Insights into Multiple Sclerosis in Germany
msregister

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Exploring the differences between treated and never treated PwMS in the German MS Register

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Introduction

Disease-modifying therapies (DMTs) are prescribed to reduce the frequency and severity of relapses, and to slow disease progression in patients with MS (PwMS). However, some PwMS never receive DMTs, although the vast majority of PwMS in Germany are covered by health insurance.

Objectives/Aims

1) To ascertain the proportion and characteristics of PwMS who have never received any DMT (nevDMT)

2) To compare one-year annualised relapse rates (ARRs) of currently treated PwMS (currDMT), nevDMT and currently untreated PwMS who discontinued their previous DMT (pastDMT)

Methods

- Data from the German MS Register from 2000 to 02/2025 were included, encompassing clinical and demographic variables

- Inclusion criteria:
  - Confirmed MS diagnosis
  - Documented diagnosis date

- Cluster analysis was conducted for the nevDMT group, exploring subgroups by age/disease duration

Results

- Study population: N=23,430

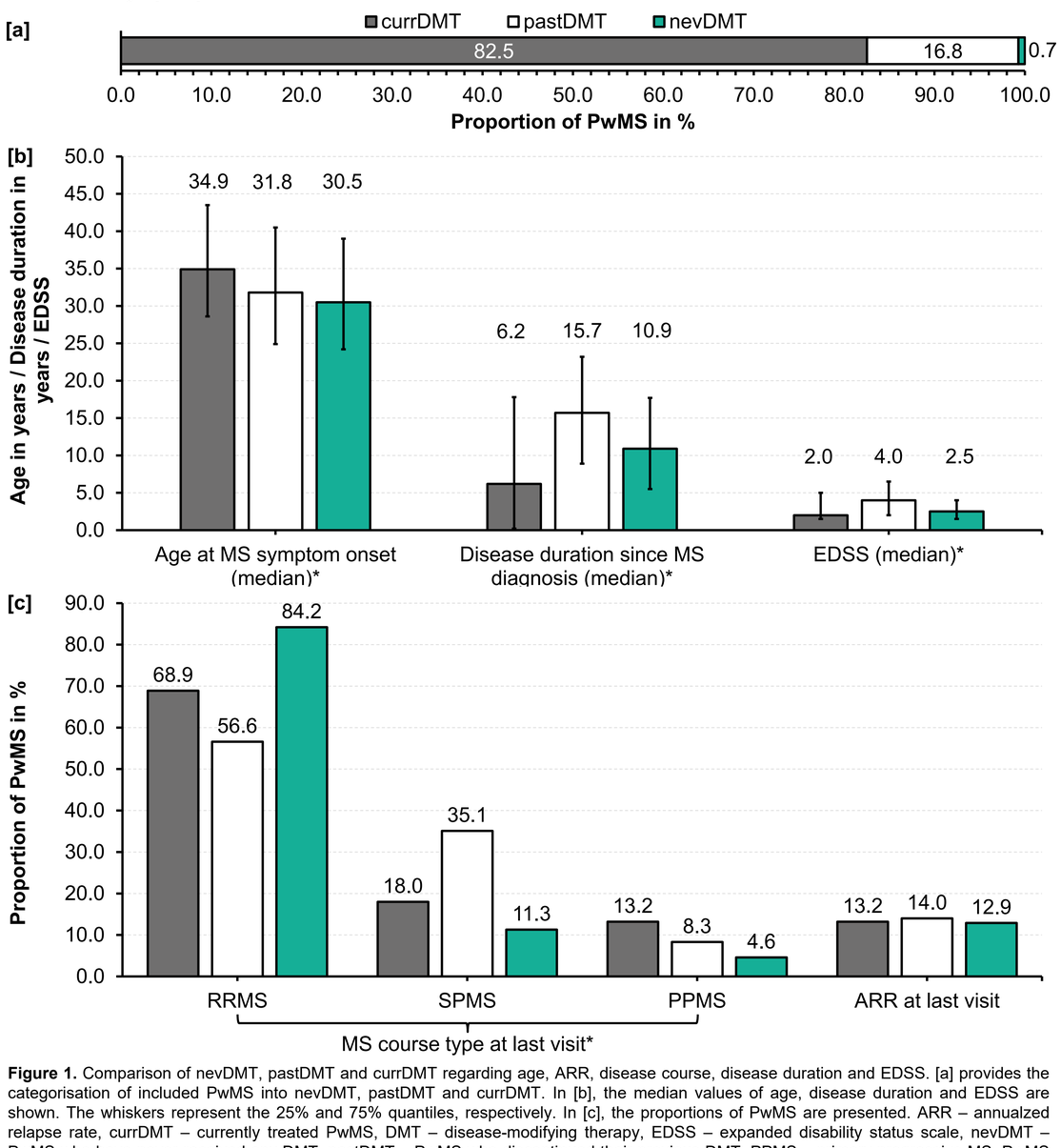

Figure 1. Comparison of nevDMT, pastDMT and currDMT regarding age, ARR, disease course, disease duration and EDSS. [a] provides the categorisation of included PwMS into nevDMT, pastDMT and currDMT. In [b], the median values of age, disease duration and EDSS are shown. The whiskers represent the 25% and 75% quantiles, respectively. In [c], the proportions of PwMS are presented. ARR – annualzed relapse rate, currDMT – currently treated PwMS, DMT – disease-modifying therapy, EDSS – expanded disability status scale, nevDMT – PwMS who have never received any DMT, pastDMT – PwMS who discontinued their previous DMT, PPMS – primary progressive MS, PwMS – people with multiple sclerosis, RRMS – relapsing-remitting MS, SPMS – secondary progressive MS, * – p<0.001

- nevDMT (n=167): classified into early still DMT-naïve PwMS (EN: n=74) + late continuously untreated PwMS (UN: n=93)

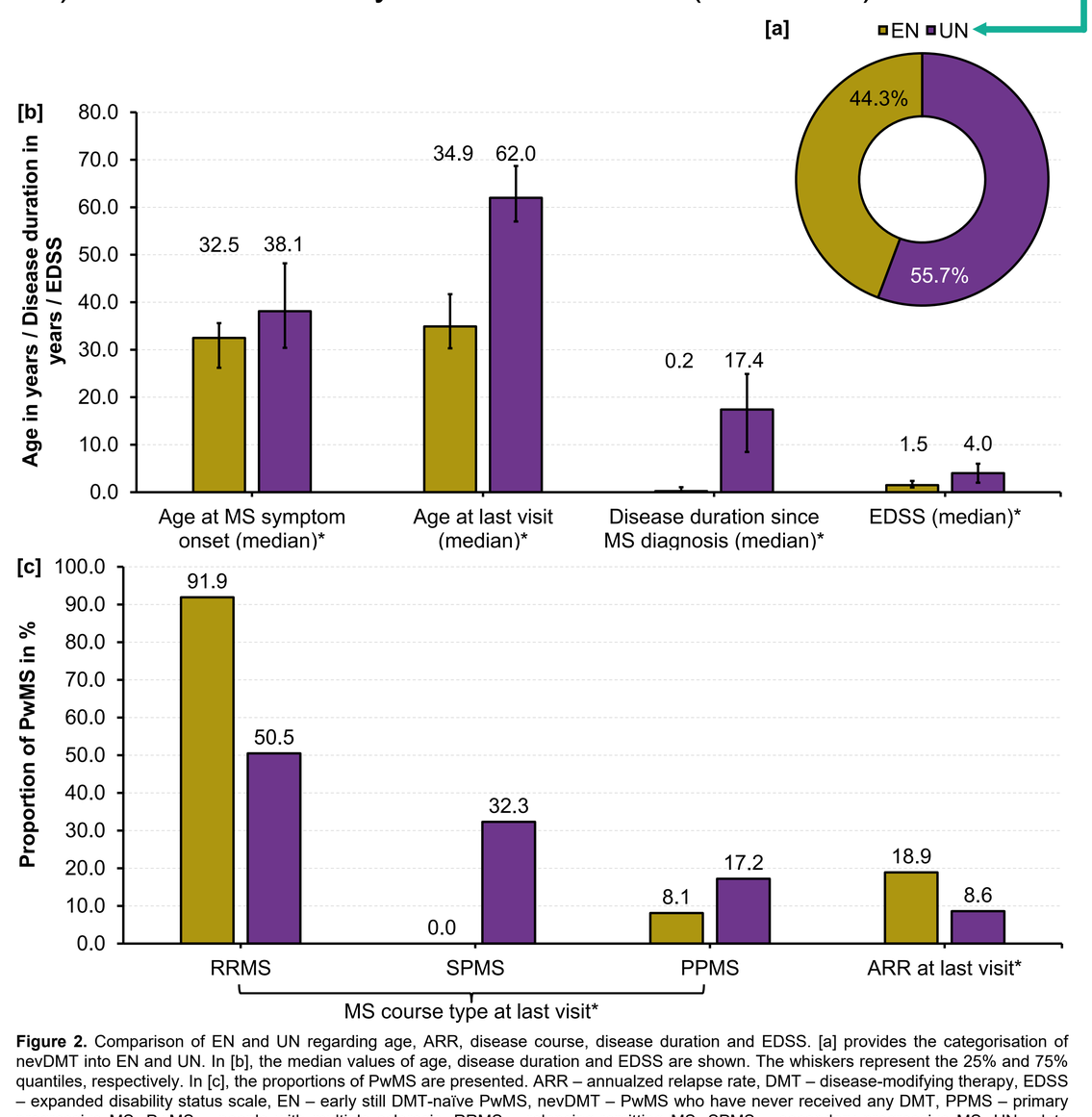

Figure 2. Comparison of EN and UN regarding age, ARR, disease course, disease duration and EDSS. [a] provides the categorisation of nevDMT into EN and UN. In [b], the median values of age, disease duration and EDSS are shown. The whiskers represent the 25% and 75% quantiles, respectively. In [c], the proportions of PwMS are presented. ARR – annualzed relapse rate, DMT – disease-modifying therapy, EDSS – expanded disability status scale, EN – early still DMT-naïve PwMS, nevDMT – PwMS who have never received any DMT, PPMS – primary progressive MS, PwMS – people with multiple sclerosis, RRMS – relapsing-remitting MS, SPMS – secondary progressive MS, UN – late continuously untreated PwMS, * – p<0.001

Concusion

- The decision not to receive DMT is not based on a homogeneous patient group ➔ influenced by various factors such as age, disease stage, disease activity and progression
- Variability within the nevDMT group ➔ reasons for not receiving therapy are complex
- Further research is needed to better understand the long-term consequences and decision-making process

Disclosure of conflict of interest:
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