IMMEDIATE TREATMENT WITH IFNB-1B AFTER A FIRST EVENT SUGGESTIVE OF MS DELAYS PERSISTENT NEUROLOGICAL IMPAIRMENT

X. Montalban [1] L. Kappos [2] C. Polman [3] G. Edan[4] M.S. Freedman [5] H.P. Hartung [6] D. Miller [7] F. Barkhof [3] L. Bauer [8] S. Dahms [8] C.Pohl [8] R. Sandbrink [8]

[1]Hospital Vall d'Hebron, Barcelona, Spain [2]University Hospital, Basel, Switzerland, [3]Vrije Universiteit Medical Centre, Amsterdam, The Netherlands [4]Centre Hospitalier Universitaire, Rennes, France [5]The Ottawa Hospital, Ottawa, Canada [6]Heinrich-Heine-Universitat, Dusseldorf, Germany [7]National Hospital for Neurology & Neurosurgery, London, UK [8]Bayer Schering Pharma AG, Berlin, Germany

There is now comprehensive evidence for the significance of initiating treatment with interferon beta (IFNB) immediately after a first neurological event suggestive of multiple sclerosis (MS) in terms of delaying time to the diagnosis of MS. However, advantages of immediate over deferred treatment in the longer-term remain to be proven, in particular with regard to whether, and to what extent, this might also slow the development of neurological impairment. The Benefit (BEtaferon®/BEtaseron® in Newly Emerging MS for Initial Treatment) studies aim to also answer this question. In the placebo-controlled phase, 468 patients with a first clinical event suggestive of MS were randomized to either IFNB-1b 250 µg or placebo subcutaneously every-other-day. On completion of this phase, patients were eligible to enrol into a pre-planned follow-up phase, with IFNB-1b being offered to all patients. 89% of the original patients were enrolled into the follow-up phase. A pre-planned analysis, 3 years after the first clinical event, showed that confirmed progression of impairment, as measured by the Expanded Disability Status Scale, was reached by 16% of patients treated immediately and by 24% of patients with deferred treatment ($p = 0.0218$). 37% of patients treated immediately and 51% of those treated later had developed CDMS ($p = 0.0011$). These findings provide the first evidence of a positive effect of immediate IFNB-1b treatment on later neurological impairment. In addition, these results confirm those of the placebo-controlled phase of BENEFIT by showing that immediate treatment after the first event delays the onset of MS.