Cost Per Response Analysis of Repository Corticotropin Injection versus Other Late-Line Treatments for Multiple Sclerosis Relapses in Adults

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BACKGROUND

Multiple Sclerosis (MS) is an autoimmune, inflammatory, demyelinating disease of the central nervous system, characterized by relapsing-remitting disease³,⁴.

Revealing relapses is critical to patient care, as is managing relapses and treatment aggressiveness.³⁻⁶ There is evidence that early treatment can help reduce disability and improve quality of life.³⁻⁶ Relapses have a potential to be associated with a delay in diagnosis of MS;³⁻⁶ however, there is a lack of evidence comparing the cost per response of these late-line treatments for the resolution of MS relapses.³⁻⁶

OBJECTIVE

To estimate the cost per response of MS relapse treatment with RCI versus PMP/IVIg among patients with acute exacerbations of MS (≥1 relapse per year) from a payer perspective.

METHODS

Sample: Patients who experienced ≥1 MS exacerbations

Treatments: RCI and PMP/IVIg

Average annual cost of care (Figure 1)


Response: Upper bound

Response: Range (Table 1)

Data source: Humana Comprehensive Health Insights Database® (January 1, 2008 through July 31, 2015) and HealthCore Integrated Research Databases® (January 1, 2008 through November 30, 2016)

Response: No additional relapse treatments or procedures within 30 days

Relapses: Defined using established claims-based methodology which included inpatient or outpatient claim with a diagnosis of MS followed by receipt of a relapse treatment or procedure (RCI, PMP, or IVIg)

Cost per response: Designed to compare annual cost of care per patient achieving MS relapse resolution

RESULTS

Base case results (Figure 2)

The base case annual cost per RCI response ($141,970) was lower than that with PMP/IVIg ($253,331)

Sensitivity analysis results (Figure 3)

The cost per response for RCI was sensitive to the response rate and annual cost of care

Cost per response: range: $126,412 - $157,019 for change in response rate from 56.0% to 88.0%

Cost per response: range: $124,060 - $161,450 for change in average annual cost of care from $107,432 to $138,616

RCI had a lower cost per response compared with PMP/IVIg with changes in annual cost of care and response rate

CONCLUSIONS

Although average annual cost of late-line treatments is similar, the cost per response of RCI is lower than other late-line treatments

Sensitivity analysis shows that RCI was still cost-saving compared to other late-line treatments

These findings shed light on the importance of late-line treatment selection strategies for patients with acute exacerbations of MS

Robust management of MS relapse should reflect timely resolution with appropriate treatment to minimize patient burden

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DISCLOSURES

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