● **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug.

Capsule

CAUTIONARY AND ADVISORY LABELS 25

▸ **Vyndaqel** (Pfizer Ltd) ▼

Tafamidis 20 mg Vyndaqel 20mg capsules | 30 capsule PoM £10,685.00 (Hospital only)

4.2 Parkinson's disease

Parkinson's disease

19-Feb-2020

Description of condition

Parkinson's disease is a progressive neurodegenerative condition resulting from the death of dopaminergic cells of the substantia nigra in the brain.

Patients with Parkinson's disease classically present with motor-symptoms including hypokinesia, bradykinesia, rigidity, rest tremor, and postural instability.

Non-motor symptoms include dementia, depression, sleep disturbances, bladder and bowel dysfunction, speech and language changes, swallowing problems and weight loss.

EvGr Patients with suspected Parkinson's disease should be referred to a specialist and reviewed every 6 to 12 months. When Parkinson's disease diagnosis is confirmed, patients should be advised to inform the DVLA and their car insurer. A

Aims of treatment

Parkinson's disease is an incurable progressive condition, and the aim of treatment is to control the symptoms and to improve the patient's quality of life.

Non-drug treatment

EvGr Parkinson's disease patients should be offered physiotherapy if balance or motor function problems are present, speech and language therapy if they develop communication, swallowing or saliva problems, and occupational therapy if they experience difficulties with their daily activities. Dietitian referral should be considered. A

Drug treatment

Drug management of motor symptoms in Parkinson's disease

First-line treatment

EvGr In early stages of Parkinson's disease, patients whose motor symptoms decrease their quality of life should be offered *levodopa* combined with *carbidopa* (co-careldopa p. 434) or *benserazide* (co-beneldopa p. 433).

Parkinson's disease patients whose motor symptoms *do not* affect their quality of life, could be prescribed a choice of *levodopa*, *non-ergot-derived dopamine-receptor agonists* (pramipexole p. 442, ropinirole p. 444 or rotigotine p. 445) or *monoamine-oxidase-B inhibitors* (rasagiline p. 446 or selegiline hydrochloride p. 447).

Before starting antiparkinsonian treatment, the patient's individual circumstances, including symptoms, comorbidities and preferences, should be discussed together with the potential benefits and harms from the different drugs available.

Patients and their carers should be informed about the risk of adverse reactions from antiparkinsonian drugs, including psychotic symptoms, excessive sleepiness and sudden onset of sleep with dopamine-receptor agonists, and impulse control disorders with all dopaminergic therapy (especially *dopamine-receptor agonists*). For further information *see Impulse control disorders*. A

Levodopa treatment is associated with motor complications, including response fluctuations and dyskinesias. Response fluctuations are characterised by large variations in motor performance, with normal function during the 'on' period, and weakness and restricted mobility during the 'off' period. 'End-of-dose' deterioration with progressively shorter duration of benefit can also occur. Modified-release preparations may help with 'end-of-dose' deterioration or nocturnal immobility.

The overall improvement in motor performance is more noticeable with *levodopa* than with *dopamine-receptor agonists*, and motor complications are less likely to occur with *dopamine-receptor agonists* when used alone long-term. Conversely, excessive sleepiness, hallucinations, and impulse control disorders are more likely to occur with *dopamine-receptor agonists* than with *levodopa*.

EvGr To avoid the potential for acute akinesia or neuroleptic malignant syndrome, antiparkinsonian drug concentrations should not be allowed to fall suddenly due to poor absorption or abrupt withdrawal. A

Adjuvant therapy

EvGr If a patient with Parkinson's disease develops dyskinesia or motor fluctuations, specialist advice should be sought before modifying antiparkinsonian drug therapy.

Patients who develop dyskinesia or motor fluctuations despite optimal *levodopa* therapy should be offered a choice of *non-ergotic dopamine-receptor agonists* (pramipexole, ropinirole, rotigotine), *monoamine oxidase B inhibitors* (rasagiline or selegiline hydrochloride) or COMT inhibitors (entacapone p. 432 or tolcapone p. 432) as an adjunct to *levodopa*.

An *ergot-derived dopamine-receptor agonist* (bromocriptine p. 439, cabergoline p. 440 or pergolide p. 441) should **only** be considered as an adjunct to *levodopa* if symptoms are not adequately controlled with a *non-ergot-derived dopamine-receptor agonist*.

If dyskinesia is not adequately managed by modifying existing therapy, amantadine hydrochloride p. 437 should be considered. A

Drug management of non-motor symptoms in Parkinson's disease

Daytime sleepiness and sudden onset of sleep

EvGr Patients who experience daytime sleepiness or sudden onset of sleep, should have their Parkinson's drug treatment adjusted under specialist medical guidance. If reversible pharmacological and physical causes have been excluded, modafinil p. 514 should be considered to treat excessive daytime sleepiness, and treatment should be reviewed at least every 12 months.

Patients with Parkinson's disease who have daytime sleepiness or sudden onset of sleep should be advised not to drive, to inform the DVLA about their symptoms, and to think about any occupational hazards. A

Nocturnal akinesia

EvGr When treating nocturnal akinesia in patients with Parkinson's disease, *levodopa* or oral *dopamine-receptor agonists* should be considered as first-line options and rotigotine p. 445 as second-line (if both *levodopa* or oral *dopamine-receptor agonists* are ineffective). A

Postural hypotension

EvGr Patients with Parkinson's disease who develop postural hypotension should have their drug treatment reviewed to address any pharmacological cause. If drug therapy is required, midodrine hydrochloride p. 199 should be considered as the first option and fludrocortisone acetate p. 713 [unlicensed indication] as an alternative. A

Depression

See Antidepressant drugs p. 376.

Psychotic symptoms

EvGr Hallucinations and delusions need not be treated if they are well tolerated. Otherwise, the dosage of any antiparkinsonism drugs that might have triggered hallucinations or delusions should be reduced, taking into account the severity of symptoms and possible withdrawal