

PREGABALIN - SAFE PRESCRIBING - POTENTIAL FOR ABUSE

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- ▶ UNDERSTAND THE IMPORTANCE OF INDIVIDUAL DOSE TITRATION
- ▶ CHECK AND MONITOR RENAL FUNCTION
- ▶ BE AWARE OF SUICIDAL BEHAVIOUR AND IDEATION
- ▶ BE AWARE OF POTENTIAL FOR ABUSE

Pregabalin is an analogue of gamma-aminobutyric acid (GABA) It is used for the treatment of neuropathic pain and as adjunctive therapy in adults with focal seizures with or without secondary generalisation. It is also used for generalised anxiety disorder, although this is an unapproved indication.¹

UNDERSTAND THE IMPORTANCE OF INDIVIDUAL DOSE TITRATION

The adult dose range is 150 to 600mg per day in two divided doses.

- **Neuropathic pain**
Initially 75mg twice daily, increased if necessary after 3-7 days to 150mg twice daily, increased if necessary after 7 days to maximum 300mg twice daily.
- **Focal seizures with or without secondary generalisation**
Initially 75mg twice daily, increased if necessary after 7 days to 150mg twice daily, then increasing further if necessary after 7 days to maximum 300mg twice daily.
- **Generalised anxiety disorder (unapproved)**

In patients like the frail elderly, who may be particularly susceptible to adverse effects, consider reducing the starting dose to 25mg twice daily and use a slower titration.²

If pregabalin is discontinued, it is recommended to withdraw gradually over a minimum of one week.^{1,2}

Common adverse effects

Adverse effects increase in frequency as the dose increases. It may be necessary to titrate the dose up or down, to achieve the best dose that provides effective analgesia and minimises the adverse effects.³ The most commonly reported adverse effects of pregabalin are problems with balance and sedation. Cognitive issues are significant in the elderly but can occur in younger patients too. Please see Table 1 for common adverse effects.

Table 1 Common adverse effects of pregabalin³

Adverse effect	Percentage of patients experiencing adverse effects
Dizziness/balance	19-31%
Sedation	14-29%
Dry mouth	15%
Weight gain	Up to 15% gain 5kg
Peripheral oedema	7%
Constipation	6%
Euphoria	6%
Abnormal thinking	6%

CHECK AND MONITOR RENAL FUNCTION

Renal impairment

Pregabalin clearance is directly proportional to creatinine clearance, therefore dosage reduction in renally impaired patients will be required.^{1,2} Refer to table 2 for dosing recommendations.

Table 2. Pregabalin dose based on renal function.²

eGFR mL/minute/1.73m ²	Total daily dose	
	Starting dose (mg/day)	Maximum dose (mg/day)
≥ 60	150	600 (in two divided doses)
30 - 60	75	300 (daily or in two divided doses)
15 - 30	25 - 50	150 (daily or in two divided doses)
< 15	25	75 (daily)

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▶ PREGABALIN

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Hepatic impairment

Pregabalin is excreted predominantly via renal clearance, so no dosage adjustment is required for patients with hepatic impairment.¹

Use in pregnancy

There is insufficient evidence to estimate the risk of congenital malformations from monotherapy with pregabalin,^{4,5} but this does not necessarily mean that there is no risk. It is recommended that pregabalin should not be used in pregnancy unless the benefit to the mother outweighs the potential risk.¹

Use in women of child-bearing age

There is an increased risk of adverse events if used during pregnancy, so women of child bearing age should be advised of the potential risks. Two forms of effective contraception should be used. If pregabalin is being considered for a condition like neuropathic pain, other suitable treatment option should be considered.⁵

Breastfeeding.

No data from breast-feeding mothers is available, so it is considered contraindicated during breastfeeding.^{1,2}

BE AWARE OF SUICIDAL BEHAVIOUR AND IDEATION

There is an increased risk of suicidal thoughts and behaviour in patients taking pregabalin.⁶ Monitor patients closely for emergence or worsening of depression and suicidal thoughts or behaviours. Advise patients, their families and caregivers to seek immediate medical advice if they have any concerns about changes in mood or behaviour. Suicidality can occur at any point during treatment. In a CARM report in 2015, time reported to onset was between 12 hours and five years.^{6,7}

BE AWARE OF POTENTIAL FOR ABUSE

Pregabalin is an effective treatment for neuropathic pain. There is an awareness amongst primary care providers that pregabalin is increasingly implicated in drug misuse.⁸ It is often taken in combination with other medicines, particularly opioids, which potentiate its effect.⁸ It produces a range of sensations including euphoria, sedation and dissociation.⁹ It is more rapidly absorbed than gabapentin, which may contribute to its addiction potential.⁸ There is evidence that patients with concurrent substance use disorder have an increased risk of abuse and overdose when taking pregabalin.^{7,10,11} Concerns surrounding the role of gabapentinoids in opioid overdose deaths were first raised in 2013.⁹ In cases of deaths involving pregabalin

many cases detailed that pregabalin had been consumed alongside other medicines, either prescribed and/or illicit, as well as alcohol in some of the cases.¹²

When prescribing pregabalin, exercise caution in the same way as when prescribing any drug of misuse. Be aware of high risk populations, a history of substance use disorder and monitor for signs of abuse.^{7,8,9,10}

Advice to prescribers is :

- Do not prescribe to new or unknown patients,
- Do not prescribe in response to direct requests for it by name
- Supply in limited quantities
- Arrange regular review
- Consider stopping treatment gradually if lack of efficacy is seen
- Consider weekly prescribing

In patients who have been treated long term, a decision to discontinue should be accompanied by careful tapering and support to prevent unpleasant physiological and psychological withdrawal symptoms.¹²

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REFERENCES

1. New Zealand data Sheet Version 10519 www.medsafe.govt.nz/Profs/datasheet/l/Lyricacaps.pdf (Accessed May 2019)
2. New Zealand Formulary v84 2019 https://nzf.org.nz/nzf_2631 (Accessed May 2019)
3. Olson J, Prescribing gabapentin and pregabalin: upcoming subsidy changes, BPAC Feb 2018. www.bpac.org.nz/2018/gabapentinoids.aspx (Accessed May 2019)
4. Royal College of Obstetricians & Gynaecologists. Epilepsy in pregnancy (green-top guideline No.68). Royal College of Obstetricians & Gynaecologists 2016. www.rcog.org.uk/globalassets/documents/guidelines/green-top-guidelines/gtg68_epilepsy.pdf (Accessed June 2019)
5. Sadleir L, Balancing the benefits and risk of prescribing antiepileptic medicines in women, BPAC 2018 www.bpac.org.nz/2018/antiepileptic.aspx (Accessed June 2019)
6. Medsafe Prescriber update. Antiepileptic Medicines and Suicide Prescriber Update 37(1): 6-7 March 2016 <https://www.medsafe.govt.nz/profs/PUArticles/March2016/AntiepilepticMedicinesAndSuicide.htm> (Accessed June 2019)
7. Evoy K E, Morrison, MD, & Saklad SR. Abuse and Misuse of Pregabalin and Gabapentin, *Drugs* (2017) 77: 403. <https://doi.org/10.1007/s40265-017-0700-x> (Accessed June 2019)
8. Gabapentinoid misuse: an emerging problem, NPS MedicineWise, 2018 www.nps.org.au/news/gabapentinoid-misuse-an-emerging-problem (Accessed July 2019)
9. Ponton R, Pregabalin misuse: preventing potential problems in New Zealand, *NZJM* Vol 131 No 1478: 13 July 2018. www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2018/vol-131-no-1478-13-july-2018/7621 (Accessed August 2019)
10. Auckland Regional Health Pathways, Pregabalin - increased risk of misuse https://aucklandregion.healthpathways.org.nz/index.htm?13454.htm?utm_source=December2018&utm_medium=email&utm_campaign=SubscriberUpdate (Accessed Oct 2019)
11. Dunn A, Unintentional misuse of prescription medicines, BPAC 2018, www.bpac.org.nz/2018/misuse.aspx (Accessed Aug 2019)
12. Marsden J et al, Medicines associated with dependence or withdrawal: a mixed-methods public health review and national database study in England, *The Lancet, Psychiatry*. 2019 www.sciencedirect.com/science/article/pii/S2215036619303311?via=ihub (Accessed October 2019)

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