Topic: Therapy - disease modifying - Immunomodulation/Immunosuppression

Title: The German MS Registry: update on immunotherapy

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Text: <u>Background</u>: Disease-modifying drugs (DMD) serve to alter the long-term course of MS by reducing the inflammatory aspects of the disease. Currently, Immunotherapy is available for relapsing-remitting (RRMS) and secondary progressive (SPMS) forms of MS, none of the licensed drugs has proven efficacy in primary progressive MS (PPMS) and thus current S2e-guidelines in Germany do not foresee DMD treatment. Conversely, a recent study by Petersen et al. (2014) based on claims data by health insurance funds showed high numbers of PPMS-patients receiving DMD-treatment (1). Data from the German MS-Register were analysed in an attempt to verify these findings based on clinical data.

Methods: In 2014 the German MS-Register established new data set and register infrastructure. Currently 65 out of 165 participating centres in the register already use the new dataset and infrastructure, and further are currently migrating. This analysis is based on data sets collected from 2014 until 04/2016. A total of 3132 patients were enrolled in the new database. Data related to DMD-treatment and course of disease was available for 2744 of them. Proportion of patients receiving treatment are given for each disease course along with 95%-Clopper-Pearson confidence intervals. Global test for differences between courses are done with Chi²-test.

Results: The number of patients receiving DMD-treatment differed substantially between RRMS, SPMS and PPMS (p< 0.001): 85.1% of patients with RRMS (95%-CI: [83.4-86.6%]; n=1981) received DMD-treatment, while 53.2% of SPMS patients (95%-CI: [48.8-57.6%]; n=511) were treated with DMDs. 32.3% of the PPMS patients (95%-CI: [25.0-40.2%]; n=155) received DMD treatment.

Conclusions: The updated results show that a high proportion of MS patients receive DMD treatment which is in line with previous analyses and other investigations. The amount of PPMS patients receiving DMD treatment in conflict with the guidelines, is lower than in our older analyses from 2009 but is still high and confirms the findings of the population based analysis (1). The reduction in comparison to our analysis in 2009 [59% of PPMS patients received DMD treatment] could indicate a stronger adherence to the guidelines. This might be influenced by health insurance funds claiming damages if treatment is not in line with the guidelines.

References:

1. Petersen G, et al. Epidemiologie der Multiplen Sklerose in

Deutschland. Nervenarzt. 2014;85(8)

Disclosure: Buckow, Ellenberger, Mai and Stahmann: nothing to disclose.

Heymann; Received an unconditional travel grant by XYZ Zettl: Received institutional research grants and personal honoraria as speaker from Biogen Idec, Bayer, Genzyme, Merck Serono, Novartis and TEVA Sanofi

The German MS Society, National Association yearly publishes the received grants and sources of funding: www.dmsg.de - The consented guidelines by the association of self-help organizations and the DMSG-guidelines for co-operation with (pharmaceutical) companies apply.