

Biogen har tillkännagivit resultat från fas 3b NOVA-studien som utvärderar TYSABRI® (natalizumab) IV med dosering var sjätte vecka vid skovvis förlöpande multipel skleros

- Resultaten visar att patienter med skovvis förlöpande multipel skleros som bytte från den godkända doseringen var fjärde vecka till administrering av natalizumab IV var sjätte vecka kontrollerar sjukdomsaktiviteten
- Data från den första prospektiva, randomiserade, kontrollerade studien med ett utökat doseringsschema för natalizumab ger tillsammans med resultat från real-world data^{1,2,3} viktig kunskap
- Uppdaterade analyser från TOUCH® förskrivningsregister indikerar att ett doseringsschema på i genomsnitt sex veckor är associerat med en minskad risk för att utveckla PML⁴ med 88 procent

Cambridge, Mass. – August 2, 2021 – Biogen Inc. (Nasdaq: BIIB) today announced results from the two-year prospective, randomized, interventional, controlled, open-label Phase 3b NOVA study (NCT03689972). NOVA was designed to estimate a potential difference between the efficacy of every six-week (Q6W) 300mg natalizumab intravenous (IV) administration compared to the efficacy of the approved every four-week (Q4W) dose in people treated with TYSABRI® (natalizumab) (n=499) for relapsing-remitting multiple sclerosis (MS) after at least one year of disease stability on a Q4W IV dosing schedule.

The primary endpoint showed a numerical difference between the mean number of new or newly enlarging T2 hyperintense lesions at week 72 of 0.05 (Q4W) and 0.20 (Q6W) (p=0.0755), which based on the full trial results is not clinically meaningful. The numerical difference was driven by a high number of lesions occurring in two participants in the Q6W arm – one patient who developed lesions three months after treatment discontinuation and a second patient who developed asymptomatic progressive multifocal leukoencephalopathy (PML), a rare but serious brain infection. The proportion of patients that developed new or newly enlarging T2 lesions in each arm was 4.1 percent (Q4W) and 4.3 percent (Q6W).

There were no statistically significant or clinically meaningful differences in secondary endpoints at week 72 between the Q4W and Q6W treatment arms, and disease activity was well-controlled in both arms:

- Annualized relapse rates were low at 0.00010 (Q4W) and 0.00013 (Q6W), with 97.9 percent
 patients in the Q4W arm remaining relapse-free compared to 97.2 percent of patients in the
 Q6W arm.
- The proportion of patients that developed T1 hypointense lesions in each arm was 1.1 percent (Q4W) and 1.4 percent (Q6W).
- Both arms demonstrated 0.5 percent of participants with gadolinium (Gd) enhancing T1 lesions.

"The NOVA study provides the first prospective, randomized efficacy data of every six-week dosing with natalizumab, building on its well-established clinical profile and the real-world findings^{1,2,3}," said Maha Radhakrishnan, M.D., Chief Medical Officer at Biogen. "In addition to the safety analyses from

the TOUCH Prescribing Program, which showed significant reduction in the probability of PML, the results from NOVA deliver a more comprehensive understanding of the six-week dosing regimen of natalizumab."

The NOVA study was initiated to assess the efficacy of Q6W dosing with natalizumab IV administration following analyses from the TOUCH (TYSABRI Outreach: Unified Commitment to Health) Prescribing Program, which showed that extended interval dosing was associated with a significant reduction in the probability of PML. An updated analysis of data from TOUCH showed that an average Q6W dosing regimen is associated with an 88 percent reduction (hazard ratio 0.118, p<0.0001) in the probability of PML in comparison to the approved Q4W dose.⁴

The safety findings in the NOVA study were consistent with the known safety profile of IV natalizumab and the incidence of adverse events and serious adverse events were similar between the two treatment arms. One patient with asymptomatic PML in the Q6W arm was high-risk based on the known risk factors (anti-JCV antibody index >1.5, and >2 years of TYSABRI treatment), underlying the importance of PML monitoring and risk factor considerations in patients treated with natalizumab.

A complete analysis of the study data is ongoing and detailed results will be shared in a future scientific forum. Natalizumab is available commercially under the brand name TYSABRI and the only approved dose is 300mg on a Q4W regimen.

Om TYSABRI® (natalizumab)

I Sverige är NATALIZUMAB indicerat som sjukdomsmodifierande behandling (DMT) i monoterapi hos vuxna med mycket aktiv skovvis förlöpande multipel skleros (RRMS) och har i kliniska prövningar visat på fördröjning och stabilisering av funktionsförsämring, samt minskning av bildandet av nya hjärnskador och återfall i sjukdom. Godkänd administrering är var fjärde vecka.

NATALIZUMAB ökar risken för progressiv multifokal leukoencefalopati (PML), en sällsynt opportunistisk virusinfektion i hjärnan som har associerats med dödsfall eller svåra funktionshinder. Riskfaktorer som ökar risken för PML är förekomsten av anti-JC-virusantikroppar, tidigare immunosuppressiv behandling och längre behandlingsduration. Patienter som har alla tre riskfaktorer har den högsta risken att utveckla PML. När behandling med NATALIZUMAB påbörjas eller fortsätter bör läkare överväga om den förväntade nyttan med NATALIZUMAB är tillräcklig för att kompensera denna risk.

För information om förskrivningsinformation för TYSABRI® i EU, besök: https://ec.europa.eu/health/documents/community-register/html/h346.htm
För information om TYSABRI i Sverige, besök: www.fass.se

Om Biogen

Biogen upptäcker, utvecklar och tillhandahåller innovativa terapier för människor som lever med allvarliga neurologiska och neurodegenerativa sjukdomar. Företaget grundades 1978 av Charles Weissmann, Heinz Schaller, Kenneth Murray och Nobelpristagarna Walter Gilbert och Phillip Sharp och blev därmed ett av världens första globala bioteknikföretag. Idag har Biogen den ledande portföljen av läkemedel för att behandla multipel skleros, den första godkända behandlingen för spinal muskulär atrofi, marknadsför avancerade biosimilarer och fokuserar på att utveckla forskningsprogram inom multipel skleros och neuroimmunologi, Alzheimers sjukdom och demens, neuromuskulära sjukdomar, neuropsykiatri, immunologi, akut neurologi och neuropatisk smärta.

Vi publicerar rutinmässigt information som kan vara viktig för investerare på vår webbplats www.biogen.com.

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Biogen Safe Harbor

This news release contains forward-looking statements, including statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, about the potential benefits, safety and efficacy of TYSABRI (natalizumab) and Q6W; the results of the NOVA Phase 3b study and certain real-world data; clinical trials and data readouts and presentations; and the treatment of MS. These forward-looking statements may be identified by words such as "aim," "anticipate," "believe," "could," "estimate," "expect," "forecast," "goal," "intend," "may," "plan," "possible," "potential," "will," "would" and other words and terms of similar meaning. You should not place undue reliance on these statements or the scientific data presented.

These statements involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements, including without limitation the occurrence of adverse safety events and/or unexpected concerns that may arise from additional data or analysis; regulatory authorities may require additional information or further studies, or may fail or refuse to approve or may delay approval of expansion of product labeling; risks of unexpected costs or delays; failure to protect and enforce our data, intellectual property and other proprietary rights and uncertainties relating to intellectual property claims and challenges; product liability claims; and the direct and indirect impacts of the ongoing COVID-19 pandemic on our business, results of operations and financial condition. The foregoing sets forth many, but not all, of the factors that could cause actual results to differ from our expectations in any forward-looking statement. Investors should consider this cautionary statement as well as the risk factors identified in our most recent annual or quarterly report and in other reports we have filed with the U.S. Securities and Exchange Commission. These statements are based on our current beliefs and expectations and speak only as of the date of this news release. We do not undertake any obligation to publicly update any forward-looking statements, whether as a result of new information, future developments or otherwise.

Referenser:

- Chisari et al. Clinical effectiveness of different natalizumab interval dosing schedules in a large Italian population of patients with multiple sclerosis. J Neurol Neurosurg Psychiatry. 2020;0:1–7. doi: 10.1136/jnnp-2020-323472.
- 2. Butzkueven H et al. Similar Clinical Outcomes for Natalizumab Patients Switching to Every-6-Week Dosing Versus Remaining on Every-4-Week Dosing in Real-World Practice. Poster presented at 8th Joint ACTRIMS-ECTRIMS Virtual Meeting; September 11–13, 2020. P0393.
- 3. Zhovtis Ryerson L et al. No Difference in Radiologic Outcomes for Natalizumab Patients on Extended Interval Dosing Compared with Standard Interval Dosing in MS PATHS. Poster presented at American Academy of Neurology Virtual Annual Meeting; April 17-22,2021. P15.210.
- 4. Zhovtis Ryerson et al. Natalizumab Extended Interval Dosing (EID) is Associated with a Reduced Risk of Progressive Multifocal Leukoencephalopathy (PML) Compared with Every-4-week (Q4W) Dosing: Updated Analysis of the TOUCH® Prescribing Program Database. Poster presented at American Academy of Neurology Virtual Annual Meeting; April 17-22, 2021.P15.201

5. Combined post-marketing data based on prescriptions and clinical trials exposure to TYSABRI as of January 31, 2021.

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