Introduction

According to the Spanish Neurology Society (SEN), it is estimated that around 47,000 Spaniards suffer from multiple sclerosis (MS) and 16% of them suffer from Secondary Progressive MS (SPMS), around 7,250 patients.1

Patients with relapsing-remitting MS (RRMS) to SPMS represents a critical point in the disease, implying an inescapable progression of disability with fewer treatments available with enough capacity to modify the course of the disease.2

MS symptoms, who lead to a general disability, impacting the quality of life of patients and being also related with an important economic burden on the National Health Systems (NHS), the patients, caregivers and the whole society.3

There has been published data on the economic impact of considering the NHS, patient and society perspectives separately.

Objective

To estimate the economic impact of SPMS in Spain.

Methods

DISCOVER (CBAF312AES01) is an observational, non-interventional, cross-sectional, retrospective and multicenter study.

Consecutive patients treated and monitored according to routine clinical practice were recruited in 34 public hospitals in Spain. All data were collected in one single visit.

Primary endpoint was the total annual cost per patient from 3 perspectives:

Spain NHS perspective: including direct costs.

Patient perspective: including pharmacological payments by patients and other direct health costs privately incurred.

Societal perspective: including direct and indirect costs.

Results

Table 2 Crossover between the presence of relapses during the last 2 years and the presence of lesions in T1 and T2+.

<table>
<thead>
<tr>
<th>Relapses in the last 2 years</th>
<th>Gd+ lesions T1</th>
<th>Gd+ lesions T2+</th>
<th>Gd+ lesions T1 &amp; T2+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No relapses</td>
<td>226 (76.1%)</td>
<td>10 (3.4%)</td>
<td>5 (1.7%)</td>
<td>241 (81.1%)</td>
</tr>
<tr>
<td>1 relapse</td>
<td>39 (13.1%)</td>
<td>6 (2.0%)</td>
<td>4 (1.3%)</td>
<td>49 (15.9%)</td>
</tr>
<tr>
<td>2 or more relapses</td>
<td>3 (1.0%)</td>
<td>9 (3.0%)</td>
<td>10 (3.3%)</td>
<td>22 (7.1%)</td>
</tr>
</tbody>
</table>

Total patients included in our analysis: 297.

Impact of SPMS on patient's quality of life

• Health related quality of life (HRQoL) has a negative correlation with EDSS score meaning that more severe stages of the disease result in a higher HRQoL (Figure 2).

• Disease progression negatively impacts the patient’s HRQoL and increases the total annual cost per patient reached up to 41,449 € (Figure 4).

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• Low direct non-medical costs may be related with the fact that 88.6% of the sampled patients in Spain were living with a relative (indirect caregiver).

Economic impact of SPMS

• Total annual cost per patient reached up to 41,449 € (Figure 4).

• All types of costs had a positive correlation with EDSS score meaning that more severe stages of the disease result in a higher use of resources. Specifically, EDSS showed a correlation of 0.6837 with direct healthcare resources, 0.2742 with direct non-healthcare resources, 0.2269 with indirect resources and 0.2224 with total costs (Figure 5).

Conclusions

• SPMS is associated with a high loss of work productivity, with most patients being unemployed for reasons related to MS.

• Disease progression negatively impacts the patient’s HRQoL and increases the total annual cost per patient.

• An economic burden of 41,449 € per patient/year was attributable to SPMS in Spain, indirect costs representing the 51.5% of the total.

• DISCOVER study revealed a significant economic impact of MS progression, highlighting the importance of implementing therapeutic strategies specific for MS patients within the early stages of progression.

References


Disclosures

Dr. Coret is an advisor and grant recipient for Novartis. Dr. Hoppe has received compensation for consulting services and speaking fees from Merck, Biogen, Novartis, Sanofi - Genzyme, Almirall, Paredox, and Roche. Dr. Alves has received speaker honoraria from Sanofi Genzyme, Dr. Raffo has received speaker honoraria from Sanofi Genzyme, Dr. Rhind has received research support from Sanofi Genzyme and Genzyme, Dr. Genberg has served as a consultant for Genzyme, Genentech, and Janssen. Dr. El Khadraoui was an investigator in observational studies for Sanofi and Novartis. Dr. Teh has had investigational/consulting relationship with Novartis, Roche, Merc

Figure 3 Percentage of SPMS patients reporting problems according to the EQ-5D-5L dimensions vs general population.

Figure 5 Total annual SPMS cost by patient perspective and patient's EDSS score.

EAM, AL, JRAC, BPF, LRT, FGG, VGQ, CLS, FCP, VML; IPM.

Study supported by Novartis Pharmaceuticals Corporation, USA, and by the National Institute of Neurological Disorders and Stroke (U01NS066055-01). P274.