

## OBJECTIVE

To evaluate long-term treatment strategies, including retreatment, in people with multiple sclerosis (PwMS) treated with cladribine tablets in real-world practice.

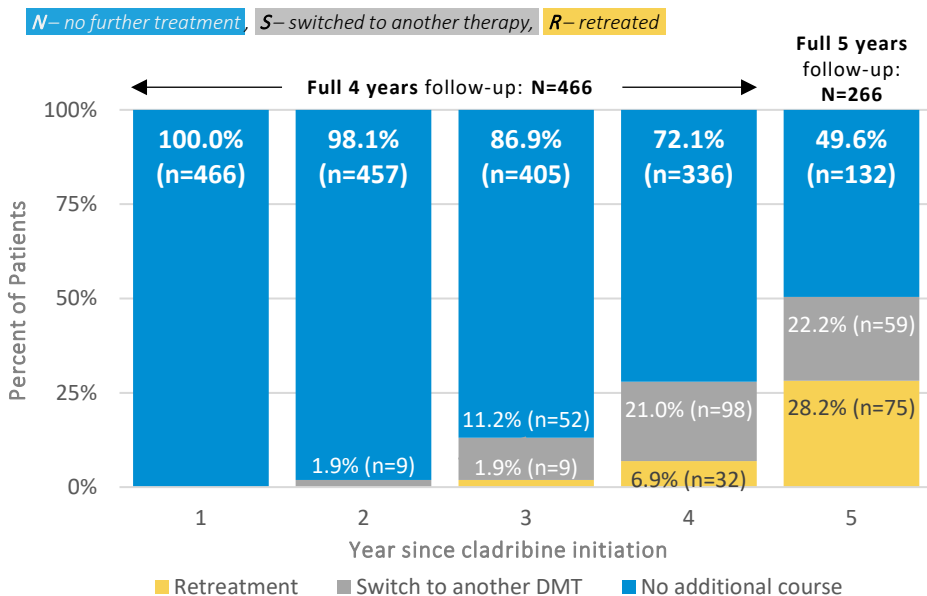
## BACKGROUND

While cladribine tablets have demonstrated short-term efficacy, data on management beyond 4-5 years, particularly regarding retreatment after the initial 2 courses, is limited.

## METHODS

We analyzed patients from the Czech national registry of PwMS (ReMuS) who completed 2 cladribine courses by December 31, 2024, with at least 4 years of follow-up (FU). Patients were categorized as: **R-retreating** cladribine course, **S-switching** to another disease-modifying therapy (DMT), and **N-receiving no further treatment**. Characteristics and outcomes were compared across these groups.

**Figure 1.** Cumulative percentage of patients in each year since cladribine initiation:



# FROM TRIALS TO REAL-WORLD DATA: NATIONAL INSIGHTS ON CLADRIBINE TABLETS IN MULTIPLE SCLEROSIS AFTER FOUR YEARS AND BEYOND

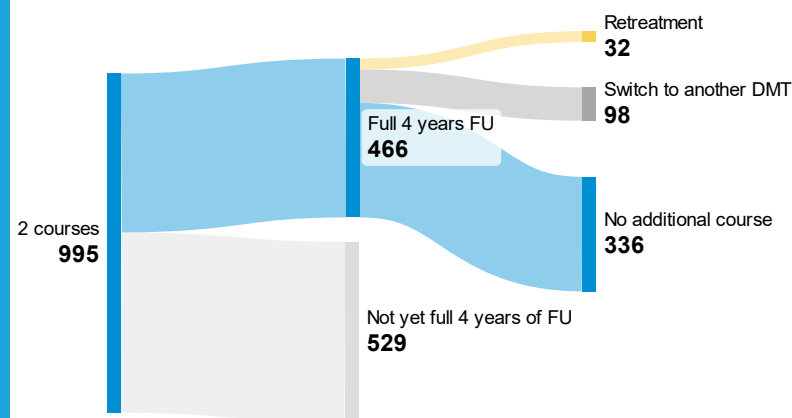
D. Stastna<sup>1</sup>, G. Fistravec<sup>2</sup>, J. Drahota<sup>1,2</sup>, P. Potuznik<sup>3</sup>, I. Menkyova<sup>1,2</sup>, R. Ampapa<sup>4</sup>, M. Dufek<sup>5</sup>, M. Grunermelova<sup>6</sup>, E. Kubala Havrdova<sup>1</sup>, J. Houskova<sup>7</sup>, J. Libertinova<sup>8</sup>, A. Martinkova<sup>9</sup>, Z. Pavelek<sup>10</sup>, M. Peterka<sup>3,10</sup>, E. Recmanova<sup>11</sup>, Z. Rous<sup>12</sup>, I. Stetkarova<sup>13</sup>, P. Stourac<sup>14</sup>, M. Vachova<sup>15</sup>, I. Woznicova<sup>16</sup>, D. Horakova<sup>1</sup>

1. Department of Neurology and Centre of Clinical Neuroscience, First Faculty of Medicine, Charles University in Prague and General University Hospital, Prague; 2. ReMuS, The Czech Republic Multiple Sclerosis Patient Registry, Prague 3. Department of Neurology, Faculty of Medicine and University Hospital in Pilsen, Charles University, Pilsen; 4. Department of Neurology, Hospital of Jihlava, Jihlava; 5. First Department of Neurology, Masaryk University, St. Anne's University Hospital, Brno; 6. Department of Neurology, Thomayer Hospital, Prague; 7. Department of Neurology, Hospital Ceske Budejovice, Ceske Budejovice; 8. Department of Neurology, 2nd Faculty of Medicine, Charles University in Prague and Motal University Hospital, Prague; 9. Department of Neurology, Hospitals of the Pardubice Region, Hospital of Pardubice, Pardubice; 10. Department of Neurology, Charles University in Prague, Faculty of Medicine and University Hospital Hradec Kralove, Hradec Kralove; 11. Department of Neurology, Tomas Bata Regional Hospital, Zlín; 12. Department of Neurology, Faculty of Medicine and Dentistry, Palacky University Olomouc and University Hospital Olomouc, Olomouc; 13. Charles University in Prague, Third Faculty of Medicine, Charles University and Hospital Kralovske Vinohrady, Prague; 14. Department of Neurology, Masaryk University and University Hospital Brno, Brno; 15. Department of Neurology, KZ a.s., Hospital Teplice, Teplice; 16. Department of Neurology, University Hospital Ostrava, Ostrava

## RESULTS

Of the 995 patients completing 2 cladribine courses, **466 had 4+ years of FU** (mean FU 5.06±0.66 years; mean age 36.4±8.9; 74.5% female; 93.6% pre-treated). Groups R (n=32), S (n=98), and N (n=336, 72%) differed significantly in mean: **age** (35.3; 35.4; 37.5 years), **EDSS at initiation** (2.6; 2.8; 2.6) and **end of year 4** (3.2; 3.8; 2.9), **time to first relapse** (28; 20; 29 months), **relapse-free rates** (41%; 65%; 89%), **Progression Independent of Relapse Activity (PIRA) free rates** (100%; 83%; 96%), and **3-months confirmed progression-free rates** (97%; 63%; 92%). Among **retreated patients (R)**, relapse-free PwMS increased from 41% in the year before retreatment to 56% after (only if FU ≥ 1 year after the retreatment, n=32). At year 5 (164 patients had 5+ years of FU), results remained similar: Group N had the highest relapse-free (89%), PIRA-free (96%), and progression-free (92%) rates, while Group S, with the highest EDSS at initiation, had the lowest relapse-free (65%), PIRA-free (83%), and progression-free (63%) rates and switched therapies at a mean of 2.7 years.

**Figure 2.** Patients treated with cladribine with full 4 years of follow-up



## CONCLUSIONS

Most PwMS do not require additional treatment 4-5 years after initiating cladribine tablets, despite not being treatment-naïve like majority in the CLARITY trial. **Retreatment appears to be a beneficial strategy for less stable patients**, but further FU is needed to assess its long-term efficacy.



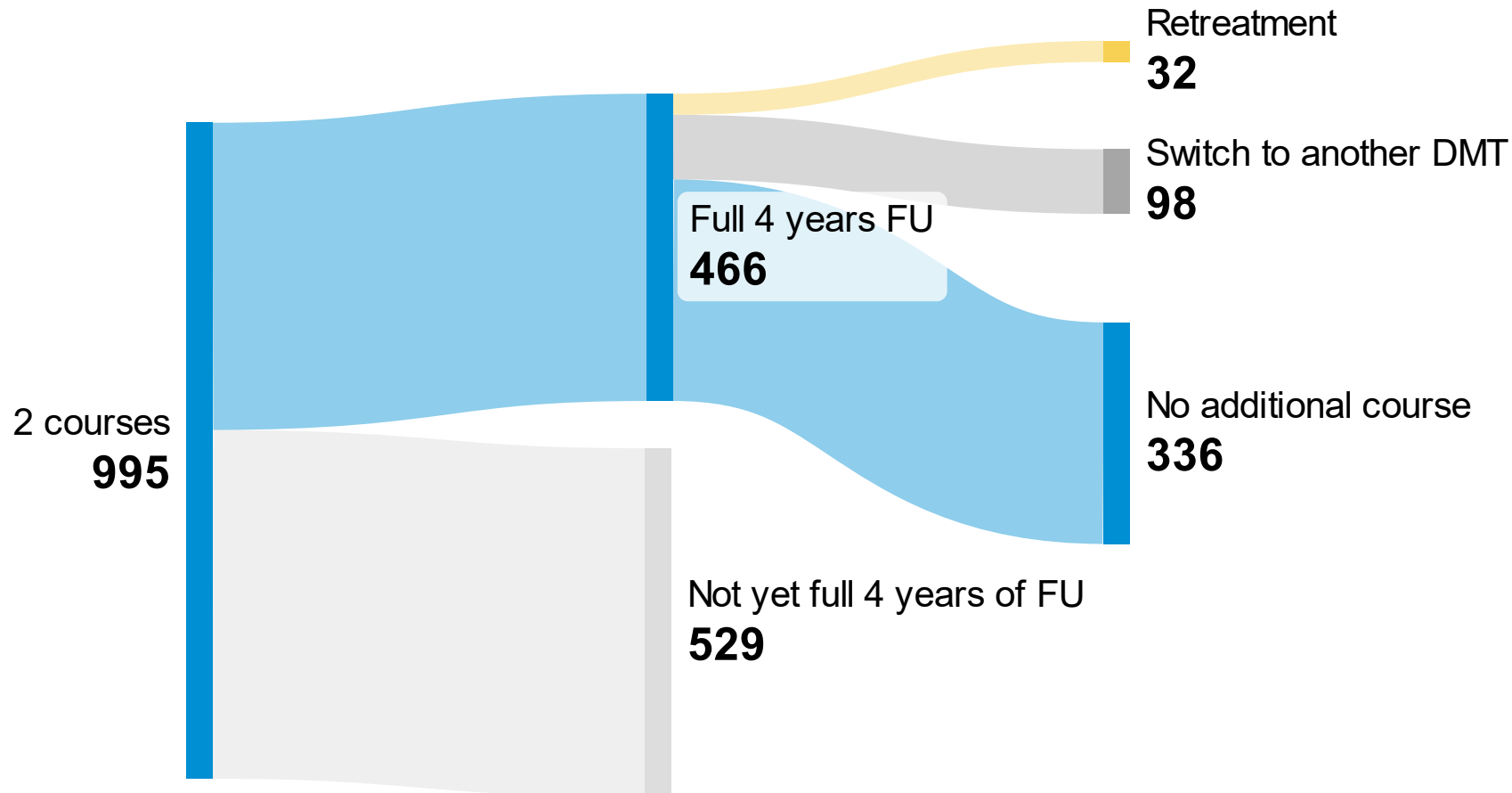
# FROM TRIALS TO REAL-WORLD DATA: NATIONAL INSIGHTS ON **CLADRIBINE** TABLETS IN MULTIPLE SCLEROSIS **AFTER FOUR YEARS AND BEYOND**

D. Stastna<sup>1</sup>, G. Fistravec<sup>2</sup>, J. Drahota<sup>1,2</sup>, P. Potuznik<sup>3</sup>, I. Menkyova<sup>1,2</sup>, R. Ampapa<sup>4</sup>,  
M. Dufek<sup>5</sup>, M. Grunermelova<sup>6</sup>, E. Kubala Havrdova<sup>1</sup>, J. Houskova<sup>7</sup>, J. Libertinova<sup>8</sup>,  
A. Martinkova<sup>9</sup>, Z. Pavelek<sup>10</sup>, M. Peterka<sup>3,10</sup>, E. Recmanova<sup>11</sup>, Z. Rous<sup>12</sup>,  
I. Stetkarova<sup>13</sup>, P. Stourac<sup>14</sup>, M. Vachova<sup>15</sup>, I. Woznicova<sup>16</sup>, D. Horakova<sup>1</sup>

1. Department of Neurology and Centre of Clinical Neuroscience, First Faculty of Medicine, Charles University in Prague and General University Hospital, Prague; 2. ReMuS, The Czech Republic Multiple Sclerosis Patient Registry, Prague 3. Department of Neurology, Faculty of Medicine and University Hospital in Pilsen, Charles University, Plzen; 4. Department of Neurology, Hospital of Jihlava, Jihlava; 5. First Department of Neurology, Masaryk University, St. Anne's University Hospital, Brno; 6. Department of Neurology, Thomayer Hospital, Prague; 7. Department of Neurology, Hospital Ceske Budejovice, Ceske Budejovice; 8. Department of Neurology, 2nd Faculty of Medicine, Charles University in Prague and Motol University Hospital, Prague; 9. Department of Neurology, Hospitals of the Pardubice Region, Hospital of Pardubice, Pardubice; 10. Department of Neurology, Charles University in Prague, Faculty of Medicine and University Hospital Hradec Kralove, Hradec Kralove; 11. Department of Neurology, Tomas Bata Regional Hospital, Zlin; 12. Department of Neurology, Faculty of Medicine and Dentistry, Palacky University Olomouc and University Hospital Olomouc, Olomouc; 13. Charles University in Prague, Third Faculty of Medicine, Charles University and Hospital Kralovske Vinohrady, Prague; 14. Department of Neurology, Masaryk University and University Hospital Brno, Brno; 15. Department of Neurology, KZ a.s., Hospital Teplice, Teplice; 16. Department of Neurology, University Hospital Ostrava, Ostrava



## RESULTS

*Figure 2. Patients treated with cladribine with full 4 years of follow-up*

FROM TRIALS TO REAL-WORLD DATA:  
NATIONAL INSIGHTS ON **CLADRIBINE**  
TABLETS IN MULTIPLE SCLEROSIS  
**AFTER FOUR YEARS**  
**AND BEYOND**

**CONCLUSIONS**

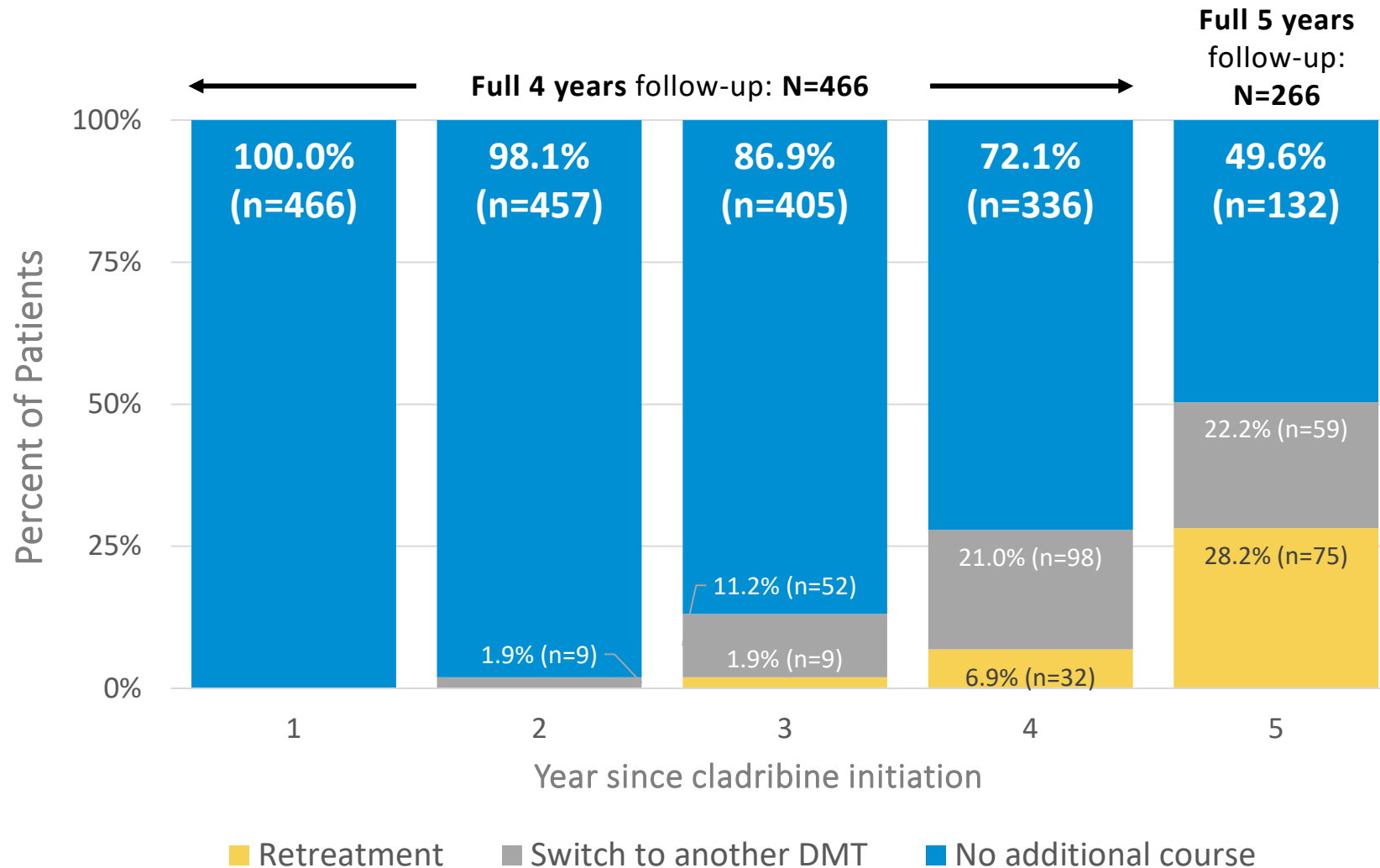
Most PwMS **do not require additional treatment 4-5 years after** initiating cladribine tablets, despite not being treatment-naïve like majority in the CLARITY trial. **Retreatment appears to be a beneficial strategy for less stable patients**, but further FU is needed to assess its long-term efficacy.



## RESULTS

**Figure 1.** Cumulative percentage of patients in each year since cladribine initiation:

**N** – no further treatment, **S** – switched to another therapy, **R** – retreated



FROM TRIALS TO REAL-WORLD DATA:  
NATIONAL INSIGHTS ON **CLADRIBINE**  
TABLETS IN MULTIPLE SCLEROSIS  
**AFTER FOUR YEARS**  
**AND BEYOND**

**CONCLUSIONS**

Most PwMS **do not require additional treatment 4-5 years after** initiating cladribine tablets, despite not being treatment-naïve like majority in the CLARITY trial. **Retreatment appears to be a beneficial strategy for less stable patients**, but further FU is needed to assess its long-term efficacy.

