and overseas databases including Ovid-MEDLINE, Ovid-EMBASE and Cochrane Library. All 247 studies were searched and 6 studies were included in the final assessment. Each of the stages from literature search and extraction of data were carried out independently by 2 researchers. RESULTS: The effectiveness of CBL gene mutation test was assessed by CBL gene mutation detection rate, relevance between CBL gene mutation and clinical outcomes. Discrepancies were resolved by discussion. The CBL gene mutation detection rate was 5 to 19 among JMMJ patients. The hemoglobin level and age-at-diagnosis were both significantly lower among patients with a CBL gene mutation (p = 0.01; p = 0.03). There was no significant difference between the two groups in terms of the risk of disease progression. CBL gene mutation test was an effective test that can contribute to the diagnosis of JMMJ and help determine the treatment strategy (Grade of recommendation: C).

PDN8
CONFIRMED DISABILITY IMPROVEMENT IN PATIENTS WITH ACTIVE MULTIPLE SCLEROSIS TREATED WITH FINGOLIMOD VersUS BRACE: A MATCHED COMPARISON OF TREATMENTS FROM THE PANGAEA AND PEARL REGISTRY STUDIES
Aalo1, J., Bergvall2, C., Cornelissen2, V., Vormflie2, M., Medic2, J., Zimmerman2, T.
1Numerus, Wokingham, UK, 2Novartis Pharma AG, Basel, Switzerland, 3Novartis Pharma GmbH, Nuremberg, Germany, 4University Clinic Carl Gustav Carus, Dresden, Germany
OBJECTIVES: To compare confirmed disability improvement in propensity score (PS)-matched cohorts receiving fingolimod or BRACE (beta-lactamase or glatiramer acetate) following previous BRACE treatment, who had active multiple sclerosis (MS), using data from two German observational studies, PANGAEA and PEARL REGISTRY STUDIES.
METHODS: Patients with active MS (≥ 2 relapses in the year before the study) from the PANGAEA and PEARL registries were included if they had received BRACE before participating in the studies and did not have missing relapse data in the previous year. Patients from the PANGAEA registry were excluded if they had relapsed in RA within 12 months of the last relapse in RA, or glatiramer acetate in the previous year. Patients in the PANGAEA cohort were matched in a 3:1 ratio to patients in the PEARL cohort using a PS-matching approach. Time to 3-month and 6-month confirmed disability improvement was assessed using a Kaplan-Meier approach. Hazard ratios for confirmed disability improvement (fingolimod vs BRACE) were estimated using a Cox proportional hazards model. RESULTS: After PS matching, a total of 1535 patients were included (PANGAEA, n = 1183; PEARL, n = 352). The proportions of patients in the PANGAEA and PEARL registries were well-balanced with respect to age, sex, duration of disease, number of previous relapses, and disability progression. Hazard ratios for confirmed disability improvement (fingolimod vs BRACE) were 1.73 with 95% CI 1.2, 2.5 (p = 0.006) and 2.09 with 95% CI 1.3, 3.2 (p = 0.002) for 3-month and 6-month confirmed disability improvement, respectively. CONCLUSIONS: The results from the analysis indicate that patients with active MS who have received previous BRACE treatment before participating in the studies had higher risk of confirmed disability progression on BRACE than on fingolimod. The results from this matched comparison support the use of fingolimod in this population.