

Steroid Use, Toxicity, and Monitoring in Patients With Generalized Myasthenia Gravis: **A Survey of Neurologists in the United States**

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INTRODUCTION

• Generalized myasthenia gravis (gMG) is a rare, chronic autoimmune disorder characterized by muscle weakness resulting from pathogenic immunoglobulin G (IgG) autoantibodies targeting the postsynaptic neuromuscular junction and disrupting neuromuscular transmission¹⁻⁴

→ Global prevalence is ≈ 12.4 per 100,000 persons⁵

- As with other chronic autoimmune disorders, immunosuppressant treatment for gMG is usually lifelong⁶
- Corticosteroids (CSs) are recommended as a first-line treatment for MG^{1,7}
 - Adverse effects (AEs) can be severe and toxicity monitoring for patients given high-dose or long-term CSs is critical⁸

RESULTS

Table 1. Respondent Characteristics		Figure 1. Ch		
Characteristic	n=101	CS	Dose	Cor
Patients with gMG treated by respondents each year, %		%	60 50	
10-20	38		40 -	
≥21	62	den	30 -	
Mean (SD) number of patients on ≥10 mg CS for ≥1 month	26.4 (28.3)	Respondents,	20 - 10 -	
Primary practice setting, %		ĸ	0	
Community	49			≤5
Academic	51			
Mean (SD) years since residency/training	20.5 (10.4)	Fi	gure 2) Fa
Board certifications (in addition to neurology), %			50	
Neuromuscular	45	%	40 –	C
Electrodiagnostic medicine/ clinical neurophysiology	35	espondents,	30 -	the wi
Pediatric neurology	17	ono	20 -	
See patients referred by other neurologists, %		Resp	10 -	
Yes	72		0	
No	28			Not fan

Transl Med. 2016;375(26):2570-2581; 3. Behin A, et al. J Ret Dis. 2018;5(3):265-277; 4. Mahic M, et al. J Ret Dis. 2023;18(1):169; 5. Salari N, et al. J Ret Dis. 2018;5(3):265-277; 4. Mahic M, et al. J Ret Dis. 2018;5(3):265-277; 4. Mahic M, et al. J Ret Dis. 2023;18(1):169; 5. Salari N, et al. J Ret Dis. 2018;5(3):265-277; 4. Mahic M, et al. J Ret Dis. 2018;5(3):265-277; 7. National M, et al. J Ret Dis. 2018;5(3):265-277; 7. National M, et al. J Ret Dis. 2018;5(3):265-277; 7. National M, et al. J Ret Dis. 2018;5(3):265-277; 7. National M, et al. J Ret Dis. 2018;5(3):265-277; 7. National M, et al. J Ret Dis. 2018;5(3) Baconsultant/advisor for Alexion, argenx, BPL, Cartesian, Grifols, Janssen, Takeda, UCB and receives/has received grant support from Alexion, argenx, BPL, Cartesian, Grifols, Janssen, Takeda, UCB and receives/has and MGFA. DG, TH, and VTSR are employees of argenx. PAN is an employee of One Research, which received payment for the scientific advisor for Alexion, JS has served as a consultant to argenx on glucocorticoid toxicity and is chair of the scientific advisor for Alexion, and Steritas. PN is a consultant to argenx on glucocorticoid toxicity and is chair of the scientific advisor for Alexion, and Steritas. argenx, Dianthus, GSK, Janssen, Novartis, and UCB; receives/has received research support from Alexion, Dianthus, Janssen, PCORI, and UCB; and receives royalties from Springer Nature. ACKNOWLEDGMENTS: Susan A. Leon, PhD, CMPP, of Claritas Scientific LLC provided by Ann and UCB; and receives royalties from Alexion, Dianthus, Janssen, PCORI, and UCB; and receives royalties from Springer Nature. **D. Bledsoe Bollert, MA, CMPP**, of Y-Axis Editorial.

To survey CS prescribing patterns of board-certified neurologists and assess provider comfort and familiarity with monitoring CS toxicity in patients with gMG

METHODS

OBJECTIVE

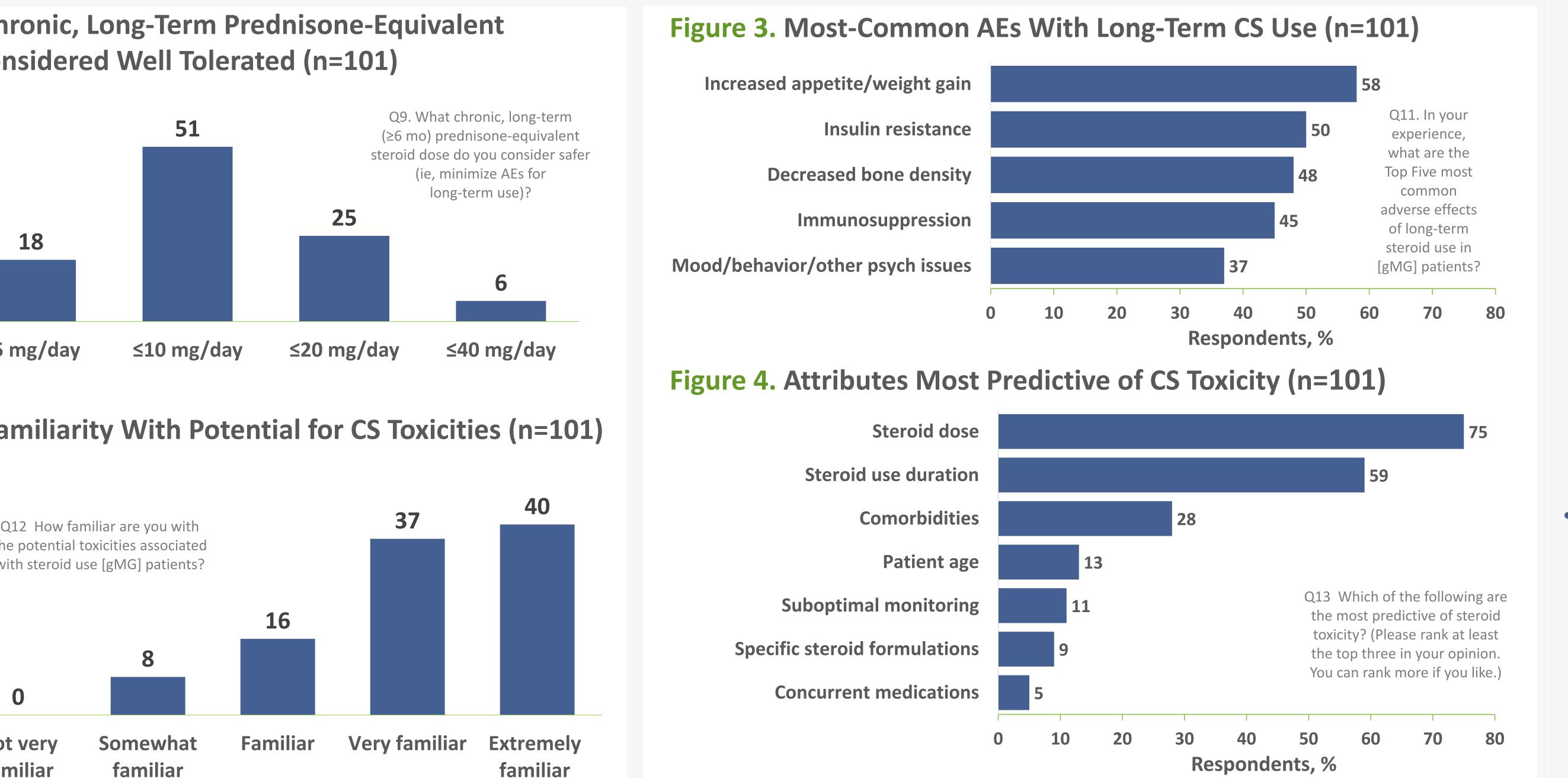
• 15-minute, cross-sectional online survey deployed in November and December 2023

• Survey enrolled 200 US neurologists (neurologists from Vermont excluded)

> 101 answered for gMG and 99 for CIDP (see poster #306 for CIDP data)

• Respondents had to meet the following criteria:

 \succ Be board certified in neurology, in practice in the US for ≥ 2 years since residency, and have treated or consulted in the past year on ≥ 10 patients with gMG who had been on a CS dose ≥10 mg for ≥1 month



SUMMARY AND PERSPECTIVE

- Although most neurologists reportedly monitor and manage CS toxicity in patients with gMG, only about half reported using guideline(s) to do so
- Current MG treatment guidelines emphasize use of lowest dose to control symptoms, but do not include specific recommendations on dosing, duration, or monitoring for toxicities
- Clearer guidance on how to administer CSs and manage toxicities in patients with gMG would be welcomed by neurologists and have potential for benefit to patient care





#MG89

RESULTS

101 neurologists who met criteria estimated:

- $\geq \approx 60\%$ of their patients with gMG are being treated with CSs
- $\geq \approx 40\%$ of their patients are being treated with nonsteroidal immunosuppressant therapy (NSIST)

Less than 50% are able to taper down to ≤10 mg/day in <6 months

52% of neurologists reported using recommendations from guidelines to make clinical decisions on monitoring CS toxicity

> However, 34% endorsed use of a nonexistent guideline (Guideline) for Systematic Surveillance of Steroid Safety [GSSS])

Neurologists' top 5 strategies for managing CS toxicities are:

- Dose adjustment/tapering (80%)
- Lifestyle modifications, eg, diet, exercise (48%)
- \succ Symptomatic treatment of specific AEs (48%)
- Addition of NSISTs (46%)
- Referral to other specialists, eg, endocrinologist, nephrologist (39%)

The top parameters neurologists considered when monitoring for **CS toxicities are:**

- Blood glucose levels (81%)
- Weight gain (75%)
- Blood pressure (66%)
- Bone mineral density (57%)
- \succ Ocular exam (eg, for cataracts) (43%)
- Psychological/behavioral changes (34%)

Neurologists said the greatest obstacles in monitoring for CS toxicity are:

- Balancing efficacy and toxicity (64%)
- Patient compliance and communication (47%)
- Coordination of care (39%)
- Time constraints (33%)
- Lack of consensus or standardized guidelines (28%)