trials of Lanabecestat for Alzheimer's Disease

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Independent data monitoring committee advises lanabecestat is unlikely to meet primary endpoints, leading to decision to discontinue these trials

INDIANAPOLIS, June 12, 2018 /PRNewswire/ -- Eli Lilly and Company (NYSE: LLY) and AstraZeneca are discontinuing the global Phase 3 clinical trials of lanabecestat, an oral beta secretase cleaving enzyme (BACE) inhibitor, for the treatment of Alzheimer's disease. The decision is based on recommendations by an independent data monitoring committee (IDMC) which concluded that both the AMARANTH trial, in early Alzheimer's disease, and the DAYBREAK-ALZ trial, in mild Alzheimer's disease dementia, were not likely to meet their primary endpoints upon completion and therefore should be stopped for futility. As a result of this decision, the related AMARANTH extension trial will also be discontinued.

"The complexity of Alzheimer's disease poses one of the most difficult medical challenges of our time, and we are deeply disappointed for the millions suffering from this devastating disease," said Daniel Skovronsky, M.D., Ph.D., president of Lilly Research Labs. "We are grateful for the contributions of the study participants and their families and encourage them to consider other Alzheimer's disease clinical trials. Lilly remains dedicated to Alzheimer's disease research as we have been for the last three decades. We won't give up on finding a solution for Alzheimer's patients."

The IDMC recommendation to stop the studies was not based on safety concerns. The Lilly and AstraZeneca BACE Alliance for lanabecestat remains in place, and the companies will now work with the clinical trial sites involved to implement the discontinuations.

"We are saddened by this outcome as our researchers are working tirelessly to find a solution for the many people who are impacted by this devastating disease," said Menelas Pangalos, Ph.D., Executive Vice President, IMED Biotech Unit, AstraZeneca. "We are committed to ensuring our findings can be used to inform further research in the Alzheimer's community, given the importance of finding a treatment for this disease."

The AMARANTH trial randomized patients with early Alzheimer's disease to receive lanabecestat, 20mg or 50mg, or placebo orally once daily for 104 weeks. The primary endpoint of the trial was change from baseline on the 13-item Alzheimer's Disease Assessment Scale - Cognitive Subscale (ADAS-Cog13). Early Alzheimer's disease is defined as the continuum of patients with mild cognitive impairment due to Alzheimer's disease and patients diagnosed with mild Alzheimer's dementia. Patients who completed the AMARANTH trial were given the opportunity to enroll in the AMARANTH extension trial, where all patients received active treatment.

The DAYBREAK-ALZ trial randomized patients with mild Alzheimer's disease dementia to receive lanabecestat, 20mg or 50mg, or placebo orally once daily for up to 156 weeks. The primary endpoint of the trial was change from baseline on ADAS-Cog13.

Lilly does not anticipate significant costs associated with this decision and is reaffirming both its financial guidance for 2018 and its mid-term guidance for the remainder of this decade.

About Alzheimer's Disease

Alzheimer's disease is a fatal illness that causes progressive decline in memory and other aspects of cognition.[1] Dementia due to Alzheimer's disease is the most common form of dementia, accounting for 60 to 80 percent of all cases.[2] There are currently an estimated 50 million people living with dementia around the world, with numbers expected to increase to nearly 75 million by 2030 and 132 million by 2050. Almost 10 million new cases of dementia are diagnosed each year worldwide, implying one new case approximately every 3 seconds. The current total annual societal and economic estimated cost of dementia is $818 billion USD worldwide and this year may rise above a trillion USD.[3]

About the Lilly and AstraZeneca BACE Alliance

AstraZeneca and Lilly announced an alliance in 2014 for the development and commercialization of lanabecestat. It was agreed that Lilly would lead clinical development, working with researchers from AstraZeneca's Research and Development Team, while AstraZeneca would be responsible for manufacturing.

About Eli Lilly and Company

Lilly is a global healthcare leader that unites caring with discovery to make life better for people around the world. We were founded more than a century ago by a man committed to creating high-quality medicines that meet real needs, and today we remain true to that mission in all our work. Across the globe, Lilly employees work to discover and bring life-changing medicines to those who need them, improve the understanding and management of disease, and give back to communities through philanthropy and volunteerism. To learn more about Lilly, please visit us at www.lilly.com and www.lilly.com/newsroom/social-channels. P-LLY

About AstraZeneca

AstraZeneca is a global, science-led biopharmaceutical company that focuses on the discovery, development and commercialisation of prescription medicines, primarily for the treatment of diseases in three therapy areas - Oncology, Cardiovascular, Renal & Metabolism and Respiratory. The Company also is selectively active in the areas of autoimmunity, neuroscience and infection. AstraZeneca operates in over 100 countries and its innovative medicines are used by millions of patients worldwide.

For more information, please visit www.astrazeneca.com and follow us on Twitter @AstraZeneca.

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financial results, all of which are subject to known and unknown risks, uncertainties and factors that may cause the company's actual results to differ materially from those expressed or implied by these forward-looking statements. Many of these risks are beyond the company's ability to control or predict. For additional information about the factors that could cause actual results to differ materially from forward-looking statements, please see the company's latest Form 10-K and Form 10-Q filed with the Securities and Exchange Commission. You should not place undue reliance on forward-looking statements, which speak only as of the date of this release. Except as required by law, the company expressly disclaims any obligation to publicly update or revise any forward-looking statements to reflect events after the date of this release.

[1]Alzheimer's Association. What is Alzheimer's? http://www.alz.org/alzheimers_disease_what_is_alzheimers.asp. Accessed April 2018.

[2]Alzheimer's Association. What is Dementia? http://www.alz.org/what-is-dementia.asp. Accessed April 2018.

[3] Alzheimer's Disease International. Dementia Statistics. https://www.alz.co.uk/research/statistics. Accessed April 2018.

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