EPR-087

Healthcare resource utilization and costs associated with exacerbation or crisis in generalized myasthenia gravis

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Conflicts of Interest

This study was sponsored by Johnson & Johnson.

Nicholas J. Silvestri and Kavita Grover have received personal compensation for serving as consultants for Johnson & Johnson.

Kavita Gandhi, Antoine C El Khoury and Zia Choudhry are employees of Johnson & Johnson and may hold stock/stock options of Johnson & Johnson. Geoffroy Coteur is contractor for Johnson & Johnson.

Martin Cloutier, Maryia Zhdanava, Porpong Boonmak, Anabelle Tardif-Samson and Yuxi Wang are serving as employees of Analysis Group, Inc., a consulting company that has provided paid consulting services to Johnson & Johnson

Maria Ait-Thiyaty is a former employee of Johnson & Johnson and was an employee at time of study completion.

Presented by K. Gandhi at 11th Congress of the European Academy of Neurology; June 21-24, 2025; Helsinki, Finland

Introduction

Background:

- Substantial proportion of patients with generalized myasthenia gravis (gMG) experience exacerbations, and although myasthenic crises are rare, they are associated with high costs and serious health consequences[1]
- Evidence on economic implications of exacerbations and crises are sparse, limiting efforts to address unmet needs for disease control

Objective:

- Describe healthcare resource use (HRU) and associated costs among patients with gMG who experience exacerbations or crises (i.e., clinical events)

[1] Zhdanava et al. Curr Med Res Opin. 2024 Jul;40(7):1145-1153.

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Methods

Data source:

- Health insurance claims from Komodo Research Data (01/01/2016 to 09/30/2023)

Study population:

- Adults with gMG (i.e., MG diagnosis by a neurologist), who subsequently experienced a clinical event as defined below
  - **MG exacerbation**: diagnosis of MG with exacerbation (G70.01) in any setting or primary diagnosis of MG without exacerbation (G70.00) in inpatient or emergency department setting
  - **MG crisis**: inpatient admission with MG diagnostic code and procedure for intubation, tracheostomy or mechanical ventilation

Study design:

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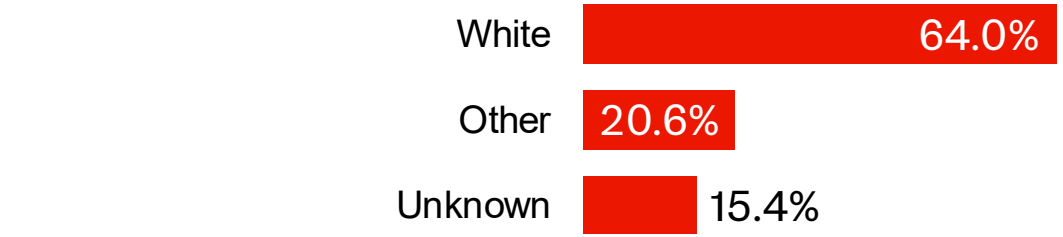
Characteristics of patients and first clinical event (N = 2,657)

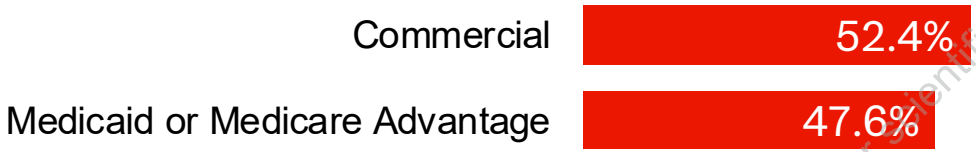
Patient characteristics

Mean age: 61 years old, female: 47.5%

Race/Ethnicity



Payer

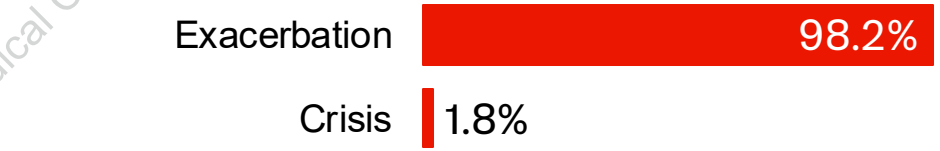


Comorbidities

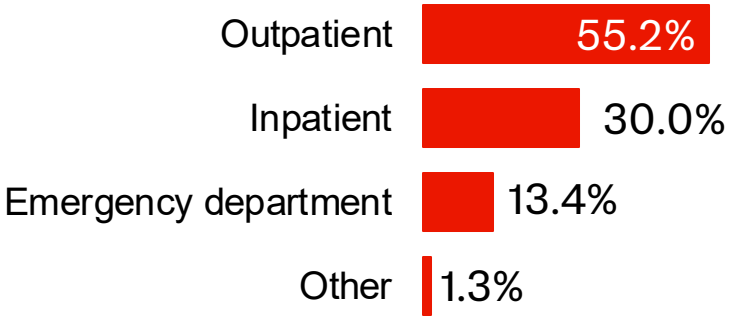
First clinical event

Mean time from diagnosis: 3.8 months

Type of event



Setting of event



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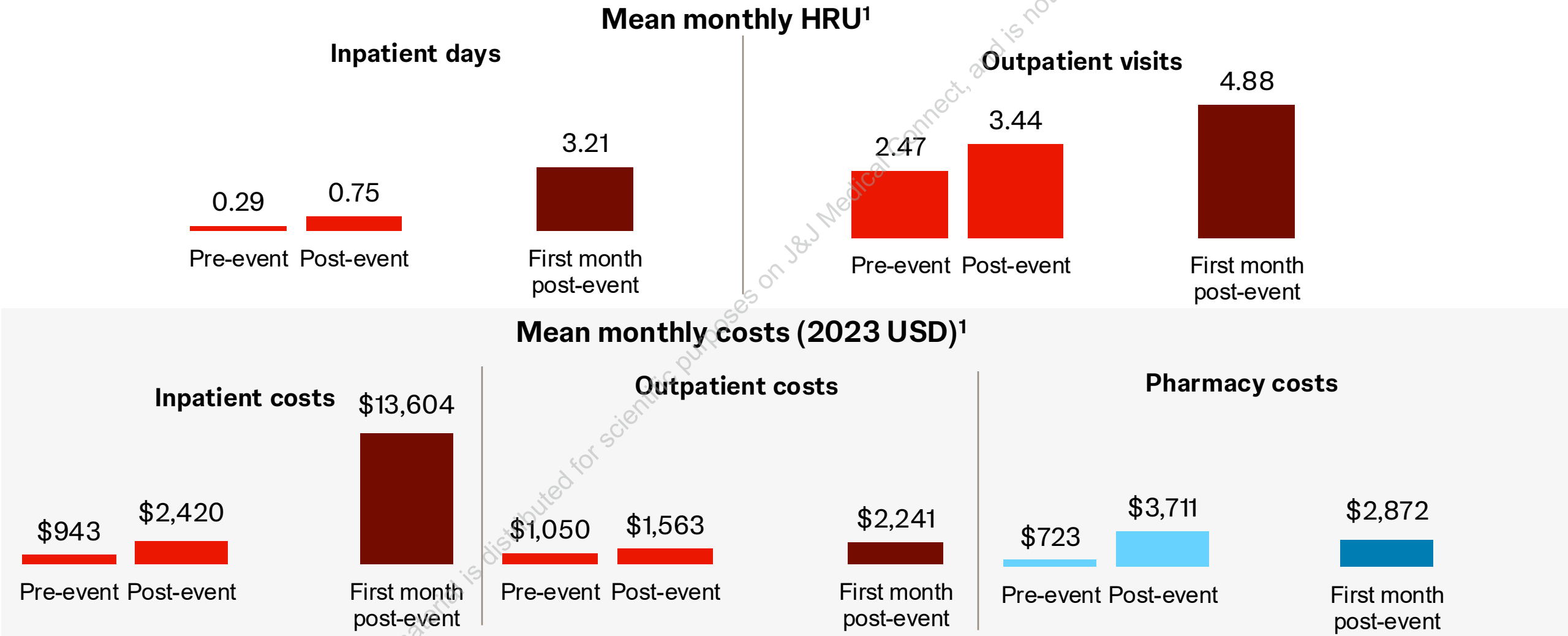
Mean monthly HRU and medical costs peaked during the first month after clinical event and remained elevated



[1] The pre- and post-event periods spanned 12 months before and after the first clinical event, respectively. The post-event period included the event.

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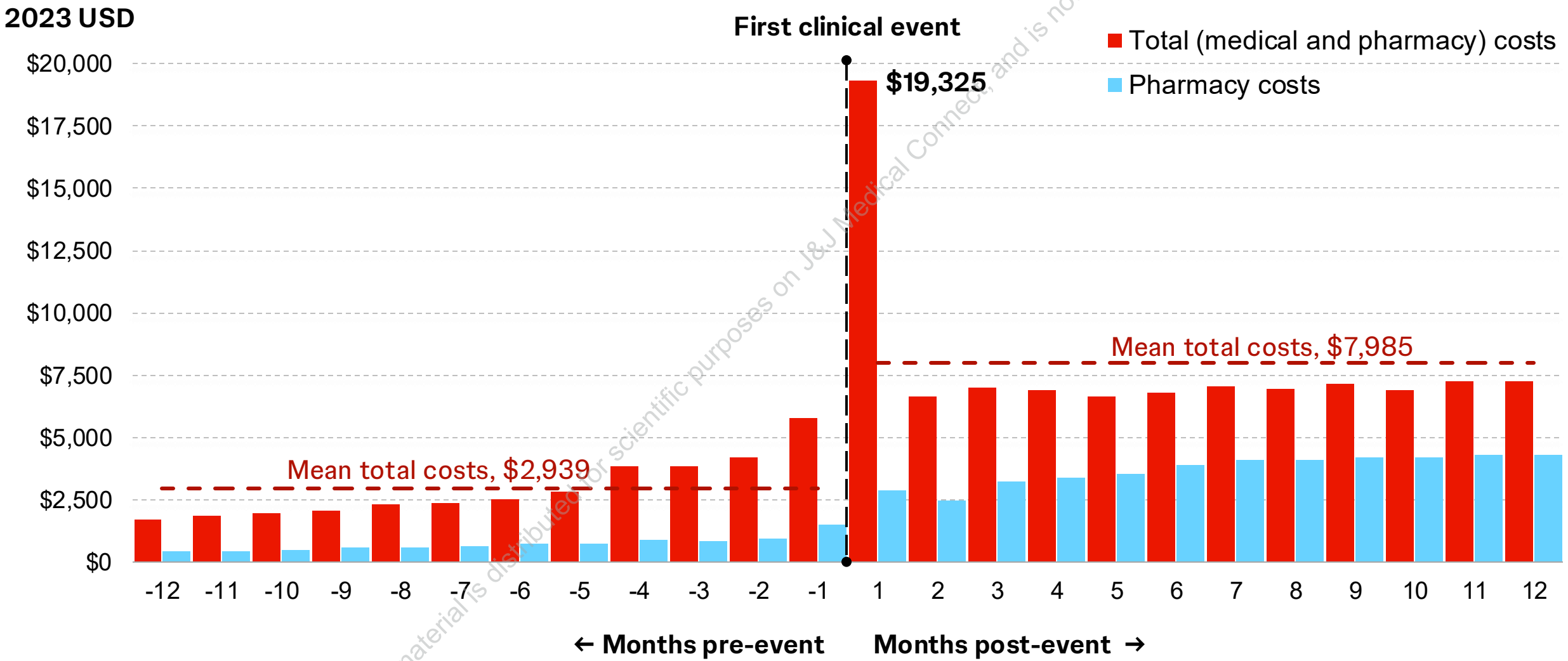
Mean monthly total (medical + pharmacy) costs peaked during first month after clinical event and remained elevated



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Conclusions

Conclusions:

- Clinical events associated with gMG are costly and resource-intensive, with both acute and long-term impacts
- Findings underscore the importance of more effective and earlier treatments to achieve optimal disease control and reduce risk of exacerbations and crises in gMG

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