

Clinical Status, Treatment, and Disease Burden of Generalised Myasthenia Gravis in the Asia-Pacific

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Supplementary Materials

Supplementary table S1: Symptoms at diagnosis and at time of survey for the overall cohort and the six study APAC regions.

	Overall	China	Japan	Malaysia	Australia	Taiwan	South Korea
Symptoms at diagnosis, n (%)	n=403	n=138	n=87	n=53	n=52	n=48	n=25
Drooping of one or both eyelids (ptosis)	336 (83.4)	113 (81.9)	73 (83.9)	50 (94.3)	43 (82.7)	37 (77.1)	20 (80.0)
Blurred or double vision (diplopia)	285 (70.7)	89 (64.5)	61 (70.1)	49 (92.5)	40 (76.9)	30 (62.5)	16 (64.0)
Difficulty swallowing (dysphagia)	196 (48.6)	54 (39.1)	45 (51.7)	24 (45.3)	33 (63.5)	25 (52.1)	15 (60.0)
General fatigue	187 (46.4)	65 (47.1)	42 (48.3)	23 (43.4)	31 (59.6)	13 (27.1)	13 (52.0)
Impaired speech (dysarthria)	184 (45.7)	39 (28.3)	45 (51.7)	27 (50.9)	30 (57.7)	25 (52.1)	18 (72.0)
Difficulty chewing	180 (44.7)	53 (38.4)	33 (37.9)	23 (43.4)	31 (59.6)	22 (45.8)	18 (72.0)
Weakness in the arms	179 (44.4)	47 (34.1)	49 (56.3)	20 (37.7)	31 (59.6)	22 (45.8)	10 (40.0)
Weakness in the legs	174 (43.2)	47 (34.1)	46 (52.9)	21 (39.6)	26 (50.0)	23 (47.9)	11 (44.0)
Shortness of breath (dyspnoea)	151 (37.5)	40 (29.0)	29 (33.3)	21 (39.6)	29 (55.8)	21 (43.8)	11 (44.0)
Weakness in the neck	145 (36.0)	33 (23.9)	43 (49.4)	20 (37.7)	24 (46.2)	17 (35.4)	8 (32.0)
Weakness in the hands	120 (29.8)	36 (26.1)	37 (42.5)	10 (18.9)	13 (25.0)	17 (35.4)	7 (28.0)
Weakness in the fingers	92 (22.8)	29 (21.0)	30 (34.5)	11 (20.8)	10 (19.2)	7 (14.6)	5 (20.0)
Muscle ache following physical activity	64 (15.9)	25 (18.1)	6 (6.9)	8 (15.1)	14 (26.9)	7 (14.6)	4 (16.0)
Change in facial expression	62 (15.4)	27 (19.6)	9 (10.3)	8 (15.1)	12 (23.1)	6 (12.5)	0 (0.0)
Difficulty in smiling	39 (9.7)	7 (5.1)	6 (6.9)	5 (9.4)	13 (25)	7 (14.6)	1 (4.0)
Drooling (sialorrhea)	34 (8.4)	10 (7.2)	5 (5.7)	7 (13.2)	5 (9.6)	5 (10.4)	2 (8.0)
Twitching of the lips	8 (2.0)	6 (4.3)	0 (0.0)	1 (1.9)	0 (0.0)	1 (2.1)	0 (0.0)
Other	3 (0.7)	2 (1.4)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)
None of the above	1 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)
Symptoms at time of survey, n (%)	n=407	n=138	n=89	n=54	n=53	n=48	n=25
Drooping of one or both eyelids (ptosis)	314 (77.1)	113 (81.9)	66 (74.2)	45 (83.3)	30 (56.6)	42 (87.5)	18 (72.0)
Blurred or double vision (diplopia)	262 (64.4)	92 (66.7)	54 (60.7)	41 (75.9)	32 (60.4)	29 (60.4)	14 (56.0)
Impaired speech (dysarthria)	217 (53.3)	71 (51.4)	44 (49.4)	24 (44.4)	18 (34.0)	41 (85.4)	19 (76.0)
Difficulty swallowing (dysphagia)	209 (51.4)	78 (56.5)	35 (39.3)	21 (38.9)	23 (43.4)	35 (72.9)	17 (68.0)
Difficulty chewing	198 (48.6)	77 (55.8)	38 (42.7)	17 (31.5)	19 (35.8)	29 (60.4)	18 (72.0)
Shortness of breath (dyspnoea)	176 (43.2)	53 (38.4)	40 (44.9)	19 (35.2)	19 (35.8)	32 (66.7)	13 (52.0)
General fatigue	102 (25.1)	56 (40.6)	19 (21.3)	8 (14.8)	15 (28.3)	1 (2.1)	3 (12.0)
Weakness in the arms	99 (24.3)	40 (29.0)	20 (22.5)	15 (27.8)	11 (20.8)	12 (25.0)	1 (4.0)
Weakness in the legs	93 (22.9)	44 (31.9)	19 (21.3)	14 (25.9)	7 (13.2)	8 (16.7)	1 (4.0)
Weakness in the hands	73 (17.9)	38 (27.5)	18 (20.2)	8 (14.8)	1 (1.9)	8 (16.7)	0 (0.0)
Weakness in the neck	69 (17.0)	33 (23.9)	19 (21.3)	5 (9.3)	6 (11.3)	6 (12.5)	0 (0.0)
Muscle ache following physical activity	46 (11.3)	22 (15.9)	6 (6.7)	4 (7.4)	9 (17)	4 (8.3)	1 (4.0)
Weakness in the fingers	42 (10.3)	21 (15.2)	11 (12.4)	6 (11.1)	1 (1.9)	3 (6.2)	0 (0.0)
Change in facial expression	22 (5.4)	16 (11.6)	2 (2.2)	2 (3.7)	1 (1.9)	1 (2.1)	0 (0.0)
Difficulty in smiling	12 (2.9)	5 (3.6)	3 (3.4)	2 (3.7)	1 (1.9)	1 (2.1)	0 (0.0)
Drooling (sialorrhea)	6 (1.5)	2 (1.4)	0 (0.0)	4 (7.4)	0 (0.0)	0 (0.0)	0 (0.0)
Twitching of the lips	2 (0.5)	2 (1.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Other	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
None of the above	8 (2.0)	0 (0.0)	4 (4.5)	1 (1.9)	3 (5.7)	0 (0.0)	0 (0.0)

Supplementary table S2: Patterns in treatment lines 1,2 and 3 for the overall cohort and the six study APAC regions.

		Overall	China	Japan	Malaysia	Australia	Taiwan	South Korea
Line 1	Number of drugs received, n (%)	n=400	n=138	n=87	n=53	n=53	n=45	n=24
	0	2 (0.5)	0 (0.0)	1 (1.1)	0 (0.0)	0 (0.0)	1 (2.2)	0 (0.0)
	1	140 (35.0)	72 (52.2)	21 (24.1)	29 (54.7)	8 (15.1)	6 (13.3)	4 (16.7)
	2	144 (36.0)	55 (39.9)	31 (35.6)	20 (37.7)	10 (18.9)	22 (48.9)	6 (25.0)
	≥3	114 (28.5)	11 (8.0)	34 (39.1)	4 (7.5)	35 (66.0)	16 (35.6)	14 (58.3)
	Mean (SD)	2.1 (1.1)	1.6 (0.7)	2.4 (1.2)	1.5 (0.6)	2.9 (1.2)	2.3 (1.0)	2.8 (1.2)
	Duration of Line (years)	n=281	n=126	n=46	n=21	n=38	n=28	n=22
	Mean (SD)	2.4 (3.6)	1.8 (2.4)	3.0 (3.6)	1.1 (1.7)	1.7 (3.0)	1.6 (2.7)	7.3 (7.2)
	Drug class, n (%)	n=398	n=138	n=86	n=53	n=53	n=44	n=24
	AChEIs	311 (78.1)	108 (78.3)	51 (59.3)	46 (86.8)	45 (84.9)	39 (88.6)	22 (91.7)
	Corticosteroids	242 (60.8)	60 (43.5)	68 (79.1)	25 (47.2)	35 (66.0)	37 (84.1)	17 (70.8)
Line 2	NSIST	155 (38.9)	38 (27.5)	42 (48.8)	9 (17.0)	29 (54.7)	18 (40.9)	19 (79.2)
	Advanced therapies	92 (23.1)	8 (5.8)	34 (39.5)	1 (1.9)	33 (62.3)	10 (22.7)	6 (25.0)
	Other	1 (0.3)	1 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Number of drugs received, n (%)	n=235	n=69	n=50	n=46	n=41	n=20	n=9
	1	33 (14.0.0)	15 (21.7)	3 (6.0)	7 (15.2)	3 (7.3)	3 (15.0)	2 (22.2)
	2	109 (46.4)	39 (56.5)	10 (20.0)	29 (63.0)	16 (39.0)	11 (55.0)	4 (44.4)
	≥3	93 (39.6)	15 (21.7)	37 (74.0)	10 (21.7)	22 (53.7)	6 (30.0)	3 (33.3)
	Mean (SD)	2.4 (1.0)	2.0 (0.7)	3.0 (1.0)	2.1 (0.7)	2.8 (1.0)	2.2 (0.8)	2.4 (1.3)
	Duration of Line (years)	n=182	n=67	n=35	n=28	n=36	n=8	n=8
	Mean (SD)	2.1 (2.8)	1.2 (1.2)	2.7 (3.8)	1.6 (2.2)	3.4 (3.0)	0.9 (1.1)	4.4 (4.9)
	Drug class, n (%)	n=235	n=69	n=50	n=46	n=41	n=20	n=9
Line 3	AChEIs	187 (79.6)	57 (82.6)	34 (68.0)	36 (78.3)	33 (80.5)	18 (90.0)	9 (100.0)
	Corticosteroids	166 (70.6)	44 (63.8)	44 (88.0)	33 (71.7)	26 (63.4)	14 (70.0)	5 (55.6)
	NSIST	134 (57.0)	30 (43.5)	36 (72.0)	25 (54.3)	29 (70.7)	9 (45.0)	5 (55.6)
	Advanced therapies	64 (27.2)	7 (10.1)	29 (58.0)	1 (2.2)	22 (53.7)	3 (15.0)	2 (22.2)
	Other	1 (0.4)	1 (1.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Number of drugs received, n (%)	n=96	n=16	n=17	n=28	n=18	n=12	n=5
	0	1 (1.0)	0 (0.0)	1 (5.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	1	9 (9.4)	2 (12.5)	1 (5.9)	2 (7.1)	3 (16.7)	1 (8.3)	0 (0.0)
	2	31 (32.3)	9 (56.2)	1 (5.9)	13 (46.4)	2 (11.1)	4 (33.3)	2 (40.0)
	≥3	55 (57.3)	5 (31.2)	14 (82.4)	13 (46.4)	13 (72.2)	7 (58.3)	3 (60.0)
	Mean (SD)	2.7 (1.0)	2.2 (0.8)	3.1 (1.2)	2.4 (0.7)	3.0 (1.3)	2.6 (0.8)	2.8 (0.8)
	Duration of Line (years)	n=77	n=16	n=11	n=24	n=15	n=6	n=5
	Mean (SD)	1.8 (2.4)	1.0 (0.5)	2.6 (3.6)	1.9 (2.4)	2.2 (2.5)	1.5 (1.4)	1.7 (3.2)

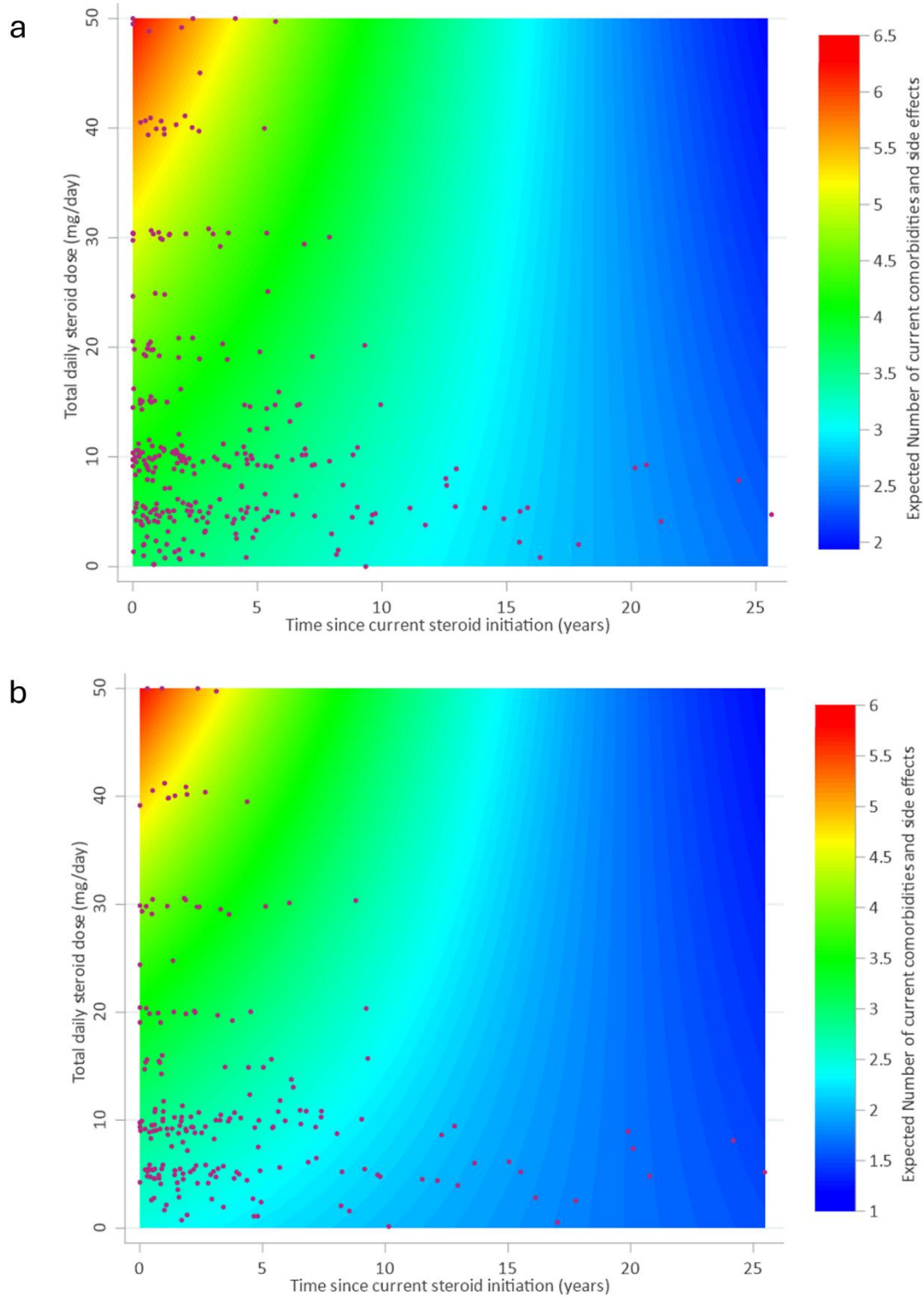
Drug class, n (%)	n = 95	n=16	n=16	n=28	n=18	n=12	n=5
AChEIs	79 (83.2)	11 (68.8)	11 (68.8)	25 (89.3)	15 (83.3)	12 (100.0)	5 (100.0)
Corticosteroids	69 (72.6)	9 (56.2)	15 (93.8)	19 (67.9)	11 (61.1)	11 (91.7)	4 (80.0)
NSIST	73 (76.8)	14 (87.5)	14 (87.5)	23 (82.1)	14 (77.8)	5 (41.7)	3 (60.0)
Advanced therapies	29 (30.5)	2 (12.5)	10 (62.5)	1 (3.6)	11 (61.1)	3 (25.0)	2 (40.0)

Abbreviations: AChEIs – acetylcholinesterase inhibitors; NSIST – non-steroidal immunosuppressants; SD – standard deviation

Supplementary table S3: Adverse events for the overall cohort attributed to current treatment regimen.

	Overall	China	Japan	Malaysia	Australia	Taiwan	South Korea
Adverse events attributed to current treatment regimen, n (%)	n=407	n=138	n=89	n=54	n=53	n=48	n=25
Adverse events experienced	278 (68.3)	114 (82.6)	36 (40.4)	41 (75.9)	36 (67.9)	38 (79.2)	13 (52.0)
Weight gain	74 (18.2)	16 (11.6)	7 (7.9)	27 (50.0)	11 (20.8)	6 (12.5)	7 (28.0)
Altered mood	66 (16.2)	18 (13.0)	1 (1.1)	28 (51.9)	3 (5.7)	9 (18.8)	7 (28.0)
Dizziness	64 (15.7)	18 (13.0)	9 (10.1)	26 (48.1)	1 (1.9)	8 (16.7)	2 (8.0)
Diarrhoea	53 (13.0)	17 (12.3)	1 (1.1)	8 (14.8)	6 (11.3)	18 (37.5)	3 (12.0)
Anorexia	49 (12.0)	18 (13.0)	2 (2.2)	23 (42.6)	0 (0.0)	4 (8.3)	2 (8.0)
Fatigue	48 (11.8)	19 (13.8)	8 (9.0)	0 (0.0)	8 (15.1)	7 (14.6)	6 (24.0)
Hyperglycaemia	45 (11.1)	6 (4.3)	11 (12.4)	6 (11.1)	6 (11.3)	11 (22.9)	5 (20.0)
Fluid retention	39 (9.6)	15 (10.9)	1 (1.1)	11 (20.4)	4 (7.5)	7 (14.6)	1 (4.0)
Increased infections	38 (9.3)	16 (11.6)	1 (1.1)	3 (5.6)	5 (9.4)	12 (25.0)	1 (4.0)
Increased blood pressure	35 (8.6)	9 (6.5)	4 (4.5)	8 (14.8)	2 (3.8)	9 (18.8)	3 (12.0)
Osteoporosis	35 (8.6)	16 (11.6)	2 (2.2)	4 (7.4)	5 (9.4)	6 (12.5)	2 (8.0)
Insomnia	34 (8.4)	8 (5.8)	6 (6.7)	7 (13.0)	3 (5.7)	8 (16.7)	2 (8.0)
Nausea	33 (8.1)	11 (8.0)	1 (1.1)	11 (20.4)	4 (7.5)	2 (4.2)	4 (16.0)
Alopecia	31 (7.6)	16 (11.6)	0 (0.0)	10 (18.5)	1 (1.9)	2 (4.2)	2 (8.0)
Indigestion	29 (7.1)	12 (8.7)	2 (2.2)	4 (7.4)	3 (5.7)	4 (8.3)	4 (16.0)
Headache	26 (6.4)	7 (5.1)	5 (5.6)	8 (14.8)	3 (5.7)	3 (6.2)	0 (0.0)
Loss of appetite	24 (5.9)	9 (6.5)	3 (3.4)	4 (7.4)	1 (1.9)	5 (10.4)	2 (8.0)
Constipation	23 (5.7)	14 (10.1)	1 (1.1)	5 (9.3)	0 (0.0)	0 (0.0)	3 (12.0)
Vomiting	20 (4.9)	7 (5.1)	0 (0.0)	11 (20.4)	0 (0.0)	1 (2.1)	1 (4.0)
Fever	18 (4.4)	1 (0.7)	2 (2.2)	13 (24.1)	1 (1.9)	1 (2.1)	0 (0.0)
Muscle pain	18 (4.4)	2 (1.4)	2 (2.2)	11 (20.4)	1 (1.9)	0 (0.0)	2 (8.0)
Blurred vision	12 (2.9)	7 (5.1)	2 (2.2)	0 (0.0)	1 (1.9)	2 (4.2)	0 (0.0)
Hyperhidrosis	15 (3.7)	13 (9.4)	0 (0.0)	0 (0.0)	0 (0.0)	2 (4.2)	0 (0.0)
Onset/worsening of diabetes	10 (2.5)	0 (0.0)	1 (1.1)	3 (5.6)	2 (3.8)	1 (2.1)	3 (12.0)
Rash	10 (2.5)	7 (5.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (12.0)
Respiratory tract infection	9 (2.2)	1 (0.7)	1 (1.1)	0 (0.0)	3 (5.7)	3 (6.2)	1 (4.0)
Sleep deprivation/difficulty sleeping	9 (2.2)	4 (2.9)	0 (0.0)	4 (7.4)	0 (0.0)	1 (2.1)	0 (0.0)
Paraesthesia	6 (1.5)	3 (2.2)	1 (1.1)	1 (1.9)	0 (0.0)	1 (2.1)	0 (0.0)
Cardiac events	6 (1.5)	3 (2.2)	0 (0.0)	0 (0.0)	0 (0.0)	2 (4.2)	1 (4.0)
Lymphocytopenia	5 (1.2)	1 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	3 (6.2)	1 (4.0)
Stomatitis	5 (1.2)	2 (1.4)	1 (1.1)	0 (0.0)	1 (1.9)	1 (2.1)	0 (0.0)
Joint pain	5 (1.2)	2 (1.4)	0 (0.0)	2 (3.7)	1 (1.9)	0 (0.0)	0 (0.0)
Confusion	2 (0.5)	0 (0.0)	2 (2.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Photosensitivity	2 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (4.2)	0 (0.0)
Kidney damage	1 (0.2)	0 (0.0)	1 (1.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Infusion/injection site reaction	1 (0.2)	0 (0.0)	1 (1.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Other	8 (2.0)	2 (1.4)	0 (0.0)	0 (0.0)	6 (11.3)	0 (0.0)	0 (0.0)

Supplementary figure S1: Contour maps of the negative binomial regression analysis for a) the overall cohort, and b) for patients who did not have weight gain.



Wald test gave p-values of a) 0.0319 and b) 0.0005

Disaggregated data for female and male patients with gMG

Supplementary table S4: Patient demographic and clinical characteristics.

	Overall	Female	Male
Age	n=407	n=237	n=170
Years, mean (SD)	51.5 (15.3)	48.7 (15.0)	55.3 (14.9)
Country, n (%)	n=407	n=237	n=170
China	138 (33.9)	90 (38)	48 (28.2)
Japan	89 (21.9)	51 (21.5)	38 (22.4)
Taiwan	54 (13.3)	29 (12.2)	25 (14.7)
Australia	53 (13)	24 (10.1)	29 (17.1)
Malaysia	48 (11.8)	29 (12.2)	19 (11.2)
South Korea	25 (6.1)	14 (5.9)	11 (6.5)
BMI (kg/m2), n (%)	n=407	n=237	n=170
Underweight (< 18.5)	24 (5.9)	20 (8.4)	4 (2.4)
Healthy weight (18.5 - 24.9)	261 (64.1)	167 (70.5)	94 (55.3)
Overweight (25 - 29.9)	89 (21.9)	37 (15.6)	52 (30.6)
Obese (30 +)	33 (8.1)	13 (5.5)	20 (11.8)
Patient weight, n	n=407	n=237	n=170
kg, mean (SD)	64.4 (14.0)	58.0 (10.2)	73.4 (13.8)
Autoantibodies status ^a, n (%)	n=405	n=235	n=170
Anti-AChR positive	324 (80.0)	184 (78.3)	140 (82.4)
Anti-MuSK positive	40 (9.9)	24 (10.2)	16 (9.4)
Anti-AChE positive	12 (3.0)	7 (3.0)	5 (2.9)
Other	19 (4.7)	11 (4.7)	8 (4.7)
Patient has not been tested	13 (3.2)	11 (4.7)	2 (1.2)
Patient is seronegative (no detectable antibody)	35 (8.6)	20 (8.5)	15 (8.8)
Remission status	n=407	n=237	n=170
Pharmacological remission	142 (34.9)	88 (37.1)	54 (31.8)
MM-1	8 (2)	6 (2.5)	2 (1.2)
MM-2	53 (13)	35 (14.8)	18 (10.6)
MM-3	137 (33.7)	71 (30)	66 (38.8)
Not in remission	67 (16.5)	37 (15.6)	30 (17.6)
MGFA class - At diagnosis	n=407	n=237	n=170
Class I	36 (8.8)	19 (8)	17 (10)
Class II	211 (51.8)	128 (54)	83 (48.8)
Class III	120 (29.5)	63 (26.6)	57 (33.5)
Class IV	29 (7.1)	20 (8.4)	9 (5.3)
Class V	11 (2.7)	7 (3)	4 (2.4)
MGFA Class - At the initiation of most recent treatment regimen	n=405	n=237	n=168
Class I	12 (3)	5 (2.1)	7 (4.2)
Class II	233 (57.5)	139 (58.6)	94 (56)
Class III	123 (30.4)	73 (30.8)	50 (29.8)
Class IV	33 (8.1)	19 (8)	14 (8.3)
Class V	4 (1)	1 (0.4)	3 (1.8)
MGFA class - Currently	n=407	n=237	n=170
Class II	316 (77.6)	179 (75.5)	137 (80.6)
Class III	82 (20.1)	53 (22.4)	29 (17.1)
Class IV	9 (2.2)	5 (2.1)	4 (2.4)
Current comorbidities ^b, n (%)	n=407	n=237	n=170
Diagnosed with any comorbidities	288 (70.8)	159 (67.1)	129 (75.9)
Hypertension	109 (26.8)	54 (22.8)	55 (32.4)
Anxiety	62 (15.2)	49 (20.7)	13 (7.6)
Dyslipidaemia	57 (14.0)	32 (13.5)	25 (14.7)
Depression	51 (12.5)	33 (13.9)	18 (10.6)
Diabetes without chronic complications	46 (11.3)	27 (11.4)	19 (11.2)
Time since gMG diagnosis, n	n=387	n=225	n=162
Years, mean (SD)	4.9 (5.4)	4.9 (5.4)	4.8 (5.5)
Thymus related complications, n (%)	n=404	n=235	n=169
Thymoma	67 (16.6)	36 (15.3)	31 (18.3)
Thymic hyperplasia	66 (16.3)	42 (17.9)	24 (14.2)
Thymic carcinoma	3 (0.7)	2 (0.9)	1 (0.6)

No	269 (66.6)	156 (66.4)	113 (66.9)
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Abbreviations: AChE – acetylcholinesterase; AChR – acetylcholine receptor; BMI – body mass index; gMG – generalised myasthenia gravis; MM – Minimal manifestations; MGFA – Myasthenia Gravis Foundation of America; MuSK – muscle-specific kinase; SD – standard deviation

^a Autoantibodies status overall below 3% [anti-LRP4 positive, anti-RyR positive, another autoantibody (specify), anti-Kv1.4 positive, anti-ColQ positive] were combined into “Other”.

^b Current comorbidities diagnosed in less than 10% of patients (osteoporosis, obesity, mild liver disease, chronic pulmonary disease, any malignancy, including leukemia and lymphoma, cerebrovascular disease, peptic ulcer disease, renal disease, hyperthyroidism, rheumatologic disease, congestive heart failure, myocardial infarction, diabetes with chronic complications, dementia, peripheral vascular disease, Hashimoto’s thyroiditis, hepatitis B (HBV), systemic lupus erythematosus (SLE), long term effects of COVID-19, hemiplegia or paraplegia, Sjögren’s syndrome, hepatitis C (HCV), other) were recorded.

Supplementary table S5: Symptoms at diagnosis and at time of survey.

	Overall	Female	Male
At diagnosis, n (%)	n=403	n=234	n=169
Drooping of one or both eyelids (ptosis)	336 (83.4)	198 (84.6)	138 (81.7)
Blurred or double vision (diplopia)	285 (70.7)	160 (68.4)	125 (74.0)
Difficulty swallowing (dysphagia)	196 (48.6)	120 (51.3)	76 (45.0)
General fatigue	187 (46.4)	112 (47.9)	75 (44.4)
Impaired speech (dysarthria)	184 (45.7)	108 (46.2)	76 (45.0)
Difficulty chewing	180 (44.7)	107 (45.7)	73 (43.2)
Weakness in the arms	179 (44.4)	110 (47.0)	69 (40.8)
Weakness in the legs	174 (43.2)	110 (47.0)	64 (37.9)
Shortness of breath (dyspnoea)	151 (37.5)	89 (38.0)	62 (36.7)
Weakness in the neck	145 (36.0)	82 (35.0)	63 (37.3)
Weakness in the hands	120 (29.8)	73 (31.2)	47 (27.8)
Weakness in the fingers	92 (22.8)	62 (26.5)	30 (17.8)
Muscle ache following physical activity	64 (15.9)	39 (16.7)	25 (14.8)
Change in facial expression	62 (15.4)	39 (16.7)	23 (13.6)
Difficulty in smiling	39 (9.7)	24 (10.3)	15 (8.9)
Drooling (sialorrhea)	34 (8.4)	20 (8.5)	14 (8.3)
Twitching of the lips	8 (2.0)	4 (1.7)	4 (2.4)
Other	3 (0.7)	1 (0.4)	2 (1.2)
None of the above	1 (0.2)	0 (0.0)	1 (0.6)
Symptoms at survey, n (%)	n=407	n=237	n=170
Drooping of one or both eyelids (ptosis)	314 (77.1)	185 (78.1)	129 (75.9)
Blurred or double vision (diplopia)	262 (64.4)	153 (64.6)	109 (64.1)
Impaired speech (dysarthria)	217 (53.3)	128 (54.0)	89 (52.4)
Difficulty swallowing (dysphagia)	209 (51.4)	125 (52.7)	84 (49.4)
Difficulty chewing	198 (48.6)	116 (48.9)	82 (48.2)
Shortness of breath (dyspnoea)	176 (43.2)	102 (43.0)	74 (43.5)
General fatigue	102 (25.1)	68 (28.7)	34 (20.0)
Weakness in the arms	99 (24.3)	64 (27.0)	35 (20.6)
Weakness in the legs	93 (22.9)	65 (27.4)	28 (16.5)
Weakness in the hands	73 (17.9)	45 (19.0)	28 (16.5)
Weakness in the neck	69 (17.0)	45 (19.0)	24 (14.1)
Muscle ache following physical activity	46 (11.3)	33 (13.9)	13 (7.6)
Weakness in the fingers	42 (10.3)	29 (12.2)	13 (7.6)
Change in facial expression	22 (5.4)	19 (8.0)	3 (1.8)
Difficulty in smiling	12 (2.9)	11 (4.6)	1 (0.6)
Drooling (sialorrhea)	6 (1.5)	3 (1.3)	3 (1.8)
Twitching of the lips	2 (0.5)	2 (0.8)	0 (0.0)
None of the above	8 (2.0)	3 (1.3)	5 (2.9)

Supplementary table S6: Patient myasthenic events and hospitalisation.

	Overall	Female	Male
Myasthenic events experienced since diagnosis ^a, n (%)	n=395	n=229	n=166
≥1 exacerbation of symptoms	147 (37.2)	93 (40.6)	54 (32.5)
≥1 myasthenic crisis	89 (22.5)	53 (23.1)	36 (21.7)
Yes	208 (52.7)	125 (54.6)	83 (50.0)
Exacerbations of symptoms in the last 12 months	n=132	n=85	n=47
≥1 exacerbations, n (%)	67 (50.8)	45 (52.9)	22 (46.8)
Mean (SD)	0.6 (0.8)	0.7 (0.7)	0.6 (0.8)
Myasthenic crises in the last 12 months	n=79	n=45	n=34
≥1 crises, n (%)	22 (27.8)	7 (15.6)	15 (44.1)
Mean (SD)	0.3 (0.7)	0.2 (0.4)	0.6 (0.8)
Number of hospitalisations in the last 12 months	n=379	n=222	n=157
≥1 hospitalisation, n (%)	131 (34.6)	72 (32.4)	59 (37.6)
Mean (SD)	0.5 (0.9)	0.4 (0.7)	0.5 (1.2)
Reason for most recent hospital admission, n (%)	n=130	n=72	n=58
To treat a complication of gMG ^b	86 (66.2)	42 (58.3)	44 (75.9)
To manage an adverse treatment reaction	17 (13.1)	12 (16.7)	5 (8.6)
For surgery	12 (9.2)	6 (8.3)	6 (10.3)
Other	15 (11.5)	12 (16.7)	3 (5.2)

Abbreviations: gMG – generalised myasthenia gravis; SD – standard deviation

^a Myasthenic exacerbation and crises categories are not mutually exclusive.

^b gMG complications included: exacerbation of symptoms (not including ventilation), myasthenic crisis (including ventilation), MG-related fall, choking event, severe weight loss, other complication.

Supplementary table S7: Treatment patterns and corticosteroid doses between the patient subgroups “not in remission” and “pharmacological remission”.

	Not in remission	Female Pharmacological remission	Not in remission	Male Pharmacological remission
Number of treatment regimens received, including current regimen	n=88	n=54	n=149	n=116
Mean (SD)	1.8 (1.0)	1.9 (1.5)	2.1 (1.2)	2.1 (1.3)
Number of individual treatments in the current regimen	n=88	n=54	n=149	n=116
Mean (SD)	2.1 (1.0)	2.2 (0.9)	2.6 (1.0)	2.7 (1.0)
Current prednisone/prednisolone dose (mg)	n=47	n=27	n=96	n=81
Mean (SD)	13.6 (14.8)	16.4 (15.1)	14.8 (13.3)	12.3 (12.6)
Current methylprednisolone dose (mg)	n=4	n=1	n=7	n=7
Mean (SD)	10.0 (7.1)	5.0 (0.0)	92.4 (141.9)	298.7 (479.2)
Current dexamethasone dose (mg)	n=5	n=5	n=4	n=3
Mean (SD)	10.9 (21.9)	14.0 (20.5)	3.2 (4.5)	18.3 (27.5)

MM – Minimal manifestations; SD – standard deviation

Not in remission includes: MM-1, MM-2, MM-3, and not in remission.

Supplementary table S8: Patterns in treatment lines 1,2 and 3.

	Overall	Female	Male
Line 1			
Number of drugs received, n (%)	n=400	n=233	n=167
0	2 (0.5)	1 (0.4)	1 (0.6)
1	140 (35.0)	82 (35.2)	58 (34.7)
2	144 (36.0)	88 (37.8)	56 (33.5)
≥3	114 (28.5)	62 (26.6)	52 (31.1)
Mean (SD)	2.1 (1.1)	2.0 (1.1)	2.1 (1.1)
Duration of Line (years)	n=281	n=167	n=114
Mean (SD)	2.4 (3.6)	2.3 (3.4)	2.4 (3.8)
Drug class, n (%)	n=398	n=232	n=166
AChEIs	311 (78.1)	181 (78)	130 (78.3)
Corticosteroids	242 (60.8)	137 (59.1)	105 (63.3)
NSIST	155 (38.9)	91 (39.2)	64 (38.6)
Advanced therapies	92 (23.1)	52 (22.4)	40 (24.1)
Other	1 (0.3)	0 (0)	1 (0.6)
Line 2			
Number of drugs received, n (%)	n=235	n=141	n=94
1	33 (14.0.0)	20 (14.2)	13 (13.8)
2	109 (46.4)	65 (46.1)	44 (46.8)
≥3	93 (39.6)	56 (39.7)	37 (39.4)
Mean (SD)	2.4 (1.0)	2.4 (1.0)	2.4 (0.9)
Duration of Line (years)	n=182	n=111	n=71
Mean (SD)	2.1 (2.8)	1.9 (2.5)	2.5 (3.1)
Drug class, n (%)	n=235	n=141	n=94
AChEIs	187 (79.6)	107 (75.9)	80 (85.1)
Corticosteroids	166 (70.6)	97 (68.8)	69 (73.4)
NSIST	134 (57.0)	80 (56.7)	54 (57.4)
Advanced therapies	64 (27.2)	45 (31.9)	19 (20.2)
Other	1 (0.4)	1 (0.7)	0 (0)
Line 3			
Number of drugs received, n (%)	n=96	n=58	n=38
0	1 (1.0)	0 (0)	1 (2.6)
1	9 (9.4)	7 (12.1)	2 (5.3)
2	31 (32.3)	17 (29.3)	14 (36.8)
≥3	55 (57.3)	34 (58.6)	21 (55.3)
Mean (SD)	2.7 (1.0)	2.7 (1.0)	2.6 (1.0)
Duration of Line (years)	n=77	n=47	n=30
Mean (SD)	1.8 (2.4)	1.6 (2.1)	2.2 (2.8)
Drug class, n (%)	n=95	n=58	n=37
AChEIs	79 (83.2)	46 (79.3)	33 (89.2)
Corticosteroids	69 (72.6)	44 (75.9)	25 (67.6)
NSIST	73 (76.8)	42 (72.4)	31 (83.8)
Advanced therapies	29 (30.5)	20 (34.5)	9 (24.3)

Abbreviations: AChEIs – acetylcholinesterase inhibitors; NSIST – non-steroidal immunosuppressants; SD – standard deviation

Supplementary table S9: Adverse events for the overall cohort attributed to current treatment regimen.

	Overall	Female	Male
Adverse events attributed to current treatment regimen, n (%)	n=407	n=237	n=170
Adverse events experienced	278 (68.3)	162 (68.4)	116 (68.2)
Weight gain	74 (18.2)	42 (17.7)	32 (18.8)
Altered mood	66 (16.2)	38 (16)	28 (16.5)
Dizziness	64 (15.7)	39 (16.5)	25 (14.7)
Diarrhoea	53 (13.0)	31 (13.1)	22 (12.9)
Anorexia	49 (12.0)	27 (11.4)	22 (12.9)
Fatigue	48 (11.8)	31 (13.1)	17 (10)
Hyperglycaemia	45 (11.1)	30 (12.7)	15 (8.8)
Fluid retention	39 (9.6)	23 (9.7)	16 (9.4)
Increased infections	38 (9.3)	23 (9.7)	15 (8.8)
Increased blood pressure	35 (8.6)	25 (10.5)	10 (5.9)
Osteoporosis	35 (8.6)	18 (7.6)	17 (10)
Insomnia	34 (8.4)	18 (7.6)	16 (9.4)
Nausea	33 (8.1)	18 (7.6)	15 (8.8)
Alopecia	31 (7.6)	18 (7.6)	13 (7.6)
Indigestion	29 (7.1)	14 (5.9)	15 (8.8)
Headache	26 (6.4)	16 (6.8)	10 (5.9)
Loss of appetite	24 (5.9)	14 (5.9)	10 (5.9)
Constipation	23 (5.7)	15 (6.3)	8 (4.7)
Vomiting	20 (4.9)	8 (3.4)	12 (7.1)
Fever	18 (4.4)	12 (5.1)	6 (3.5)
Muscle pain	18 (4.4)	8 (3.4)	10 (5.9)
Hyperhidrosis	15 (3.7)	7 (3)	8 (4.7)
Blurred vision	12 (2.9)	6 (2.5)	6 (3.5)
Onset/worsening of diabetes	10 (2.5)	6 (2.5)	4 (2.4)
Rash	10 (2.5)	7 (3)	3 (1.8)
Respiratory tract infection	9 (2.2)	7 (3)	2 (1.2)
Sleep deprivation/difficulty sleeping	9 (2.2)	6 (2.5)	3 (1.8)
Other ^a	41 (10.1)	29 (12.2)	12 (7.1)

^a Other: paresthesia, cardiac events, lymphocytopenia, stomatitis, joint pain, confusion, photosensitivity, kidney damage, infusion/injection site reaction, and other