MS PROGRESSION DISCUSSION TOOL (MSPRODISCUSSTM) USABILITY AND USEFULNESS ASSESSMENT IN CLINICAL PRACTICE IN CHILE

Cárcamo, C.¹; Ciampi, E.²; <u>Fernández, R.³</u>; Galleguillos, L.⁴; Oporto, S.⁵; Scherpenisse, J.⁶; Rivera, M.⁵; Araya, A.⁷; Hitschfeld, M.⁷

¹Pontificia Universidad Católica de Chile (Santiago, Chile); ²Pontificia Universidad Católica de Chile & Hospital Dr. Sótero del Río (Santiago, Chile); ³Hospital Clínico de Magallanes (Punta Arenas, Chile); ⁴Clínica Alemana (Santiago, Chile); ⁵Clínica Dávila (Santiago, Chile); ⁶Clínica Las Condes (Santiago, Chile); ⁷Novartis Chile S.A. (Santiago, Chile)



DISCLOSURES

Cárcamo, C. has received speaker fees from Merck Chile, Novartis México, Genzyme Argentina, Genzyme Chile and financial support to attend congresses through donations for continuous education from Universidad Católica Medical School. She has been granted research funds from Laboratorio Chile/Teva and Merck, and has participated as Advisory Board member for Novartis, Biogen and Merck. Ciampi, E. has received educational grants from the ECTRIMS Clinical Training Fellowship Programme 2013-2014 and travel grant awards from ECTRIMS. She has participated as Advisory Board member for Genzyme, Biogen, Novartis, and Merck, has received professional travel and accommodation stipends from Novartis, Biogen, Genzyme, Merck, and Roche and has participated in clinical trials sponsored by Novartis, Biogen and Teva. She is part of the Multiple Sclerosis Expert Committee for the Ricarte Soto Law of the Chilean Ministry of Health (ad honorem). Fernández, R. has participated as Advisory Board member for Genzyme, Biogen, Novartis, and Merck and has received professional travel (congresses) support from Novartis, Biogen, Genzyme, Merck, Roche and Laboratorio Chile/Teva. Galleguillos, L. has participated as speaker in meetings sponsored by and received consulting fees from Novartis, Merck, Biogen, Merck and Genzyme, and fees for outreach talks from Novartis, Biogen, Merck and Genzyme. Scherpenisse, J. has received professional travel (congresses) from Biogen and Roche, and speaker fees from Novartis. Rivera, M. has participated as speaker and has received congresses invitations from Novartis, Biogen, Merck, Sanofi, and Roche. Hitschfeld, M. and Araya, A. are employees of Novartis Chile S.A.

Acknowledgments: the authors thank the patients who took part of this project.

Funding: The study was funded by Novartis Pharma AG, Basel, Switzerland

BACKGROUND

Multiple Sclerosis (MS) is the most common chronic immune-mediated and neurodegenerative disease of the Central Nervous System, affecting around 2.3 million people worldwide¹. Approximately 25 to 40% of patients will transition to Secondary Progressive Multiple Sclerosis (SPMS) within ten years of MS onset. The proportion of patients with diagnosed SPMS ranges from 12 to 39% across the Americas and EU-5 countries². Defining the transition from Relapsing Remitting Multiple Sclerosis (RRMS) to SPMS can be challenging and may result in delayed diagnosis and impact treatment decision making. MSProDiscuss™ (https://msprodiscuss.com/) is a freely available educational tool developed and validated to facilitate physician-patient discussion on subtle early signs of MS progression and enable patient-HCP conversation³.

Objective:

Evaluate the **usefulness and usability** of the MSProDiscuss[™] tool **in the clinical practice** in Chile.

[.] Browne, P. et al. Atlas of Multiple Sclerosis 2013: a growing global problem with widespread inequity. Neurology 2014;83:1022-1024.

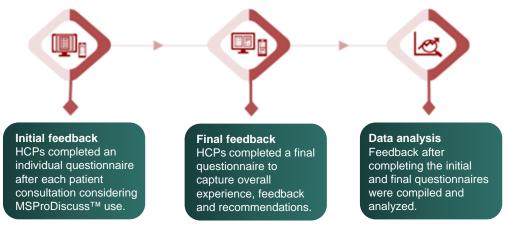
^{2.} Khurana, V. et al. Estimated Prevalence of Diagnosed Secondary Progressive Multiple Sclerosis in the Americas and Europe: Results From a Systematic Literature Review American Academy of Neurology 2018

^{3.} Ziemssen, T. et al. A physician-Completed Digital Tool for Evaluating Disease Progression (Multiple Sclerosis Progression Discussion Tool): Validation Study. J Med Internet Res. 2020;22:e16932

METHODS

► Eight neurologists were consulted on feedback for MSProDiscuss[™] questionnaire implementation into daily clinical practice.

Figure 1: MSProDiscuss™ usability and usefulness assessment



METHODS



Neurologists entered details of patient disease activity, symptoms and their impact experienced in the last six months. After completion, a traffic-light output displayed the probable level of progression.

Figure 2: Tool domains

Questions address three main areas

Visual, motor, ambulatory, coordination and balance, pain, sensory, cognition, fatigue, speech.

Disease activity in past 6 months*

Has the patient experienced any relapses in the past 6 month? Yes/No

- How many?
- Recovery rate from most recent relapse?

Has an MRI been performed in the past 6 months? Yes/No

Signs of new activity?

Symptoms in the past 6 months

Has the patient experienced any visual symptoms in the past 6 months due to their MS? Yes/No

- Were the symptoms experienced during relapse?
- Were the symptoms intermittent or persistent?
- If the symptoms were persistent, were they improving, stable or worsening.

--over time?

Impacts experienced in past month

Please indicate the impact of the patient's overall symptoms in the past 6 months on following:

- Mobility
- Self-care
- Other daily activities
- · Hobbies and leisure
- Paid and unpaid Work

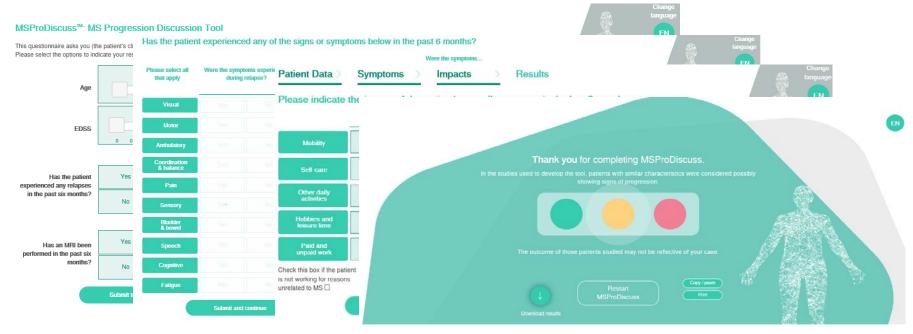
None/little/moderate/severe/unable

.*Including age and optional EDSS

EDSS, Expanded Disability Status Scale; MRI, magnetic resonance imaging; MS, multiple sclerosis

MSProDiscuss[™]

MSProDiscuss™ tool can be accessed on website: www.msprodiscuss.com



RESULTS

► The tool was implemented during **278 MS patient medical neurological appointments** and after each an **individual questionnaire** was completed.

Feedback on the individual questionnaires

- ▶ In all instances when MSProDiscuss[™] was used, the neurologists indicated that the time taken to complete the tool was considered satisfactory.
- ► The majority of neurologists agreed or strongly agreed that MSProDiscuss[™] was beneficial in their practice:
 - ▶ In 96.8% of cases, neurologists felt that the patients understood the questions well and neurologists were willing to use the tool again in the same patient in 98.9% of cases.
 - ▶ The tool was found **useful in discussing MS symptoms and its impact on daily activities** in 88% of cases and **cognitive function** in 89.6% of cases and in discussing **progression in general** (80.2% of cases).

RESULTS





I would use this tool again in the future with this patient.

Question

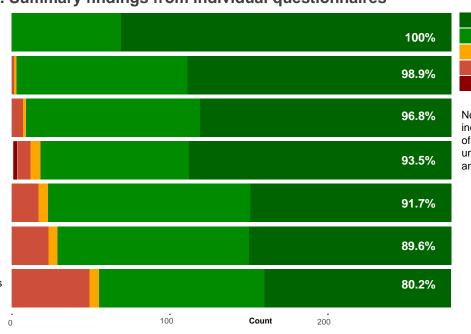
The patient was able to comprehend the questions from the tool that I asked in the course of the patient consultation.

The green/yellow/red results at the end of the questionnaire helped me discuss progression with my patient.

The tool helped me discuss the topic of progression with my patient.

The tool helped me discuss symptoms of MS progression and. the impact on patients daily activities.

The tool helped me discuss symptoms of MS progression and its impact on cognitive function.



Note: the percentage indicates the proportion of responses falling under 'strongly agree' and 'agree

Strongly agree

Strongly disagree

Neither agree nor disagree

Agree

Disagree

RESULTS

Six HCPs completed a final questionnaire after using MSProDiscuss™ along with 40 patients.

Feedback on the final questionnaire

- ► The overall feedback on MSProDiscuss™ was similar to and consistent with the findings from the feedback on the individual questionnaires:
 - ▶ Most (96.8%) HCPs said the patients understood the questions well and 83.3% agreed that the questions were similar to those asked in regular consultations.
 - ► The majority of HCPs agreed that MSProDiscussTM was helpful for understanding the impact of MS symptoms on patient's daily activities (83.3%) and cognitive function (66.7%).
 - ▶ 100% HCPs would recommend MSProDiscuss[™] to a colleague and a similar proportion of HCPs think that it is feasible to integrate MSProDiscuss in their daily clinical practice.

Additional insight

Participant HCPs reported that current diagnosis of the 278 participant patients was 16.2% SPMS and 83.8% RRMS. (CIS and PPMS patients were excluded of the project).

CONCLUSIONS

- Neurologists indicated that MSProDiscuss[™] was **very useful for evaluating and consulting** about the **MS progression** and **its impact on daily life**. According to their feedback, it provided an idea of the **degree of disability and transition** to SPMS. Besides, it **facilitated** an informed **doctor-patient discussion**.
- ► The prevalence of SPMS is currently unknown in Chile. However, the proportion of current SPMS diagnosis reported by the participating neurologists before utilizing the tool is within the internationally reported SPMS diagnosis proportion range.
- ▶ Participating neurologists were all well-experienced in diagnosing and managing MS patients; therefore, their feedback may not necessarily be representative of other professionals.
- ▶ Based on study design, no assumptions can be made regarding the tool contribution to detect the transition from RRMS to SPMS in routine clinical practice. We recommend conducting further studies to assess the utility of MSProDiscuss™ in Chile.