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**Cladribine Tablets 35mg/kg Is Efficacious in Patients Aged Above and Below 45 Years with Relapsing Multiple Sclerosis in the Clarity Study**

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**Background:** In clarity, cladribine tablets 3.5 mg/kg (CT3.5) showed strong efficacy vs placebo over 2 years in patients with relapsing multiple sclerosis (RMS). Age-related variability in response to disease modifying treatments has been observed in patients with MS. This post-hoc analysis assessed the effect of CT3.5 in patients with RMS  $\leq 45$  and  $>45$  years of age.

**Methods:** CT3.5 efficacy versus placebo was analysed in  $\leq 45$ yr and  $>45$ yr subgroups for qualifying relapses, all relapses, and T1 gadolinium-enhancing (gd+), active T2, and combined unique (CU) lesions.

**Results:** 649 patients were  $\leq 45$ yr (CT3.5, n=330; median age, 34.5yrs); 221 were  $>45$ yr (CT3.5, n=103; median age, 51.0yrs). A greater proportion of females were in the older (77.7%) versus younger (66.1%) group. For both groups, CT3.5 was associated with significantly reduced relative risk for annualised qualifying relapses versus placebo ( $\leq 45$ yr: 0.39 [95% confidence interval 0.31, 0.51],  $p < 0.0001$ ;  $>45$ yr: 0.50 [0.31, 0.80],  $p = 0.004$ ) and all relapses ( $\leq 45$ yr: 0.40 [0.34, 0.49],  $p < 0.0001$ ;  $>45$ yr: 0.52 [0.37, 0.72],  $p < 0.0001$ ) and a significant difference in mean number per patient per scan of active T2 lesions ( $\leq 45$ yr: -0.667 [-0.67, -0.50],  $p < 0.0001$ ;  $>45$ yr: -0.167 [-0.33, 0.00],  $p < 0.0001$ ), and CU lesions ( $\leq 45$  years: -0.667 [-1.00, -0.67],  $p < 0.0001$ ;  $>45$  years; -0.333 [-0.33, 0.00],  $p < 0.0001$ ). CT3.5 reduced the number of cumulative new T1gd+ lesions at week 96 compared with placebo in both age groups.

**Conclusions:** CT3.5 treatment was efficacious in patients both above and below 45 years of age in reducing relapse frequency and number of MRI lesions, consistent with previous similar analyses.