Worldwide longitudinal observational study of fatiguerelated symptoms in patients with relapsing multiple sclerosis, daily assessment and 7-day lookback



E. ZYLBERMINE 1, J. LAURENT 1, L.RADOSZYCKI 1

142214

1. Carenity, Online Patient Community, Paris, France

## INTRODUCTION

Fatigue is one of the most common symptoms of multiple sclerosis (MS)<sup>1</sup>.

Using MS-specific patient reported outcomes to characterize it would grant a better understanding of its impact on patients' quality of life (QoL).

#### **OBJECTIVE**

This observational longitudinal study aimed to measure fatigue in Relapsing MS (RMS) patients from multiple countries using the **Fatigue**Symptoms and its Impacts

Questionnaire-RMS (FSIQ-RMS)<sup>2</sup>.

# **METHOD**

- Adult patients from the **United States** (US) (n=300), **Europe** (EU) (n=362) and **Latin America** (LATAM) (n=60) recruited via an online patient community of patients with MS (**Carenity platform** <sup>3</sup>).
- Self-reported data were collected through an online survey.
- The 20-item FSIQ-RMS assesses MS-related fatigue, measuring its severity based on the average daily ratings over a 7-day period, and evaluates its impact on three subdomains: physical, cognitive/emotional, and coping.
- On the seventh day, participants were asked to assess their fatigue over the previous 7 days. FSIQ-RMS and the 7-day lookback scores were compared using Pearson's correlation coefficient (r) for all regions at baseline, and for the US after 6, 12 and 18 months.

Fig 1: Design: A non-interventional prospective study

#### Day 1 (Mandatory)

- Screening criteria
- Sociodemographic and clinical characteristics
- Fatigue characteristics
- Impact on professional life
- Expectations and solutions to manage fatigue
- FSIQ-RMS symptom items (7)

#### Day 2 to 6 (at least 2/5)

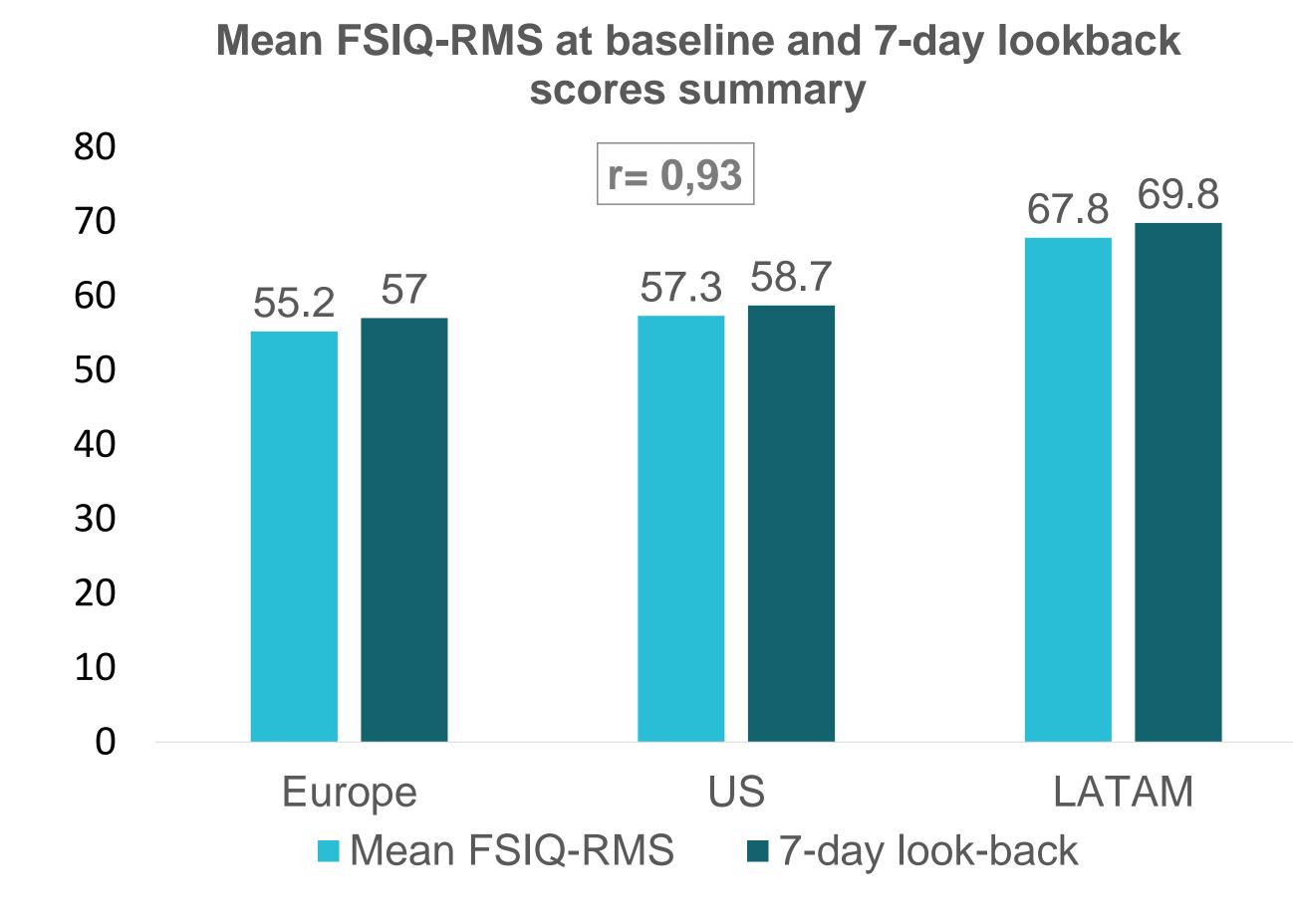
FSIQ-RMS symptom items (7)

#### Day 7 (Mandatory)

- FSIQ-RMS symptom items (7)
- FSIQ-RMS impact items (13)
- 7-day lookback on fatigue symptoms
- Current relapse
- Quality of sleep
- Unusual factors influencing fatigue

### **RESULTS**

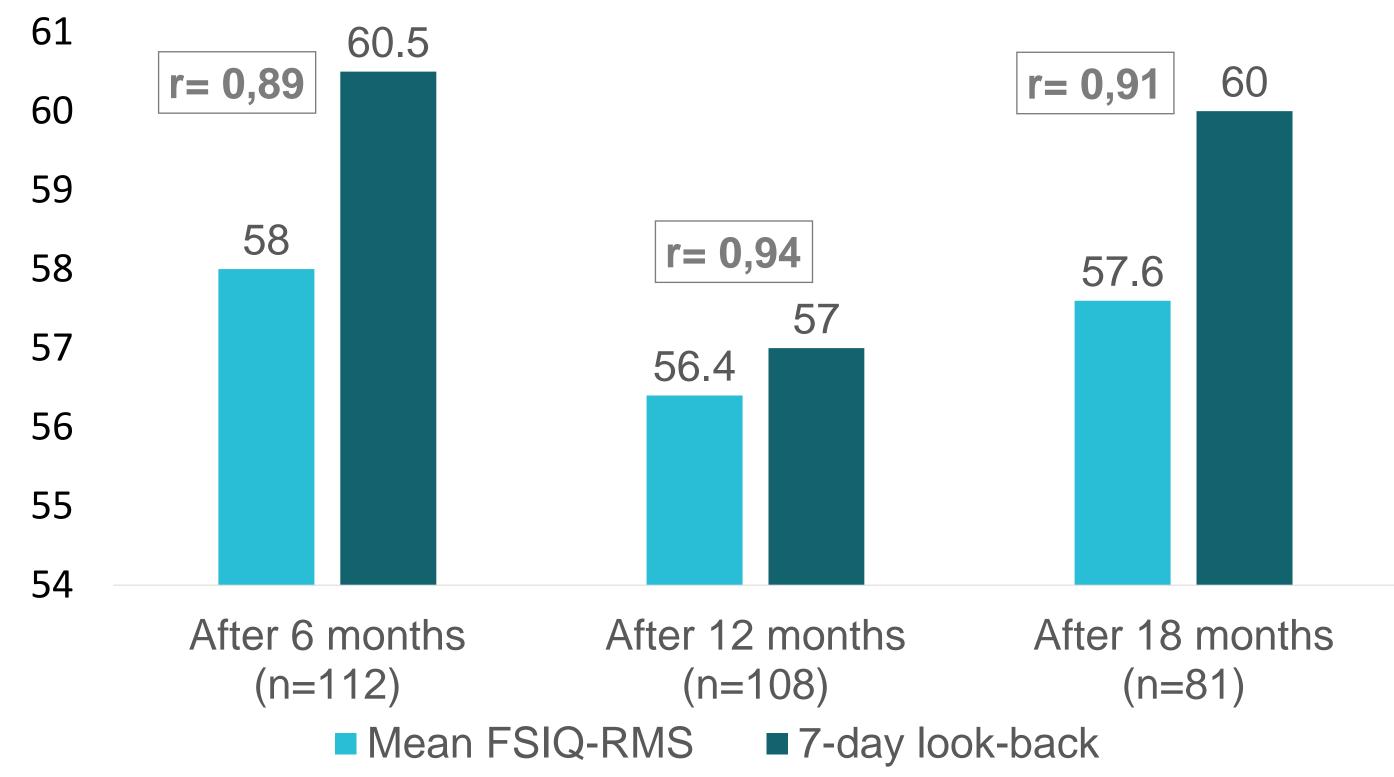
Fig 2: Mean FSIQ-RMS symptom scores at baseline and 7-day lookback summary



For all regions, there is high similarity between the FSIQ-RMS daily symptom score and its 7-day retrospective assessment. The correlation between FSIQ-RMS and 7-day lookback was 0.93.

<u>Fig 3:</u> FSIQ-RMS symptom and 7-day lookback in the US after 6 months, 12 months, and 18 months

# Mean FSIQ-RMS at baseline and 7-day lookback scores summary in the US



All correlation coefficients were close to one, indicating a strong correlation between the two scores (r-ranges between [0.89-0.94]).

#### CONCLUSIONS

- The Mean FSIQ-RMS symptom scores at baseline and 7-day lookback were mostly similar across Europe and US respondents. However, they were slightly higher for LATAM respondents.
- We found **high similarity** between the FSIQ-RMS daily symptom score and its 7-day retrospective assessment in different regions and at different points in the analysis.
- The results suggest that the 7-day lookback assessment is reliable.

# REFERENCES

- 1. Khan F, Amatya B, Galea M. Management of fatigue in persons with multiple sclerosis. Front Neurol. 2014.
- 2. Hudgens S, Schüler R, Stokes J, Eremenco S, Hunsche E, Leist TP. Development and Validation of the FSIQ-RMS: A New Patient-Reported Questionnaire to Assess Symptoms and Impacts of Fatigue in Relapsing Multiple Sclerosis. Value Health. 2019.
- 3. www,carenity.com

julie@carenity.com

# **CONTACT INFORMATION**



