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Micro-costing of relapse and refractory EGPA treatment in Brazil using the lens of experts

SILVA D[1], ALEMAR M[1], BERNARDINO G[1], BAISCH E[1], GAZZOTTI MR[1], TANAKA S[1], MARCHESAN T[1]

[1]GSK Brazil

Introduction

- EGPA is a rare form of ANCA-associated vasculitis characterized by eosinophilic inflammation (including asthma) and extravascular granulomas.
- The key symptoms derive from the nervous system, skin, airways, lungs, heart, intestines, and kidney involvement.
- The aim is to estimate the costs associated with refractory Eosinophilic Granulomatosis with Polyangiitis (EGPA) treatment from the Brazilian Public Healthcare System perspective, based on five specialists' treatment practices and experience.

Methods

- A four-hour virtual panel was held in June 2023 with five experts: rheumatologists with 8 to 25 years of experience in the field and a history of eight patients with EGPA, on average, treated in the last 12 months of clinical practice.
- The discussion was guided by a previously validated questionnaire regarding the required patient resources to treat this serious disease through Brazil's public health system.
- After defining resource use standards, each item was assigned a cost according to published governmental prices.
- Costs were represented in Brazilian Reais (BRL/R$).
- The anonymity of the study sponsor was assured.

Results

Table 1: **Cost per three months for patients in remission.**

Category	Minor recurrence
Medical consultations	R$ 10.00
Complementary exams	R$ 57.66
Procedures	R$ 0.00
Medicines	R$ 84.31
Emergency visit	R$ 0.00
Hospitalizations	R$ 0.00
TOTAL (quarterly)	R$ 151.97

Table 2: **Cost per three months for patients with minor relapse.**

Category	Minor recurrence
Medical consultations	R$ 30.00
Complementary exams	R$ 573.18
Procedures	R$ 0.00
Medicines	R$ 124.90
Emergency visit	R$ 120.16
Hospitalizations	R$ 0.00
TOTAL (quarterly)	R$ 848.23

Table 3: **Cost per three months for major relapse patients.**

Category	Minor recurrence
Medical consultations	R$ 60.00
Complementary exams	R$ 742.34
Procedures	R$ 3,149.34
Medicines	R$ 527.44
Emergency visit	R$ 240.31
Hospitalizations	R$ 15,578.28
TOTAL (quarterly)	R$ 20,297.71

Table 4: **Cost per three months for patients with refractory disease.**

Category	Minor recurrence
Medical consultations	R$ 15.00
Complementary exams	R$ 227.69
Procedures	R$ 787.34
Medicines	R$ 169.10
Emergency visit	R$ 240.31
Hospitalizations	R$ 7,789.14
TOTAL (quarterly)	R$ 9,228.58

Conclusion

- Understanding the cost details related to EGPA patient care is fundamental to preparing for assistance planning in the public health system.
- This study sheds light on an understudied topic in Brazil and lacks economic evaluations worldwide.
- Further research with more experts could help to deepen the understanding of the assistance for this rare disease.

- The quarterly follow-up cost for a patient in remission was estimated at BRL 151.97, including medical consultations, laboratory and imaging tests, and medications.
- Costs per patient with minor relapse was BRL 848.23 each quarter driven by complementary exams.
- Patients with severe relapse demand substantially additional resources, BRL 20,297.71 per quarter, of which 77% are spent on hospitalizations and 16% on diagnostic procedures.
- A single patient with refractory disease would require BRL 9,228.58 per quarter with direct costs, driven by hospitalizations and diagnostic procedures.
- Patients with refractory disease cost 60 times more than patients in remission.

References

1. S. Furuta, T. Iwamoto, and H. Nakajima, "Update on eosinophilic granulomatosis with polyangiitis," Allergol. Int., vol. 68, no. 4, pp. 430–436, Oct. 2019, doi: 10.1016/j.alit.2019.06.004.
2. Ministério da Saúde (Brasil)., "Banco de Preços em Saúde," 2023. https://www.gov.br/saude/pt-br/acesso-a-informacao/banco-de-precos (accessed Oct. 09, 2023).
3. Ministério da Saúde (Brasil)., "SIGTAP - Sistema de Gerenciamento da Tabela de Procedimentos, Medicamentos e OPM do SUS," 2023. http://sigtap.datasus.gov.br/tabela-unificada/app/sec/inicio.jsp (accessed Oct. 09, 2023).

Disclosures

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EGPA: Eosinophilic Granulomatosis with Polyangiitis; BRL: Brazilian Real.

Presenting author: Straus Tanaka; straus.y.tanaka@gsk.com