Traffic light classification- Amber 2
Information sheet for Primary Care Prescribers

CLINICAL INFORMATION

Key points/interactions
- **Use of pergolide is no longer recommended unless already established on it and attempts to change to alternative therapy have failed**
- Ergot based agonists can cause pleural, pericardial and retroperitoneal fibrosis and cardiac valve damage and should not be used unless patients cannot tolerate a non-ergot alternative such as ropinirole, pramipexole or rotigotine.
- When patients are taking an ergot based agonist they should undergo 6 monthly monitoring for these complications.

Licensed Indications
Second-line therapy of Parkinson’s disease, or as adjunctive treatment to levodopa, when treatment with dopamine agonist is considered and when non-ergot alkaloids are contraindicated or are no longer adequate.

Therapeutic Summary
As per the licensed indication.

NICE recommendations for the use of Pergolide in Parkinson’s disease are:
- Do not offer ergot-derived dopamine agonists as first-line treatment for Parkinson's disease.
- Only consider an ergot-derived dopamine agonist as an adjunct to levodopa for people with Parkinson's disease:
  - who have developed dyskinesia or motor fluctuations despite optimal levodopa therapy and
  - whose symptoms are not adequately controlled with a non-ergot-derived dopamine agonist.

Medicines Initiation
Consultant neurologist / specialist experienced in the management of PD.

Dose Regimen
- Administration of pergolide should be initiated with a daily dosage of 50 micrograms for the first 2 days.
- The dosage should then be gradually increased by 100 or 150 micrograms/day every third day over the next 12 days of therapy.
- The dosage may then be increased by 250 micrograms/day every third day until an optimal therapeutic dosage is achieved but not to exceed 3 mg/day.
- The daily dose is usually administered in 3 divided doses.
Duration of treatment
Pergolide is a treatment for a chronic disease and therefore course length can be many years.

Contraindications
- Hypersensitivity to Pergolide (or any other ergot derivatives) or to any of the excipients
- Pregnancy & breast feeding
- History of fibrotic disorders
- Evidence of cardiac valvulopathy

Precautions
- Arrhythmias / underlying cardiac disease
- History of confusion, hallucinations, or psychosis (may exacerbate)
- Acute porphyria
- Dyskinesia (may exacerbate)
- Discontinuation of pergolide should be undertaken gradually

Monitoring
Performed by the specialist before starting treatment and at 6 month intervals thereafter.
- Chest x-ray/ lung function
- ECG
- Echocardiogram
- Renal function
- CRP
- ESR

Adverse Effects

<table>
<thead>
<tr>
<th>Side Effects</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdominal pain, dyspepsia, diarrhoea, constipation</td>
<td>Usually transient. If persists discuss with neurologist/PD nurse specialist [PDNS]</td>
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<tr>
<td>Nausea &amp; vomiting</td>
<td>Usually transient but may be quite severe. Unless very minor, prescribe domperidone 10mg tds (or lowest effective dose: see MHRA) during dose titration; this can usually be stopped within a few weeks.</td>
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<tr>
<td>Sedation</td>
<td>Usually transient. Advise patients not to drive / operate machinery if affected. If persists discuss with neurologist.</td>
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<tr>
<td>Orthostatic hypotension</td>
<td>Usually transient. If persists discuss with neurologist/PDNS.</td>
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<tr>
<td>Light-headedness, dizziness</td>
<td>Usually transient. If persists discuss with neurologist/PDNS.</td>
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<tr>
<td>Tachycardia, atrial premature contractions, palpitation, cardiac valvulopathy, pericarditis, pericardial effusion</td>
<td>Discuss with neurologist/PDNS</td>
</tr>
<tr>
<td>Pleuritis, pleural effusion, pleural fibrosis</td>
<td>Discuss with neurologist/PDNS</td>
</tr>
<tr>
<td>Rhinitis, dyspnoea</td>
<td>Rarely a major problem. Discuss with</td>
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<tr>
<td>Condition</td>
<td>Action</td>
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<td>--------------------------------------------------------------------------</td>
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<tr>
<td>Dyspnoea, shortness of breath, persistent cough or chest pain.</td>
<td>Discuss with neurologist/PDNS</td>
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<tr>
<td>Renal insufficiency, ureteral/abdominal vascular obstruction, pain in</td>
<td>Discuss with neurologist/PDNS</td>
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<tr>
<td>the loin/flank, lower limb oedema, abdominal masses or tenderness that</td>
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<td>may indicate retroperitoneal fibrosis</td>
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<td>Cardiac failure</td>
<td>Discuss with neurologist/PDNS</td>
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<tr>
<td>Hallucinations, confusion</td>
<td>Discuss with neurologist/PDNS</td>
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<tr>
<td>Psychotic reactions (other than hallucinations), including delusion,</td>
<td>Discuss with neurologist/PDNS</td>
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<tr>
<td>paraoia, delirium</td>
<td></td>
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<tr>
<td>'Dopamine dysregulation syndrome’ Manifests as a change in behaviour,</td>
<td>Discuss with neurologist/PDNS</td>
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<tr>
<td>typically with an obsessional, risk-taking, sexual or financial axis.</td>
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<tr>
<td>Hypersensitivity reactions including urticaria, rash, angioedema.</td>
<td>Discontinue and discuss with neurologist/PDNS</td>
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<tr>
<td>Visual disorders</td>
<td>Ophthalmological testing. Discuss with neurologist/PDNS</td>
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</tbody>
</table>

**Clinically relevant medicine interactions and their management**

Patients selected for treatment with pergolide are almost certain to be taking concomitant medications for their Parkinson’s disease. In the initial stages of pergolide therapy the patient should be monitored for unusual side-effects or signs of potentiation of effect.

- **Neuroleptic medicinal products and other centrally acting dopamine antagonists**
  - e.g. sulpiride, metoclopramide - may have an antagonistic effect if used with pergolide. Avoid concomitant use.
- **Antihypertensives** – increased hypotensive effect
- **Concomitant use of other ergot alkaloids** - avoid
- **Memantine** - enhanced effect.

*For further information on contraindications, precautions, adverse effects and interactions refer to the BNF or Summary of Product Characteristics.*

**Information given to patient**

Patients (and their family members and carers) should be given information on the following:

- The risk of excessive daytime sleepiness and sudden onset of sleep and the need to exercise caution when driving or operating machinery. If affected patients should refrain from driving or operating machinery until these effects have stopped occurring.
- The increased risk of developing impulse control disorders when taking dopamine agonist therapy, and that these may be concealed by the person affected. Advice should be given about who to contact if impulse control disorders develop.
- The risk of psychotic symptoms (hallucinations and delusions) with all Parkinson’s disease treatments (and the higher risk with dopamine agonists).

**Products available**

Pergolide 250 mcg, 500mcg, 1mg tablets
An estimate of the potential medicine costs (and any additional costs) to primary care
Pergolide 1mg tds £111 (28 days) (max dose)

REFERENCES
British National Formulary Jan 2018
Summary of Product Characteristics April 2016 (accessed via www.mhra.gov.uk)
NICE NG71 Parkinson’s Disease in adults July 2017
MHRA Drug Safety Update: Domperidone: risks of cardiac side effects, May 2014

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