Gabapentinoids, when used appropriately, have been shown to be effective for some patients in the management of neuropathic pain.

The table below provides the number needed to treat (NNT) and number needed to harm (NNH) for both drugs.\[2\]

<table>
<thead>
<tr>
<th>Drug</th>
<th>NNT</th>
<th>NNH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregabalin</td>
<td>7.7 (95% CI 6.5-9.4)</td>
<td>13.9 (95% CI 11.6-17.4)</td>
</tr>
<tr>
<td>Gabapentin</td>
<td>6.3 (95% CI 5.0-8.3) and 8.3 (95% CI 6.2-13) for extended release (ER) preparations</td>
<td>25.6 (95% CI 15.3-78.6) and 31.9 (95% CI 17-230) for ER preparations</td>
</tr>
</tbody>
</table>

Gabapentinoids are not licensed for non-neuropathic pain, nor is there any evidence to support their use.

Gabapentinoids will be reclassified class C controlled substances under section the Misuse of Drugs Act from April 2019\[3\]

Side Effects & Risks

Common side effects include dizziness, drowsiness and balance issues. With gabapentin, there have also been issues of respiratory depression, although this is not common. Caution should be shown when initiating gabapentin in patients with compromised respiratory function or neurological disease, renal impairment, and/or concomitant use of CNS depressants. Elderly people might be at higher risk of severe respiratory depression.\[4\] \[5\]

Drug-related deaths in Scotland involving gabapentin and pregabalin have risen from 2 in 2009, to 225 in 2016.\[6\]

Public Health England advice states:

*Professionals prescribing pregabalin and gabapentin should be aware not only of the potential benefits of these drugs to patients, but also that the drugs can lead to dependence and may be misused or diverted.\[7]*

Choice of Therapy

SIGN 136 recommends amitriptyline or gabapentin as first line medicine in neuropathic pain, dependent on clinical preference and patient factors (including the risks below). Pregabalin is an alternative in patients who have found no benefit from, or not tolerated, amitriptyline or gabapentin.

Patients' aims for pharmacological treatment should be discussed using the What matters to you? approach. The Pain Concern Navigator Tool can be used to support discussion and enable the patient to be a partner in making decisions about their care. See full resource for further information.

Realistic aims may include pain reduction (e.g. 30%) and/or functional goal improvement.\[8\]

Achieving the Correct Dosage

The following principles may be useful in the process of determining the correct dose for a patient:

• A titrated approach is recommended, accounting for patient characteristics, e.g. elderly, renal impairment, breast feeding, etc.
  • Gabapentin – Start 300mg at night. Titrate upwards by 300mg per week. Evidence suggests a minimum of 1200mg is needed but doses may need to be increased to the maximum of 3600mg.
  • Pregabalin – Start 75mg twice daily. Titrate up to a maximum of 300mg twice daily. Manage according to side effects and clinical effectiveness.
• Regular review should be scheduled, particularly during the initiation phase, with first review within 4 weeks.
• A trial of dose reduction/cessation should be undertaken, following a period of stability
• Stepping up should be closely monitored. Dispense daily or weekly in high-risk patients
• Aim to maintain patients on the minimum dose which controls pain
• Where patients fail to engage with review, or there is no or insufficient effect in 2 months, consider gradual dose reduction and stopping
Doses should be normally be reduced gradually to minimise symptoms of withdrawal and allow assessment of response. The following principles may be useful:

- A trial of dose reduction/cessation should be undertaken, following a period of stability
- A suggested reduction regime (full regime available in the full guide) for analgesic use would be:
  - Gabapentin – reduce at maximum daily rate of 300mg every week
  - Pregabalin - reduce at maximum daily rate of 50-100mg every week
- In high risk patients, temporarily halt reduction, in preference to re-escalating the dose when required
- Rapid reduction to stop is justified if there is clear evidence of attempts to divert or obtain illicit supplies of gabapentin or pregabalin

In practice, reduction regime may be adjusted depending on individual response and degree of associated risk.

It is recommended that practitioners give careful consideration to the individual patient when prescribing pregabalin and gabapentin to minimise the risk of misuse, dependence, and diversion. Referral to specialist substance misuse services is advised, as required, for assessment and psychological treatment of the underlying difficulties where the whole substance misuse picture will be considered.

Assessment of the balance of benefits and risks is essential.

Individuals at high risk of misusing or diverting gabapentinoids may include those who:

- Have a history of substance misuse
- Make specific requests for initiation of either gabapentin or pregabalin
- Request pregabalin or gabapentin following liberation from prison service
- Make repeated early prescription requests
- Repeatedly report lost medication
- Contact out of hours services for supplies of medication

### Reducing a Patient’s Dosage

Doses should be normally be reduced gradually to minimise symptoms of withdrawal and allow assessment of response. The following principles may be useful:

- A trial of dose reduction/cessation should be undertaken, following a period of stability
- A suggested reduction regime (full regime available in the full guide) for analgesic use would be:
  - Gabapentin – reduce at maximum daily rate of 300mg every week
  - Pregabalin - reduce at maximum daily rate of 50-100mg every week
- In high risk patients, temporarily halt reduction, in preference to re-escalating the dose when required
- Rapid reduction to stop is justified if there is clear evidence of attempts to divert or obtain illicit supplies of gabapentin or pregabalin

In practice, reduction regime may be adjusted depending on individual response and degree of associated risk.

### Summary

Care should be taken when prescribing Gabapentinoids in the management of neuropathic pain. Steps should be taken to minimise the risk of abuse. Caution, with due consideration of first line options, and special care exercised in the substance misusing population is required to help minimise the risk of misuse and diversion. Early and ongoing review is essential for all patients prescribed gabapentinoids. Extreme care should be taken when co-prescribing gabapentinoids and opioids.

### Further Resources

The full guide is available at [https://www.therapeutics.scot.nhs.uk/pain/](https://www.therapeutics.scot.nhs.uk/pain/) and includes principles for prescribing, reduction regimes, a patient pain management plan, and links to websites with a variety of patient resources.

### References