

recrudescence of disease activity during glucocorticoid weaning, particularly in neurological disease. As stated, there is significant practice variation in glucocorticoid use, even when there are data regarding a regimen with a good treatment response. Neurological diseases often employ high dose glucocorticoid treatment.<sup>3</sup> Acute side effects of high dose glucocorticoid regimens include hyperglycaemia, hypertension, muscle weakness, and sleep and mood disturbance.<sup>4,5</sup> There is considerable apparent interindividual variation in these side effects that cannot be reliably predicted.<sup>6</sup> The variability in systemic glucocorticoid metabolism and in tissue sensitivity to steroids requires large scale observation to determine the optimal risk–benefit dosage to be applied within individual diseases. Large clinical trials may assist, but the variation in practice in our current state of uncertainty may be advantageous in analysing clinical registry data.

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- 1 Bacchi S, Tan S, Slee M. Glucocorticoid-induced adrenal suppression: physiological basis and strategies for glucocorticoid weaning [letter]. *Med J Aust* 2024; doi: mja2.52298.
- 2 Torpy DJ, Lim WT. Glucocorticoid-induced adrenal suppression: physiological basis and strategies for glucocorticoid weaning. *Med J Aust* 2023; 219: 444–447. <https://www.mja.com.au/journal/2023/219/10/glucocorticoid-induced-adrenal-suppression-physiological-basis-and-strategies>
- 3 Gensler LS. Glucocorticoids: complications to anticipate and prevent. *Neurohospitalist* 2013; 3: 92–97.
- 4 Huscher D, Thiele K, Gromnica-Ihle E, et al. Dose-related patterns of glucocorticoid-induced side effects. *Ann Rheum Dis* 2009; 68: 1119–1124.
- 5 Sarnes E, Crofford L, Watson M, et al. Incidence and US costs of corticosteroid-associated adverse events: a systematic literature review. *Clin Ther* 2011; 33: 1413–1432.
- 6 Rohleder N, Wolf JM, Kirschbaum C. Glucocorticoid sensitivity in humans—interindividual differences and acute stress effects. *Stress* 2003; 6: 207–222. ■