

TITLE PAGE

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Title:	Post-marketing study of ropinirole prolonged release tablets in Parkinson's disease: Evaluation outcomes associated with long term use of Ropinirole-PR using the clinical practice research datalink (CPRD)
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1. LIST OF ABBREVIATIONS

AE	Adverse Event
CPRD	Clinical Practice Research Database (UK)
GSK	GlaxoSmithKline
MHRA	UK Medicines and Healthcare products Regulatory Agency
Ropinirole-IR	Ropinirole immediate release formulation
Ropinirole-PR	Ropinirole prolonged release formulation

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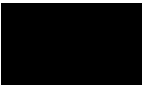
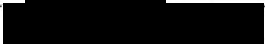
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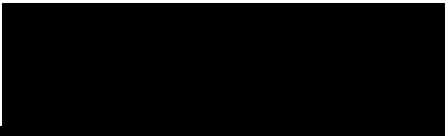
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3. ABSTRACT

Title

Post-marketing study of ropinirole prolonged release tablets: Evaluation of the short term drug utilisation patterns and long term use of Ropinirole-PR using the clinical practice research database (CPRD)

Rationale and background

The proposed study is required as part of a post marketing commitment to the MHRA to evaluate the long term safety of ropinirole-PR. Specifically, it is proposed to estimate the incidence of dyskinesias, on-off phenomena and impulse control disorders, in Parkinson's patients initiating ropinirole-PR monotherapy as compared to those initiating immediate release dopamine agonists as monotherapy up to a maximum of 5 years of treatment. The study will use data recorded on the Clinical Practice Research Datalink (CPRD) a primary care based observational data source, supplemented with data to be obtained by GP questionnaire. As part of these activities, treatment persistence and adherence will be evaluated as well as off-label use of ropinirole-PR.

Research question and Objective(s)

Primary objectives:

1: To estimate, amongst individuals with Parkinson's disease, the incidence rate ratio of dyskinesia in individuals initiating ropinirole-PR monotherapy compared to those initiating immediate release dopamine agonist monotherapy. Incidence rate ratios will also be estimated for other outcomes of interest, notably on-off phenomena and impulse control disorders. The exposure groups will be propensity score matched.

Secondary objectives:

2: To describe and compare the baseline characteristics of individuals initiating ropinirole-PR with those initiating immediate release dopamine agonist monotherapy for PD.

3: To describe treatment persistence and adherence amongst patients initiating therapy on ropinirole-PR versus a matched cohort initiating immediate release dopamine agonists.

4: To describe the extent of off-label use amongst ropinirole-PR initiators.

Study Design

Propensity matched cohort design with adjustments for time varying covariates

Population, including the setting and study population

Parkinson's disease patients initiating an oral dopamine agonist therapy between 2004 and 2012 will be eligible for inclusion in the study. Follow-up will commence at date of initiation of treatment +30days (index date). Individuals with an outcome of interest on or prior to index date will be excluded. Follow-up will continue to the earliest of development of an outcome of interest, treatment discontinuation+30days, end of follow-up, up to a maximum of 5 years of treatment. The treatment exposure groups of interest are PD patients initiating ropinirole-PR monotherapy or immediate release dopamine agonist monotherapy. Propensity score matching will be used to reduce the risk of confounding by indication, and aims to ensure that the exposure groups are similar with regards to baseline characteristics.

Variables

Outcomes: Incident dyskinesia and impulse control disorders will be identified using READ codes and be supplemented with information to be obtained by GP questionnaire. On-off phenomena will be identified based on GP responses alone. Time to levodopa initiation will be estimated to determine whether differences exist between the exposure groups, this will be determined based on prescription patterns on the CPRD

Covariates: Demographics, PD disease duration, PD treatment history and duration, Charlson comorbidity score and morbidity burden at baseline.

Time varying covariates: Initiation of levodopa, COMT inhibitor, MAOB-I, or decarboxylase inhibitor during follow-up

Data sources:

The study will be conducted using the Clinical Practice Research Datalink (CPRD), a primary care database. In the UK ongoing treatment of PD is managed in the primary care setting. This database provides longitudinal follow-up on a representative sample of the U.K. general population.

Study size

A recent feasibility assessment identified 577 individuals initiating ropinirole-PR as monotherapy and 1660 initiating an immediate release dopamine agonist monotherapy on the CPRD. Up to three comparators will be matched to each ropinirole-PR monotherapy patient. The anticipated GP response rate is 68%, which is response rate achieved in the pilot study.

A Cox regression of the log hazard ratio on a covariate with a standard deviation of 0.5000 based on a sample of 1000 observations, based on independent sampling of the exposure groups (i.e. no matching) achieves 82% power at a 0.05 significance level to detect a regression coefficient equal to 0.4055. The sample size was adjusted for an anticipated event rate of 0.2000. It is hoped that in the present study the use of matched samples will give some additional power.

Data analysis

A Cox proportional hazards regression model will be used to evaluate time to dyskinesias in individuals prescribed ropinirole-PR with those prescribed other dopamine agonists of interest. Patients will be followed up from index date (initiation of treatment) up to a censoring event (earliest of the outcome of interest, discontinuation of therapy+30days or end of CPRD follow-up).

Crude and adjusted hazard ratios and 95% CI will be estimated amongst individuals who are free from the outcome of interest at baseline and meeting all inclusion criteria in the two groups of interest (**ropinirole PR cohort** and the **IR-DA matched cohort**) accounting for time varying covariates.

Milestones

ISAC approval will be sought in October 2015. Analysis will commence once approval by ISAC has been granted.

4. AMENDMENTS AND UPDATES

Amendment or update no	Date	Section of study protocol	Amendment or update	Reason

5. MILESTONES

Milestone	Planned date
Submission to ISAC for approval	October-November 2015
Registration in the EU PAS register	<i>Following ISAC approval</i>
Identification of study populations	November 2015
Start of data collection (GP questionnaire)	January 2016
Interim review of response rate	March 2016
End of data collection	May 2016
Review of achieved response rate	May 2016
Analysis of data	June 2016
Final report of study results	September 2016

6. RATIONALE AND BACKGROUND

6.1. Background

6.1.1. Parkinson's disease

Parkinson's disease (PD) is an age-related progressive neurodegenerative condition, the underlying pathology of PD involves progressive loss of nigrostriatal neurones which

results in deficiency of the neurotransmitter dopamine. The mean age of onset is about 65 years, however an early onset form of the condition exists affecting individuals aged less than 40 years. Similar frequencies are observed in males and females. The overall age-adjusted prevalence is approximately 0.3% overall and 1% of individuals aged >60 years. (Samii et al, 2004)

6.1.2. Treatment of Parkinson's disease

Currently available therapies aim to replace or compensate for the lost dopamine in order to improve motor function. There are no disease modifying therapies available.

Choice of initial therapy depends on a patient's age and specific symptoms. If motor symptoms are mild but require therapy, patients may initiate a monoamine oxidase B inhibitor before moving to more potent dopaminergic therapies such as levodopa or a dopamine agonist.

There is a higher incidence of levodopa-related dyskinesia in younger-onset PD, as such dopamine agonists are usually introduced as initial treatment for patients younger than 60 years. (Connolly & Lang, 2014) With time, individuals controlled initially with dopamine agonist monotherapy will eventually require the addition of levodopa to adequately control their symptoms.

In patients aged ≥ 60 years, the levodopa is often favoured as the first line treatment. (Connolly & Lang, 2014)

6.1.2.1. Dopamine agonists

Two subclasses of dopamine agonist exist: ergot (bromocriptine, pergolide, lisuride, α -dihydroergocryptine and cabergoline) and non-ergot (apomorphine, rotigotine, pramipexole, pramipexole and ropinirole).

Whereas the aim of levodopa treatment is to replace dopamine, dopamine agonists exert their anti-parkinsonian effects by acting directly on dopamine receptors and mimicking the endogenous neurotransmitter. (Brooks, 2000) (Bonuccelli & Ceravolo, 2008)

Dopamine agonists can be used as monotherapy or as an adjunct to levodopa. When used as monotherapy, the intention is to delay the need to initiate levodopa therapy and hence deferring the onset of levodopa associated complications. Since younger age-of-onset of Parkinson disease is a risk factor for motor fluctuations and dyskinesia, dopamine agonists are usually introduced as initial treatment for patients younger than 60 to 65 years. (Brooks, 2000)

Most patients that initiate dopamine agonist therapy will eventually need the addition of levodopa to their treatment regimen. (Connolly & Lang, 2014) Conversely, individuals initiating their treatment as levodopa monotherapy may be prescribed a dopamine agonist as adjunctive therapy in patients exhibiting fluctuating motor responses and dyskinesias associated with its chronic use. (Connolly & Lang, 2014; Giroux, 2007) Addition of dopamine agonists allows a reduction in dose of levodopa and leads to improvement in the disabling complications.

Known side effects of dopamine agonists include hallucinations, excessive daytime sleepiness, hypotension and nausea. (Bonuccelli & Ceravolo, 2008) Ergot derived dopamine agonists are also associated with an increased risk of cardiac valve regurgitation and as a result are not generally prescribed. (Schade et al, 2007) Other potential complications of PD medications include impulse control behaviours. (Bonuccelli & Ceravolo, 2008) (British National Formulary, 2015)

Ropinirole for the treatment of Parkinson's disease (prolonged and immediate release)

Ropinirole is a potent and highly selective non-ergot dopamine receptor agonist that is active both peripherally and centrally. It is indicated for Parkinson's disease and the symptomatic treatment of moderate to severe idiopathic restless legs syndrome (RLS). Ropinirole has been approved and marketed in the UK for the treatment of PD for over fifteen years and has been shown to be well tolerated and effective. (Adler et al., 1997; Pahwa et al, 2004)

Immediate release formulation:

Ropinirole is available as an immediate release (IR) formulation (REQUIP™) and is administered three times daily for the treatment of PD. The initial daily dose is 0.75mg titrating upwards to a maximum dose of 24mg daily.

Prolonged release formulation:

A prolonged release formulation of ropinirole (ropinirole-PR) has been more recently developed for the treatment of PD and has the advantage of being taken only once a day providing a simplified dosing regimen and reduced pill-burden. Ropinirole-PR is available in 2, 3, 4 and 8 mg tablet strengths. The initial dose of treatment is 2mg once daily, to a maximum daily dose of 24mg based on the patient's response. For patients switching from ropinirole-IR, patients should be switched to the equivalent daily dose of ropinirole-PR. Ropinirole-PR was licensed in 2008.

The once daily dosing has the potential to improve compliance, which may lead to improved efficacy. The prolonged release formulation reduces plasma-level fluctuations in the concentration of ropinirole over a 24 hour period, producing a smoother pharmacokinetic profile which may result in a reduced potential to cause side-effects. (Pahwa R et al., 2007)

6.1.2.2. Levodopa

Levodopa is the first line treatment of choice amongst PD patients aged over 60 years. Levodopa is the amino acid precursor of dopamine and remains the most potent and widely used antiparkinson drug throughout much of the disease course. In combination with a peripheral decarboxylase inhibitor, it is the most effective symptomatic treatment. Levodopa enters dopaminergic neurons where it is metabolised to dopamine, replacing the depleted endogenous neurotransmitter.

Known side-effects of levodopa include dyskinesias and on-off fluctuations. ([British National Formulary](#), 2015)

6.1.2.2.1. Levodopa add-on therapies

Decarboxylase inhibitors, Catechol O-methyltransferase (COMT) inhibitors and inhibitors are often prescribed together with levodopa to prolong its action. Monoamine oxidase type B (MAOB) inhibitors prevent the breakdown dopamine in the brain. Whereas decarboxylase and COMT inhibitors are generally only prescribed with levodopa, MAOB-I's can be used on its own in the early stages of the condition or in conjunction with levodopa. In this situation, it reduces the required dosage of levodopa and prolongs its action.

6.1.3. Motor complications associated with long-term treatment of PD

A complication of long-term dopaminergic treatment for PD, are the development of motor fluctuations (such as end-of-dose wearing-off, on-off phenomena) and dyskinesias. ([Samii et al.](#), 2004). Motor complications can impair quality of life and cause significant disability for patients. ([Connolly & Lang](#), 2014)

6.1.3.1. End-of-dose wearing off

End-of-dose wearing off develops as the disease progresses and is often one of the first signs of motor complication associated with therapy. ([Santens & de Noordhout](#), 2006)

With continued loss of substantia nigra, the treatment benefit of each dose of levodopa progressively shortens. Patients notice a re-emergence of their Parkinsonian signs within 4 hours or less after administration of a single dose of levodopa. Symptom control can be regained by taking the next levodopa dose.

End of dose wearing off is a relatively predictable variation of motor fluctuations that is temporally associated with the timing of levodopa ingestion. A study of 60 incident PD patients by Thomas et al found that 30% on dopamine agonist mono therapy experienced “wearing-off” 15–21 months after beginning treatment. ([Thomas et al.](#), 2006)

6.1.3.2. On-off phenomena

“On-off” phenomenon refers to a switch between mobility and immobility in levodopa-treated patients, which occurs as sudden and unpredictable motor fluctuations. Periods of improved mobility are known as “on” periods during which the patient responds to levodopa and where medication is providing symptomatic benefit and periods of impaired motor function or “off” responses in when symptomatic benefit has been lost over the preceding minutes or hours. ([Samii et al.](#), 2004)

Strategies for reducing the time that medication is not optimally effective (“off” time) include increasing the dosage of dopaminergic medication, adding another dopaminergic medication, dividing the levodopa dosage into smaller but more frequent doses (levodopa dose fractionation), or adding a COMT inhibitor or MAOB inhibitor to inhibit the breakdown of levodopa and dopamine and prolong their effects. ([Pahwa et al.](#), 2006)

6.1.3.3. Dyskinesias

Dyskinesias are drug-induced involuntary movements including chorea and dystonia and describes a group of abnormal involuntary (non-tremor) movements that appear to be a fragmentation of the normal smoothly controlled limb and facial movements. They are a central side effect of dopaminergic therapy and represent a major clinical problem in the management of patients with PD. Dopaminergic reduction strategies will reduce dyskinesias but worsen PD symptoms. Amantadine may be used to reduce dyskinesia severity. (Connolly & Lang, 2014)

Dyskinesias are reported to occur in up to 45% of patients after 5 years of therapy with levodopa and 20% amongst those prescribed a dopamine agonist. (Gomez, et al., 1997; Rascol et al., 2000; Samii et al., 2004)

6.1.4. Impulse control disorders (ICDs)

ICDs are defined as behaviours that are performed repetitively, excessively, and compulsively to an extent that interferes in major areas of life functioning. In recent years, there has been increasing evidence and awareness that PD patients are at increased risk of developing one or more of four major ICDs, which are compulsive or pathological gambling, buying, sexual, and eating behaviours. (Weintraub et al., 2014)

Amongst patients prescribed levodopa, motor complications can occur as early as 2 years into therapy, although it is generally assumed that motor fluctuations occur in about 50 percent of patients after 5 years of levodopa treatment, increasing to 70 percent among patients treated for 15 years or more. (Giroux, 2007) (Santens & de Noordhout, 2006)

Dopamine agonists are less likely than levodopa to cause dopaminergic motor complications, particularly dyskinesia. The reason for this is not known, however it may be related to the longer half life of dopamine agonists and differences in receptor selectivity. (Brooks, 2000) Evidence suggests that the abnormal pulsatile stimulation of dopamine receptors by the intermittent administration of agents with short half-lives such as levodopa is an important factor in the development of motor fluctuations. (Olanow & Obeso, 2000) (Santens, et al., 2003) (Brooks, 2000; Samii et al., 2004)

Initiating therapy with a long-acting dopamine agonist has been shown to delay the onset and reduce the severity of motor complications in MPTP monkeys and PD patients. Administering levodopa with a COMT inhibitor to block its peripheral metabolism increases its plasma half-life and might have a similar effect. (Olanow & Obeso, 2000)

At the time of submission, the MHRA expressed concerns about the long-term consequences of continuous dopamine agonism in PD patients prescribed ropinirole-PR. GSK have therefore proposed to conduct a post-marketing observational study using the Clinical Practice Research Datalink (CPRD) in order to address these concerns. A post-marketing study will be conducted incidence of known consequences of dopamine agonism over a five-year period in Parkinson's patients initiating ropinirole PR as monotherapy compared to those initiating immediate release dopamine agonist monotherapy.

Additional questions that GSK will address include evaluating adherence and persistence to medication off label use of ropinirole PR.

7. RATIONALE

GSK has committed to conducting a post-marketing observational study to evaluate the long-term consequences of continuous dopamine agonism in PD patients initiating ropinirole-PR monotherapy compared to those initiating an immediate release dopamine agonist monotherapy. GSK have proposed to conduct this post-marketing observational study using data from the CPRD, a UK primary care dataset.

8. RESEARCH QUESTION AND OBJECTIVE(S)

The aim of this study is to estimate the incidence of dyskinesias, on-off phenomena and impulse control disorders amongst PD patients initiating prolonged release ropinirole (ropinirole-PR) monotherapy compared to those initiating immediate release dopamine agonist monotherapy using data from the CPRD.

8.1. Primary objectives:

1: To estimate, amongst individuals with Parkinson's disease, the incidence rate ratio of dyskinesia in individuals initiating ropinirole-PR monotherapy compared to those initiating immediate release dopamine agonist monotherapy. Incidence rate ratios will also be estimated for other outcomes of interest, notably on-off phenomena and impulse control disorders. The exposure groups will be propensity score matched.

8.2. Secondary objectives:

2: To describe and compare the baseline characteristics of individuals initiating ropinirole-PR with those initiating immediate release dopamine agonist monotherapy for PD.

3: To estimate time to levodopa use amongst PD patients initiating ropinirole-PR monotherapy and those initiating immediate release dopamine agonist monotherapy.

4: To describe treatment persistence and adherence amongst patients initiating therapy on ropinirole-PR versus a matched cohort initiating immediate release dopamine agonists.

5: To describe the extent of off-label use amongst ropinirole-PR initiators.

9. RESEARCH METHODS

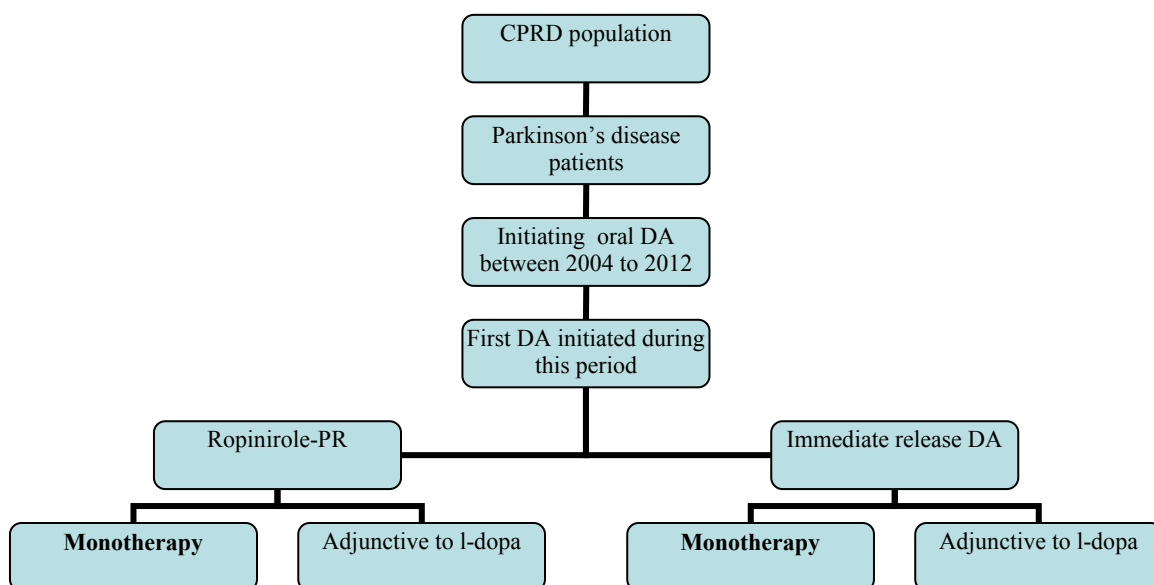
This observational study will involve retrospective analysis of longitudinal electronic medical records (EMR) from the CPRD. This will be supplemented with data to be obtained by GP questionnaire.

9.1. Design

This study will use a propensity matched cohort design with adjustments for time varying covariates. Parkinson's disease patients initiating an oral dopamine agonist therapy between 2004 and 2012 will be eligible for inclusion in the study.

Comparisons will initially be made between individuals initiating ropinirole-PR and those initiating immediate release dopamine agonists for their Parkinson's disease. Patient demographics and medical history up to the time of initiation of therapy will be described and compared between the two groups. Treatment histories will also be evaluated in order to determine whether patients initiated their therapy as an adjunct to levodopa or as dopamine agonist monotherapy. [Figure 1](#) provides an overview of the eligible population.

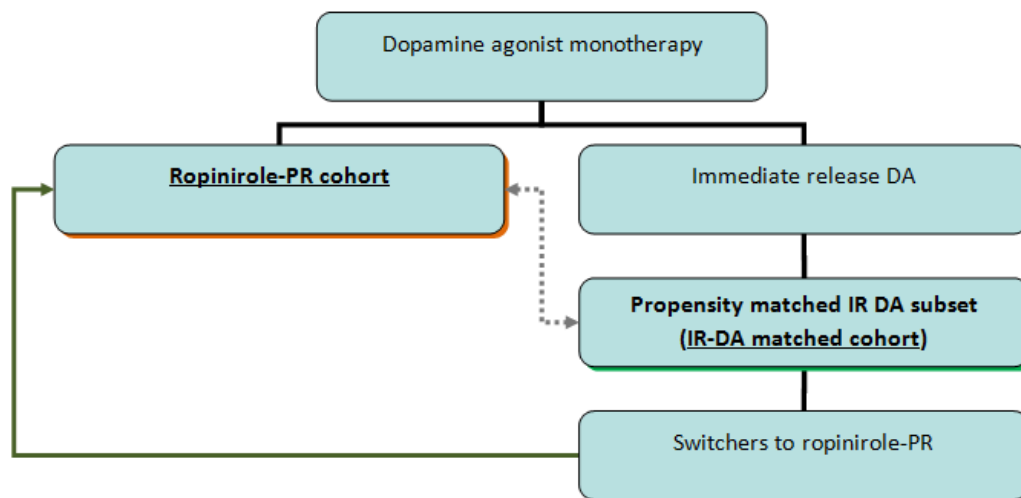
Figure 1 Overview of populations of interest



The longitudinal analysis will be restricted to individuals prescribed their dopamine agonist as a monotherapy (i.e. without concomitant use of or a history of levodopa use). The reason for this is because of the complexity of the PD treatment pathway and because patients already established on levodopa may be prescribed a dopamine agonist as an adjunct to help alleviate existing motor fluctuations associated with levodopa use.

Individuals initiating immediate release dopamine agonists as monotherapy will be propensity score matched to individuals initiating ropinirole-PR monotherapy to ensure comparability between groups and to minimise confounding (**ropinirole-PR cohort**). Individuals initially in the IR-DA cohort that switch to ropinirole-PR will enter the ropinirole-PR cohort at the time of switch. See [Figure 2](#).

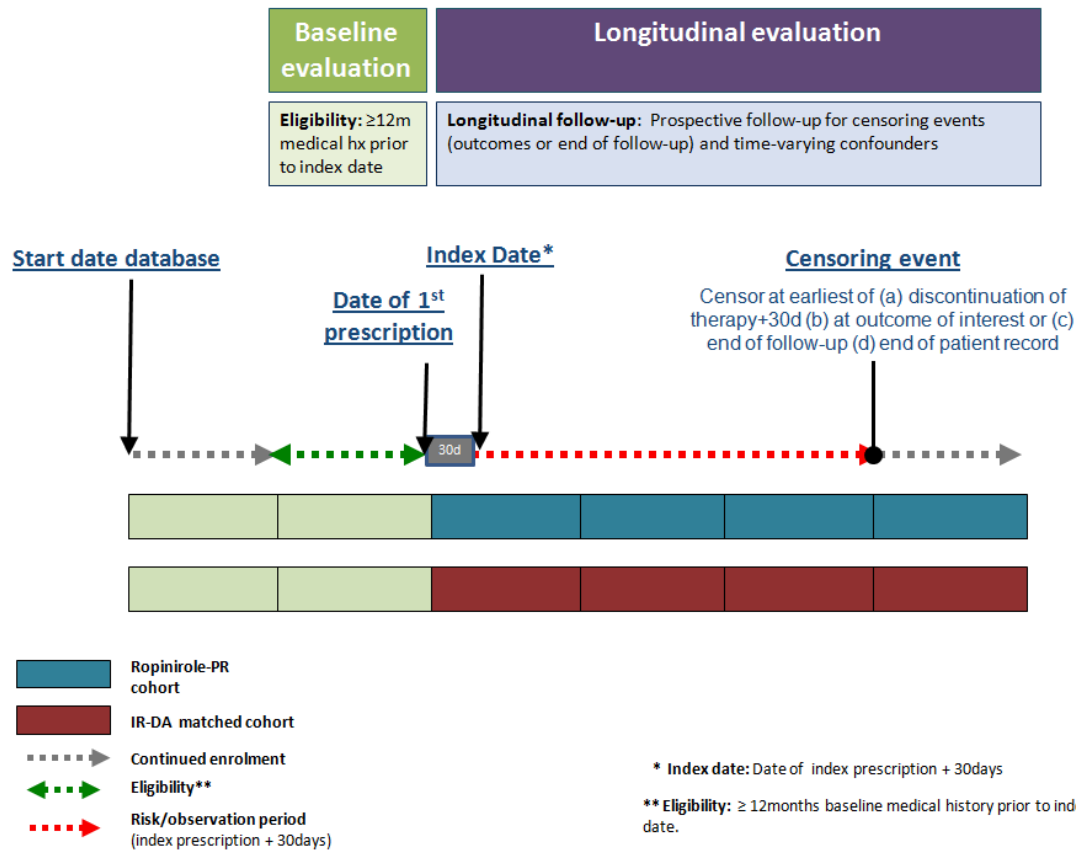
Figure 2 Populations of interest for longitudinal evaluation (DA monotherapy; ropinirole-PR and propensity score matched immediate release DA)



Factors to be considered in generating the propensity score will include demographics, PD disease duration, morbidity burden and treatment histories up to index date (refer to Section 9.3.3.1). Initiation of levodopa, COMT, decarboxylase inhibitors or MAOB during the observation period will also be accounted for since they are known to prolong the effects of levodopa and hence may modify the risk of some of the outcomes of interest. Compliance and adherence to medication may be greater in individuals prescribed ropinirole-PR compared to immediate release dopamine agonists due to its once a day formulation. Therefore adherence to medication will also be described.

The longitudinal analysis will be conducted amongst those patients initiating ropinirole-PR monotherapy and the IR-DA matched cohort. See Figure 3 below.

Figure 3 Schematic of study design: Longitudinal evaluation of DA monotherapy (ropinirole-PR vs. IR-DA matched cohort)



The observation period will commence from date of initiation of therapy + 30 days (index date) and continue up to a censoring event (earliest of discontinuation of therapy + 30 days, development of an outcome of interest (dyskinesia, on-off phenomena or impulse control disorder), or end of follow-up on the CPRD) up to a maximum of 5 years of treatment. Follow-up commences 30 days after initiating therapy to allow sufficient exposure to the drug, and to account for instances whereby a patient might be switching from another therapy because of developing an outcome of interest. Similarly this is the justification for censoring patients 30 days after treatment discontinuation.

9.2. Setting

The study population for this study will be comprised of individuals with a recorded Parkinson's disease diagnosis initiating a dopamine agonist therapy between January 1st 2004 and December 31st 2012. Patients will be identified from the CPRD, a UK primary care based electronic health record database. Within the United Kingdom, ongoing

Parkinson's disease treatment is managed in the primary care setting by general practitioners.

9.2.1. Clinical Practice Research Datalink

The CPRD is an observational database of anonymised longitudinal records collected from computerised primary care practices throughout the UK containing all records deemed relevant to patient care. Details of demographics, primary care diagnoses and prescription treatment are routinely recorded by date in individual patient records. Due to the structure of the UK National Health Service, details of referrals, secondary care diagnoses and deaths are also captured. Major events from before computerisation are added retrospectively so that the GP has complete patient records. Data on preventive medicine can also be recorded with laboratory results electronically transferred to many practices. Medical events are automatically coded at entry using the READ coding system.(NIH, 2015). Prescriptions issued by the GP are coded using BNF coding. Each patient within the CPRD is assigned an 'up to standard' date (UTS) when the recording of their details is considered to be of research standard.

Data quality of the CPRD is monitored continuously by MHRA and practices that fail to maintain the required standards are removed from the database. The data is collected from over 400 contributing clinical practices throughout the UK and currently contains around 4 million active patients. The CPRD has been found to be highly representative of the UK general population. Several studies have demonstrated nearly identical age and sex distributions when stratified by geographic region between the CPRD population and the entire UK population. (Walley & Mantgani, 1997) On average, individual patients are followed for more than 6 years.

The latest version of the CPRD available at the time of data analysis will be used.

9.2.2. Populations of interest

To be considered eligible for this study, individuals must first meet the criteria for Parkinson's disease which will be defined using READ codes (Section 9.3.2.1). From this population, individuals initiating a dopamine agonist therapy of interest between 2004 and 2012 will be identified.

From this, the following populations of interest will be derived:

- All individuals initiating ropinirole-PR
 - Individuals initiating ropinirole-PR as monotherapy
- All individuals initiating an oral immediate release DA
 - Individuals initiating an oral immediate release DA as monotherapy.

In addition, a separate population will be identified to evaluate off-label use of ropinirole-PR.

9.2.2.1. PD patients initiating ropinirole-PR

PD patients prescribed ropinirole-PR by their GP will be identified from the CPRD. All individuals that meet the case definition for PD and have least 1 prescription for ropinirole-PR on or after their PD diagnosis date will be considered for inclusion.

Inclusion criteria

- i. Patients must meet the case definition of PD.
- ii. Individuals must have at least one script for ropinirole-PR between 2004 and 2012 (on or after PD diagnosis date).
- iii. Patients must have at least 12 months registration prior to index date in order to collect information on comorbidity, medical and prescription history.

Exclusion criteria

The study population will be redefined for analysis of each outcome of interest to ensure that the population under study is free from that outcome at baseline.

- Exclude patients that belong to practices that are not considered up to research standard on index date.
-
- Exclude individuals with any outcomes of interest (dyskinesia, impulse control, on-off phenomena) on or prior to index date. The study population will be redefined for the analysis of each outcome of interest to ensure that the population under study is free from that outcome at baseline.

9.2.2.2. Ropinirole-PR monotherapy (ropinirole-PR cohort)

A subset of the population above initiating ropinirole-PR as monotherapy. Refer to Section [9.3.2.4](#) for monotherapy definition.

9.2.2.3. PD patients initiating immediate release dopamine agonists

This group will comprise of Parkinson's disease patients initiating an oral immediate release dopamine agonist between 2004 and 2012. This may include individuals initiating the immediate release formulation of ropinirole. Individuals must not have been prescribed prolonged release formulations of ropinirole or pramipexole prior to index date.

Individuals that subsequently switch to ropinirole-PR during follow-up will enter the ropinirole-PR cohort at the time of switch.

Inclusion

- Individuals meeting the PD case definition and initiating an immediate release formulation of a dopamine agonist of interest (between 2004 and 2012) will be included.
- The index date will be defined as the date the dopamine agonist of interest was initiated.

- Patients must belong to practices that are considered up to research standard on index date.
- Patients must have at least 12 months of registration prior to the index date in order to collect information on disease, comorbidity, medical and prescription history.

Exclusion

- Exclude individuals with exposure to prolonged release dopamine agonists (pramipexole or ropinirole) prior to index date.
- Exclude individuals with any outcomes of interest (dyskinesia, impulse control, on-off phenomena) on or prior to index date. The study population will be redefined for analysis of each outcome of interest to ensure that the population under study is free from that outcome at baseline.
- See Section 9.2.3 relating to matching criteria.

9.2.2.4. Immediate release dopamine agonist monotherapy

A subset of the population above initiating their treatment as monotherapy. Refer to Section 9.3.2.4 for monotherapy definition.

9.2.2.5. Ropinirole-PR off-label population

All individuals on the CPRD with at least one ropinirole-PR prescription (irrespective of age) will be identified. Patients are required to have at least 12 months of medical history prior to the index date in order to determine likely indication for prescription for the off-label evaluation. The off-label population will comprise of those without a prior history of PD. The proportion of the off-label population with restless leg syndrome (RLS), fibromyalgia, sexual dysfunction, periodic limb movement disorder (without mention of RLS) will be estimated. In addition the proportion of the off-label population at are aged <18years at index date will be estimated (paediatric population)

9.2.3. Matching Criteria

Up to 3 individuals from the comparator cohort (**IR-DA cohort**) will be matched to each individual in the **ropinirole-PR cohort** using the propensity scores. The matching technique (greedy vs. optimal) is yet to be determined.

Propensity score matching aims to improve comparability between the ropinirole-PR and immediate release DA monotherapy groups at baseline. The propensity score is defined as the conditional probability of being treated given the baseline covariates. The propensity score will be used as a matching variable in order to balance the baseline covariates in the two groups.(D'Agostino, 1998) Trimming of propensity scores may be used to provide additional equipoise between treatment groups as this will exclude those with more extreme propensity score values.

To estimate propensity scores, the distribution of the treatment indicator variable is modelled, given the observed covariates at baseline. SAS unconditional logistic regression models will be used; ropinirole-PR use will be the outcome variable. Each

individual is assigned a probability for receiving ropinirole-PR (propensity score) given factors known at baseline. Propensity scores are then used to match individuals with the same propensity score for ropinirole-PR, however, one will have received ropinirole-PR and the other treated with another dopamine agonist of interest.

Factors (at baseline) to be considered in the propensity score generation are listed in Section 9.3.3.1 and include age at PD diagnosis, PD disease duration, PD medication history and morbidity burden at index date.

When missing values occur on covariates to be used in the propensity score, subjects will be excluded.

The distribution of the propensity scores for each exposure will be plotted, before and after matching. The variation within each group (e.g. the SD) will be compared with the separation between the exposed and unexposed groups (e.g. difference between means) to determine whether an adequate degree of matching has been achieved.

A comparison between baseline factors (including those used to generate the propensity score) between the ropinirole-PR cohort and IR-DA cohort will be made to ensure that the matching was successful in balancing the groups.

All longitudinal analyses will be conducted amongst the **ropinirole-PR monotherapy cohort** and the propensity matched immediate release monotherapy group (**IR-DA matched cohort**).

9.3. Variables

9.3.1. Outcome definitions

Refer to [ANNEX 1](#) for a copy of the GP questionnaire

9.3.1.1. Dyskinesia

Dyskinesia will be identified using data captured on the CPRD using READ codes, as well as by GP questionnaire.

Individuals will be classified as having dyskinesia if:

Dyskinesia = YES on GP questionnaire

or

Where Dyskinesia is not known/blank on the GP questionnaire AND CPRD algorithm = [probable] or [possible + initiation of amantadine+clinical review]

For patients where there are conflicting information (i.e. no on GP questionnaire and probable on the CPRD), a review of the patients electronic medical record will be made by the clinical consultant and independently by the safety physician to determine outcome status.

Date of dyskinesia is the earliest of the dates cited from either source. In the instance where date of dyskinesia is absent (i.e. if from GP questionnaire only), then patient should be excluded from analysis of that outcome.

READ codes can be found in [ANNEX 3](#).

9.3.1.2. On-off phenomena

READ codes are not specific enough to define on-off phenomena, therefore it will be identified using responses from GP questionnaire alone ([ANNEX 1](#)).

Month and year of diagnosis will be obtained via GP questionnaire. If date is absent, then the patient should be excluded from analysis of that outcome.

Should the GP questionnaire response rate substantially differ between exposure groups, this outcome will not be included.

9.3.1.3. Impulse control disorders

The following impulse control behaviours will be defined using data from the CPRD and from GP questionnaire:

- i. Compulsive eating
- ii. Compulsive shopping
- iii. Pathological gambling
- iv. Hypersexuality
- v. Other impulse control disorder

Individuals will be classified as having an impulse control disorder if: Response to any ICD question = YES on GP questionnaire <u>or</u> ICD response = not known or blank on GP questionnaire AND CPRD algorithm = probable For patients where there are conflicting information (i.e. no on GP questionnaire and probable on the CPRD, a review of the patients electronic medical record will be made by the clinical consultant and independently by the safety physician to determine outcome status. Date of onset of ICD is the earliest of the dates cited from either source. In the instance where date of impulse control disorder is absent (i.e. if from GP questionnaire only), then patient should be excluded from analysis of that outcome.

It is proposed to evaluate the risk of ICD overall. A description of the specific behaviours that have been reported will be described.

READ codes can be found in [ANNEX 3](#).

9.3.1.4. Additional outcomes of interest

Time to levodopa initiation

Time to levodopa use amongst individuals without a history of use of levodopa at baseline will be evaluated in both cohorts. As levodopa is associated with dyskinesias, delay in its use may further reduce the risk of the development of motor complications, or reflect better control of PD symptoms by current therapy.

BNF codes will be used to identify levodopa containing medications. ([ANNEX 3](#))

Duration of treatment persistence

Persistence is defined as time from initiation to discontinuation of therapy (a gap in treatment of at least 60 consecutive days). This will be monitored based on prescriptions issued within the CPRD.

The duration of treatment will be derived from either days supply, or pack size divided by the indicated number of tablets to be taken per day. Some patients may have overlapping prescriptions as prescriptions may be issued prior to the previous prescription ending, in these instances, prescriptions can be assumed immediately follow the previous one.

Adherence

The medication possession ratio (MPR) will be used to describe adherence to medication.

This will be calculated by summing the days supply from the first to the last prescription (inclusive) divided by time between the last prescription date plus days supply and the first prescription date.

The following categories of MPR will be created:

- <30%
- 30-50%
- 51-80%
- $\geq 80\%$

Off-label use of ropinirole-PR

Amongst individuals prescribed ropinirole-PR, diagnoses (defined by READ codes) any time prior to index date will be evaluated to determine likely indication for treatment. The proportion of individuals with any of the following conditions on or prior to index date will be evaluated:

- Parkinson's disease

Then, amongst those without a history of PD:

- Restless legs syndrome (RLS)
- Fibromyalgia
- Periodic limb movement disorder (PLMD) without mention of RLS
- Sexual dysfunction
- Individuals initiating therapy without any history of the mentioned conditions, will be coded as "other".

READ codes have been reviewed by a clinician at GSK can be found in [ANNEX 3](#)

Ropinirole daily dose amongst switchers from ropinirole-IR to ropinirole-PR

Individuals that have switched from the immediate release to the prolonged release formulation of ropinirole will be identified. Switchers will be defined as the subset of the ropinirole-PR population that have at least one script for ropinirole-IR formulation in the one month period prior to index date. The difference between the average daily dose of the last ropinirole-IR script and first ropinirole-PR will be calculated.

The average prescribed daily dose will be calculated based on tablet strength, prescription duration and number of daily tablets per prescription.

- Days' supply: if not stated, then divide total quantity by the quantity prescribed per day.
- Daily dose: multiply the quantity prescribed per day by the dose of the tablets
- Where two scripts are given on the same day (different strengths), assume that the doses are additive (i.e. 2mg and 4mg on same day = 6mg). For instances where the patients have two scripts for the same dose on the same day (i.e. separate

entries for 2 sets of 2mg), these should be flagged. Additional review will be required to determine whether these are additive or not based on data captured on the CPRD.

The number of patients missing dose information will be described.

9.3.2. Exposure definitions

9.3.2.1. Parkinson's disease population (PD)

Parkinson's disease will be defined using READ codes captured on the CPRD. READ codes for Primary/idiopathic Parkinson's disease patients can be found in [ANNEX 3](#).

The date of PD diagnosis will be derived using an algorithm based approach ([ANNEX 3](#))

9.3.2.2. Ropinirole-PR

BNF codes will be used to identify ropinirole-PR prescriptions. These codes have undergone review by a clinician at GSK. These codes will be reviewed prior to starting the study to ensure that the list of codes is complete. ([ANNEX 3](#))

The index date will be defined as date of initiation of the ropinirole-PR therapy + 30 days.

9.3.2.3. Oral immediate release dopamine agonists

BNF codes will be used to identify prescriptions for dopamine agonists that are oral and immediate release formulations. These include both ergot and non-ergot dopamine agonists, and will also include individuals prescribed immediate release formulation of ropinirole. Initiators of therapy will be included.

BNF codes have undergone review by a clinician at GSK. ([ANNEX 3](#)).

Index date will be date of initiation of the dopamine agonist therapy + 30 days.

9.3.2.4. Dopamine agonist monotherapy definition

Monotherapy is defined dopamine agonist use without concurrent levodopa use, or dopamine agonist use without a history of levodopa use prior to dopamine agonist initiation.

9.3.2.5. Adjunctive use of dopamine agonist definition

Adjunctive therapy is defined as concurrent use (overlapping prescriptions/exposures) of a dopamine agonist with levodopa at the time of dopamine agonist initiation.

9.3.3. Confounders and effect modifiers

Potential confounders include age, sex, duration of PD, year of first dopaminergic prescription

Additionally, as the risk of motor fluctuations such as dyskinesias increases with advancing disease state, PD duration at index date will also be determined using data on the CPRD.

The table below outlines the covariates of interest.

9.3.3.1. Baseline covariates

The following covariates are based on data captured on the CPRD up to and including index date.

Covariate	From GP questionnaire	Comments
Demographics and baseline health state		
Age at index date		Age at initiation of medication of interest. Consider using age at index date or PD duration at index date. (age $\pm$ 5yrs)
Age at PD diagnosis		(age $\pm$ 5yrs)
Gender		
Disease state (early or advanced) at baseline	X	To be obtained from GP questionnaire and will be based on whether a patient experienced motor fluctuations at index date.
Socioeconomic status (practice level)		
Mean number of GP consultations in 12 months to index date		
Charlson comorbidity score		Charlson comorbidity score at baseline – based on full available medical history at index date. Scoring: Comorbidity Component (Apply 1 point to each unless otherwise noted). 1. Myocardial infarction 2. Congestive heart disease 3. Peripheral vascular disease 4. Cerebrovascular disease 5. Dementia 6. COPD 7. Connective tissue disease 8. Peptic ulcer disease 9. Diabetes mellitus (1 point uncomplicated, 2 points if end-organ damage)

Covariate	From GP questionnaire	Comments
		10. Moderate to severe chronic kidney disease (2 points) 11. Hemiplegia (2 points) 12. Leukemia (2 points) 13. Malignant lymphoma (2 points) 14. Solid tumor (2 points, 6 points if metastatic) 15. Liver disease (1 point mild, 3 points if moderate to severe) 16. Aids (6 points) See ANNEX 3 – READ codes to be defined.
Hypertension		READ diagnosis code or receiving treatment for hypertension – ANNEX 3
Type 2 diabetes		READ diagnosis code or receiving treatment for T2D – ANNEX 3
Hypercholesterolemia		READ diagnosis code or receiving a statin – ANNEX 3
Respiratory illness		COPD, asthma
History of psychiatric disease		ANNEX 3
Index year		
Duration of PD at index date		Time from PD diagnosis date to index date
PD medication history up to and including index date		
Duration of PD treatment		Time in years from first ever dopaminergic therapy to index date.
MAOB-I use		Any history of MAOB-I use up to index date (see ANNEX 3 for code) MAOB-I inhibits an enzyme that breaks down dopamine in the brain. It can be used on its own in the early stages of the condition or in conjunction with levodopa . In this situation, it reduces the required dosage and prolongs the action of the levodopa.
Type of first line therapy used		Dopamine agonist or levodopa **not applicable to longitudinal evaluation**
Number of distinct dopaminergic therapies used up		Based on generic name. To identify frequent switchers of PD treatment.

Covariate	From GP questionnaire	Comments
to index date		Also use to identify whether specific treatment is first line therapy or not.
History of levodopa use up to index date		Ever use – Y/N and total duration of levodopa use up to index date (months). **not applicable to longitudinal evaluation**
Amantadine use		Any history of amantadine use up to index date Amantadine can be prescribed as a monotherapy to provide relief of symptoms of mild, early-stage PD. It may also be prescribed concomitantly with dopaminergic therapies during the later stages of Parkinson's disease to control involuntary movements (dyskinesias). (see ANNEX 3 for code)
COMT or Decarboxylase inhibitor ever used on or prior to index date		(see ANNEX 3 for code)
Apomorphine use on or prior to index date		(see ANNEX 3 for code)

9.3.3.2. Time varying covariates

Since long-term levodopa use is associated with an increased risk of dyskinesias, initiation of levodopa during follow-up will be captured.

Use of medications such as COMT inhibitors, decarboxylase inhibitors or use of an MAO-B inhibitor prolong the action of levodopa and dopamine respectively, and it is therefore proposed that use of these medications during the period of follow-up will also be accounted for in the analysis

An estimate of duration of exposure to levodopa, or to a levodopa add-on therapy at the time of censoring will be obtained. This estimate will ideally be based on dates and durations of prescriptions issued during follow-up. Should this prove computationally too complex, it will be based on date first prescription and censoring date, otherwise exposure to these may be coded as a binary variable (ever exposed or not exposed during follow-up) to simplify this further.

Time varying covariates include:

- Initiation of a levodopa containing therapy during follow-up
- Initiation of a COMT inhibitor or decarboxylase inhibitor during follow-up
- Initiation of an MAOB-I during follow-up

BNF codes can be found in [ANNEX 3](#)

9.4. Data sources

This study will be conducted using data recorded on the CPRD and supplemented by information to be obtained by GP questionnaire. A pilot study conducted in 2010 confirmed that this was a suitable data source to collect data on exposures and outcomes of interest. Refer to [ANNEX 1](#) for a description of the pilot study findings.

9.4.1. Validity of using READ codes to identify individuals with Parkinson's disease

In the UK, patients with suspected Parkinson's disease are referred by their GP to a specialist (neurologist or a geriatrician with a special interest in Parkinson's disease) where a diagnosis is made and treatment initiated. Patients usually have follow-up visits with the specialist every 6-12 months, however ongoing patient management (including repeat prescriptions) occurs in the primary care setting in coordination with a PD nurse specialist.

The pilot study conducted by GSK found that use of READ codes to identify patients was good; 40 out of the 41 cases included in the pilot study were correctly identified as PD using READ codes.

PD diagnosis date will be derived based on the earliest of PD READ code, PD medication or PD symptomatology to determine PD diagnosis date. In the pilot study, this provided a more accurate estimate of PD diagnosis date than PD READ code alone.

9.4.2. Capture of PD medication use in the primary care setting

Although PD treatment is initiated by a specialist, ongoing treatment (including repeat prescriptions) is managed in the primary care setting; therefore it is believed that the CPRD will adequately capture ongoing treatment of PD patients.

It is important to note that although prescriptions may be issued by a GP, this does not mean that a patient filled their prescription or took their medications as instructed.

9.4.3. Validity and justification for choice of outcomes of interest

A pilot study was conducted to evaluate outcomes based on data captured on the CPRD with those reported via a GP questionnaire. Individuals in the pilot study included individuals with Parkinson's disease, some of whom had an outcome of interest as defined by the presence of READ codes.

Questions were included on the GP questionnaire which required the GP to note the presence or absence of the outcomes and the date of onset of the outcome. The outcomes of interest that were evaluated as part of the pilot study were dyskinesia, end of dose wearing off, sudden onset of sleep and impulse control disorders. Comparisons were made between data captured on the CPRD with GP responses.

Based on findings from the pilot study, it was deemed that it would not be feasible to include end of dose wearing off or sudden onset of sleep as outcomes in the study. Reasons for this include, a poor response to the question by GPs questionnaire, a lack of appropriate medical codes available on the CPRD and substantial conflicting results between CPRD and GP questionnaire, meaning that the validity of the outcome would be questionable.

Refer to [ANNEX 1](#) for details of the pilot study.

9.5. Study size

A Cox regression of the log hazard ratio on a covariate with a standard deviation of 0.5000 based on a sample of 1000 observations, based on independent sampling of the exposure groups (i.e. no matching) achieves 82% power at a 0.05 significance level to detect a regression coefficient equal to 0.4055. The sample size was adjusted for an anticipated event rate of 0.2000. It is hoped that in the present study the use of matched samples will give some additional power.

Cox Regression Power Analysis

Numeric Results

	Sample	Reg.	S.D.	Event	R-Squared	Two-	
Power	Size	Coef.	of X1	Rate	X1 vs	Sided	Beta
	(N)	(B)	(SD)	(P)	Other X's	Alpha	
					(R2)		
0.81789	1000	0.4055	0.5000	0.2000	0.0000	0.05000	0.18211
0.93964	1500	0.4055	0.5000	0.2000	0.0000	0.05000	0.06036

A recent feasibility assessment identified 577 individuals initiating ropinirole-PR as monotherapy and 1660 initiating an immediate release dopamine agonist monotherapy on the CPRD. Up to three comparators will be matched to each ropinirole-PR monotherapy patient. An anticipated GP response rate is 68%, this estimate is based on the response rate achieved in the pilot study.

Report Definitions

Power is the probability of rejecting a false null hypothesis. It should be close to one.

N is the size of the sample drawn from the population.

B is the size of the regression coefficient to be detected

SD is the standard deviation of X1.

P is the event rate.

R2 is the R-squared achieved when X1 is regressed on the other covariates.

Alpha is the probability of rejecting a true null hypothesis.

Beta is the probability of accepting a false null hypothesis.

9.6. Data management

The study will be performed by the Worldwide Epidemiology department of GlaxoSmithKline using in-house full-featured CPRD data. The analysis will be conducted and quality checked in-house by a named programmer and QC analyst who will be dedicated to this study. This project will be managed by the neurosciences epidemiology team. The data derived from the CPRD database will be held in-house on a secure network server with restricted access.

GP questionnaires will be managed and collated by the MHRA and sent to GSK with the patient identifiers removed. Data from GP questionnaire will be linked to CPRD records, and will remain anonymised.

All data will be stored on secure servers.

9.6.1. Data handling conventions

All data handling and data analysis will be performed by a trained analyst from the Observational Data Analytics group within the Worldwide Epidemiology Department. The data will be extracted from the CPRD and maintained as a SAS dataset in the WWEpi UNIX project area. The MHRA will manage data collection from the GP questionnaire; these will be anonymised and provided to GSK.

9.6.2. Resourcing needs

- A principal programmer will be assigned to this project together with a QC analyst who will independently programme the study.
- A named statistical consultant will provide support as needed.
- Input from the safety physician will be required when reviewing discordant outcomes between the CPRD and GP questionnaire. The physician will not be informed of the exposure status of the individuals to minimise bias.

9.6.3. Timings of Assessment during follow-up

Described elsewhere

9.7. Data analysis

All analyses will be conducted in SAS version 9.3.

9.7.1. Overview of statistical techniques

9.7.1.1. Descriptive and univariate analyses

Normally distributed continuous variables will be presented as mean $\pm$ standard deviation (SD) and skewed data as median (inter quartile range). Comparisons of continuous

variables between the exposure groups will be evaluated using the Student's t-test and categorical data are to be evaluated using a chi-squared test with Yate's correction or by Fisher's exact test depending on the sample sizes. For the univariable analyses a two-sided p-value of 0.05 will be considered to be statistically significant.

A paired sample t-test will be used to assess whether patients prescribed ropinirole-IR who switch to ropinirole-PR, switch to an equivalent daily dose.

9.7.1.2. Incidence estimation

The incidence of newly diagnosed dyskinesia (and other outcomes of interest) events after the index date will be calculated as the number of events per total number of person-years (PY) of follow-up (per 1000 person-years) in individuals in the ropinirole-PR cohort compared to those in the IR-DA matched cohort. In these cohorts, patients will be followed for events until the earliest of an outcome of interest, discontinuation of therapy+30days, end of a patient record or end of the study period. Crude incident rates per 1000 PY with exact Poisson 95%CI for each type of outcome will be calculated.

Incidence rates will be stratified by age group (at index date) and PD duration,. Incidence rate ratios (IRR) will be estimated between the exposure groups and adjusted for risk factors using multivariable Poisson regression

In addition, incidence rates amongst switchers to ropinirole-PR and those initiating ropinirole-PR *de novo* (as a first line therapy) will be estimated. Should the 95% CI of the IRR not include 1, then consideration will need to be given with regards to differential underlying risk of the outcome amongst these two groups.

9.7.1.3. Multiple regression analyses - Cox proportional hazards regression

A Cox proportional hazards regression model will be used to evaluate time to dyskinesias in individuals prescribed ropinirole-PR with those prescribed other dopamine agonists of interest. Patients will be followed up from index date (initiation of treatment) up to a censoring event (see Section 9.7.1.4). A diagnostic test will be done of the proportional hazards assumption, by adding an exposure x time interaction term to the model.

Crude hazard ratios and 95% CI will be estimated amongst individuals who are free from the outcome of interest at baseline and meeting all inclusion criteria in the two groups of interest (**ropinirole PR cohort** and the **IR-DA matched cohort**). Adjusted hazards ratios will be estimated, accounting for potential confounders and time varying covariates.

Matching will be defined as a stratum variable using a STRATA statement in the SAS procedure, PROC PHREG. The follow-up time for a matched set will continue as long as there is at least one case and one matched control in the analysis.

9.7.1.4. Censoring

- Follow-up will continue to the earliest of: the recording of the outcome of interest, discontinuation of therapy+30days, end of a patient record or end of CPRD follow-up up to a maximum of 5 years of treatment.

- For the estimation of incident rate ratios for those continuing therapy for up to 1, 3 and 5 years, censoring will occur at the end of each of those time points.

9.7.2. Essential analysis

Please refer to standalone document in [ANNEX 1](#) for table shells.

Objective: To describe and compare the baseline characteristics of individuals with Parkinson's disease initiating ropinirole-PR with those initiating immediate release formulation dopamine agonists.

OUTPUT 1: Figure 1 - Derivation of initial study population

Schematic showing derivation of initial study population following application of inclusion and exclusion criteria.

OUTPUT 2: Figure 2 - Derivation of study population for longitudinal analysis

Schematic showing derivation of the two populations of interest for the longitudinal analysis; ropinirole-PR cohort, IR-DA (unmatched) and the matched IR-DA cohort)

OUTPUT 3: Propensity score

- Description of factors used to generate the score
- Distributions of scores for both groups, and matched group (distribution plot, plus quintiles)
- A description of the number of ropinirole-PR patients that were unmatched (no suitable comparator)
- In addition, a count and descriptive analysis of individuals that were not able to be matched that were prescribed ropinirole-PR.

OUTPUT 4: Table 1 - Baseline characteristics of populations of interest before matching

A descriptive analysis of the patient characteristics at index date amongst:

- Ropinirole-PR cohort
- IR-DA (unmatched)

Covariates to include those listed in Section 9.3.3.1. and include patient demographics, disease duration, PD treatment history and comorbidity burden.

OUTPUT 5: Table 2 - Baseline characteristics of populations of interest after matching

As per output 4, but instead comparing the following populations:

- Ropinirole-PR cohort
- IR-DA matched cohort

In addition a count of the number of individuals that was not possible to match.

OUTPUT 6: Table 3 - Average daily dose of ropinirole amongst individuals switching from IR to PR formulation

Amongst individuals that switched from the IR to the PR formulation of ropinirole-PR, the difference between average daily dose pre and post switch.

Population: PD patients initiating ropinirole-PR that switched from ropinirole-IR

Exposure categories:

- Parkinson's disease patients initiating ropinirole-PR as monotherapy
- Parkinson's disease patients initiating ropinirole-PR adjunctive to levodopa
- Parkinson's disease patients initiating ropinirole-PR (monotherapy or adjunctive use)

Outputs:

- Average daily dose at last prescription of ropinirole-IR (prior to switch to ropinirole-PR)
- Average daily dose of ropinirole-PR at time of switch

Objective: To estimate the incidence of dyskinesia and other outcomes of interest amongst individuals with Parkinson's disease initiating ropinirole-PR compared to a propensity score matched cohort of individuals initiating immediate release formulations of dopamine agonists as monotherapy

Populations of interest (exposure groups) for the longitudinal analysis are:

- Ropinirole-PR cohort
- IR-DA matched cohort

Outcomes of interest: Dyskinesia, on-off phenomena, impulse control disorders, initiation of levodopa.

The following outputs will be required for **each** outcome of interest

OUTPUT 7: Table 4: Incidence of outcome of interest

- Incidence (per 1,000 person-years) stratified by age group (at index date), gender, PD duration.
- Crude and adjusted incidence rate ratios
- Crude incidence for those continuing therapy for 1, 3 and 5 years respectively (i.e. for this estimation only, censor at year 1, 3 and 5 respectively)

Separate tables required for each outcome of interest.

OUTPUT 8: Table 5 Median time to outcome.

- Median time (days) from initiation of therapy to onset of outcome amongst the ropinirole-PR cohort and IR-DA matched cohort

OUTPUT 9: Cox proportional hazards model

- Crude and adjusted hazards ratio for exposure groups of interest, accounting for initiation of levodopa or levodopa add-on therapies during follow-up (Section 9.3.3.2) when evaluating dyskinesia, impulse control disorders and on-off phenomena.
- Kaplan-Meier survival curves for patients in the ropinirole-PR and matched immediate release DA cohorts.

Refer to Section 9.3.3.1 for list of potential covariates to consider for adjustment. When evaluating time to levodopa use as an outcome, there is no need to account for time varying-covariates.

Objective: To describe treatment persistence and adherence amongst patients initiating therapy on ropinirole-PR versus a matched cohort initiating immediate release dopamine agonists

Populations of interest (exposure groups):

- Ropinirole-PR cohort
- IR-DA matched cohort

OUTPUT 10: Table 6 - Duration of treatment persistence and medication possession ratio amongst the ropinirole-PR and IR-DA matched cohorts.

OUTPUT 11: Kaplan-Meier plot – medication persistence between exposure groups (ropinirole-PR and IR-DA matched cohorts).

Objective 4: Evaluation of off-label use of ropinirole-PR

OUTPUT 12: Figure 3 – extent of off label use of ropinirole-PR

Population of interest – Ropinirole-PR off-label population

Schematic showing derivation of off-label population, and probable indication of ropinirole-PR treatment

9.7.3. Exploratory analysis

- **OUTPUT 13: Table 7** - incidence of [dyskinesia etc] per 1,000 person-years for patients initiating ropinirole-PR as a first line monotherapy and those prescribed ropinirole-pr switching from another dopamine agonist

Patients may switch therapies due to inadequate control of PD symptoms, onset of motor complications or due to poor tolerability of medication. It is possible that these reasons may not be recorded by the GP. In this study, patients may have switched from another dopamine agonist therapy prior to switching to ropinirole-PR, it is therefore proposed to estimate the risk of the outcomes of interest amongst the subset of the population that are initiating their ropinirole-PR as first line therapy as compared to those switching from other dopamine agonist therapies.

- **OUTPUT 14 and OUTPUT 15: Table 8, and Table 9** – sensitivity analysis – evaluation of risk of dyskinesias amongst individuals with at least two consecutive prescriptions.

It is possible that a single script being issued may not represent a medicine having been taken by a patient. Therefore a sensitivity analysis including individuals with at least two consecutive scripts will be conducted when evaluating dyskinesia as an outcome.

- Dose of treatment has not been accounted for in the analyses. A stratified analysis by dose of treatment may be considered for each main outcome; this is dependent upon the extent of missing dose data on the CPRD.

9.7.4. General considerations for data analyses

Two approaches will be used to adjust for potential confounders: propensity score matching and covariate adjustment. These have been discussed in the statistical analysis section.

Colinearity: There are a number of factors that may be highly correlated, for example PD disease duration and duration of PD treatment up to index date. Following inspection of

the intermediate results, it is proposed that one or the other may be dropped from multiple regression models.

9.8. Quality control

The study protocol has undergone internal GSK review by epidemiology, statistics, clinical and observational database experts at the epidemiology Protocol Review Forum (PRF).

All analyses will be conducted according to internal quality control procedures.

9.9. Strengths of data source

The CPRD is an electronic source of medical records and prescriptions that has been designed for epidemiologic research. The average duration of follow-up of patients is sufficiently long allowing the long-term evaluation of patients prescribed dopamine agonist therapy for treatment of their Parkinson's disease. The CPRD population closely matches the age and gender distribution of the UK population and represents clinical practice as it occurs in the real-world; our findings are therefore generalisable to ropinirole PR use as it occurs in the UK primary care population. As the CPRD contains medical diagnoses deemed relevant to patient care, we are able to take into account a number of baseline factors in our analysis, as well as being able to evaluate off-label use of the drug.

9.10. Limitations of the research methods

The use of administrative data of this type carries some limitations. A primary limitation is our limited ability to control for confounding. Matching by use of propensity scores will help ensure that the exposure groups are comparable at baseline, however, we are only able to control for potential confounders that are contained within the CPRD data. GP's choice of therapy may be influenced by a number of factors such as the severity of PD symptoms at baseline, which is not measurable using data from the CPRD.

The CPRD is representative of patient care as provided by GPs in the primary care setting. In the UK, PD patients are initially assessed and prescribed therapy by Neurologists or PD Nurse Specialists, however, it is believed that ongoing therapy is managed in primary care. The CPRD will not therefore capture prescriptions issued by specialists, however subsequent prescriptions will be

There is the possibility of enhanced GP ascertainment/ patient reporting of compulsive behaviours among dopamine agonist users because of media attention related to this class of drug. However, this should not affect our ropinirole-PR vs. other dopamine agonists comparison.

Our study will only follow patients as far back as they were registered with an up-to-standard CPRD practice to obtain information on prior dopamine agonist prescriptions and medical diagnoses. We may be missing some events in the study groups that had occurred further back in time, but their effect on the baseline risk of dyskinesias or other adverse outcomes is likely to be minimal. Dose of treatment has not been accounted for;

if it is feasible to evaluate this (based on the extent of missing dose data), then this may be conducted as part of the exploratory analyses. Finally, we are using prescriptions received as a proxy for treatment compliance. This merely represents prescriptions given to the patient and does not represent dispensed prescriptions. It is therefore possible that some patients are not taking their medications, but are still receiving prescriptions. Again, this occurrence should be non-differential across our treatment groups, however may vary by age of patient.

GP response rate of around 68% is anticipated based on findings from the pilot study. Presence of on-off phenomena will be determined based on GP questionnaire response alone. Should any significant differences in GP response rate between exposure groups be observed, then it may not be feasible or appropriate to include this as an outcome of interest.

Due to the age of PD patients and course of disease, loss-to-follow up due to death or move to secondary care facilities will need to be monitored as this will impact sample size.

9.10.1. Study closure/uninterpretability of results

As mentioned elsewhere, should there be an imbalance of GP questionnaire response rate between exposure groups or a poor GP response rate, then outcomes such as on-off phenomena may be omitted from this study. GSK will communicate such findings to the MHRA.

9.11. Other aspects

Not applicable

10. PROTECTION OF HUMAN SUBJECTS

10.1. Ethical approval and subject consent

Independent Scientific Advisory Committee (ISAC) approval will be sought prior to finalising the protocol. The data analyses can start only after ISAC approval is granted.

10.2. Subject confidentiality

The CPRD has removed all patient identifiers ensuring patient confidentiality. The MHRA will be responsible for contacting GPs via a questionnaire, and collating the responses, GSK will not have access to potentially patient identifiable information.

11. MANAGEMENT AND REPORTING OF ADVERSE EVENTS/ADVERSE REACTIONS

If, during the study, an adverse event (serious or non serious) is identified as explicitly attributed to any GSK product (including products not covered in the specific study objective), this will be reported. The study epidemiologist must forward the report to

GSK central safety department within 24 hours of first becoming aware of the event as per SOP 52214 (Reporting and Disclosing Information from Observational Safety Studies and Analyses of Epidemiology Data).

When conducted by a third party, the adverse event must be faxed to GSK Global Clinical Safety and Pharmacovigilance at [REDACTED] within 24 hours of receiving the information.

In addition, GSK will evaluate the feasibility of investigating the association of newly reported potential adverse events using the CPRD dopamine agonist cohorts described should they arise or be identified from spontaneous reporting or elsewhere.

12. PLANS FOR DISSEMINATING AND COMMUNICATING STUDY RESULTS

12.1. Target Audience

Findings from this study will be shared internally to GSK stakeholders (including but not limited to the ropinirole Safety Review Team, Project Team and Regulatory Team). The results will be disseminated externally via regulatory submission to the MHRA as well as, manuscript.

12.2. Study reporting and publications

The results of the study will be disseminated through abstract submissions, publishing in a peer reviewed journal and posting on publically accessible GSK website.

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14. ANNEX 1. LIST OF STAND-ALONE DOCUMENTS

No	Document Reference No	Date	Title
1.	2015N258160_00	29 September 2015	PROPOSED GP QUESTIONNAIRE Questionnaire design_Sept2015.pdf
2.	2015N258149_00		TABLE SHELLS AND FIGURES FOR PROPOSED ANALYSIS TableShells.pdf
3	2015N258161_00		SUMMARY OF FINDINGS FROM THE PILOT STUDY FindingsFromPilotStudy.pdf
4	2015N258154_00		DYSKINESIA READ CODES MCL1802_Dyskinesia_CPRD_jul14.pdf ALSO SEE ANNEX 3
5	2015N258156_00		IMPULSE CONTROL DISORDER READ CODES MCL1803_impulse_control_CPRD_jul14.pdf ALSO SEE ANNEX 3
6	2015N258153_00		PARKINSON'S DISEASE MEDICATION CODES (BNF) MCL1730_antiParkinson_CPRD_may14.pdf ALSO SEE ANNEX 3

No	Document Reference No	Date	Title
7	2015N258157_00		OFF-LABEL INDICATIONS – READ CODES MCL1805_Ropinirol_offlabel_CPRD_jul14.pdf ALSO SEE ANNEX 3
8	2015N258151_00		PARKINSON’S DISEASE READ CODES MCL1690_PD_CPRD.pdf ALSO SEE ANNEX 3
9	2015N258158_00 2015N258159_00		SECONDARY PARKINSONISM EXCLUSION CODES (READ AND BNF) MCL1806_drug_parkinsonism_GPRD_jul14.pdf MCL1806_PD_2nd_CPRD_jul14.pdf ALSO SEE ANNEX 3
10	2015N258152_00		READ CODES – PD SYMPTOMATOLOGY MCL1728_PDSymptom_CPRD_jul14.pdf ALSO SEE ANNEX 3

15. ANNEX 2.ENCEPP CHECKLIST FOR STUDY PROTOCOLS

<u>Section 1: Research question</u>	Yes	No	N/A	Page Number(s)
1.1 Does the formulation of the research question clearly explain:				
1.1.1 Why the study is conducted? (e.g. to address an important public health concern, a risk identified in the risk management plan, an emerging safety issue)	☒	☐	☐	19
1.1.2 The objectives of the study?	☒	☐	☐	19
1.2 Does the formulation of the research question specify:				
1.2.1 The target population? (i.e. population or subgroup to whom the study results are intended to be generalised)	☒	☐	☐	20
1.2.2 Which formal hypothesis(-es) is (are) to be tested?	☒	☐	☐	19
1.2.3 if applicable, that there is no <i>a priori</i> hypothesis?	☐	☐	☒	

Comments:

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<u>Section 2: Source and study populations</u>	Yes	No	N/A	Page Number(s)
2.1 Is the source population described?	☒	☐	☐	20
2.2 Is the planned study population defined in terms of:				
2.2.1 Study time period?	☒	☐	☐	20

<u>Section 2: Source and study populations</u>	Yes	No	N/A	Page Number(s)
2.2.2 Age and sex?	☒	☐	☐	22
2.2.3 Country of origin?	☒	☐	☐	22
2.2.4 Disease/indication?	☒	☐	☐	20
2.2.5 Co-morbidity?	☐	☐	☒	
2.2.6 Seasonality?	☐	☐	☒	
2.3 Does the protocol define how the study population will be sampled from the source population? (e.g. event or inclusion/exclusion criteria)	☒	☐	☐	23

Comments:

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<u>Section 3: Study design</u>	Yes	No	N/A	Page Number(s)
3.1 Does the protocol specify the primary and secondary (if applicable) endpoint(s) to be investigated?	☒	☐	☐	26
3.2 Is the study design described? (e.g. cohort, case-control, randomised controlled trial, new or alternative design)	☒	☐	☐	20
3.3 Does the protocol describe the measure(s) of effect? (e.g. relative risk, odds ratio, deaths per 1000 person-years, absolute risk, excess risk, incidence rate ratio, hazard ratio, number needed to harm (NNH) per year)	☒	☐	☐	37
3.4 Is sample size considered?	☒	☐	☐	35
3.5 Is statistical power calculated?	☒	☐	☐	35

Comments:

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<u>Section 4: Data sources</u>	Yes	No	N/A	Page Number(s)
4.1 Does the protocol describe the data source(s) used in the study for the ascertainment of:	☒	☐	☐	30
4.1.1 Exposure? (e.g. pharmacy dispensing, general practice prescribing, claims data, self-report, face-to-face interview, etc)	☒	☐	☐	26
4.1.2 Endpoints? (e.g. clinical records, laboratory markers or values, claims data, self-report, patient interview including scales and questionnaires, vital statistics, etc)	☐	☐	☐	31
4.1.3 Covariates?				
4.2 Does the protocol describe the information available from the data source(s) on:				

<u>Section 4: Data sources</u>	Yes	No	N/A	Page Number(s)
4.2.1 Exposure? (e.g. date of dispensing, drug quantity, dose, number of days of supply prescription, daily dosage, prescriber)	☒	☐	☐	30
4.2.2 Endpoints? (e.g. date of occurrence, multiple event, severity measures related to event)	☒	☐	☐	26
4.2.3 Covariates? (e.g. age, sex, clinical and drug use history, co-morbidity, co-medications, life style, etc.)	☒	☐	☐	31
4.3 Is the coding system described for:				
4.3.1 Diseases? (e.g. International Classification of Diseases (ICD)-10)	☒	☐	☐	23
4.3.2 Endpoints? (e.g. Medical Dictionary for Regulatory Activities(MedDRA) for adverse events)	☒	☐	☐	23
4.3.3 Exposure? (e.g. WHO Drug Dictionary, Anatomical Therapeutic Chemical (ATC)Classification System)	☒	☐	☐	23
4.4 Is the linkage method between data sources described? (e.g. based on a unique identifier or other)	☐	☐	☒	

Comments:

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<u>Section 5: Exposure definition and measurement</u>	Yes	No	N/A	Page Number(s)
5.1 Does the protocol describe how exposure is defined and measured? (e.g. operational details for defining and categorising exposure)	☒	☐	☐	24
5.2 Does the protocol discuss the validity of exposure measurement? (e.g. precision, accuracy, prospective ascertainment, exposure information recorded before the outcome occurred, use of validation sub-study)	☒	☐	☐	34
5.3 Is exposure classified according to time windows? (e.g. current user, former user, non-use)	☒	☐	☐	22
5.4 Is exposure classified based on biological mechanism of action?	☐	☒	☐	
5.5 Does the protocol specify whether a dose-dependent or duration-dependent response is measured?	☒	☐	☐	41

Comments:

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<u>Section 6: Endpoint definition and measurement</u>	Yes	No	N/A	Page Number(s)
6.1 Does the protocol describe how the endpoints are defined and measured?	☒	☐	☐	26
6.2 Does the protocol discuss the validity of endpoint measurement? (e.g. precision, accuracy, sensitivity, specificity, positive predictive value, prospective or retrospective ascertainment, use of validation sub-study)	☒	☐	☐	34

Comments:

<u>Section 7: Biases and Effect modifiers</u>	Yes	No	N/A	Page Number(s)
7.1 Does the protocol address:				
7.1.1 Selection biases?	☒	☐	☐	42
7.1.2 Information biases?	☒	☐	☐	42
(e.g. anticipated direction and magnitude of such biases, validation sub-study, use of validation and external data, analytical methods)				
7.2 Does the protocol address known confounders? (e.g. collection of data on known confounders, methods of controlling for known confounders)	☒	☐	☐	31
7.3 Does the protocol address known effect modifiers?	☒	☐	☐	31
(e.g. collection of data on known effect modifiers, anticipated direction of effect)				
7.4 Does the protocol address other limitations?	☒	☐	☐	25

Comments:

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<u>Section 8: Analysis plan</u>	Yes	No	N/A	Page Number(s)
8.1 Does the plan include measurement of absolute effects?	☒	☐	☐	37
8.2 Is the choice of statistical techniques described?	☒	☐	☐	37
8.3 Are descriptive analyses included?	☒	☐	☐	37
8.4 Are stratified analyses included?	☒	☐	☐	37
8.5 Does the plan describe the methods for identifying:	☒	☐	☐	37
8.5.1 Confounders?	☐	☐	☐	37
8.5.2 Effect modifiers?				
8.6 Does the plan describe how the analysis will address:	☒	☐	☐	37
8.6.1 Confounding?	☐	☒	☐	
8.6.2 Effect modification?				

Comments:

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<u>Section 9: Quality assurance, feasibility and reporting</u>	Yes	No	N/A	Page Number(s)
9.1 Does the protocol provide information on data storage? (e.g. software and IT environment, database maintenance and anti-fraud protection, archiving)	☒	☐	☐	36
9.2 Are methods of quality assurance described?	☒	☐	☐	42
9.3 Does the protocol describe quality issues related to the data source(s)?	☒	☐	☐	23

<u>Section 9: Quality assurance, feasibility and reporting</u>	Yes	No	N/A	Page Number(s)
9.4 Does the protocol discuss study feasibility? (e.g. sample size, anticipated exposure, duration of follow-up in a cohort study, patient recruitment)	☒	☐	☐	35
9.5 Does the protocol specify timelines for				
9.5.1 Start of data collection?	☒	☐	☐	14
9.5.2 Any progress report?	☐	☐	☒	
9.5.3 End of data collection?	☒	☐	☐	14
9.5.4 Reporting? (i.e. interim reports, final study report)	☒	☐	☐	14
9.6 Does the protocol include a section to document future amendments and deviations?	☒	☐	☐	14
9.7 Are communication methods to disseminate results described?	☒	☐	☐	44
9.8 Is there a system in place for independent review of study results?	☐	☒	☐	

Comments:

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<u>Section 10: Ethical issues</u>	Yes	No	N/A	Page Number(s)
10.1 Have requirements of Ethics Committee/Institutional Review Board approval been described?	☒	☐	☐	43
10.2 Has any outcome of an ethical review procedure been addressed?	☐	☒	☐	
10.3 Have data protection requirements been	☒	☐	☐	43

<u>Section 10: Ethical issues</u>	Yes	No	N/A	Page Number(s)
described?				

Comments:

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Name of main author of study protocol:



Date: 29/09/2015

Signature: _____

16. ANNEX 3.ADDITIONAL INFORMATION

16.1. Dyskinesia

GSK coding library identifier: MCL1802

16.2. Impulse control disorders

GSK coding library identifier: MCL1803

16.3. Parkinson's disease medications

GSK coding library identifier: MCL1730

Drug	GSK Coding library identifier	classify	Composition	Release_time
levodopa	MCL1730	<i>Contains</i> levodopa *		
Oral, immediate release dopamine agonists	MCL1730	Dopamine agonist*		<i>Does not =</i> <i>'modified release'</i> (note retain those where release_time is null or immediate release)
Ropinirole- PR Prolonged release formulation of ropinirole	MCL1730	Dopamine agonist*	*ropinirole*	= 'modified release'

Drug	GSK Coding library identifier	classify	Composition	Release_time
Pramipexole-PR Prolonged release formulation of pramipexole	MCL1730	Dopamine agonist*	*pramipexole*	= 'modified release'
COMT	MCL1730	Classify contains *COMT*		
decarboxylase inhibitor	MCL1730	Classify contains *decarboxylase *		
MAO-B inhibitor (time varying medication)	MCL1730	Classify contain "MAO B inhibitor"		
Apomorphine	MCL1730		*apomorphine *	
Amantadine	MCL1730		*amantadine*	

16.4. Off-label indications

GSK coding library identifier: **MCL1805**

16.5. Parkinson's disease population (PD)

Inclusion criteria

1. Primary/idiopathic Parkinson's disease patients will be identified using READ codes outlined below. [GSK coding library identifier: **MCL1690**]

CPRD Medical code	READ Code	Description
9509	Eu02300	[X]Dementia in Parkinson's disease
96860	F11x900	Cerebral degeneration in Parkinson's disease
4321	F12..00	Parkinson's disease
1691	F120.00	Paralysis agitans
14912	F12z.00	Parkinson's disease NOS

2. All individuals in the analyses require at least 12 months of registration prior to the **PD diagnosis date** (see below for algorithm to derive) to allow time for the recording of prevalent events
3. Patients must be aged at least 40 years at the time of PD diagnosis (see algorithm to determine date of PD diagnosis below)

Exclusion criteria

- Patients aged less than 40 years at the time of PD diagnosis.
- Drug induced Parkinsonism (code for drug induced PD or exposure to any prescription for drugs known to induce Parkinsonism in the 3 month period before the Parkinson's disease diagnosis date) [GSK coding library request identifier **MCL1806**]

Other secondary parkinsonism. (including Malignant Neuroleptic syndrome, Postencephalytic Parkinsonism, Vascular and Syphilitic Parkinsonisms) prior to index date [GSK identifier **MCL1806**]

16.6. Date of PD diagnosis

For individuals fulfilling the PD definition (above) use the earliest of:

- Date of Parkinson's READ or CPRD medical code [GSK identifier: **MCL1690**]
- Dopaminergic therapy (dopamine agonist or levodopa therapy) [GSK identifier: **MCL1730** where classify = dopamine agonist* or levodopa*]
- PD symptomatology (based on READ or CPRD code) were reviewed by a GSK clinical consultant. GSK identifier **MCL1728** – where review = yes.

16.7. Charlson comorbidity score

Codes yet to be defined

16.8. Hypertension*Codes yet to be defined***16.9. Hypercholesterolemia***Codes yet to be defined***16.10. Type 2 diabetes***Codes yet to be defined***16.11. Psychiatric disease***Codes yet to be defined***16.12. Respiratory disease***Codes yet to be defined*

CPRD/MHRA Identifiers

Practice ID _____

Patient Identifier _____

This questionnaire is part of a prospective study that is evaluating Parkinson's disease outcomes amongst individuals that have been prescribed a dopamine agonist therapy

In particular we wish you to:

- **Confirm that your patient has previously been diagnosed with Parkinson's disease**
- **Document whether they had evidence of specific conditions of interest, and when.**

If this patient is no longer registered at your practice then please complete Section A only

It is anticipated that the information you provide will be used to verify data already present on the CPRD, as well as providing supplementary information.

Section A: Patient registration

1. Is this patient currently registered at your practice
Yes ☐ (if Yes, please continue to section B)
No ☐ (if No, please complete questions 2 and 3)
2. If this patient no longer registered at this practice, please state reason
Died ☐ **Transferred practice** ☐ **Not known** ☐
3. Year patient ceased being registered at your practice _____

Section B: Patient Baseline Characteristics

4. Please confirm the year the patient was first diagnosed with Parkinson's disease _____
5. Before [**INDEX DATE**] did the patient experience motor fluctuations?* (please tick one):
Yes ☐ **No** ☐ **Not known** ☐

* **Motor fluctuations** include, reduced duration of anti-parkinsonian action (wearing off phenomenon, end of dose wearing off), sudden shifts between under-treated and over-treated states (on-off phenomenon), freezing and involuntary movements such as dyskinesias

Section C: Follow-up Questions**6. Has this patient experienced symptoms compatible with or receive a diagnosis for any of the following between INDEX YEAR and CENSOR DATE**

	Yes	No	NK	Month + Year of diagnosis/presentation [†] (i.e. Feb 2010)
a. Dyskinesias [‡]	☐	☐	☐	_____
b. On-off phenomena [§]	☐	☐	☐	_____
c. Impulse Control Disorders ^{**}				
<i>Pathological Gambling</i>	☐	☐	☐	_____
<i>Hypersexuality</i>	☐	☐	☐	_____
<i>Compulsive Shopping</i>	☐	☐	☐	_____
<i>Compulsive Eating</i>	☐	☐	☐	_____
<i>Other impulse control disorder</i>	☐	☐	☐	_____

If other impulse control disorder, please specify _____

[†] If month not available, please enter the year only

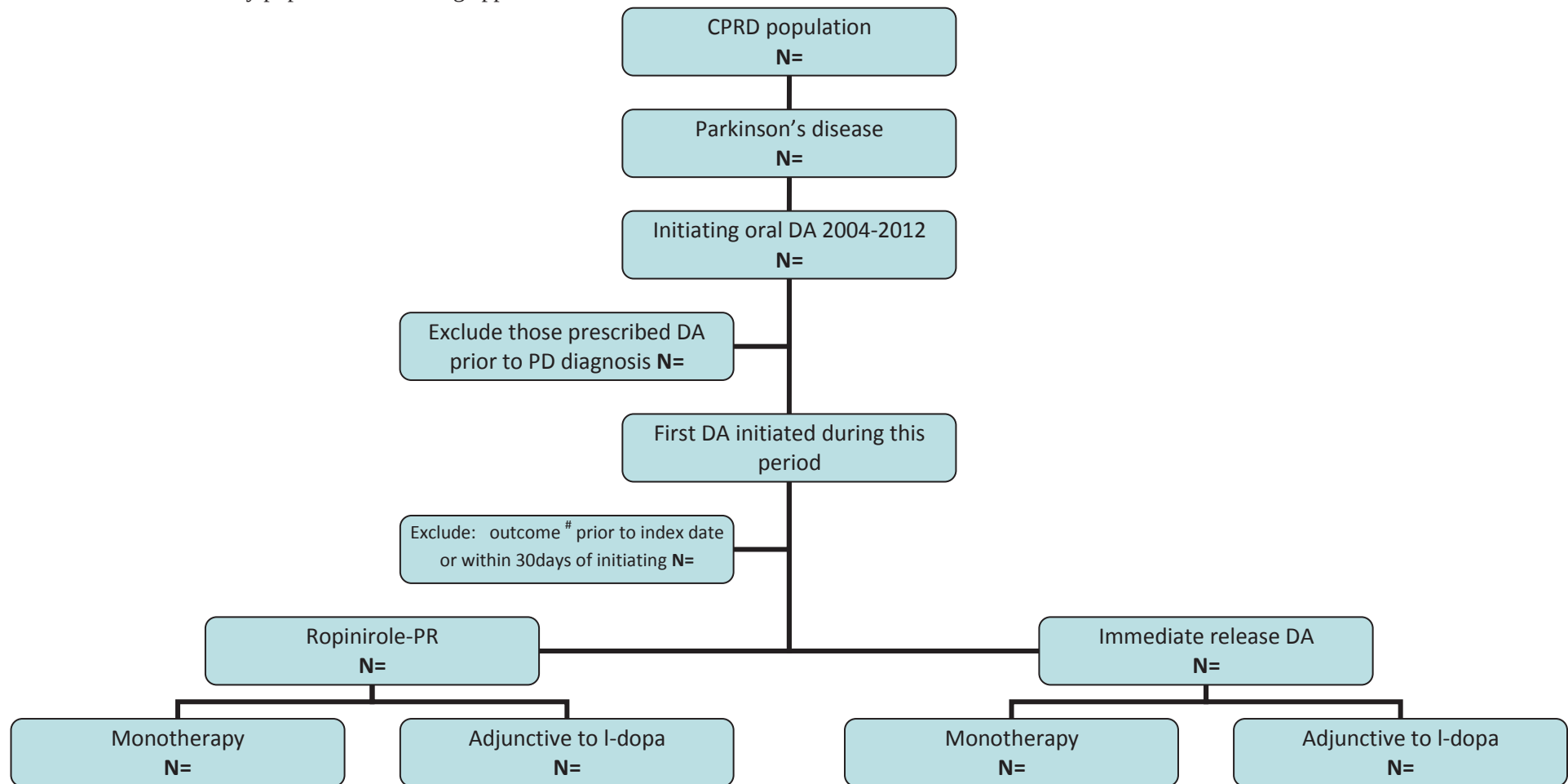
[‡] **Dyskinesia** describes a group of involuntary (non-tremor) movements that appear to be a fragmentation of the normal smoothly controlled limb and facial movements.

[§] **On-off phenomena** (unpredictable on-off) is defined as unpredictable fluctuations between periods of relatively good function and good mobility –'on,' and periods of poor function and poor mobility, immobility or freezing–'off'

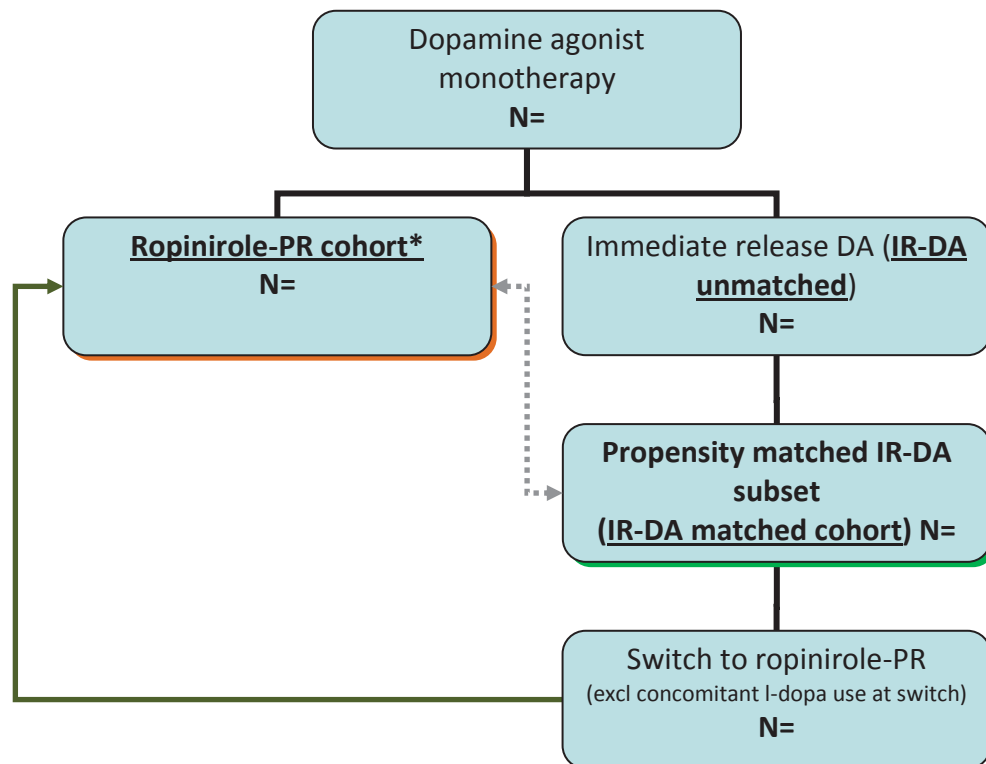
^{**} **Impulse control disorders** are a class of psychiatric disorders characterised by impulsivity; a failure to resist a temptation, urge or impulse that may harm oneself or others.

OUTPUT 1: FIGURE 1 - DERIVATION OF STUDY POPULATION

Derivation of initial study population following application of inclusion and exclusion criteria.



Provide a breakdown of the following: Dyskinesia N= , impulse control disorder N= , on-off phenomena N=

OUTPUT 2: FIGURE 2 - DERIVATION OF STUDY POPULATION FOR LONGITUDINAL ANALYSIS

* Comprises of individuals switching from an immediate release dopamine agonist monotherapy as well as those whose first prescription between 2004 and 2012 is ropinirole-PR

OUTPUT 3: PROPENSITY SCORE METRICS

- Plot of distributions of propensity scores for ropinirole-PR, IR-DA (unmatched) and IR-DA (matched).
- Description of factors used to generate the propensity score
- Describe number of ropinirole-PR that were unmatched (no suitable comparator)
- In addition, a descriptive analysis of individuals that were not able to be matched that were prescribed ropinirole-PR (use table shell in output 4).

OUTPUT 4: TABLE 1 - BASELINE CHARACTERISTICS OF POPULATIONS OF INTEREST BEFORE MATCHING

	Ropinirole-PR	Immediate release dopamine agonists	
	Ropinirole-PR cohort	IR-DA unmatched	p-value
	N=	N=	
Mean age at index date			
Age at PD diagnosis			
Age at index date			
Gender			
% male			
% female			
PD duration (years)			
Index year			
Disease stage at baseline (early, advanced)			
% early			
% late			
% not specified			
First line dopaminergic treatment at time of PD diagnosis (dopamine agonist or Levodopa)			
MAOB-I ever used prior to index date			
COMT ever used prior to index date			
Decarboxylase inhibitor ever used prior to index date			
Amantadine ever used prior to index date			
Number of distinct dopamine agonists used up to index date			
Mean number of GP consultations in 12months to index date			
Charlson comorbidity score at baseline			

OUTPUT 5: TABLE 2 - BASELINE CHARACTERISTICS OF POPULATIONS OF INTEREST AFTER MATCHING

	Ropinirole-PR	Immediate release dopamine agonists	
	Ropinirole-PR cohort	IR-DA <u>matched</u>	p-value
	N=	N=	
Mean age at index date			
Age at PD diagnosis			
Age at index date			
Gender			
% male			
% female			
PD duration (years)			
Index year			
Disease stage at baseline (early, advanced)			
% early			
% late			
% not specified			
First line dopaminergic treatment at time of PD diagnosis (dopamine agonist or Levodopa)			
MAOB-I ever used prior to index date			
COMT ever used prior to index date			
Decarboxylase inhibitor ever used prior to index date			
Amantadine ever used prior to index date			
Number of distinct dopamine agonists used up to index date			
Mean number of GP consultations in 12months to index date			
Charlson comorbidity score at baseline			

OUTPUT 6: TABLE 3 - AVERAGE DAILY DOSE OF ROPINIROLE AMONGST INDIVIDUALS SWITCHING FROM IR TO PR FORMULATION

	Number of individuals	Average daily dose of IR pre-switch (milligrams)	Average daily dose at switch (milligrams)	p-value
Parkinson's disease patients initiating ropinirole-PR (ropinirole-PR cohort)		-	-	-
Parkinson's disease patients switching from ropinirole-IR to PR amongst:				
Parkinson's disease patients initiating ropinirole-PR as monotherapy				
Parkinson's disease patients initiating ropinirole-PR adjunctive to Levodopa				
Parkinson's disease patients initiating ropinirole-PR (all)				

Number of subjects in which dose was missing: N=

OUTPUT 7: TABLE 4 - INCIDENCE OF [DYSKINESIA] PER 1,000 PERSON-YEARS FOR PATIENTS PRESCRIBED ROPINIROLE-PR MONOTHERAPY (ROPINIROLE-PR COHORT) AND THOSE INITIATING AN IMMEDIATE RELEASE DOPAMINE AGONISTS (IR-DA MATCHED COHORT) ON THE CPRD

Cohort	Ropinirole-PR				Immediate release dopamine agonist (matched)				Incident rate ratio - crude	Incident rate ratio - adjusted
	Person-time	Number with incident [dyskinesia]	Rate per 1,000 person years	95% confidence intervals	Person-time	Number with incident [dyskinesia]	Rate per 1,000 person years	95% confidence intervals	RR (95% CI)	RR (95% CI)
Overall										
Age										
<60 yrs										
60-69 yrs										
70-79 yrs										
80 yrs +										
Gender										
Female										
Male										
PD duration (quartiles)										
1 st quartile										
2 nd quartile										
3 rd quartile										
4 th quartile										
Patients continuing treatment										

for: 1yr 3yrs 5yrs										
-----------------------------	--	--	--	--	--	--	--	--	--	--

Repeat for ICD, on-off phenomena and levodopa use as outcomes.

OUTPUT 8: TABLE 5 - MEDIAN TIME TO DYSKINESIA (DAYS)

	Ropinirole-PR	IR-DA matched	p-value
Median Time (days) to [dyskinesia]			
Then stratify by			
Age group			
<60y			
60-60y			
70-79y			
80+			
Male			
Female			
PD duration (quartiles)			
1st			
2nd			
3rd			
4th			

Repeat for ICD, on-off phenomena and levodopa use as outcomes.

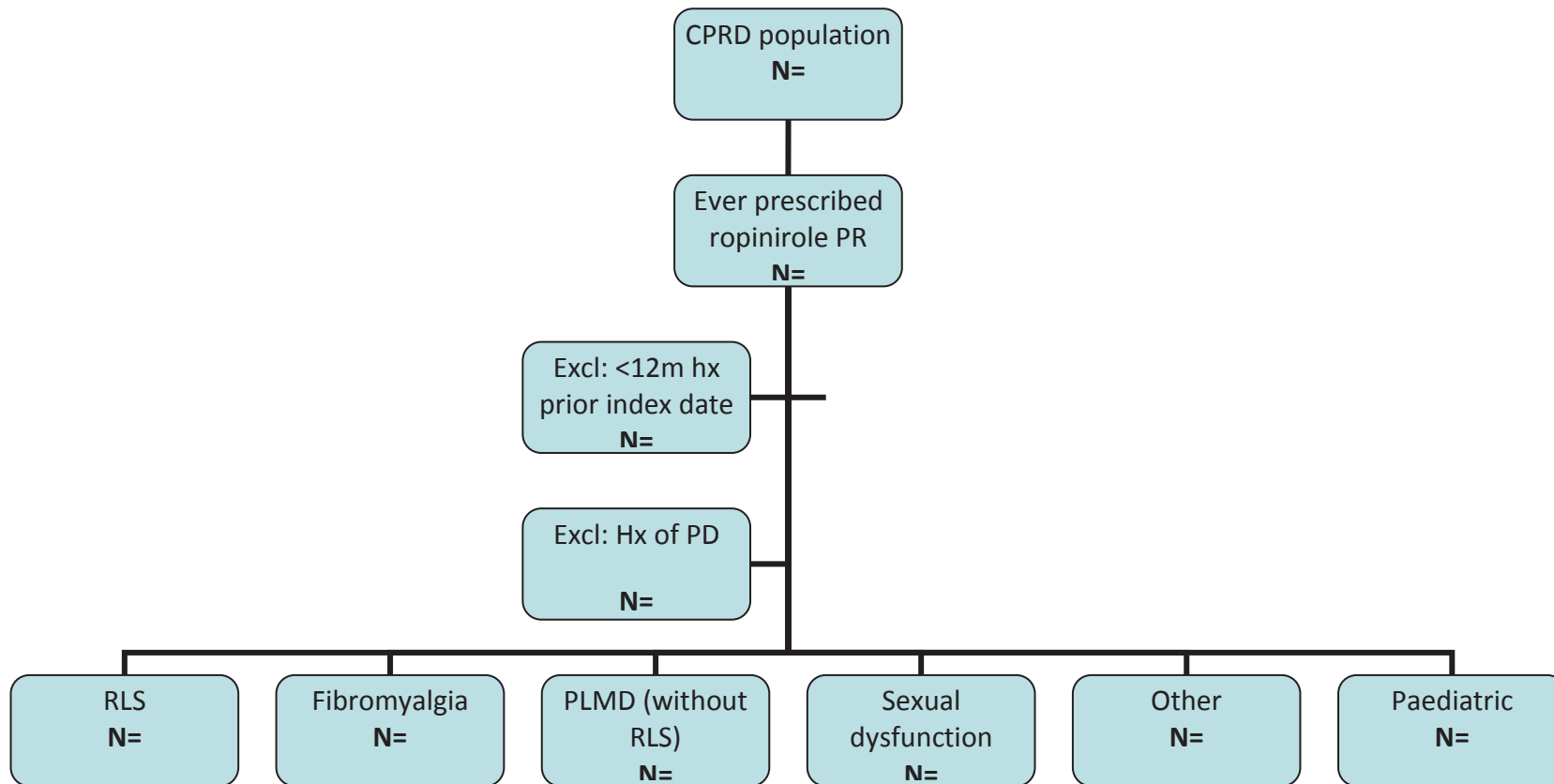
OUTPUT 9: COX PROPORTIONAL HAZARDS MODEL

- Crude and adjusted hazards ratio for exposure groups of interest, accounting for initiation of levodopa or levodopa add-on therapies during follow-up (section 8.3.3.2) when evaluating dyskinesia, impulse control disorders and on-off phenomena.
- Kaplan-Meier survival curves for patients in the ropinirole-PR and matched immediate release DA cohorts.

OUTPUT 10: TABLE 6 DURATION OF TREATMENT PERSISTENCE AND MEDICATION POSSESSION RATIO AMONGST THE ROPINIROLE-PR AND IR-DA MATCHED COHORTS.

	Ropinirole-PR	IR-DA matched	p-value
Time from initiation to treatment discontinuation (days)			
Mean (95% CI)			
Median (interquartile range)			
Medication Possession Ratio	N (%)	N (%)	
<30%			
30-50%			
51-79%			
>=80%			

OUTPUT 11: KAPLAN-MEIER PLOTS – PERSISTENCE TO TREATMENT (ROPINIROLE-PR VS, IR-DA MATCHED COHORT).

OUTPUT 12: FIGURE 3 - OFF LABEL EVALUATION OF ROPINIROLE-PR

Note: Paediatric defined as aged, 18yrs at index prescription.

OUTPUT 13: TABLE 7 - INCIDENCE OF [DYSKINESIA] PER 1,000 PERSON-YEARS FOR PATIENTS INITIATING ROPINIROLE-PR AS A FIRST LINE MONOTHERAPY AND THOSE PRESCRIBED ROPINIROLE-PR SWITCHING FROM ANOTHER DOPAMINE AGONIST

Cohort	Ropinirole-PR (FIRST LINE)				Ropinirole-PR (SWITCHED)				Incident rate ratio - crude
	Person-time	Number with incident [dyskinesia]	Rate per 1,000 person years	95% confidence intervals	Person-time	Number with incident [dyskinesia]	Rate per 1,000 person years	95% confidence intervals	RR (95% CI)
Overall									
Age									
<60 yrs									
60-69 yrs									
70-79 yrs									
80 yrs +									
Gender									
Female									
Male									
PD duration (quartiles) 1 st quartile 2 nd quartile 3 rd quartile 4 th quartile									
Patients continuing treatment for: 1yr 3yrs 5yrs									

OUTPUT 14: TABLE 8 - SENSITIVITY ANALYSIS - EVALUATION OF RISK OF DYSKINESIAS AMONGST INDIVIDUALS WITH AT LEAST TWO CONSECUTIVE PRESCRIPTIONS.

Cohort	Ropinirole-PR (WITH >= 2 SCRIPTS)				Immediate release dopamine agonist (matched) (WITH >= 2 SCRIPTS)				Incident rate ratio - crude	Incident rate ratio - adjusted
	Person -time	Number with incident [dyskinesia]	Rate per 1,000 person years	95% confiden ce intervals	Person- time	Number with incident [dyskinesia]	Rate per 1,000 person years	95% confidence intervals	RR (95% CI)	RR (95% CI)
Overall										
Age										
<60 yrs										
60-69 yrs										
70-79 yrs										
80 yrs +										
Gender										
Female										
Male										
PD duration (quartiles) 1 st quartile 2 nd quartile 3 rd quartile 4 th quartile										
Patients continuing treatment for: 1yr 3yrs 5yrs										

OUTPUT 15: TABLE 9 - MEDIAN TIME TO DYSKINESIA (DAYS)

	Ropinirole-PR (WITH >= 2 SCRIPTS)	IR-DA matched cohort (WITH >= 2 SCRIPTS)	p-value
Median Time (days) to [dyskinesia]			
Then stratify by			
Age group			
<60y			
60-60y			
70-79y			
80+			
Male			
Female			
PD duration (quartiles)			
1st			
2nd			
3rd			
4th			

Summary of findings from a pilot study to assess utility of capturing Parkinson's disease related outcome data by GP questionnaire

In support of the Post marketing study of ropinirole prolonged release tablets: Evaluation of the short term drug utilisation patterns and long term use of ropinirole PR using the CPRD

Overview:

In 2008, GSK was granted approval for the prolonged release formulation of ropinirole (ropinirole PR) for the treatment of Parkinson's disease (PD) by the MHRA.

As part of its post-marketing commitment to the MHRA, GSK proposed to conduct an observational study using the Clinical Practice Datalink (CPRD). The primary aim of this study will be to evaluate long term outcomes amongst individuals prescribed ropinirole-PR as compared to those prescribed immediate release dopamine agonists.

A pilot study was conducted together with the University of Bath, to determine whether it was feasible or necessary to supplement information routinely captured on the CPRD relating to outcomes of interest and PD disease stage (early or advanced) and duration by use of a GP questionnaire.

Methods:

Parkinson's disease patients were identified on the CPRD using READ and OXMIS medical codes. All patients were required to have at least 12 months of registration prior to PD index date.

Algorithms were developed together with the University of Bath for each potential outcome of interest. Potential outcomes of interest included dyskinesias, sudden onset of sleep, end-of dose wearing off, on-off phenomenon and impulse control disorders. GSK and the University of Bath independently identified READ and OXMIS codes for each outcome of interest. Codes underwent clinical review at both sites and lists were compared to ensure completeness. For each outcome of interest, clinicians at GSK and at the University of Bath independently assigned the level of certainty associated with each code as 'no', 'possible', 'probable' based on the READ and OXMIS codes.

Questionnaires were sent (via the MHRA) to the GP's of 60 Parkinson's patients identified on the CPRD; 50 of whom had at least one of the potential outcomes of interest recorded on the CPRD and 10 without an outcome recorded on the CPRD. The following baseline and outcome information was requested on the GP questionnaire:

- Baseline data: Confirmation of PD diagnosis, year PD diagnosed, year dopaminergic therapy initiated, motor fluctuations experienced on or prior to initiation of dopamine agonist therapy.
- Outcomes (including date of onset):

- Dyskinesia
- Proportion of waking day with dyskinesia
- End of dose wearing off ¹
- On-off phenomena
- Proportion of waking day off
- Sudden onset of sleep (during day)
- Impulse control disorders (pathological gambling, hypersexuality, compulsive shopping, compulsive eating, other impulse control disorders)

Data recorded on the CPRD were compared with the GP responses. On-off phenomena could not be defined using codes available on the CPRD, therefore identification of this outcome was made by GP response alone.

Findings

Responses were received for 41 questionnaires (response rate of 68%).

Confirmation of PD diagnosis: PD diagnosis was recorded correctly on the CPRD in 40 of the 41 responses. It was therefore deemed that data captured on the CPRD was sufficient and that further validation from the GP questionnaire would not be necessary for the main study.

Year of PD diagnosis: The year of PD diagnosis matched in 28 of the 40 responses. Of the remaining 12 responses, the GP response was always earlier than the CPRD date. Based on these results, and following a review of patient medical records, an algorithm was defined. By using the earliest of the PD diagnosis code, dopaminergic therapy or PD symptomatology allows estimation of PD diagnosis date to within 4 months in approximately 90% of cases compared to using date of PD READ coding date alone. It is proposed to use this algorithm to derive PD diagnosis date (and hence PD duration) using data captured within the CPRD. Supplementary information from GP questionnaire are not required.

Motor fluctuations prior to index date: This question aimed help classify patients into PD disease stage (early vs. advanced) at index date. The response to this question was reported as not known in 35% of GP responses, yes in 37.5% and no in 27.5%. It is proposed to retain this question in the GP questionnaire however if there are significant numbers of responses that are not known in the main study, this variable may be omitted.

Medication use: Medication use was well captured on the CPRD. Supplementary information from GP questionnaire will not be required in the main study.

Outcomes:

¹ Individuals with end of dose wearing off were identified on the CPRD based on evidence of clinical manifestations of wearing off (READ codes for motor fluctuations, or evaluation of prescriptions suggesting increasing dose of levodopa /carbidopa, addition of a dopamine agonist, COMT inhibitor, apomorphine or MAO-B inhibitor, or deep brain stimulation) amongst individuals with PD that were treated with levodopa . In the GP questionnaire, the GP was required to tick a box to indicate the presence or absence of end of dose wearing off, together with a date of onset.

Dyskinesia:

Of the 12 cases that were identified as having probable dyskinesia on the CPRD, 7 were also confirmed by the GP questionnaire, 3 GPs responded no to the question and 2 did not know. 3 of the 9 cases that were identified as possible dyskinesia on the CPRD were also confirmed by the GP. 4 cases of dyskinesia were reported by the GP that were not identified using data from the CPRD. Data from the CPRD alone cannot be used to identify all dyskinesia cases. It is proposed that dyskinesia be identified based on data captured from the CPRD and from GP questionnaire. Individuals with dyskinesia reported from the GP questionnaire or with probable dyskinesia (defined using CPRD codes) will be used to identify individuals with dyskinesia. A clinical review of patient records with possible dyskinesia will be conducted to determine whether additional cases of dyskinesia exist.

Proportion of waking day with dyskinesia:

In the pilot study, we requested that GPs provided an estimate of the proportion of the waking day with dyskinesias. This information was poorly completed, and it is therefore proposed to omit this from the questionnaire for the main study.

End of dose wearing off:

Of the 9 patients identified on the CPRD as having end of dose wearing off, 1 of the GPs agreed but had the diagnosis 13 months earlier. 2 the GPs responded Not known and 6 stated No.

The GP identified 3 patients with end of off dose wearing off that had not been identified on the GPRD

Due to the inconsistency between the two sources of data, it is proposed to omit this outcome from the main study. Data captured within the CPRD are insufficient to define end of dose wearing off using READ, CPRD medical codes, or prescription data based on findings from the pilot study. There are concerns about the reliability and validity of this outcome if obtained from GP questionnaire alone, it is therefore proposed to omit this outcome from the main study.

On-off phenomena:

On-off phenomena was identified from the GP questionnaire alone since no relevant CPRD codes exist. Three patients were reported as having on-off phenomena from GP questionnaire. Since the accuracy and validity of this outcome is not known, all analyses evaluating this outcome must be interpreted with caution. In addition, should GP response rates substantially differ between exposure groups in the main study, then consideration to omit this outcome from the main study should be given.

Proportion of waking day off:

Although requested, no responses to the question “what proportion of the waking day is off” were received. It is therefore proposed to omit this question from the GP questionnaire.

Sudden onset of sleep (SOS):

Results from the CPRD and GP questionnaire were conflicting. Of the five individuals identified with READ codes suggestive of SOS (codes included narcolepsy, cataplexy, hypersomnia/excessive sleepiness and drowsiness) on the CPRD, only one was confirmed by the GP questionnaire. A code for hypersomnia was recorded in the GP record for the patient which was identified as possibly having SOS. The remaining four were reported not to have sudden onset of sleep from the GP questionnaire.

In total, four individuals were reported to have SOS based on GP questionnaire responses (including the one patient that was identified using READ codes). None of the GPs reported date of onset of SOS. It is therefore proposed to omit this outcome from the study due to concerns about the reliability or validity of the outcome.

Impulse control disorders:

It is proposed to retain this question in the GP questionnaire.

Pathological gambling: All three of the individuals identified as having pathological gambling on the CPRD were confirmed on the GP questionnaire.

Hypersexuality: No cases were identified on the CPRD, however three were identified by GP questionnaire.

Compulsive shopping, eating or other compulsive disorders: No cases were identified on the CPRD or by GP questionnaire.

Summary

It is not feasible to reliably identify patients with sudden onset of sleep or end of dose wearing off using data captured on the CPRD or by GP questionnaire. It is proposed to include questions on dyskinesias, on-off phenomena and impulse control disorders on the GP questionnaire for the main study. An evaluation of the GP questionnaire response rate between exposure groups must be taken into consideration prior to analysis of data.

review	comments	medcode	read_code	clinical_pat	desc
Probable		16179	2972.00	335	O/E - choreiform movement
Probable		6889	F135.00	602	Other choreas
Probable		4108	F135000	165	Hemiballismus
Probable		34327	F135200	13	Drug-induced chorea
Probable		27450	F135z00	140	Other choreas NOS
Probable		27655	F137200	69	Drug-induced dystonia
Probable		50078	F138.00	9	Fragments of torsion dystonia
Probable		23356	F138100	481	Orofacial dyskinesia
Probable		5094	F138111	1587	Tardive dyskinesia
Probable		2005	F138200	27453	Spasmodic torticollis
Probable		71249	F138z00	4	Fragments of torsion dystonia NOS
Probable		63182	F139.00	72	Paroxysmal dyskinesia
Probable		107057	F139000	1	Paroxysmal non-kinesigenic dyskinesia
Probable		67242	F139100	11	Paroxysmal kinesigenic dyskinesia
Probable		51777	F13A.00	111	Paroxysmal dystonia
Probable		94690	F13B.00	104	Myoclonic dystonia
Probable		2006	F13X.00	4000	Dystonia, unspecified
Probable		65734	Fyu2400	39	[X]Other dystonia
Probable		94540	Fyu2600	13	[X]Other chorea
Probable		52917	Fyu2A00	27	[X]Dystonia, unspecified
Probable		2003	R013.11	1887	[D]Dyskinesia
Possible		36027	1B2..00	180	Involuntary movement symptom
Possible		31658	1B2Z.00	119	Involuntary movemt.symptom NOS
Possible		17533	297..00	1255	O/E - involuntary movements
Possible		39341	2973.00	111	O/E - athetosis
Possible		43079	297Z.00	59	O/E - involuntary movement NOS
Possible		19491	E273.00	221	Stereotyped repetitive movements
Possible		64158	E273z00	10	Stereotyped repetitive movements NOS
Possible		19740	Eu9y400	295	[X]Stereotyped movement disorders
Possible		35006	F13..00	119	Other extrapyramidal disease and abnormal movement
Possible		5545	F132.00	2361	Myoclonus
Possible		19015	F132300	2504	Myoclonic jerks
Possible		28281	F132y00	84	Other specified myoclonus
Possible		97376	F132y11	1	Paramyoclonus multiplex
Possible		37897	F132z00	189	Myoclonus NOS
Possible		27967	F137.00	111	Symptomatic torsion dystonia
Possible		92598	F137100	2	Double athetosis
Possible		25777	F137y00	3	Other specified symptomatic torsion dystonia
Possible		62081	F137z00	6	Symptomatic torsion dystonia NOS
Possible		2829	F138000	6179	Blepharospasm
Possible		21268	F138300	312	Organic writers' cramp
Possible		6787	F13z.00	82	Other/unspecified extrapyramidal/abnormal movement
Possible		36319	F13zz00	1743	Extrapyramidal disease and abnormal movement disorder

Possible		100790	Fyu2.00	1	[X]Extrapyramidal and movement disorders
Possible		100612	Fyu2700	1	[X]Other specified extrapyramidal and movement dis
Possible		5412	R010.00	4077	[D]Abnormal involuntary movements
Possible		18925	R010000	182	[D]Head movements abnormal
Possible		20323	R010400	180	[D]Athetosis, acquired, NOS
Possible		15845	R010z00	337	[D]Abnormal involuntary movement NOS
Possible		67936	Ryu3000	5	[X]Other and unspecified abnormal involuntary move
Possible		34864	2979.00	189	O/E - myoclonus
N		106461	1b2..00	42	
N		106321	1b2..11	8	
N		107633	1b2Z.00	1	
N		80481	2979	0	
N		80763	2979P	0	
N		82940	2979PA	0	
N		77525	2979PH	0	
N		80482	2979PI	0	
N		79461	2979PR	0	
N		61547	E273000	9	Body-rocking
N		15196	E273100	1085	Head-banging
N		21560	E273200	91	Spasmus nutans - nodding spasm
N		28170	F13..11	256	Extrapyramidal disease excluding Parkinson's diseas
N		52420	F132000	14	Familial essential myoclonus
N		37644	F132100	77	Progressive myoclonic epilepsy
N		63826	F132111	2	Unverricht - Lundborg disease
N		45602	F132200	62	Myoclonic encephalopathy
N		8487	F132z12	1319	Myoclonic seizure
N		2685	F135100	296	Paroxysmal choreo-athetosis
N		73943	F137.11	10	Athetoid cerebral palsy
N		42406	F137.12	20	Athetosis - congenital
N		16977	F137000	488	Athetoid cerebral palsy
N		64561	F137011	4	Vogt's disease
N		66314	F137111	9	Congenital athetosis
N		33868	F13z000	47	Unspecified extrapyramidal disease
N		25880	F13z100	71	Stiff-man syndrome
N		104967	F13z111	5	Stiff person syndrome
N		6275	F13z200	50398	Restless legs syndrome
N		50476	F13z300	179	Akinetic rigid syndrome
N		62421	F13z400	22	Hyperekplexia
N		30742	F13z500	205	Benign neonatal sleep myoclonus
N		21024	R013.00	1126	[D]Lack of coordination

Reviewed by [REDACTED] for Dyskinesia as an outcome

matching_terms
% 2972%
% F135%
% F135%
% F135%
% F135%
% F137%
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% F139%
% F13A%
% F13B%
% F13X%
% Fyu24%
% Fyu26%
% Fyu2A%
% R013.%
% 1B2..%
% 1B2Z%
% 297..%
% 2973%
% 297Z%
% E273%
% E273%
% Eu9y4%
% F13..%
% F132%
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% F13z%

% Fyu2.%
% Fyu27%
% R010.%
% R0100%
% R0104%
% R010z%
% Ryu30%
% 2979%
% 1B2..%
% 1B2..%
% 1B2Z%
% 2979%
% 2979%
% 2979%
% 2979%
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review	Classify	medcode	read_code	clinical_pat	desc
Probable	compulsive eating	35490	1614.00	163	Excessive eating - polyphagia
Probable	compulsive eating	60373	1614.11	6	Hyperalimentation - symptom
Probable	compulsive eating	31227	1614.12	204	Polyphagia symptom
Probable	compulsive eating	3477	C38y.00	450	Other hyperalimentation
Probable	compulsive eating	4377	E275100	6518	Bulimia (non-organic overeating)
Probable	compulsive eating	11608	E275111	432	Compulsive eating disorder
Probable	compulsive eating	9581	Eu50200	6883	[X]Bulimia nervosa
Probable	compulsive eating	6583	Eu50211	3275	[X]Bulimia NOS
Probable	compulsive eating	96475	Eu50212	3	[X]Hyperorexia nervosa
Probable	compulsive eating	33863	Eu50300	185	[X]Atypical bulimia nervosa
Probable	compulsive eating	39383	Eu50400	144	[X]Overeating associated with other psycholog
Probable	compulsive eating	17439	Eu50411	92	[X]Psychogenic overeating
Probable	compulsive eating	15235	R036.00	259	[D]Polyphagia
Probable	compulsive eating	17642	R036000	1667	[D]Excessive eating
Probable	compulsive eating	605	R036011	6070	[D]Bulimia NOS
Probable	compulsive eating	98900	R036100	4	[D]Hyperalimentation
Probable	compulsive eating	72870	R036z00	2	[D]Polyphagia NOS
Possible	Compulsive pulling out hair	20286	E27z000	572	Hair plucking
Probable	Compulsive pulling out hair	3165	Eu63300	1706	[X]Trichotillomania
Probable	Compulsive water drinking	26395	E275700	378	Psychogenic polydipsia
Probable	Compulsive water drinking	45362	E275711	74	Compulsive water drinking
Probable	hypersexuality	52941	E22y500	11	Nymphomania
Probable	hypersexuality	68750	E22y600	5	Satyriasis
Possible	hypersexuality	20882	E27z300	360	Masturbation
Possible	hypersexuality	29001	E2C1.11	190	Promiscuity
Probable	hypersexuality	26411	Eu52700	128	[X]Excessive sexual drive
Probable	hypersexuality	50326	Eu52800	20	[X]Erotomania
Probable	other impulse control disorders	22654	1P3..00	1241	Compulsive behaviour
Possible	other impulse control disorders	51769	1P30.00	11	Compulsive uncontrollable drug taking
Possible	other impulse control disorders	66615	1P31.00	44	Compulsive drug taking
Probable	other impulse control disorders	26155	28L..00	243	O/E - impulsive behaviour
Probable	other impulse control disorders	23597	E213.00	975	Explosive personality disorder
Probable	other impulse control disorders	25468	E2C3.00	206	Impulse control disorder NEC
Probable	other impulse control disorders	22539	E2C3000	20	Impulse control disorder, unspecified
Probable	other impulse control disorders	53590	E2C3400	26	Intermittent explosive disorder
Probable	other impulse control disorders	94096	E2C3500	1	Isolated explosive disorder
Probable	other impulse control disorders	58054	E2C3z00	16	Impulse control disorder NOS
Probable	other impulse control disorders	58693	Eu60313	16	[X]Explosive personality disorder
Probable	other impulse control disorders	20973	Eu63.00	315	[X]Habit and impulse disorders
Probable	other impulse control disorders	25152	Eu63y00	22	[X]Other habit and impulse disorders
Probable	other impulse control disorders	58897	Eu63z00	26	[X]Habit and impulse disorder, unspecified
Probable	Pathological fire-setting	20473	E2C3300	51	Pyromania
Probable	Pathological fire-setting	32142	Eu63100	45	[X]Pathological fire-setting

Probable	pathological gambling	20255	E2C3100	1468	Pathological gambling
Probable	pathological gambling	45543	Eu63000	98	[X]Pathological gambling
Probable	pathological gambling	8863	Eu63011	924	[X]Compulsive gambling
Possible	pathological gambling	25367	ZV4K500	561	[V]Gambling and betting
Possible	Pathological stealing	16631	13HN000	806	Theft
Possible	Pathological stealing	22911	13HN100	641	Shoplifting
Possible	Pathological stealing	9769	E2C1100	221	Solitary stealing
Possible	Pathological stealing	31719	E2C1111	175	Shop lifting
Probable	Pathological stealing	20032	E2C3200	204	Kleptomania
Probable	Pathological stealing	11731	Eu63200	121	[X]Pathological stealing
N		106559	13Hn000	12	
N		106685	13Hn100	8	
N		6339	E213.11	5291	Aggressive personality
N		36043	E213.12	8	Quarrelsome personality
N		20881	E214.00	281	Compulsive personality disorders
N		40057	E214.11	13	Anancastic personality
N		30395	E214000	104	Anankastic personality
N		1293	E214100	3671	Obsessional personality
N		34456	E214z00	66	Compulsive personality disorder NOS
N		46452	E2C1.00	20	Nonaggressive unsocial conduct disorder
N		23973	E2C1000	316	Unsocial childhood truancy
N		4885	E2C1011	6322	School refusal
N		1329	E2C1200	7969	Tantrums
N		20182	E2C1z00	230	Nonaggressive unsocial conduct disorder NOS
N		7745	Eu60300	1796	[X]Emotionally unstable personality disorder
N		20839	Eu60311	294	[X]Aggressive personality disorder
N		31789	Eu60312	196	[X]Borderline personality disorder

Reviewed by [REDACTED] for impulse control disorders

matching_terms
% 1614%
% 1614%
% 1614%
% C38y.00%
% E2751%
% E2751%
% Eu502%
% Eu502%
% Eu502%
% Eu503%
% Eu504%
% Eu504%
% R036%
% R036%
% R036%
% R036%
% R036%
% E27z0%
% Eu63%
% E2757%
% E2757%
% E22y5%
% E22y6%
% E27z3%
% E2C1%
% Eu527%
% Eu528%
% 1P3%
% 1P3%
% 1P3%
% 28L..00%
% E213%
% E2C3%
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% E2C3%
% E2C3%
% E2C3%
% Eu603%
% Eu63%
% Eu63%
% Eu63%
% E2C3%
% Eu63%

% E2C3%
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% Eu63%
% ZV4K5%
% 13HN0%
% 13HN1%
% E2C1%
% E2C1%
% E2C3%
% Eu63%
% 13HN0%
% 13HN1%
% E213%
% E213%
% E214%
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% E214%
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% Eu603%
% Eu603%
% Eu603%

revi	classify	release_time	Composition	prodcode
Y	Amantadine		Amantadine	5339
Y	Amantadine		Amantadine	6035
Y	Amantadine		Amantadine	25890
Y	Amantadine		Amantadine	7428
Y	Amantadine		Amantadine	21745
Y	Antimuscarinic drugs used in parkinsonism		Benzatropine	3260
Y	Antimuscarinic drugs used in parkinsonism		Benzatropine	29425
Y	Antimuscarinic drugs used in parkinsonism		Benzatropine	19380
Y	Antimuscarinic drugs used in parkinsonism		Benzatropine	3259
Y	Antimuscarinic drugs used in parkinsonism		Benzatropine	40377
Y	Antimuscarinic drugs used in parkinsonism		Biperiden	20073
Y	Antimuscarinic drugs used in parkinsonism		Biperiden	30474
Y	Antimuscarinic drugs used in parkinsonism		Biperiden	12922
Y	Antimuscarinic drugs used in parkinsonism		Biperiden	41888
Y	Antimuscarinic drugs used in parkinsonism		Methixene	7630
Y	Antimuscarinic drugs used in parkinsonism		Methixene	7631
Y	Antimuscarinic drugs used in parkinsonism		Orphenadrine	29836
Y	Antimuscarinic drugs used in parkinsonism		Orphenadrine	27718
Y	Antimuscarinic drugs used in parkinsonism		Orphenadrine	16685
Y	Antimuscarinic drugs used in parkinsonism		Orphenadrine	4530
Y	Antimuscarinic drugs used in parkinsonism		Orphenadrine	45258
Y	Antimuscarinic drugs used in parkinsonism		Orphenadrine	18688
Y	Antimuscarinic drugs used in parkinsonism		Orphenadrine	2274
Y	Antimuscarinic drugs used in parkinsonism		Orphenadrine	43551
Y	Antimuscarinic drugs used in parkinsonism		Orphenadrine	2278
Y	Antimuscarinic drugs used in parkinsonism		Orphenadrine	15067
Y	Antimuscarinic drugs used in parkinsonism		Orphenadrine	30068
Y	Antimuscarinic drugs used in parkinsonism		Orphenadrine	14473
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	19646
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	13565
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	17528
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	2095
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	44230
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	8638
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	26239
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	4681
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	1315
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	4151
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	45848
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	1220
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	34569
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	42084
Y	Antimuscarinic drugs used in parkinsonism		Procyclidine	34933

Y	Antimuscarinic drugs used in parkinsonism	Procyclidine	31936
Y	Antimuscarinic drugs used in parkinsonism	Procyclidine	1250
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	7878
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	7623
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	21971
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	12089
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	36516
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	7215
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	57408
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	26954
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	29947
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	552
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	33680
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	30262
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	55927
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	55909
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	41829
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	43419
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	8547
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	42735
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	6551
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	57031
Y	Antimuscarinic drugs used in parkinsonism	Trihexyphenidyl	6550
Y	Apomorphine	Apomorphine	19267
Y	Apomorphine	Apomorphine	38199
Y	Apomorphine	Apomorphine	35939
Y	Apomorphine	Apomorphine	36038
Y	Apomorphine	Apomorphine	18566
Y	Apomorphine	Apomorphine	9701
Y	Apomorphine	Apomorphine	33781
Y	Apomorphine	Apomorphine	35255
Y	Apomorphine	Apomorphine	14935
Y	Apomorphine	Apomorphine	33133
Y	Apomorphine	Apomorphine	20211
Y	COMT inhibitor	Entacapone	20651
Y	COMT inhibitor	Entacapone	758
Y	COMT inhibitor	Tolcapone	26041
Y	COMT inhibitor	Tolcapone	21118
Y	COMT inhibitor	Tolcapone	31356
Y	COMT inhibitor	Tolcapone	9327
Y	COMT inhibitor	Tolcapone	31162
Y	COMT inhibitor	Tolcapone	22675
Y	Decarboxylase inhibitor	Benserazide	10406
Y	Decarboxylase inhibitor	Benserazide	27730

Y	Decarboxylase inhibitor		Carbidopa	10770
Y	dopamine agonist (ergot)		Bromocriptine	12057
Y	dopamine agonist (ergot)		Bromocriptine	4975
Y	dopamine agonist (ergot)		Bromocriptine	34219
Y	dopamine agonist (ergot)		Bromocriptine	32067
Y	dopamine agonist (ergot)		Bromocriptine	2279
Y	dopamine agonist (ergot)		Bromocriptine	34132
Y	dopamine agonist (ergot)		Bromocriptine	56442
Y	dopamine agonist (ergot)		Bromocriptine	4300
Y	dopamine agonist (ergot)		Bromocriptine	21361
Y	dopamine agonist (ergot)		Bromocriptine	13403
Y	dopamine agonist (ergot)		Bromocriptine	41804
Y	dopamine agonist (ergot)		Bromocriptine	9333
Y	dopamine agonist (ergot)		Bromocriptine	40039
Y	dopamine agonist (ergot)		Bromocriptine	13515
Y	dopamine agonist (ergot)		Bromocriptine	40947
Y	dopamine agonist (ergot)		Cabergoline	11541
Y	dopamine agonist (ergot)		Cabergoline	17443
Y	dopamine agonist (ergot)		Cabergoline	14140
Y	dopamine agonist (ergot)		Cabergoline	5389
Y	dopamine agonist (ergot)		Cabergoline	5406
Y	dopamine agonist (ergot)		Cabergoline	6016
Y	dopamine agonist (ergot)		Cabergoline	514
Y	dopamine agonist (ergot)		Cabergoline	4581
Y	dopamine agonist (ergot)		Lisuride	17262
Y	dopamine agonist (ergot)		Lisuride	17147
Y	dopamine agonist (ergot)		Pergolide	13793
Y	dopamine agonist (ergot)		Pergolide	13736
Y	dopamine agonist (ergot)		Pergolide	20023
Y	dopamine agonist (ergot)		Pergolide	11192
Y	dopamine agonist (ergot)		Pergolide	27204
Y	dopamine agonist (ergot)		Pergolide	4941
Y	dopamine agonist (ergot)		Pergolide	2464
Y	dopamine agonist (ergot)		Pergolide	16963
Y	dopamine agonist (ergot)		Pergolide	4146
Y	dopamine agonist (ergot)		Pergolide	55876
Y	dopamine agonist (ergot)		Pergolide	11277
Y	dopamine agonist (non-ergot)	immediate release	Pramipexole	16617
Y	dopamine agonist (non-ergot)	immediate release	Pramipexole	50289
Y	dopamine agonist (non-ergot)	immediate release	Pramipexole	7339
Y	dopamine agonist (non-ergot)	immediate release	Pramipexole	37984
Y	dopamine agonist (non-ergot)	immediate release	Pramipexole	16933
Y	dopamine agonist (non-ergot)	immediate release	Pramipexole	46660
Y	dopamine agonist (non-ergot)	immediate release	Pramipexole	5766

Y	dopamine agonist (non-ergot)	immediate release	Pramipexole	37635
Y	dopamine agonist (non-ergot)	immediate release	Pramipexole	5909
Y	dopamine agonist (non-ergot)	immediate release	Pramipexole	811
Y	dopamine agonist (non-ergot)	immediate release	Pramipexole	47730
Y	dopamine agonist (non-ergot)	immediate release	Pramipexole	54469
Y	dopamine agonist (non-ergot)	modified release	Pramipexole	41359
Y	dopamine agonist (non-ergot)	modified release	Pramipexole	41358
Y	dopamine agonist (non-ergot)	modified release	Pramipexole	41360
Y	dopamine agonist (non-ergot)	modified release	Pramipexole	44566
Y	dopamine agonist (non-ergot)	modified release	Pramipexole	41350
Y	dopamine agonist (non-ergot)	modified release	Pramipexole	44750
Y	dopamine agonist (non-ergot)	modified release	Pramipexole	41484
Y	dopamine agonist (non-ergot)	modified release	Pramipexole	41243
Y	dopamine agonist (non-ergot)	modified release	Pramipexole	44486
Y	dopamine agonist (non-ergot)	modified release	Pramipexole	41272
Y	dopamine agonist (non-ergot)	modified release	Pramipexole	44649
Y	dopamine agonist (non-ergot)	modified release	Pramipexole	41219
Y	dopamine agonist (non-ergot)	modified release	Pramipexole	41242
Y	dopamine agonist (non-ergot)	modified release	Pramipexole	41265
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	17058
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	18891
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	17066
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	14934
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	12762
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	17619
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	17622
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	19478
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	12988
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	772
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	53837
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	57652
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	5674
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	41464
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	6012
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	9799
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	45303
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	14342
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	6143
Y	dopamine agonist (non-ergot)	immediate release	Ropinirole	6122
Y	dopamine agonist (non-ergot)	modified release	Ropinirole	52376
Y	dopamine agonist (non-ergot)	modified release	Ropinirole	52579
Y	dopamine agonist (non-ergot)	modified release	Ropinirole	57511
Y	dopamine agonist (non-ergot)	modified release	Ropinirole	38251
Y	dopamine agonist (non-ergot)	modified release	Ropinirole	38250

Y	dopamine agonist (non-ergot)	modified release	Ropinirole	57512
Y	dopamine agonist (non-ergot)	modified release	Ropinirole	38256
Y	dopamine agonist (non-ergot)	modified release	Ropinirole	38245
Y	dopamine agonist (non-ergot)	modified release	Ropinirole	38249
Y	dopamine agonist (non-ergot)	modified release	Ropinirole	38151
Y	dopamine agonist (non-ergot)	modified release	Ropinirole	47762
Y	dopamine agonist (non-ergot)	modified release	Ropinirole	48075
Y	dopamine agonist (non-ergot)	modified release	Ropinirole	47763
Y	dopamine agonist (non-ergot)		Rotigotine	41147
Y	dopamine agonist (non-ergot)		Rotigotine	19492
Y	dopamine agonist (non-ergot)		Rotigotine	42649
Y	dopamine agonist (non-ergot)		Rotigotine	19498
Y	dopamine agonist (non-ergot)		Rotigotine	19505
Y	dopamine agonist (non-ergot)		Rotigotine	57518
Y	dopamine agonist (non-ergot)		Rotigotine	23293
Y	dopamine agonist (non-ergot)		Rotigotine	31647
Y	dopamine agonist (non-ergot)		Rotigotine	40866
Y	dopamine agonist (non-ergot)		Rotigotine	14914
Y	dopamine agonist (non-ergot)		Rotigotine	22602
Y	dopamine agonist (non-ergot)		Rotigotine	41309
Y	dopamine agonist (non-ergot)		Rotigotine	17053
Y	dopamine agonist (non-ergot)		Rotigotine	14915
Y	dopamine agonist (non-ergot)		Rotigotine	22604
Y	Levodopa		Levodopa	18715
Y	Levodopa		Levodopa	27302
Y	Levodopa		Levodopa	24528
Y	Levodopa		Levodopa	19592
Y	Levodopa		Levodopa	4335
Y	Levodopa		Levodopa	12481
Y	Levodopa		Levodopa	18346
Y	Levodopa		Levodopa	10299
Y	Levodopa		Levodopa	25932
Y	Levodopa		Levodopa	25844
Y	Levodopa		Levodopa	16780
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	27649
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	31682
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	35407
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	32003
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	37489
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	16817
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	5464
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	57635
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	11235
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	3642

Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	5673
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	5248
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	9512
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	10507
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	3641
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	16861
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	16970
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	7879
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	8407
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	8408
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	8409
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	25949
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	19787
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	2466
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	5869
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	20726
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	7256
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	26074
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	3562
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	3910
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	20725
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	26078
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Benserazide	2465
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	40452
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	39348
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	32244
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	17578
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	27506
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	5724
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	28416
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	16777
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	36347
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	9283
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	57082
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	25288
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	4866
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	5675
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	6156
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	42215
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	41370
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	41091
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	5310
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	31268
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	7246

Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	43631
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	33541
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	55508
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	45761
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	53526
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	42172
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	1853
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	43718
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	43855
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	22223
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	25050
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	22497
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	7742
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	20250
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	3038
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	4531
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	8191
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	16808
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	51023
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	42293
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	56507
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	546
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	42041
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	57586
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	53299
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	42262
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	2074
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	2739
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	42255
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	2829
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	52694
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	42147
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	49481
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	2534
Y	Levodopa-Decarboxylase inhibitor		Levodopa/Carbidopa	43033
Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor		Levodopa/Carbidopa/Entacapone	10197
Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor		Levodopa/Carbidopa/Entacapone	40605
Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor		Levodopa/Carbidopa/Entacapone	11753
Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor		Levodopa/Carbidopa/Entacapone	38382
Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor		Levodopa/Carbidopa/Entacapone	18076
Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor		Levodopa/Carbidopa/Entacapone	40751
Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor		Levodopa/Carbidopa/Entacapone	56261
Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor		Levodopa/Carbidopa/Entacapone	10142
Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor		Levodopa/Carbidopa/Entacapone	40568

Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor	Levodopa/Carbidopa/Entacapone	7386
Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor	Levodopa/Carbidopa/Entacapone	47248
Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor	Levodopa/Carbidopa/Entacapone	56031
Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor	Levodopa/Carbidopa/Entacapone	38357
Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor	Levodopa/Carbidopa/Entacapone	14916
Y	Levodopa-Decarboxylase inhibitor-COMT inhibitor	Levodopa/Carbidopa/Entacapone	40306
Y	MAO B inhibitor	Rasagiline	21793
Y	MAO B inhibitor	Rasagiline	7040
Y	MAO B inhibitor	Selegiline	26257
Y	MAO B inhibitor	Selegiline	16224
Y	MAO B inhibitor	Selegiline	25298
Y	MAO B inhibitor	Selegiline	8426
Y	MAO B inhibitor	Selegiline	7051
Y	MAO B inhibitor	Selegiline	3640
Y	MAO B inhibitor	Selegiline	34250
Y	MAO B inhibitor	Selegiline	42808
Y	MAO B inhibitor	Selegiline	41707
Y	MAO B inhibitor	Selegiline	5233
Y	MAO B inhibitor	Selegiline	2467
Y	MAO B inhibitor	Selegiline	34123
Y	MAO B inhibitor	Selegiline	40235
Y	MAO B inhibitor	Selegiline	27738
Y	MAO B inhibitor	Selegiline	40418
Y	MAO B inhibitor	Selegiline	29846
Y	MAO B inhibitor	Selegiline	28590
Y	MAO B inhibitor	Selegiline	11586
N			5487
N			5535
N			12363
N			26868
N			28729
N			8410
N			10399
N			5575
N			5665

Reviewed by [REDACTED] for medications used for PD: levodopa, dopamine agonist (ergot), dopamine

drugsubstance	productname	formulation
Amantadine hydrochloride	Amantadine 100mg capsules	Capsule
Amantadine hydrochloride	Amantadine 50mg/5ml oral solution sugar free	Oral solution
Amantadine hydrochloride	Lysovir 100mg capsules (Alliance Pharmaceuticals Ltd)	Capsule
Amantadine hydrochloride	Symmetrel 100mg capsules (Alliance Pharmaceuticals Ltd)	Capsule
Amantadine hydrochloride	Symmetrel 50mg/5ml syrup (Alliance Pharmaceuticals Ltd)	Oral solution
Benzatropine mesilate	Benzatropine 2mg tablets	Tablet
Benzatropine mesilate	Benzatropine 2mg/2ml solution for injection ampoules	Solution for in
Benzatropine mesilate	Cogentin 1mg/ml Injection (Merck Sharp & Dohme Ltd)	Solution for in
Benzatropine mesilate	Cogentin 2mg tablets (Merck Sharp & Dohme Ltd)	Tablet
Benzatropine mesilate	Cogentin 2mg/2ml solution for injection ampoules (Lundbeck Pharmaceutica	Solution for in
Biperiden hydrochloride	Akineton 2mg tablets (Abbott Laboratories Ltd)	Tablet
Biperiden Hydrochloride	Akineton 5mg/ml Injection (Abbott Laboratories Ltd)	Injection
Biperiden hydrochloride	Biperiden 2mg tablets	Tablet
Biperiden Hydrochloride	Biperiden 5mg/ml lactate injection	Injection
Pimethixene	Methixene 5mg Tablet	Tablet
Pimethixene	Tremonil 5mg Tablet (Novartis Pharmaceuticals UK Ltd)	Tablet
Orphenadrine hydrochloride	Biorphen 25mg/5ml oral solution (Rosemont Pharmaceuticals Ltd)	Oral solution
Orphenadrine hydrochloride	DISIPAL	
Orphenadrine hydrochloride	DISIPAL 40 MG INJ	
Orphenadrine hydrochloride	Disipal 50mg tablets (Amdipharm Plc)	Tablet
Orphenadrine Hydrochloride	Orphenadrine 25mg/5ml oral solution	Oral Liquid
Orphenadrine hydrochloride	Orphenadrine 25mg/5ml oral solution sugar free	Oral solution
Orphenadrine hydrochloride	Orphenadrine 50mg tablets	Tablet
Orphenadrine hydrochloride	Orphenadrine 50mg tablets (Teva UK Ltd)	Tablet
Orphenadrine hydrochloride	Orphenadrine 50mg/5ml oral solution sugar free	Oral solution
Orphenadrine hydrochloride	ORPHENADRINE HCl 100 MG TAB	
Orphenadrine hydrochloride	ORPHENADRINE HCl 20 MG INJ	
Orphenadrine hydrochloride	ORPHENADRINE HCl SYR	
Procyclidine hydrochloride	Arpicolin 2.5mg/5ml syrup (Rosemont Pharmaceuticals Ltd)	Oral solution
Procyclidine hydrochloride	Arpicolin 5mg/5ml syrup (Rosemont Pharmaceuticals Ltd)	Oral solution
Procyclidine hydrochloride	Kemadrin 10mg/2ml solution for injection ampoules (Auden McKenzie (Pharr	Solution for in
Procyclidine hydrochloride	Kemadrin 5mg Tablet (Wellcome Medical Division)	Tablet
Procyclidine hydrochloride	Kemadrin 5mg tablets (Aspen Pharma Trading Ltd)	Tablet
Procyclidine hydrochloride	Kemadrin 5mg/ml Injection (Wellcome Medical Division)	Solution for in
Procyclidine hydrochloride	Musciniil 5mg tablets (Opus Pharmaceuticals Ltd)	Tablet
Procyclidine hydrochloride	Procyclidine 10mg/2ml solution for injection ampoules	Solution for in
Procyclidine hydrochloride	PROCYCLIDINE 2.5 MG TAB	
Procyclidine hydrochloride	Procyclidine 2.5mg/5ml oral solution sugar free	Oral solution
Procyclidine hydrochloride	Procyclidine 5mg Tablet (Berk Pharmaceuticals Ltd)	Tablet
Procyclidine hydrochloride	Procyclidine 5mg tablets	Tablet
Procyclidine hydrochloride	Procyclidine 5mg tablets (A A H Pharmaceuticals Ltd)	Tablet
Procyclidine hydrochloride	Procyclidine 5mg tablets (Actavis UK Ltd)	Tablet
Procyclidine hydrochloride	Procyclidine 5mg tablets (IVAX Pharmaceuticals UK Ltd)	Tablet

Procyclidine hydrochloride	Procyclidine 5mg tablets (Teva UK Ltd)	Tablet
Procyclidine hydrochloride	Procyclidine 5mg/5ml oral solution sugar free	Oral solution
Trihexyphenidyl hydrochloride	Artane 2mg Tablet (Wyeth Pharmaceuticals)	Tablet
Trihexyphenidyl hydrochloride	Artane 5mg Tablet (Wyeth Pharmaceuticals)	Tablet
Trihexyphenidyl hydrochloride	ARTANE SUSTETS	
Trihexyphenidyl hydrochloride	ARTANE SUSTETS 5 MG TAB	
Trihexyphenidyl Hydrochloride	Artane sustets 5mg Sustets (Bio-Diagnostics Ltd)	Sustets
Trihexyphenidyl hydrochloride	Broflex 5mg/5ml syrup (Rosemont Pharmaceuticals Ltd)	Oral solution
Trihexyphenidyl hydrochloride	Trihexyphenidyl 1mg/5ml oral solution	
Trihexyphenidyl hydrochloride	Trihexyphenidyl 2mg Tablet (DDSA Pharmaceuticals Ltd)	Tablet
Trihexyphenidyl hydrochloride	Trihexyphenidyl 2mg Tablet (Genus Pharmaceuticals Ltd)	Tablet
Trihexyphenidyl hydrochloride	Trihexyphenidyl 2mg tablets	Tablet
Trihexyphenidyl hydrochloride	Trihexyphenidyl 2mg tablets (A A H Pharmaceuticals Ltd)	Tablet
Trihexyphenidyl hydrochloride	Trihexyphenidyl 2mg tablets (Teva UK Ltd)	Tablet
Trihexyphenidyl hydrochloride	Trihexyphenidyl 2mg/5ml oral solution	Oral solution
Trihexyphenidyl hydrochloride	Trihexyphenidyl 2mg/5ml oral suspension	Oral suspension
Trihexyphenidyl hydrochloride	Trihexyphenidyl 5mg Tablet (DDSA Pharmaceuticals Ltd)	Tablet
Trihexyphenidyl hydrochloride	Trihexyphenidyl 5mg Tablet (Genus Pharmaceuticals Ltd)	Tablet
Trihexyphenidyl hydrochloride	Trihexyphenidyl 5mg tablets	Tablet
Trihexyphenidyl hydrochloride	Trihexyphenidyl 5mg tablets (Teva UK Ltd)	Tablet
Trihexyphenidyl hydrochloride	Trihexyphenidyl 5mg/5ml oral solution	Oral solution
Trihexyphenidyl hydrochloride	Trihexyphenidyl 5mg/5ml oral suspension	Oral suspension
Trihexyphenidyl Hydrochloride	Trihexyphenidyl hc 2mg/5ml sugar free Oral solution	Oral Solution
Apomorphine Hydrochloride	Apo-go 10mg/ml Injection (Britannia Pharmaceuticals Ltd)	Injection
Apomorphine hydrochloride	APO-go 20mg/2ml solution for injection ampoules (Genus Pharmaceuticals Ltd)	Solution for injection
Apomorphine hydrochloride	APO-go 50mg/5ml solution for injection ampoules (Genus Pharmaceuticals Ltd)	Solution for injection
Apomorphine hydrochloride	APO-go PEN 30mg/3ml solution for injection (Genus Pharmaceuticals Ltd)	Solution for injection
Apomorphine hydrochloride	APO-go PFS 50mg/10ml solution for infusion pre-filled syringes (Genus Pharmaceuticals Ltd)	Solution for injection
Apomorphine Hydrochloride	Apomorphine 10mg/ml injection	Injection
Apomorphine hydrochloride	Apomorphine 20mg/2ml solution for injection ampoules	Solution for injection
Apomorphine hydrochloride	Apomorphine 30mg/3ml solution for injection pre-filled disposable devices	Solution for injection
Apomorphine hydrochloride	Apomorphine 50mg/10ml solution for infusion pre-filled syringes	Solution for injection
Apomorphine hydrochloride	Apomorphine 50mg/5ml solution for injection ampoules	Solution for injection
Apomorphine Hydrochloride	Britaject 10mg/ml Subcutaneous injection (Britannia Pharmaceuticals Ltd)	Subcutaneous injection
Entacapone	Comtess 200mg tablets (Orion Pharma (UK) Ltd)	Tablet
Entacapone	Entacapone 200mg tablets	Tablet
Tolcapone	Tasmar 100mg tablets (Meda Pharmaceuticals Ltd)	Tablet
Tolcapone	Tasmar fc 100mg Tablet (Roche Products Ltd)	Tablet
Tolcapone	Tasmar fc 200mg Tablet (Roche Products Ltd)	Tablet
Tolcapone	Tolcapone 100mg tablets	Tablet
Tolcapone	TOLCAPONE FC	
Tolcapone	Tolcapone fc 200mg Tablet	Tablet
Benserazide hydrochloride	BENSERAZIDE 10 MG CAP	
Benserazide hydrochloride	BENSERAZIDE 10 MG TAB	

Carbidopa	CARBIDOPA 25 MG TAB	
Bromocriptine mesilate	Bromocriptine 10mg capsules	Capsule
Bromocriptine mesilate	Bromocriptine 1mg tablets	Tablet
Bromocriptine mesilate	Bromocriptine 2.5mg Tablet (Berk Pharmaceuticals Ltd)	Tablet
Bromocriptine mesilate	Bromocriptine 2.5mg Tablet (Generics (UK) Ltd)	Tablet
Bromocriptine mesilate	Bromocriptine 2.5mg tablets	Tablet
Bromocriptine mesilate	Bromocriptine 2.5mg tablets (A A H Pharmaceuticals Ltd)	Tablet
Bromocriptine mesilate	Bromocriptine 2.5mg tablets (Kent Pharmaceuticals Ltd)	Tablet
Bromocriptine mesilate	Bromocriptine 5mg capsules	Capsule
Bromocriptine mesilate	Parlodel 10mg Capsule (Novartis Pharmaceuticals UK Ltd)	Capsule
Bromocriptine mesilate	Parlodel 1mg Tablet (Novartis Pharmaceuticals UK Ltd)	Tablet
Bromocriptine mesilate	Parlodel 1mg tablets (Meda Pharmaceuticals Ltd)	Tablet
Bromocriptine mesilate	Parlodel 2.5mg Tablet (Novartis Pharmaceuticals UK Ltd)	Tablet
Bromocriptine mesilate	Parlodel 2.5mg tablets (Meda Pharmaceuticals Ltd)	Tablet
Bromocriptine mesilate	Parlodel 5mg Capsule (Novartis Pharmaceuticals UK Ltd)	Capsule
Bromocriptine mesilate	Parlodel 5mg capsules (Meda Pharmaceuticals Ltd)	Capsule
Cabergoline	Cabaser 1mg tablets (Pfizer Ltd)	Tablet
Cabergoline	Cabaser 2mg tablets (Pfizer Ltd)	Tablet
Cabergoline	Cabaser 4mg tablets (Pfizer Ltd)	Tablet
Cabergoline	Cabergoline 1mg tablets	Tablet
Cabergoline	Cabergoline 2mg tablets	Tablet
Cabergoline	Cabergoline 4mg tablets	Tablet
Cabergoline	Cabergoline 500microgram tablets	Tablet
Cabergoline	Dostinex 500microgram tablets (Pfizer Ltd)	Tablet
Lisuride maleate	Lisuride 200microgram tablets	Tablet
Lisuride maleate	Revanil 200microgram Tablet (Cambridge Laboratories Ltd)	Tablet
Pergolide mesilate	Celance 1mg tablets (Eli Lilly and Company Ltd)	Tablet
Pergolide mesilate	Celance 250microgram tablets (Eli Lilly and Company Ltd)	Tablet
Pergolide mesilate	Celance 50microgram tablets (Eli Lilly and Company Ltd)	Tablet
Pergolide mesilate	Celance tablets 14 day starter pack (Eli Lilly and Company Ltd)	Not applicable
Pergolide mesilate	Celance tablets 30 day starter pack (Eli Lilly and Company Ltd)	Not applicable
Pergolide mesilate	Pergolide 1mg tablets	Tablet
Pergolide mesilate	Pergolide 250microgram tablets	Tablet
Pergolide mesilate	Pergolide 250microgram tablets and Pergolide 50microgram tablets	Not applicable
Pergolide mesilate	Pergolide 50microgram tablets	Tablet
Pergolide mesilate	Pergolide 50microgram tablets (A A H Pharmaceuticals Ltd)	Tablet
Pergolide Mesilate	Pergolide Starter Pack (Pergolide 50 micrograms tablet with Pergolide 250 m	Starter Pack
Pramipexole dihydrochloride monohydrate	Mirapexin 0.088mg tablets (Boehringer Ingelheim Ltd)	Tablet
Pramipexole dihydrochloride monohydrate	Mirapexin 0.088mg tablets (Waymade Healthcare Plc)	Tablet
Pramipexole dihydrochloride monohydrate	Mirapexin 0.18mg tablets (Boehringer Ingelheim Ltd)	Tablet
Pramipexole Dihydrochloride Monohydrate	Mirapexin 0.35mg tablets (Boehringer Ingelheim Ltd)	Tablets
Pramipexole dihydrochloride monohydrate	Mirapexin 0.7mg tablets (Boehringer Ingelheim Ltd)	Tablet
Pramipexole Dihydrochloride Monohydrate	Neliprax 0.35mg tablets (Aspire Pharma Ltd)	Tablets
Pramipexole dihydrochloride monohydrate	Pramipexole 180microgram tablets	Tablet

Pramipexole Dihydrochloride Monohydrate	Pramipexole 350microgram tablets	Tablets
Pramipexole dihydrochloride monohydrate	Pramipexole 700microgram tablets	Tablet
Pramipexole dihydrochloride monohydrate	Pramipexole 88microgram tablets	Tablet
Pramipexole dihydrochloride monohydrate	Pramipexole 88microgram tablets (Actavis UK Ltd)	Tablet
Pramipexole dihydrochloride monohydrate	Pramipexole 88microgram tablets (Sigma Pharmaceuticals Plc)	Tablet
Pramipexole dihydrochloride monohydrate	Mirapexin 0.26mg modified-release tablets (Boehringer Ingelheim Ltd)	Modified-release
Pramipexole dihydrochloride monohydrate	Mirapexin 0.52mg modified-release tablets (Boehringer Ingelheim Ltd)	Modified-release
Pramipexole Dihydrochloride Monohydrate	Mirapexin 1.05mg modified-release tablets (Boehringer Ingelheim Ltd)	Prolonged Release
Pramipexole Dihydrochloride Monohydrate	Mirapexin 1.57mg modified-release tablets (Boehringer Ingelheim Ltd)	Prolonged Release
Pramipexole dihydrochloride monohydrate	Mirapexin 2.1mg modified-release tablets (Boehringer Ingelheim Ltd)	Modified-release
Pramipexole Dihydrochloride Monohydrate	Mirapexin 2.62mg modified-release tablets (Boehringer Ingelheim Ltd)	Prolonged Release
Pramipexole dihydrochloride monohydrate	Mirapexin 3.15mg modified-release tablets (Boehringer Ingelheim Ltd)	Modified-release
Pramipexole Dihydrochloride Monohydrate	Pramipexole 1.05mg modified-release tablets	Prolonged Release
Pramipexole Dihydrochloride Monohydrate	Pramipexole 1.57mg modified-release tablets	Prolonged Release
Pramipexole dihydrochloride monohydrate	Pramipexole 2.1mg modified-release tablets	Modified-release
Pramipexole Dihydrochloride Monohydrate	Pramipexole 2.62mg modified-release tablets	Prolonged Release
Pramipexole dihydrochloride monohydrate	Pramipexole 260microgram modified-release tablets	Modified-release
Pramipexole Dihydrochloride Monohydrate	Pramipexole 3.15mg modified-release tablets	Prolonged Release
Pramipexole dihydrochloride monohydrate	Pramipexole 520microgram modified-release tablets	Modified-release
Ropinirole hydrochloride	Adartrel 250microgram tablets (GlaxoSmithKline UK Ltd)	Tablet
Ropinirole hydrochloride	Adartrel 2mg tablets (GlaxoSmithKline UK Ltd)	Tablet
Ropinirole hydrochloride	Adartrel 500microgram tablets (GlaxoSmithKline UK Ltd)	Tablet
Ropinirole hydrochloride	ReQuip 1mg tablets (GlaxoSmithKline UK Ltd)	Tablet
Ropinirole hydrochloride	ReQuip 250microgram tablets (GlaxoSmithKline UK Ltd)	Tablet
Ropinirole hydrochloride	ReQuip 2mg tablets (GlaxoSmithKline UK Ltd)	Tablet
Ropinirole hydrochloride	ReQuip 5mg tablets (GlaxoSmithKline UK Ltd)	Tablet
Ropinirole hydrochloride	ReQuip tablets follow on pack (GlaxoSmithKline UK Ltd)	Not applicable
Ropinirole hydrochloride	ReQuip tablets starter pack (GlaxoSmithKline UK Ltd)	Not applicable
Ropinirole hydrochloride	Ropinirole 1mg tablets	Tablet
Ropinirole hydrochloride	Ropinirole 1mg tablets (A A H Pharmaceuticals Ltd)	Tablet
Ropinirole hydrochloride	Ropinirole 1mg tablets (Waymade Healthcare Plc)	Tablet
Ropinirole hydrochloride	Ropinirole 250microgram tablets	Tablet
Ropinirole hydrochloride	Ropinirole 250microgram tablets (Zentiva)	Tablet
Ropinirole Hydrochloride	Ropinirole 250micrograms with 500micrograms with 1mg tablet	Tablets
Ropinirole hydrochloride	Ropinirole 2mg tablets	Tablet
Ropinirole hydrochloride	Ropinirole 2mg tablets (Generics (UK) Ltd)	Tablet
Ropinirole hydrochloride	Ropinirole 500microgram tablets	Tablet
Ropinirole Hydrochloride	Ropinirole 500micrograms with 1mg with 2mg tablet	Tablets
Ropinirole hydrochloride	Ropinirole 5mg tablets	Tablet
Ropinirole hydrochloride	Ralnea XL 2mg tablets (Consilient Health Ltd)	Modified-release
Ropinirole hydrochloride	Ralnea XL 4mg tablets (Consilient Health Ltd)	
Ropinirole hydrochloride	ReQuip XL 2mg tablets (Doncaster Pharmaceuticals Ltd)	Modified-release
Ropinirole hydrochloride	ReQuip XL 2mg tablets (GlaxoSmithKline UK Ltd)	Modified-release
Ropinirole hydrochloride	ReQuip XL 4mg tablets (GlaxoSmithKline UK Ltd)	Modified-release

Ropinirole hydrochloride	ReQuip XL 4mg tablets (Waymade Healthcare Plc)	
Ropinirole hydrochloride	ReQuip XL 8mg tablets (GlaxoSmithKline UK Ltd)	Modified-release
Ropinirole hydrochloride	Ropinirole 2mg modified-release tablets	Modified-release
Ropinirole Hydrochloride	Ropinirole 4mg modified-release tablets	Modified Release
Ropinirole hydrochloride	Ropinirole 8mg modified-release tablets	Modified-release
Ropinirole hydrochloride	Spiroco XL 2mg tablets (Teva UK Ltd)	Modified-release
Ropinirole Hydrochloride	Spiroco XL 4mg tablets (Teva UK Ltd)	Modified Release
Ropinirole hydrochloride	Spiroco XL 8mg tablets (Teva UK Ltd)	Modified-release
Rotigotine	Neupro 1mg/24hours transdermal patches (UCB Pharma Ltd)	Patch
Rotigotine	Neupro 2mg/24hours transdermal patches (UCB Pharma Ltd)	Transdermal patch
Rotigotine	Neupro 3mg/24hours transdermal patches (UCB Pharma Ltd)	Transdermal patch
Rotigotine	Neupro 4mg/24hours transdermal patches (UCB Pharma Ltd)	Transdermal patch
Rotigotine	Neupro 6mg/24hours transdermal patches (UCB Pharma Ltd)	Transdermal patch
Rotigotine	Neupro 8mg/24hours transdermal patches (Mawdsley-Brooks & Company Ltd)	Transdermal patch
Rotigotine	Neupro 8mg/24hours transdermal patches (UCB Pharma Ltd)	Transdermal patch
Rotigotine	Neupro transdermal patches treatment initiation pack (UCB Pharma Ltd)	Not applicable
Rotigotine	Rotigotine 1mg/24hours transdermal patches	Patch
Rotigotine	Rotigotine 2mg/24hours transdermal patches	Transdermal patch
Rotigotine	Rotigotine 2mg/24hr with 4mg/24hr with 6mg/24hr with 8mg/24hr patch	Patch
Rotigotine	Rotigotine 3mg/24hours transdermal patches	Transdermal patch
Rotigotine	Rotigotine 4mg/24hours transdermal patches	Transdermal patch
Rotigotine	Rotigotine 6mg/24hours transdermal patches	Transdermal patch
Rotigotine	Rotigotine 8mg/24hours transdermal patches	Transdermal patch
Levodopa	Brocadopa 125mg Capsule (Yamanouchi Pharma Ltd)	Capsule
Levodopa	Brocadopa 250mg Capsule (Yamanouchi Pharma Ltd)	Capsule
Levodopa	Brocadopa 500mg Capsule (Yamanouchi Pharma Ltd)	Capsule
Levodopa	Larodopa 500mg Tablet (Cambridge Laboratories Ltd)	Tablet
Levodopa	LEVODOPA 125 MG TAB	
Levodopa	Levodopa 125mg Capsule	Capsule
Levodopa	Levodopa 250mg Capsule	Capsule
Levodopa	LEVODOPA 40 MG CAP	
Levodopa	LEVODOPA 40 MG TAB	
Levodopa	Levodopa 500mg Capsule	Capsule
Levodopa	Levodopa 500mg tablets	Tablet
Levodopa	Benserazide 12.5mg with levodopa 50mg capsules	Capsules
Levodopa	Benserazide 12.5mg with Levodopa 50mg dispersible tablets	Dispersible Tablets
Levodopa	Benserazide 25mg with levodopa 100mg capsules	Capsules
Levodopa	Benserazide 25mg with Levodopa 100mg dispersible tablet	Dispersible Tablets
Levodopa	Benserazide 25mg with Levodopa 100mg modified-release capsules	Modified Release
Levodopa	Benserazide 50mg with Levodopa 200mg capsules	Capsules
Benserazide hydrochloride/Levodopa	Co-beneldopa 12.5mg/50mg capsules	Capsule
Benserazide hydrochloride/Levodopa	Co-beneldopa 12.5mg/50mg capsules (Teva UK Ltd)	Capsule
Benserazide hydrochloride/Levodopa	Co-beneldopa 12.5mg/50mg dispersible tablets sugar free	Dispersible tablets
Benserazide hydrochloride/Levodopa	Co-beneldopa 25mg/100mg capsules	Capsule

Levodopa/Benserazide hydrochloride	Co-beneldopa 25mg/100mg dispersible tablets sugar free	Dispersible ta
Benserazide hydrochloride/Levodopa	Co-beneldopa 25mg/100mg modified-release capsules	Modified-relea
Benserazide hydrochloride/Levodopa	Co-beneldopa 50mg/200mg capsules	Capsule
Benserazide hydrochloride/Levodopa	CO-BENELDOPA 62.5 MG CAP	
Levodopa	Levodopa with benserazide 100mg + 25mg Capsule	Capsule
Levodopa	Levodopa with benserazide 100mg + 25mg Dispersible tablet	Dispersible Ta
Levodopa	Levodopa with benserazide 100mg + 25mg Modified-release capsule	Modified-relea
Levodopa	Levodopa with benserazide 200mg + 50mg Capsule	Capsule
Levodopa	Levodopa with benserazide 50mg + 12.5mg Capsule	Capsule
Levodopa	Levodopa with benserazide 50mg + 12.5mg Dispersible tablet	Dispersible Ta
Benserazide hydrochloride/Levodopa	LEVODOPA/BENSERAZIDE 100 MG TAB	
Benserazide hydrochloride/Levodopa	LEVODOPA/BENSERAZIDE 40 MG CAP	
Benserazide hydrochloride/Levodopa	MADOPAR 62.5	
Benserazide hydrochloride/Levodopa	Madopar 100mg/25mg capsules (Roche Products Ltd)	Capsule
Levodopa/Benserazide hydrochloride	Madopar 100mg/25mg dispersible tablets (Roche Products Ltd)	Dispersible ta
Benserazide hydrochloride/Levodopa	MADOPAR 125 DISPERSIBLE	
Benserazide hydrochloride/Levodopa	Madopar 200mg/50mg capsules (Roche Products Ltd)	Capsule
Benserazide hydrochloride/Levodopa	MADOPAR 250	
Benserazide hydrochloride/Levodopa	Madopar 50mg/12.5mg capsules (Roche Products Ltd)	Capsule
Benserazide hydrochloride/Levodopa	Madopar 50mg/12.5mg dispersible tablets (Roche Products Ltd)	Dispersible ta
Benserazide hydrochloride/Levodopa	MADOPAR 62.5 DISPERSIBLE	
Benserazide hydrochloride/Levodopa	MADOPAR CR	
Benserazide hydrochloride/Levodopa	Madopar CR capsules (Roche Products Ltd)	Modified-relea
Carbidopa monohydrate/Levodopa	Caramet 25mg/100mg CR tablets (Teva UK Ltd)	Modified-relea
Carbidopa monohydrate/Levodopa	Caramet 50mg/200mg CR tablets (Teva UK Ltd)	Modified-relea
Carbidopa	Carbidopa 10mg with levodopa 100mg tablets	Tablets
Carbidopa	Carbidopa 12.5mg with levodopa 50mg tablets	Tablets
Carbidopa	Carbidopa 25mg with levodopa 100mg modified-release tablets	Modified Rele
Carbidopa	Carbidopa 25mg with Levodopa 100mg tablets	Tablets
Carbidopa	Carbidopa 25mg with Levodopa 250mg tablets	Tablets
Carbidopa	Carbidopa 50mg with levodopa 200mg modified-release tablets	Modified Rele
Carbidopa	Carbidopa 5mg with levodopa 20mg/ml intestinal gel	Intestinal Gel
Carbidopa monohydrate/Levodopa	Co-careldopa 10mg/100mg tablets	Tablet
Carbidopa monohydrate/Levodopa	Co-careldopa 10mg/100mg tablets (A A H Pharmaceuticals Ltd)	Tablet
Carbidopa monohydrate/Levodopa	Co-careldopa 10mg/100mg tablets (Teva UK Ltd)	Tablet
Carbidopa monohydrate/Levodopa	Co-careldopa 12.5mg/50mg tablets	Tablet
Carbidopa monohydrate/Levodopa	Co-careldopa 25mg/100mg modified-release tablets	Modified-relea
Carbidopa monohydrate/Levodopa	Co-careldopa 25mg/100mg tablets	Tablet
Carbidopa monohydrate/Levodopa	Co-careldopa 25mg/100mg tablets (Teva UK Ltd)	Tablet
Carbidopa/levodopa	Co-careldopa 25mg/100mg/5ml oral solution	Oral Solution
Carbidopa monohydrate/Levodopa	Co-careldopa 25mg/100mg/5ml oral suspension	Oral suspensi
Levodopa/Carbidopa monohydrate	Co-careldopa 25mg/250mg tablets	Tablet
Levodopa/Carbidopa monohydrate	Co-careldopa 25mg/250mg tablets (Teva UK Ltd)	Tablet
Carbidopa monohydrate/Levodopa	Co-careldopa 50mg/200mg modified-release tablets	Modified-relea

Carbidopa monohydrate/Levodopa	Co-careldopa 50mg/200mg modified-release tablets (A A H Pharmaceuticals)	Modified-release
Carbidopa/levodopa	Co-careldopa 5mg/20mg/1ml intestinal gel 100ml cassette	Intestinal Gel
Carbidopa monohydrate/Levodopa	Co-careldopa 6.25mg/25mg/5ml oral suspension	Oral suspension
Carbidopa/levodopa	Duodopa intestinal gel 100ml cassette (AbbVie Ltd)	Intestinal Gel
Carbidopa monohydrate/Levodopa	Half Sinemet CR 25mg/100mg tablets (Doncaster Pharmaceuticals Ltd)	Modified-release
Carbidopa monohydrate/Levodopa	Half Sinemet CR 25mg/100mg tablets (Merck Sharp & Dohme Ltd)	Modified-release
Carbidopa monohydrate/Levodopa	Half sinemet cr 25mg+100mg Tablet (Bristol-Myers Squibb Pharmaceuticals)	Modified-release
Carbidopa monohydrate/Levodopa	Lecado 25mg+100mg Modified-release tablet (Sandoz Ltd)	Modified-release
Carbidopa monohydrate/Levodopa	Lecado 50mg+200mg Modified-release tablet (Sandoz Ltd)	Modified-release
Carbidopa/levodopa	LEVODOPA 100mg/10mg CARBIDOPA	
Carbidopa/levodopa	LEVODOPA 100mg/25mg CARBIDOPA	
Carbidopa/levodopa	LEVODOPA 250mg/25mg CARBIDOPA	
Carbidopa	Levodopa with carbidopa 100mg + 10mg Tablet	Tablet
Carbidopa	Levodopa with carbidopa 100mg + 25mg Modified-release tablet	Modified-release
Carbidopa	Levodopa with carbidopa 100mg + 25mg Tablet	Tablet
Carbidopa	Levodopa with carbidopa 200mg + 50mg Modified-release tablet	Modified-release
Carbidopa	Levodopa with carbidopa 250mg + 25mg Tablet	Tablet
Carbidopa	Levodopa with carbidopa 50mg + 12.5mg Tablet	Tablet
Carbidopa monohydrate/Levodopa	Sinemet 10mg/100mg tablets (Lexon (UK) Ltd)	Tablet
Carbidopa monohydrate/Levodopa	Sinemet 10mg/100mg tablets (Merck Sharp & Dohme Ltd)	Tablet
Carbidopa monohydrate/Levodopa	Sinemet 10mg/100mg tablets (Sigma Pharmaceuticals Plc)	Tablet
Carbidopa monohydrate/Levodopa	Sinemet 110 Tablet (Bristol-Myers Squibb Pharmaceuticals Ltd)	Tablet
Carbidopa monohydrate/Levodopa	Sinemet 12.5mg/50mg tablets (Merck Sharp & Dohme Ltd)	Tablet
Levodopa/Carbidopa monohydrate	Sinemet 25mg/250mg tablets (Dowelhurst Ltd)	Tablet
Levodopa/Carbidopa monohydrate	Sinemet 25mg/250mg tablets (Mawdsley-Brooks & Company Ltd)	Tablet
Levodopa/Carbidopa monohydrate	Sinemet 25mg/250mg tablets (Merck Sharp & Dohme Ltd)	Tablet
Levodopa/Carbidopa monohydrate	Sinemet 275 Tablet (Bristol-Myers Squibb Pharmaceuticals Ltd)	Tablet
Carbidopa monohydrate/Levodopa	Sinemet 62.5 Tablet (Bristol-Myers Squibb Pharmaceuticals Ltd)	Tablet
Carbidopa monohydrate/Levodopa	Sinemet CR 50mg/200mg tablets (Merck Sharp & Dohme Ltd)	Modified-release
Carbidopa monohydrate/Levodopa	Sinemet CR 50mg+200mg Tablet (Bristol-Myers Squibb Pharmaceuticals Ltd)	Modified-release
Carbidopa monohydrate/Levodopa	Sinemet Plus 25mg/100mg tablets (Doncaster Pharmaceuticals Ltd)	Tablet
Carbidopa monohydrate/Levodopa	Sinemet Plus 25mg/100mg tablets (Merck Sharp & Dohme Ltd)	Tablet
Carbidopa monohydrate/Levodopa	Sinemet Plus 25mg/100mg tablets (Waymade Healthcare Plc)	Tablet
Carbidopa monohydrate/Levodopa	Sinemet plus Tablet (Bristol-Myers Squibb Pharmaceuticals Ltd)	Tablet
Carbidopa monohydrate/Levodopa	Tilolec 200mg/50mg modified-release tablets (Tillomed Laboratories Ltd)	Modified-release
Carbidopa	Levodopa with carbidopa and entacapone 100mg + 25mg + 200mg Tablet	Tablet
Carbidopa	Levodopa with carbidopa and entacapone 125mg + 31.25mg + 200mg Tablet	Tablet
Carbidopa	Levodopa with carbidopa and entacapone 150mg + 37.5mg + 200mg Tablet	Tablet
Carbidopa	Levodopa with carbidopa and entacapone 200mg + 50mg + 200mg Tablet	Tablet
Carbidopa	Levodopa with carbidopa and entacapone 50mg + 12.5mg + 200mg Tablet	Tablet
Carbidopa	Levodopa with carbidopa and entacapone 75mg + 18.75mg + 200mg Tablet	Tablet
Levodopa/Carbidopa/Entacapone	Stalevo 100mg/25mg/200mg tablets (Lexon (UK) Ltd)	Tablet
Levodopa/Carbidopa/Entacapone	Stalevo 100mg/25mg/200mg tablets (Orion Pharma (UK) Ltd)	Tablet
Carbidopa/levodopa/entacapone	Stalevo 125mg/31.25mg/200mg tablets (Orion Pharma (UK) Ltd)	Film Coated Tablet

Entacapone/Carbidopa/Levodopa	Stalevo 150mg/37.5mg/200mg tablets (Orion Pharma (UK) Ltd)	Tablet
Carbidopa/levodopa/entacapone	Stalevo 175mg/43.75mg/200mg tablets (Orion Pharma (UK) Ltd)	Film Coated T
Carbidopa/levodopa/entacapone	Stalevo 175mg/43.75mg/200mg tablets (Orion Pharma (UK) Ltd)	
Carbidopa/levodopa/entacapone	Stalevo 200mg/50mg/200mg tablets (Orion Pharma (UK) Ltd)	Film Coated T
Carbidopa/Entacapone/Levodopa	Stalevo 50mg/12.5mg/200mg tablets (Orion Pharma (UK) Ltd)	Tablet
Carbidopa/levodopa/entacapone	Stalevo 75mg/18.75mg/200mg tablets (Orion Pharma (UK) Ltd)	Film Coated T
Rasagiline mesilate	Azilect 1mg tablets (Teva UK Ltd)	Tablet
Rasagiline mesilate	Rasagiline 1mg tablets	Tablet
Selegiline hydrochloride	Centrapryl 5mg Tablet (Opus Pharmaceuticals Ltd)	Tablet
Selegiline hydrochloride	Eldepryl 10mg tablets (Orion Pharma (UK) Ltd)	Tablet
Selegiline hydrochloride	Eldepryl 10mg/5ml syrup (Orion Pharma (UK) Ltd)	Oral solution
Selegiline hydrochloride	Eldepryl 5mg tablets (Orion Pharma (UK) Ltd)	Tablet
Selegiline hydrochloride	Selegiline 1.25mg oral lyophilisates sugar free	Oral lyophilisa
Selegiline hydrochloride	Selegiline 10mg tablets	Tablet
Selegiline hydrochloride	Selegiline 10mg tablets (IVAX Pharmaceuticals UK Ltd)	Tablet
Selegiline hydrochloride	Selegiline 10mg tablets (Niche Generics Ltd)	Tablet
Selegiline hydrochloride	Selegiline 10mg tablets (Teva UK Ltd)	Tablet
Selegiline hydrochloride	Selegiline 10mg/5ml oral solution	Oral solution
Selegiline hydrochloride	Selegiline 5mg tablets	Tablet
Selegiline hydrochloride	Selegiline 5mg tablets (IVAX Pharmaceuticals UK Ltd)	Tablet
Selegiline hydrochloride	Selegiline 5mg tablets (Niche Generics Ltd)	Tablet
Selegiline hydrochloride	Stilline 10mg Tablet (Berk Pharmaceuticals Ltd)	Tablet
Selegiline hydrochloride	Stilline 5mg Tablet (Berk Pharmaceuticals Ltd)	Tablet
Selegiline hydrochloride	Vivapryl 10mg Tablet (Viatris Pharmaceuticals Ltd)	Tablet
Selegiline hydrochloride	Vivapryl 5mg Tablet (Viatris Pharmaceuticals Ltd)	Tablet
Selegiline hydrochloride	Zelapar 1.25mg oral lyophilisates (Teva UK Ltd)	Oral lyophilisa
Apomorphine hydrochloride	Apomorphine 2mg sublingual tablets sugar free	Sublingual tab
Apomorphine hydrochloride	Apomorphine 3mg sublingual tablets sugar free	Sublingual tab
Orphenadrine Hydrochloride	Norflex 100mg Tablet (3M Health Care Ltd)	Tablet
Orphenadrine Hydrochloride	Norflex 30mg/ml Injection (3M Health Care Ltd)	Injection
Orphenadrine Hydrochloride	Orphenadrine citrate 30mg/ml Injection	Injection
Orphenadrine Hydrochloride	ORPHENADRINE CITRATE S/R 100 MG TAB	
Orphenadrine Hydrochloride	PARACETAMOL/ORPHENADRINE CITRATE TAB	
Apomorphine hydrochloride	Uprima 2mg sublingual tablets (Abbott Laboratories Ltd)	Sublingual tab
Apomorphine hydrochloride	Uprima 3mg sublingual tablets (Abbott Laboratories Ltd)	Sublingual tab

agonist (non-ergot), COMT inhibitor, decarboxylase inhibitor, MAO B inhibitor, Amantadine, Apomorphine,

bnfchapter	br	matching_terms
Dopaminergic Drugs Used	04	%Amantadine%, %MANTADINE%
Dopaminergic Drugs Used	04	%Amantadine%, %MANTADINE%
Influenza	05	%Amantadine%, %LYSOVIR%
Dopaminergic Drugs Used	04	%Amantadine%, %SYMMETREL%
Dopaminergic Drugs Used	04	%Amantadine%, %SYMMETREL%
Drugs Used In Parkinsonis	04	%Benzatropine%
Antimuscarinic Drugs Used	04	%Benzatropine%
Antimuscarinic Drugs Used	04	%Benzatropine%, %COGENTIN%
Drugs Used In Parkinsonis	04	%Benzatropine%, %COGENTIN%
Antimuscarinic Drugs Used	04	%Benzatropine%, %COGENTIN%
Unknown	00	%AKINETON%, %Biperiden%
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Antimuscarinic Drugs Used	04	%Biperiden%
Antimuscarinic Drugs Used	04	%Biperiden%
Antimuscarinic Drugs Used	04	%methixene%
Antimuscarinic Drugs Used	04	%TREMONIL%, %methixene%
Antimuscarinic Drugs Used	04	%BIORPHEN%, %Orphenadrine%
Unknown	00	%DISIPAL%
Unknown	00	%DISIPAL%
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Antimuscarinic Drugs Used	04	%Orphenadrine%
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Antimuscarinic Drugs Used	04	%KEMADRIN%, %Procyclidin%
Antimuscarinic Drugs Used	04	%KEMADRIN%, %Procyclidin%
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Antimuscarinic Drugs Used	04	%KEMADRIN%, %Procyclidin%
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Antimuscarinic Drugs Used	04	%Procyclidin%

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Antimuscarinic Drugs Used	04	%Procyclidin%
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Unknown	00	%ARTANE%
Unknown	00	%ARTANE%
Antimuscarinic Drugs Used	04	%ARTANE%, %trihexyphenidyl%
Antimuscarinic Drugs Used	04	%BROFLEX%, %trihexyphenidyl%
Antimuscarinic Drugs Used	04	%trihexyphenidyl%
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Antimuscarinic Drugs Used	04	%trihexyphenidyl%
Other Dopaminergic Drugs	04	%APO-GO%, %Apomorphine%
Dopaminergic Drugs Used	04	%APO-GO%, %Apomorphine%
Dopaminergic Drugs Used	04	%APO-GO%, %Apomorphine%
Dopaminergic Drugs Used	04	%APO-GO%, %Apomorphine%
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Other Dopaminergic Drugs	04	%Apomorphine%
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Dopaminergic Drugs Used	04	%Apomorphine%
Other Dopaminergic Drugs	04	%Apomorphine%, %BRITAJECT%
Dopaminergic Drugs Used	04	%COMTESS%, %Entacapone%
Dopaminergic Drugs Used	04	%Entacapone%
Dopaminergic Drugs Used	04	%TASMAR%, %Tolcapone%
Other Dopaminergic Drugs	04	%TASMAR%, %Tolcapone%
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Dopaminergic Drugs Used	04	%Tolcapone%
Unknown	00	%Tolcapone%
Other Dopaminergic Drugs	04	%Tolcapone%
Unknown	00	%benserazide%
Unknown	00	%benserazide%

Unknown	00	%carbidopa%
Dopaminergic Drugs Used	04	%Bromocriptine%
Dopaminergic Drugs Used	04	%Bromocriptine%
Other Dopaminergic Drugs	04	%Bromocriptine%
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Other Dopaminergic Drugs	04	%Bromocriptine%, %PARLODEL%
Bromocriptine And Other D	06	%Bromocriptine%, %PARLODEL%
Other Dopaminergic Drugs	04	%Bromocriptine%, %PARLODEL%
Bromocriptine And Other D	06	%Bromocriptine%, %PARLODEL%
Other Dopaminergic Drugs	04	%Bromocriptine%, %PARLODEL%
Dopaminergic Drugs Used	04	%Bromocriptine%, %PARLODEL%
Dopaminergic Drugs Used	04	%CABASER%, %Cabergoline%
Dopaminergic Drugs Used	04	%CABASER%, %Cabergoline%
Dopaminergic Drugs Used	04	%CABASER%, %Cabergoline%
Dopaminergic Drugs Used	04	%Cabergoline%
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Bromocriptine And Other D	06	%Cabergoline%
Bromocriptine And Other D	06	%Cabergoline%, %DOSTINEX%
Unknown	00	%Lisuride%
Other Dopaminergic Drugs	04	%Lisuride%, %REVANIL%
Dopaminergic Drugs Used	04	%CELANCE%, %Pergolide%
Dopaminergic Drugs Used	04	%CELANCE%, %Pergolide%
Dopaminergic Drugs Used	04	%CELANCE%, %Pergolide%
Unknown	00	%CELANCE%
Unknown	00	%CELANCE%
Dopaminergic Drugs Used	04	%Pergolide%
Dopaminergic Drugs Used	04	%Pergolide%
Unknown	00	%Pergolide%
Dopaminergic Drugs Used	04	%Pergolide%
Dopaminergic Drugs Used	04	%Pergolide%
Other Dopaminergic Drugs	04	%Pergolide%
Dopaminergic Drugs Used	04	%MIRAPEXIN%, %Pramipexole%
Dopaminergic Drugs Used	04	%MIRAPEXIN%, %Pramipexole%
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Dopaminergic Drugs Used	04	%MIRAPEXIN%, %Pramipexole%
Dopaminergic Drugs Used	04	%NELIPRAX%, %Pramipexole%
Dopaminergic Drugs Used	04	%Pramipexole%

Dopaminergic Drugs Used	04 %Pramipexole%
Dopaminergic Drugs Used	04 %Pramipexole%
Dopaminergic Drugs Used	04 %Pramipexole%
Dopaminergic Drugs Used	04 %Pramipexole%
Dopaminergic Drugs Used	04 %Pramipexole%
Dopaminergic Drugs Used	04 %MIRAPEXIN%, %Pramipexole%
Dopaminergic Drugs Used	04 %MIRAPEXIN%, %Pramipexole%
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Other Dopaminergic Drugs	04 %Ropinirole%
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Dopaminergic Drugs Used	04 %Ropinirole%
Other Dopaminergic Drugs	04 %Ropinirole%
Dopaminergic Drugs Used	04 %Ropinirole%
Dopaminergic Drugs Used	04 %Ralnea XL %, %Ropinirole%
Dopaminergic Drugs Used	04 %Ralnea XL %
Dopaminergic Drugs Used	04 %REQUIP%, %Ropinirole%
Dopaminergic Drugs Used	04 %REQUIP%, %Ropinirole%
Dopaminergic Drugs Used	04 %REQUIP%, %Ropinirole%

Dopaminergic Drugs Used	04	%REQUIP%
Dopaminergic Drugs Used	04	%REQUIP%, %Ropinirole%
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Dopaminergic Drugs Used	04	%NEUPRO%, %Rotigotine%
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Dopaminergic Drugs Used	04	%Rotigotine%
Dopaminergic Drugs Used	04	%Rotigotine%
Dopaminergic Drugs Used	04	%Rotigotine%
Dopaminergic Drugs Used	04	%BROCADOPA%, %levodopa%
Dopaminergic Drugs Used	04	%BROCADOPA%, %levodopa%
Dopaminergic Drugs Used	04	%BROCADOPA%, %levodopa%
Dopaminergic Drugs Used	04	%LARODOPA%, %levodopa%
Unknown	00	%levodopa%
Dopaminergic Drugs Used	04	%levodopa%
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Unknown	00	%levodopa%
Unknown	00	%levodopa%
Dopaminergic Drugs Used	04	%levodopa%
Unknown	00	%levodopa%
Dopaminergic Drugs Used	04	%benserazide%, %levodopa%
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Dopaminergic Drugs Used	04	%benserazide%, %levodopa%
Dopaminergic Drugs Used	04	%benserazide%, %levodopa%
Dopaminergic Drugs Used	04	%CO-BENELDOPA%, %benserazide%, %levodopa%
Dopaminergic Drugs Used	04	%CO-BENELDOPA%, %benserazide%, %levodopa%
Dopaminergic Drugs Used	04	%CO-BENELDOPA%, %benserazide%, %levodopa%
Dopaminergic Drugs Used	04	%CO-BENELDOPA%, %benserazide%, %levodopa%

Dopaminergic Drugs Used	04	%CO-BENELDOPA%, %benserazide%, %levodopa%
Dopaminergic Drugs Used	04	%CO-BENELDOPA%, %benserazide%, %levodopa%
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Unknown	00	%CO-BENELDOPA%
Dopaminergic Drugs Used	04	%benserazide%, %levodopa%
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Dopaminergic Drugs Used	04	%benserazide%, %levodopa%
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Unknown	00	%benserazide%, %levodopa%
Unknown	00	%benserazide%, %levodopa%
Unknown	00	%MADOPAR%
Dopaminergic Drugs Used	04	%MADOPAR%, %benserazide%, %levodopa%
Dopaminergic Drugs Used	04	%MADOPAR%, %benserazide%, %levodopa%
Unknown	00	%MADOPAR%
Dopaminergic Drugs Used	04	%MADOPAR%, %benserazide%, %levodopa%
Unknown	00	%MADOPAR%
Dopaminergic Drugs Used	04	%MADOPAR%, %benserazide%, %levodopa%
Dopaminergic Drugs Used	04	%MADOPAR%, %benserazide%, %levodopa%
Unknown	00	%MADOPAR%
Unknown	00	%MADOPAR%
Dopaminergic Drugs Used	04	%MADOPAR%, %benserazide%, %levodopa%
Dopaminergic Drugs Used	04	%carbidopa%, %levodopa%
Dopaminergic Drugs Used	04	%carbidopa%, %levodopa%
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Dopaminergic Drugs Used	04	%CO-CARELDOPA%, %carbidopa%, %levodopa%
Dopaminergic Drugs Used	04	%CO-CARELDOPA%, %carbidopa%, %levodopa%

[illegible]

Dopaminergic Drugs Used	04	%Entacapone%, %STALEVO%, %carbidopa%, %levodopa%
Unknown	00	%Entacapone%, %STALEVO%, %carbidopa%, %levodopa%
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Dopaminergic Drugs Used	04	%Entacapone%, %STALEVO%, %carbidopa%, %levodopa%
Dopaminergic Drugs Used	04	%Entacapone%, %STALEVO%, %carbidopa%, %levodopa%
Dopaminergic Drugs Used	04	%Entacapone%, %STALEVO%, %carbidopa%, %levodopa%
Dopaminergic Drugs Used	04	%AZILECT%, %rasagiline%
Dopaminergic Drugs Used	04	%rasagiline%
Other Dopaminergic Drugs	04	%CENTRAPRYL%, %selegiline%
Dopaminergic Drugs Used	04	%ELDEPRYL%, %selegiline%
Dopaminergic Drugs Used	04	%ELDEPRYL%, %selegiline%
Dopaminergic Drugs Used	04	%ELDEPRYL%, %selegiline%
Dopaminergic Drugs Used	04	%selegiline%
Dopaminergic Drugs Used	04	%selegiline%
Dopaminergic Drugs Used	04	%selegiline%
Dopaminergic Drugs Used	04	%selegiline%
Dopaminergic Drugs Used	04	%selegiline%
Dopaminergic Drugs Used	04	%selegiline%
Dopaminergic Drugs Used	04	%selegiline%
Dopaminergic Drugs Used	04	%selegiline%
Dopaminergic Drugs Used	04	%selegiline%
Other Dopaminergic Drugs	04	%STILLINE%, %selegiline%
Other Dopaminergic Drugs	04	%STILLINE%, %selegiline%
Other Dopaminergic Drugs	04	%VIVAPRYL%, %selegiline%
Other Dopaminergic Drugs	04	%VIVAPRYL%, %selegiline%
Dopaminergic Drugs Used	04	%ZELAPAR%, %selegiline%
Dopaminergic Drugs Used	04	%Apomorphine%
Dopaminergic Drugs Used	04	%Apomorphine%
Skeletal Muscle Relaxants	10	%NORFLEX%, %Orphenadrine%
Skeletal Muscle Relaxants	10	%NORFLEX%, %Orphenadrine%
Skeletal Muscle Relaxants	10	%Orphenadrine%
Unknown	00	%Orphenadrine%
Unknown	00	%Orphenadrine%
Dopaminergic Drugs Used	04	%Apomorphine%, %UPRIMA%
Dopaminergic Drugs Used	04	%Apomorphine%, %UPRIMA%

. antimuscarinic

review	classify	comments	medcode	read_code	clinical_pat
Y	Fibromyalgia		4657	N239.00	8957
Y	Fibromyalgia		717	N248.00	29085
Y	Periodic limb movement disorder	unspecific	5545	F132.00	2361
Y	Periodic limb movement disorder	unspecific	19015	F132300	2504
Y	Periodic limb movement disorder	unspecific	28281	F132y00	84
Y	Periodic limb movement disorder	unspecific	37897	F132z00	189
Y	Restless legs syndrome		6275	F13z200	50398
Y	Sexual dysfunction		94821	1ABB.00	1138
Y	Sexual dysfunction		94343	1ABC.00	970
Y	Sexual dysfunction		94316	1ABG.00	505
Y	Sexual dysfunction		102274	1D1B.00	28480
Y	Sexual dysfunction		15649	E227.00	7142
Y	Sexual dysfunction		6362	E227.11	31223
Y	Sexual dysfunction		23534	E227000	310
Y	Sexual dysfunction		2259	E227100	9952
Y	Sexual dysfunction		809	E227200	275
Y	Sexual dysfunction		710	E227300	101805
Y	Sexual dysfunction		3838	E227311	199020
Y	Sexual dysfunction		19082	E227400	267
Y	Sexual dysfunction		27816	E227500	569
Y	Sexual dysfunction		20133	E227z00	578
Y	Sexual dysfunction		9485	Eu52.00	1808
Y	Sexual dysfunction		28283	Eu52000	1040
Y	Sexual dysfunction		48175	Eu52011	8
Y	Sexual dysfunction		56603	Eu52012	20
Y	Sexual dysfunction		21122	Eu52013	1598
Y	Sexual dysfunction		42056	Eu52100	24
Y	Sexual dysfunction		24483	Eu52111	125
Y	Sexual dysfunction		33494	Eu52200	165
Y	Sexual dysfunction		60716	Eu52211	29
Y	Sexual dysfunction		12066	Eu52212	3563
Y	Sexual dysfunction		17639	Eu52213	867
Y	Sexual dysfunction		18332	Eu52300	451
Y	Sexual dysfunction		34336	Eu52311	35
Y	Sexual dysfunction		10550	Eu52312	334
Y	Sexual dysfunction		44683	Eu52y00	15
Y	Sexual dysfunction		48953	Eu52z00	18
Y	Sexual dysfunction		17894	K27y100	1206
Y	Sexual dysfunction		16060	ZV41700	1364
N			365	15D..00	93138
N			17714	1AB..00	7006
N			22377	1AB1.00	1405
N			19498	1AB1.11	902

N			30239	1AB2.00	953
N			85653	1AB3.00	11
N			52618	1AB4.00	31
N			67589	1AB5.00	29
N			94064	1AB6.00	5
N			69910	1AB7.00	12
N			29962	1AB8.00	678
N			71243	1AB9.00	60
N			89467	1ABA.00	49
N			94815	1ABD.00	150
N			94961	1ABE.00	57
N			98122	1ABF.00	9
N			102869	1ABH.00	15
N			105452	1ABH.11	4
N			102325	1ABJ.00	41560
N			103659	1ABK.00	191
N			105754	1ABL.00	11
N			25196	1ABZ.00	1990
N			27406	1ABZ.11	99
N			4485	E227600	11196
N			21253	E227700	204
N			24448	E227z11	340
N			22599	Eu52400	372
N			19745	Eu52500	33
N			30442	Eu52511	95
N			21089	Eu52600	47
N			37089	Eu52611	56
N			26411	Eu52700	128
N			50326	Eu52800	20
N			52420	F132000	14
N			37644	F132100	77
N			63826	F132111	2
N			45602	F132200	62
N			97376	F132y11	1
N			8487	F132z12	1319
N			18374	N239.11	898

Reviewed by [REDACTED] for RLS, PLMD, sexual dysfunction, fibromyalgia as the co

desc	matching_terms
Fibromyalgia	% N239.%
Fibromyalgia	% N248.%
Myoclonus	% F132%, % F132.00%
Myoclonic jerks	% F132%, % F1323%
Other specified myoclonus	% F132%, % F132y%
Myoclonus NOS	% F132%, % F132z%
Restless legs syndrome	% F13z2%
Cannot get an erection	% 1AB%
Cannot sustain an erection	% 1AB%
Sexual intercourse difficult	% 1AB%
C/O erectile dysfunction	% 1D1B%
Psychosexual dysfunction	% E227%
Lack of libido	% E227%
Unspecified psychosexual dysfunction	% E227%
Inhibited sexual desire	% E227%
Frigidity	% E227%
Impotence	% E227%
Erectile dysfunction	% E227%
Inhibited female orgasm	% E227%
Inhibited male orgasm	% E227%
Psychosexual dysfunction NOS	% E227%
[X]Sex dysfunction not caused by organic disorder or	% Eu52%
[X]Lack or loss of sexual desire	% Eu52%
[X]Frigidity	% Eu52%
[X]Hypoactive sexual desire disorder	% Eu52%
[X] Lack of libido	% Eu52%
[X]Sexual aversion and lack of sexual enjoyment	% Eu52%
[X]Anhedonia sexual	% Eu52%
[X]Failure of genital response	% Eu52%
[X]Female sexual arousal disorder	% Eu52%
[X]Male erectile disorder	% Eu52%
[X]Psychogenic impotence	% Eu52%
[X]Orgasmic dysfunction	% Eu52%
[X]Inhibited orgasm	% Eu52%
[X]Psychogenic anorgasmy	% Eu52%
[X]Oth sex dysfunction, not caused by organic disorder	% Eu52%
[X]Unspec sex dysfunction not caused by organic disorder	% Eu52%
Impotence of organic origin	% K27y1%
[V]Problem with sexual function	% ZV417%
Dyspareunia	% 15D%
Sexual activity	% 1AB%
Never been sexually active	% 1AB%
Virgin	% 1AB%

Currently not sexually active	% 1AB%
Sexual activity - daily	% 1AB%
Sexual activity - 2-3x / week	% 1AB%
Sexual activity - weekly	% 1AB%
Sexual activity - 2-3x / month	% 1AB%
Sexual activity - monthly	% 1AB%
Improved sex life	% 1AB%
Sexual activity - oral sex	% 1AB%
Sexual activity - anal sex	% 1AB%
Painful erection	% 1AB%
Abnormal angle of erection	% 1AB%
Penetration impossible	% 1AB%
Vaginal penetrative sexual intercourse	% 1AB%
Vaginal penetration	% 1AB%
Does not complain of erectile dysfunction	% 1AB%
Sexually active	% 1AB%
Homosexual activity	% 1AB%
Sexual activity NOS	% 1AB%
Wet dreams	% 1AB%
Premature ejaculation	% E227%
Psychogenic dyspareunia	% E227%
Fear of ejaculation	% E227%
[X]Premature ejaculation	% Eu52%
[X]Nonorganic vaginismus	% Eu52%
[X]Psychogenic vaginismus	% Eu52%
[X]Nonorganic dyspareunia	% Eu52%
[X]Psychogenic dyspareunia	% Eu52%
[X]Excessive sexual drive	% Eu52%
[X]Erotomania	% Eu52%
Familial essential myoclonus	% F132%
Progressive myoclonic epilepsy	% F132%
Unverricht - Lundborg disease	% F132%
Myoclonic encephalopathy	% F132%
Paramyoclonus multiplex	% F132%, % F132y%
Myoclonic seizure	% F132%, % F132z%
Myofascial pain syndrome	% N239.%

nditions for off-label use of the prolonged release formulation of ropinirole

review	comments	medcode	read_code	clinical_pats	desc
Y		9509	Eu02300	1124	[X]Dementia in Parkinson's disease
Y		96860	F11x900	20	Cerebral degeneration in Parkinson's disea
Y		4321	F12..00	35126	Parkinson's disease
Y		1691	F120.00	15273	Paralysis agitans
Y		14912	F12z.00	2740	Parkinson's disease NOS

Reviewed by [REDACTED] for Primary Parkinson's Disease

matching_terms
% Eu023%
% F11x9%
% F12..%
% F120%
% F12z%

review	omment	prodcode	drugs substance	productname
Y		3490	Amitriptyline hydrochloride/Perphenazine	Amitriptyline 10mg / Perphenazine 2mg tablets
Y		595	Amitriptyline hydrochloride/Perphenazine	Amitriptyline 25mg / Perphenazine 2mg tablets
Y		21744	Benperidol	Anquil 250microgram Tablet (Concord Pharmaceuticals Ltd)
Y		47365	Benperidol	Anquil 250microgram tablets (Archimedes Pharma UK Ltd)
Y		35442	Cinnarizine/Dimenhhydrinate	Arlevert tablets (Hampton Pharmaceuticals Ltd)
Y		12976	Metoclopramide hydrochloride	Aspirin 900mg / Metoclopramide 10mg oral powder sachets
Y		2540	Benperidol	Benperidol 250microgram tablets
Y		31796	Benperidol	Benquil 250microgram tablets (Concord Pharmaceuticals Ltd)
Y		500	Prochlorperazine maleate	Buccastem 3mg Tablet (Reckitt Benckiser Healthcare (UK))
Y		42882	Prochlorperazine maleate	Buccastem 3mg tablets (Alliance Pharmaceuticals Ltd)
Y		5971	Prochlorperazine maleate	Buccastem M 3mg tablets (Alliance Pharmaceuticals Ltd)
Y		28862	Chlorpromazine hydrochloride	Chloractil 100mg Tablet (DDSA Pharmaceuticals Ltd)
Y		17227	Chlorpromazine hydrochloride	Chloractil 25mg Tablet (DDSA Pharmaceuticals Ltd)
Y		25653	Chlorpromazine hydrochloride	Chloractil 50mg Tablet (DDSA Pharmaceuticals Ltd)
Y		8506	Chlorpromazine Hydrochloride	Chlorpromazine 100mg suppository
Y		2154	Chlorpromazine hydrochloride	Chlorpromazine 100mg tablets
Y		46960	Chlorpromazine hydrochloride	Chlorpromazine 100mg tablets (IVAX Pharmaceuticals UK Ltd)
Y		34736	Chlorpromazine hydrochloride	Chlorpromazine 100mg tablets (Teva UK Ltd)
Y		58492	Chlorpromazine hydrochloride	Chlorpromazine 100mg tablets (Waymade Healthcare Plc)
Y		8519	Chlorpromazine hydrochloride	Chlorpromazine 100mg/5ml oral solution
Y		45281	Chlorpromazine hydrochloride	Chlorpromazine 100mg/5ml oral solution (Rosemont Pharmaceuticals Ltd)
Y		9965	Chlorpromazine embonate	Chlorpromazine 100mg/5ml oral suspension sugar free
Y		37705	Chlorpromazine Hydrochloride	Chlorpromazine 100mg/5ml suspension
Y		2474	Chlorpromazine hydrochloride	Chlorpromazine 10mg tablets
Y		8045		CHLORPROMAZINE 200 MG TAB
Y		13479		CHLORPROMAZINE 25 MG SUP
Y		588	Chlorpromazine hydrochloride	Chlorpromazine 25mg tablets
Y		31175	Chlorpromazine hydrochloride	Chlorpromazine 25mg tablets (A A H Pharmaceuticals Ltd)
Y		34693	Chlorpromazine hydrochloride	Chlorpromazine 25mg tablets (Genus Pharmaceuticals Ltd)
Y		31184	Chlorpromazine hydrochloride	Chlorpromazine 25mg tablets (IVAX Pharmaceuticals UK Ltd)
Y		34668	Chlorpromazine hydrochloride	Chlorpromazine 25mg tablets (Teva UK Ltd)
Y		22606	Chlorpromazine hydrochloride	Chlorpromazine 25mg/1ml solution for injection ampoules
Y		3952	Chlorpromazine hydrochloride	Chlorpromazine 25mg/5ml oral solution
Y		44186	Chlorpromazine hydrochloride	Chlorpromazine 25mg/5ml oral solution (A A H Pharmaceuticals Ltd)
Y		37871	Chlorpromazine hydrochloride	Chlorpromazine 25mg/5ml Oral solution (Rosemont Pharmaceuticals Ltd)
Y		9190	Chlorpromazine hydrochloride	Chlorpromazine 25mg/5ml oral solution sugar free
Y		56862	Chlorpromazine hydrochloride	Chlorpromazine 25mg/5ml syrup (Rosemont Pharmaceuticals Ltd)
Y		8311	Chlorpromazine Hydrochloride	Chlorpromazine 25mg/ml injection
Y		41645	Chlorpromazine Hydrochloride	Chlorpromazine 25mg/ml Injection (Antigen Pharmaceuticals Ltd)
Y		247		CHLORPROMAZINE 50 MG INJ
Y		3348	Chlorpromazine hydrochloride	Chlorpromazine 50mg tablets
Y		31171	Chlorpromazine hydrochloride	Chlorpromazine 50mg tablets (A A H Pharmaceuticals Ltd)
Y		34630	Chlorpromazine hydrochloride	Chlorpromazine 50mg tablets (Genus Pharmaceuticals Ltd)

Y		31172	Chlorpromazine hydrochloride	Chlorpromazine 50mg tablets (Teva UK Ltd)
Y		35929	Chlorpromazine hydrochloride	Chlorpromazine 50mg/2ml solution for injection ampoules
Y		4434	Chlorpromazine hydrochloride	Chlorpromazine 50mg/5ml oral solution
Y		17221		CHLORPROMAZINE HCl 10 MG INJ
Y		12544		CHLORPROMAZINE HCl 100 MG MIX
Y		30346		CHLORPROMAZINE HCl 100 MG TAB
Y		12137		CHLORPROMAZINE HCl 25 MG TAB
Y		19033		CHLORPROMAZINE HCl 50 MG INJ
Y		10446		CHLORPROMAZINE HCl 50 MG TAB
Y		31747		CHLORPROMAZINE HYDROCHLORIDE
Y		30111	Chlorprothixene	Chlorprothixene 50mg tablets
Y		7768	Cinnarizine	Cinaziere 15mg tablets (Ashbourne Pharmaceuticals Ltd)
Y		2937		CINNARIZINE 10 MG TAB
Y		845	Cinnarizine	Cinnarizine 15mg tablets
Y		34484	Cinnarizine	Cinnarizine 15mg tablets (A A H Pharmaceuticals Ltd)
Y		34839	Cinnarizine	Cinnarizine 15mg tablets (Actavis UK Ltd)
Y		48215	Cinnarizine	Cinnarizine 15mg tablets (Generics (UK) Ltd)
Y		23974	Cinnarizine	Cinnarizine 15mg tablets (IVAX Pharmaceuticals UK Ltd)
Y		35351	Cinnarizine/Dimenhydrinate	Cinnarizine 20mg / Dimenhydrinate 40mg tablets
Y		55657	Cinnarizine	Cinnarizine 25mg tablets
Y		2098	Cinnarizine	Cinnarizine 75mg capsules
Y		1319	Zuclopenthixol dihydrochloride	Clopixol 10mg tablets (Lundbeck Ltd)
Y		22049	Zuclopenthixol decanoate	Clopixol 200mg/1ml solution for injection ampoules (Lundbeck Ltd)
Y		3774	Zuclopenthixol Decanoate	Clopixol 200mg/ml Oily injection (Lundbeck Ltd)
Y		9347	Zuclopenthixol dihydrochloride	Clopixol 25mg tablets (Lundbeck Ltd)
Y		13368	Zuclopenthixol dihydrochloride	Clopixol 2mg tablets (Lundbeck Ltd)
Y		31538	Zuclopenthixol acetate	Clopixol Acuphase 100mg/2ml solution for injection ampoules (Lundbeck Ltd)
Y		36101	Zuclopenthixol acetate	Clopixol Acuphase 50mg/1ml solution for injection ampoules (Lundbeck Ltd)
Y		5762	Zuclopenthixol Acetate	Clopixol acuphase 50mg/ml Oily injection (Lundbeck Ltd)
Y		12073	Zuclopenthixol decanoate	Clopixol Conc 500mg/1ml solution for injection ampoules (Lundbeck Ltd)
Y		19752		DEPIXOL (10ML VIAL)
Y		19283	Flupentixol decanoate	Depixol 20mg/1ml solution for injection ampoules (Lundbeck Ltd)
Y		2136	Flupentixol Decanoate	Depixol 20mg/ml Injection (Lundbeck Ltd)
Y		5712	Flupentixol dihydrochloride	Depixol 3mg tablets (Lundbeck Ltd)
Y		2156	Flupentixol decanoate	Depixol 40mg/2ml solution for injection ampoules (Lundbeck Ltd)
Y		14889	Flupentixol decanoate	Depixol Conc 100mg/1ml solution for injection ampoules (Lundbeck Ltd)
Y		2155	Flupentixol Decanoate	Depixol -conc 100mg/ml Injection (Lundbeck Ltd)
Y		18197	Flupentixol decanoate	Depixol Conc 50mg/0.5ml solution for injection ampoules (Lundbeck Ltd)
Y		14130	Flupentixol decanoate	Depixol Low Volume 200mg/1ml solution for injection ampoules (Lundbeck Ltd)
Y		25015		DEPIXOL-CONC (1ML AMP)
Y		40326	Dimenhydrinate	Dimenhydrinate with cinnarizine 40mg+20mg tablets
Y		28679	Haloperidol	Dozic 2mg/ml Oral solution (Rosemont Pharmaceuticals Ltd)
Y		6134	Haloperidol	Dozic 5mg/5ml oral solution (Rosemont Pharmaceuticals Ltd)
Y		15171	Droperidol	Droleptan 10mg Tablet (Janssen-Cilag Ltd)

Y		13369	Droperidol	Droleptan 1mg/ml Oral solution (Janssen-Cilag Ltd)
Y		21125	Droperidol	Droleptan 5mg/ml Injection (Janssen-Cilag Ltd)
Y		25759		DROPERIDOL
Y		3773	Droperidol	Droperidol 10mg tablets
Y		15128	Droperidol	Droperidol 1mg/ml liquid
Y		40928	Droperidol	Droperidol 2.5mg/1ml solution for injection ampoules
Y		13341		DROPERIDOL 5 MG/5ML ELI
Y		57571		Droperidol 5mg/5ml oral solution
Y		22609	Droperidol	Droperidol 5mg/ml injection
Y		53634	Droperidol	Droperidol capsules
Y		42229	Droperidol	Droperidol oral liquid
Y		24457	Fentanyl Citrate	Fentanyl with droperidol 500microgramwith2.5mg/ml Injecti
Y		840	Perphenazine	Fentazin 2mg tablets (Mercury Pharma Group Ltd)
Y		7919	Perphenazine	Fentazin 4mg tablets (Mercury Pharma Group Ltd)
Y		228	Perphenazine	Fentazin 5mg/ml Injection (Goldshield Pharmaceuticals Ltd)
Y		24282		FENTAZIN 8 MG TAB
Y		27565		FLUANXOL
Y		3951	Flupentixol dihydrochloride	Fluanxol 1mg tablets (Lundbeck Ltd)
Y		50592	Flupentixol dihydrochloride	Fluanxol 1mg tablets (Sigma Pharmaceuticals Plc)
Y		3953	Flupentixol dihydrochloride	Fluanxol 500microgram tablets (Lundbeck Ltd)
Y		18175	Flupentixol decanoate	Flupentixol 100mg/1ml solution for injection ampoules
Y		600	Flupentixol dihydrochloride	Flupentixol 1mg tablets
Y		14839	Flupentixol decanoate	Flupentixol 200mg/1ml solution for injection ampoules
Y		14966	Flupentixol decanoate	Flupentixol 20mg/1ml solution for injection ampoules
Y		5707	Flupentixol dihydrochloride	Flupentixol 3mg tablets
Y		2276	Flupentixol decanoate	Flupentixol 40mg/2ml solution for injection ampoules
Y		2275	Flupentixol dihydrochloride	Flupentixol 500microgram tablets
Y		18155	Flupentixol decanoate	Flupentixol 50mg/0.5ml solution for injection ampoules
Y		8712	Flupentixol Decanoate	Flupentixol decanoate 100mg/ml Injection
Y		1733	Flupentixol Decanoate	Flupentixol decanoate 20mg/ml Injection
Y		55620	Flupentixol Dihydrochloride	Flupentixol Liquid
Y		5212	Fluphenazine hydrochloride	Fluphenazine 1mg tablets
Y		8377	Fluphenazine hydrochloride	Fluphenazine 2.5mg tablets
Y		5298	Fluphenazine hydrochloride	Fluphenazine 5mg tablets
Y		35176	Fluphenazine decanoate	Fluphenazine decanoate 100mg/1ml solution for injection a
Y		10514	Fluphenazine Decanoate	Fluphenazine decanoate 100mg/ml Injection
Y		16229		FLUPHENAZINE DECANOATE 12.5 MG INJ
Y		35530	Fluphenazine decanoate	Fluphenazine decanoate 12.5mg/0.5ml solution for injectior
Y		35065	Fluphenazine decanoate	Fluphenazine decanoate 25mg/1ml solution for injection am
Y		41970	Fluphenazine decanoate	Fluphenazine decanoate 25mg/1ml solution for injection am
Y		9022	Fluphenazine Decanoate	Fluphenazine decanoate 25mg/ml Injection
Y		41971	Fluphenazine decanoate	Fluphenazine decanoate 25mg/ml Injection (Antigen Pharm
Y		35391	Fluphenazine decanoate	Fluphenazine decanoate 50mg/0.5ml solution for injection a
Y		35723	Fluphenazine decanoate	Fluphenazine decanoate 50mg/2ml solution for injection am

Y		17190	Fluphenazine Enantate	Fluphenazine enanthate 25mg/ml Injection
Y		24107		FLUPHENAZINE HCl ELI
Y		20571	Nortriptyline Hydrochloride	Fluphenazine with nortriptyline 500microgramswith10mg Ta
Y		26526		FLUSPIRILENE 2.00mg/ml
Y		10827	Fluspirilene	Fluspirilene 2mg/ml Injection
Y		21863	Metoclopramide hydrochloride	Gastrese la 15mg Modified-release tablet (Manufacturer un
Y		23379		GASTROBID CONTINUS
Y		8273	Metoclopramide hydrochloride	Gastrobid Continus 15mg tablets (Napp Pharmaceuticals Lt
Y		17496	Metoclopramide hydrochloride	Gastroflux 10mg tablets (Ashbourne Pharmaceuticals Ltd)
Y		17946	Metoclopramide Hydrochloride	Gastromax 30mg Modified-release capsule (Pfizer Ltd)
Y		30351		HALDOL 1.5 MG TAB
Y		23678	Haloperidol	Haldol 10mg tablets (Janssen-Cilag Ltd)
Y		24494	Haloperidol	Haldol 10mg/ml Liquid (Janssen-Cilag Ltd)
Y		15645		HALDOL 20 MG TAB
Y		12921	Haloperidol	Haldol 2mg/ml oral solution (Janssen-Cilag Ltd)
Y		22660	Haloperidol	Haldol 5mg tablets (Janssen-Cilag Ltd)
Y		38540	Haloperidol	Haldol 5mg/1ml solution for injection ampoules (Janssen-Ci
Y		6523	Haloperidol	Haldol 5mg/ml Injection (Janssen-Cilag Ltd)
Y		12386	Haloperidol decanoate	Haldol decanoate 100mg/1ml solution for injection ampoule
Y		2094	Haloperidol decanoate	Haldol decanoate 50mg/1ml solution for injection ampoules
Y		329	Haloperidol	Haloperidol 1.5mg tablets
Y		34339	Haloperidol	Haloperidol 1.5mg tablets (A A H Pharmaceuticals Ltd)
Y		32838	Haloperidol	Haloperidol 1.5mg tablets (IVAX Pharmaceuticals UK Ltd)
Y		43520	Haloperidol	Haloperidol 1.5mg tablets (Teva UK Ltd)
Y		52050		Haloperidol 1.5mg/5ml oral suspension
Y		17379	Haloperidol	Haloperidol 1.5mg/5ml sugar free Oral solution
Y		25063		HALOPERIDOL 100mg/ml
Y		12050		HALOPERIDOL 100MG/ML 100 MG INJ
Y		475	Haloperidol	Haloperidol 10mg tablets
Y		45810	Haloperidol	Haloperidol 10mg/5ml oral solution sugar free
Y		47808	Haloperidol	Haloperidol 10mg/5ml oral solution sugar free (A A H Pharm
Y		10435	Haloperidol	Haloperidol 10mg/ml Oral solution
Y		47149	Haloperidol	Haloperidol 1mg/5ml oral solution
Y		47013	Haloperidol	Haloperidol 1mg/5ml oral suspension
Y		5192	Haloperidol	Haloperidol 1mg/5ml sugar free Oral solution
Y		41546	Haloperidol	Haloperidol 1mg/ml Liquid (Hillcross Pharmaceuticals Ltd)
Y		34039	Haloperidol	Haloperidol 1mg/ml Liquid (Rosemont Pharmaceuticals Ltd)
Y		2620	Haloperidol	Haloperidol 1mg/ml Oral solution
Y		9975	Haloperidol	Haloperidol 1mg/ml sugar free Oral solution
Y		12387	Haloperidol	Haloperidol 20mg tablets
Y		8129	Haloperidol	Haloperidol 20mg/2ml solution for injection ampoules
Y		36771	Haloperidol	Haloperidol 250micrograms/5ml oral suspension
Y		49207	Haloperidol	Haloperidol 2mg/5ml oral solution
Y		53649	Haloperidol	Haloperidol 2mg/5ml oral suspension

Y		11213	Haloperidol	Haloperidol 2mg/5ml sugar free Oral solution
Y		55871	Haloperidol	Haloperidol 2mg/ml Liquid (Hillcross Pharmaceuticals Ltd)
Y		42000	Haloperidol	Haloperidol 2mg/ml Liquid (Rosemont Pharmaceuticals Ltd)
Y		13105	Haloperidol	Haloperidol 2mg/ml Oral solution
Y		3233	Haloperidol	Haloperidol 2mg/ml sugar free Liquid
Y		8136		HALOPERIDOL 5 MG LIQ
Y		2419	Haloperidol	Haloperidol 500microgram capsules
Y		42807	Haloperidol	Haloperidol 500microgram Tablet (Lagap)
Y		3671	Haloperidol	Haloperidol 500microgram tablets
Y		43431	Haloperidol	Haloperidol 500microgram tablets (A A H Pharmaceuticals Ltd)
Y		41420	Haloperidol	Haloperidol 500microgram tablets (Sandoz Ltd)
Y		32051	Haloperidol	Haloperidol 5mg Tablet (Generics (UK) Ltd)
Y		2621	Haloperidol	Haloperidol 5mg tablets
Y		34903	Haloperidol	Haloperidol 5mg tablets (IVAX Pharmaceuticals UK Ltd)
Y		42895	Haloperidol	Haloperidol 5mg tablets (Teva UK Ltd)
Y		38262	Haloperidol	Haloperidol 5mg/1ml solution for injection ampoules
Y		55848	Haloperidol	Haloperidol 5mg/1ml solution for injection ampoules (Merck & Co Inc)
Y		45880	Haloperidol	Haloperidol 5mg/5ml oral solution sugar free
Y		4234	Haloperidol	Haloperidol 5mg/ml Injection
Y		34272	Haloperidol	Haloperidol 5mg/ml Injection (Antigen Pharmaceuticals)
Y		15814	Haloperidol decanoate	Haloperidol decanoate 100mg/1ml solution for injection ampoules
Y		10565	Haloperidol decanoate	Haloperidol decanoate 50mg/1ml solution for injection ampoules
Y		43020	Haloperidol	Haloperidol Oral solution
Y		19002	Chlorpromazine Hydrochloride	Largactil 100mg Suppository (Rhône-Poulenc Rorer Ltd)
Y		7493	Chlorpromazine hydrochloride	Largactil 100mg Tablet (Hawgreen Ltd)
Y		58702	Chlorpromazine hydrochloride	Largactil 100mg tablets (Sanofi)
Y		8771	Chlorpromazine hydrochloride	Largactil 10mg Tablet (Hawgreen Ltd)
Y		55012	Chlorpromazine hydrochloride	Largactil 10mg tablets (Sanofi)
Y		2814	Chlorpromazine hydrochloride	Largactil 25mg Tablet (Hawgreen Ltd)
Y		55011	Chlorpromazine hydrochloride	Largactil 25mg tablets (Sanofi)
Y		10434	Chlorpromazine hydrochloride	Largactil 25mg/5ml Oral solution (Hawgreen Ltd)
Y		57550	Chlorpromazine hydrochloride	Largactil 25mg/5ml syrup (Sanofi)
Y		12356		LARGACTIL 50 MG INJ
Y		3772	Chlorpromazine hydrochloride	Largactil 50mg Tablet (Hawgreen Ltd)
Y		58703	Chlorpromazine hydrochloride	Largactil 50mg tablets (Sanofi)
Y		7514	Chlorpromazine hydrochloride	Largactil 50mg/2ml solution for injection ampoules (Sanofi)
Y		15418	Chlorpromazine embonate	Largactil forte 100mg/5ml Oral suspension (Hawgreen Ltd)
Y		10689		LARGACTIL FORTE SYR
Y		28231	Levomepromazine maleate	Levinan 6mg Tablet (Link Pharmaceuticals Ltd)
Y		49606	Levomepromazine maleate	Levinan 6mg tablets (Archimedes Pharma UK Ltd)
Y		5014	Levomepromazine maleate	Levomepromazine 25mg tablets
Y		6064	Levomepromazine hydrochloride	Levomepromazine 25mg/1ml solution for injection ampoules
Y		53951	Levomepromazine maleate	Levomepromazine 6.25mg/5ml oral solution
Y		40782	Levomepromazine Maleate	Levomepromazine 6mg Tablet

Y		7390	Levomepromazine maleate	Levomepromazine 6mg tablets
Y		20174	Loxapine succinate	Loxapac 10mg capsules (Wyeth Pharmaceuticals)
Y		12619	Loxapine succinate	Loxapac 25mg capsules (Wyeth Pharmaceuticals)
Y		26800	Loxapine succinate	Loxapac 50mg capsules (Wyeth Pharmaceuticals)
Y		12616	Loxapine succinate	Loxapine 10mg capsules
Y		12615	Loxapine succinate	Loxapine 25mg capsules
Y		12630	Loxapine succinate	Loxapine 50mg capsules
Y		27581		MAXOLON
Y		511	Metoclopramide hydrochloride	Maxolon 10mg Tablet (Shire Pharmaceuticals Ltd)
Y		39621	Metoclopramide hydrochloride	Maxolon 10mg tablets (Amdipharm Plc)
Y		179	Metoclopramide hydrochloride	Maxolon 10mg/2ml Injection (Shire Pharmaceuticals Ltd)
Y		39653	Metoclopramide hydrochloride	Maxolon 10mg/2ml solution for injection ampoules (Amdipharm Plc)
Y		15093		MAXOLON 500 MG INJ
Y		304	Metoclopramide hydrochloride	Maxolon 5mg tablets (Shire Pharmaceuticals Ltd)
Y		1724	Metoclopramide hydrochloride	Maxolon 5mg/5ml Oral solution (Shire Pharmaceuticals Ltd)
Y		39710	Metoclopramide hydrochloride	Maxolon 5mg/5ml syrup (Amdipharm Plc)
Y		14844	Metoclopramide hydrochloride	Maxolon High Dose 100mg/20ml solution for injection ampoules (Shire Pharmaceuticals Ltd)
Y		8386	Metoclopramide hydrochloride	Maxolon Paediatric 5mg/5ml liquid (Amdipharm Plc)
Y		15601	Metoclopramide hydrochloride	Maxolon SR 15mg capsules (Amdipharm Plc)
Y		8774	Thioridazine hydrochloride	Melleril 100mg tablets (Novartis Pharmaceuticals UK Ltd)
Y		26661		MELLERIL 100mg/5ml
Y		15157	Thioridazine	Melleril 100mg/5ml oral suspension (Novartis Pharmaceuticals UK Ltd)
Y		284	Thioridazine hydrochloride	Melleril 10mg tablets (Novartis Pharmaceuticals UK Ltd)
Y		1162	Thioridazine hydrochloride	Melleril 25mg tablets (Novartis Pharmaceuticals UK Ltd)
Y		19606		MELLERIL 25mg/5ml
Y		23201		MELLERIL 25mg/5ml
Y		3579	Thioridazine	Melleril 25mg/5ml oral suspension (Novartis Pharmaceuticals UK Ltd)
Y		4673	Thioridazine hydrochloride	Melleril 25mg/5ml syrup (Novartis Pharmaceuticals UK Ltd)
Y		2502	Thioridazine hydrochloride	Melleril 50mg tablets (Novartis Pharmaceuticals UK Ltd)
Y		11576	Metoclopramide hydrochloride	Metoclopramide 10mg tablets (Actavis UK Ltd)
Y		16567	Metoclopramide hydrochloride	Metoclopramide 100mg/20ml solution for injection ampoules (Actavis UK Ltd)
Y		34887	Metoclopramide hydrochloride	Metoclopramide 10mg Tablet (C P Pharmaceuticals Ltd)
Y		455	Metoclopramide hydrochloride	Metoclopramide 10mg tablets
Y		34325	Metoclopramide hydrochloride	Metoclopramide 10mg tablets (A A H Pharmaceuticals Ltd)
Y		26363	Metoclopramide hydrochloride	Metoclopramide 10mg tablets (Actavis UK Ltd)
Y		53162	Metoclopramide hydrochloride	Metoclopramide 10mg tablets (Alliance Healthcare (Distribution) Ltd)
Y		33229	Metoclopramide hydrochloride	Metoclopramide 10mg tablets (Teva UK Ltd)
Y		299	Metoclopramide Hydrochloride	Metoclopramide 10mg/2ml Injection
Y		35046	Metoclopramide hydrochloride	Metoclopramide 10mg/2ml solution for injection ampoules (Actavis UK Ltd)
Y		48445	Metoclopramide hydrochloride	Metoclopramide 10mg/2ml solution for injection ampoules (Actavis UK Ltd)
Y		34084	Metoclopramide hydrochloride	Metoclopramide 10mg/2ml solution for injection ampoules (Actavis UK Ltd)
Y		43448	Metoclopramide hydrochloride	Metoclopramide 12.5mg/5ml oral solution
Y		405	Metoclopramide hydrochloride	Metoclopramide 15mg modified-release capsules
Y		3716	Metoclopramide hydrochloride	Metoclopramide 15mg modified-release tablets

Y		6521	Metoclopramide Hydrochloride	Metoclopramide 1mg/ml sugar free Oral solution
Y		17832	Metoclopramide Hydrochloride	Metoclopramide 30mg Modified-release capsule
Y		1759		METOCLOPRAMIDE 5 MG TAB
Y		4892	Metoclopramide hydrochloride	Metoclopramide 5mg tablets
Y		4142	Metoclopramide Hydrochloride	Metoclopramide 5mg/5ml Oral solution
Y		5081	Metoclopramide hydrochloride	Metoclopramide 5mg/5ml oral solution sugar free
Y		47547	Metoclopramide hydrochloride	Metoclopramide 5mg/5ml oral solution sugar free (A A H Ph
Y		52677	Metoclopramide hydrochloride	Metoclopramide 5mg/5ml oral solution sugar free (Alliance I
Y		25994	Metoclopramide hydrochloride	Metoclopramide 5mg/5ml oral solution sugar free (Rosemor
Y		25992	Metoclopramide hydrochloride	Metoclopramide 5mg/5ml oral solution sugar free (Sandoz L
Y		13034	Metoclopramide Hydrochloride	Metoclopramide 5mg/ml Injection (Phoenix Healthcare Distr
Y		3323		METOCLOPRAMIDE HCl 10 MG TAB
Y		20806		METOCLOPRAMIDE SR
Y		3726	Metoclopramide Hydrochloride	Metoclopramide with aspirin 5mg + 325mg Effervescent tab
Y		17180	Metoclopramide Hydrochloride	Metoclopramide with aspirin 5mg + 450mg Effervescent tab
Y		17456	Metoclopramide Hydrochloride	Metoclopramide with lysine acetylsalicylate 10mg + 900mg
Y		12869	Metoclopramide Hydrochloride	Metoclopramide with paracetamol 5mg + 500mg Sachets
Y		12778	Metoclopramide Hydrochloride	Metoclopramide with paracetamol 5mg + 500mg Tablet
Y		8784	Metoclopramide hydrochloride	Metox 10mg Tablet (M A Steinhard Ltd)
Y		5288	Metoclopramide hydrochloride	MigraMax oral powder sachets (Zentiva)
Y		3155	Metoclopramide Hydrochloride	Migravess 5mg+325mg Effervescent tablet (Bayer Plc)
Y		3386	Metoclopramide Hydrochloride	Migravess forte 5mg+450mg Effervescent tablet (Bayer Plc)
Y		22174		MODECATE
Y		8043		MODECATE 12.5 MG INJ
Y		35122	Fluphenazine decanoate	Modecate 12.5mg/0.5ml solution for injection ampoules (Sa
Y		33780	Fluphenazine decanoate	Modecate 25mg/1ml solution for injection ampoules (Sanofi
Y		3926	Fluphenazine Decanoate	Modecate 25mg/ml Injection (Sanofi-Synthelabo Ltd)
Y		35445	Fluphenazine decanoate	Modecate 50mg/2ml solution for injection ampoules (Sanofi
Y		23340		MODECATE CONC
Y		35455	Fluphenazine decanoate	Modecate Concentrate 100mg/1ml solution for injection am
Y		12128	Fluphenazine Decanoate	Modecate concentrate 100mg/ml Injection (Sanofi-Synthela
Y		35487	Fluphenazine decanoate	Modecate Concentrate 50mg/0.5ml solution for injection arr
Y		26684		MODECATE DISPOSABLE SYRINGE
Y		26692		MODECATE DISPOSABLE SYRINGE
Y		5597	Fluphenazine hydrochloride	Moditen 1mg tablets (Sanofi)
Y		7918	Fluphenazine hydrochloride	Moditen 2.5mg tablets (Sanofi)
Y		20703	Fluphenazine hydrochloride	Moditen 5mg tablets (Sanofi-Synthelabo Ltd)
Y		25835	Fluphenazine Enantate	Moditen enanthate 25mg/ml Injection (Sanofi-Synthelabo Lt
Y		19738		MORPHINE,COCAINE & CHLORPROMAZINE MIX
Y		8493	Nortriptyline hydrochloride/Flu	Motipress tablets (Sanofi-Synthelabo Ltd)
Y		2936	Fluphenazine hydrochloride/N	Motival 10mg/500microgram tablets (Sanofi)
Y		8031	Pericyazine	Neulactil 10mg Tablet (JHC Healthcare Ltd)
Y		40881	Pericyazine	Neulactil 10mg tablets (Sanofi)
Y		7833	Pericyazine	Neulactil 2.5mg Tablet (JHC Healthcare Ltd)

Y		39830	Pericyazine	Neulactil 2.5mg tablets (Sanofi)
Y		21064	Pericyazine	Neulactil 25mg Tablet (JHC Healthcare Ltd)
Y		29967		NEULACTIL FORTE
Y		13902	Pericyazine	Neulactil Forte syrup (Sanofi)
Y		7780	Fluphenazine hydrochloride/N	Nortriptyline 10mg / Fluphenazine 500microgram tablets
Y		14578	Nortriptyline hydrochloride/Flu	Nortriptyline 30mg / Fluphenazine 1.5mg tablets
Y		4232	Levomepromazine maleate	Nozinan 25mg tablets (Sanofi)
Y		52846	Levomepromazine hydrochlori	Nozinan 25mg/1ml solution for injection ampoules (Lexon (U
Y		4442	Levomepromazine hydrochlori	Nozinan 25mg/1ml solution for injection ampoules (Sanofi)
Y		27148	Pimozide	Orap 10mg Tablet (Janssen-Cilag Ltd)
Y		4524	Pimozide	Orap 2mg tablets (Janssen-Cilag Ltd)
Y		15047	Pimozide	Orap 4mg tablets (Janssen-Cilag Ltd)
Y		3514	Paracetamol/Metoclopramide	Paracetamol 500mg / Metoclopramide 5mg effervescent po
Y		2306	Paracetamol/Metoclopramide	Paracetamol 500mg / Metoclopramide 5mg tablets
Y		890	Paracetamol/Metoclopramide	Paramax sachets (Zentiva)
Y		892	Paracetamol/Metoclopramide	Paramax tablets (Zentiva)
Y		3356	Trifluoperazine Hydrochloride	Parstelin Tablet (GlaxoSmithKline Consumer Healthcare)
Y		29972		PERICYAZINE
Y		8032	Pericyazine	Pericyazine 10mg tablets
Y		12195	Pericyazine	Pericyazine 10mg/5ml oral solution
Y		22655		PERICYAZINE 2.5 MG ELI
Y		7834	Pericyazine	Pericyazine 2.5mg tablets
Y		15472	Pericyazine	Pericyazine 25mg tablet
Y		609	Perphenazine	Perphenazine 2mg tablets
Y		16323	Amitriptyline Hydrochloride	Perphenazine 2mg with Amitriptyline 10mg tablet
Y		6894	Amitriptyline Hydrochloride	Perphenazine 2mg with Amitriptyline 25mg tablet
Y		14987	Perphenazine	Perphenazine 2mg/5ml oral solution sugar free
Y		2157	Perphenazine	Perphenazine 4mg tablets
Y		25909	Perphenazine	Perphenazine 4mg/5ml Oral solution sugar free
Y		17087	Perphenazine	Perphenazine 5mg/ml injection
Y		20061		PERPHENAZINE 8 MG TAB
Y		8637	Pimozide	Pimozide 10mg tablet
Y		2489	Pimozide	Pimozide 2mg tablets
Y		5821	Pimozide	Pimozide 4mg tablets
Y		12340	Pipotiazine Palmitate	Piportil 50mg/ml Depot injection (JHC Healthcare Ltd)
Y		35488	Pipotiazine palmitate	Piportil Depot 100mg/2ml solution for injection ampoules (S
Y		35235	Pipotiazine palmitate	Piportil Depot 50mg/1ml solution for injection ampoules (Sa
Y		36394	Pipotiazine palmitate	Pipotiazine 100mg/2ml solution for injection ampoules
Y		35684	Pipotiazine palmitate	Pipotiazine 50mg/1ml solution for injection ampoules
Y		10944	Pipotiazine Palmitate	Pipotiazine palmitate 50mg/ml depot injection
Y		8525	Metoclopramide hydrochloride	Primperan 10mg Tablet (Berk Pharmaceuticals Ltd)
Y		9118	Metoclopramide hydrochloride	Primperan 5mg/5ml Oral solution sugar free (Berk Pharmac
Y		23753	Metoclopramide Hydrochlorid	Primperan 5mg/ml Injection (Berk Pharmaceuticals Ltd)
Y		14364	Prochlorperazine mesilate	Prochlorperazine 12.5mg/1ml solution for injection ampoule

Y		32122	Prochlorperazine mesilate	Prochlorperazine 12.5mg/1ml solution for injection ampoule
Y		1990	Prochlorperazine maleate	Prochlorperazine 25mg suppositories
Y		3932	Prochlorperazine maleate	Prochlorperazine 25mg tablets
Y		4769	Prochlorperazine maleate	Prochlorperazine 3mg buccal tablets
Y		237		PROCHLORPERAZINE 5 MG ELI
Y		9590	Prochlorperazine mesilate	Prochlorperazine 5mg effervescent granules sachets sugar
Y		1434	Prochlorperazine maleate	Prochlorperazine 5mg suppositories
Y		54458	Prochlorperazine maleate	Prochlorperazine 5mg Tablet (Teva UK Ltd)
Y		85	Prochlorperazine maleate	Prochlorperazine 5mg tablets
Y		34344	Prochlorperazine maleate	Prochlorperazine 5mg tablets (A A H Pharmaceuticals Ltd)
Y		32064	Prochlorperazine maleate	Prochlorperazine 5mg tablets (Actavis UK Ltd)
Y		43420	Prochlorperazine maleate	Prochlorperazine 5mg tablets (Dr Reddy's Laboratories (UK
Y		32772	Prochlorperazine maleate	Prochlorperazine 5mg tablets (Generics (UK) Ltd)
Y		32551	Prochlorperazine maleate	Prochlorperazine 5mg tablets (IVAX Pharmaceuticals UK Lt
Y		55038	Prochlorperazine maleate	Prochlorperazine 5mg tablets (Sigma Pharmaceuticals Plc)
Y		32876	Prochlorperazine maleate	Prochlorperazine 5mg tablets (Teva UK Ltd)
Y		6036	Prochlorperazine mesilate	Prochlorperazine 5mg/5ml oral solution
Y		4401	Prochlorperazine Maleate	Prochlorperazine maleate 10mg modified release capsule
Y		15438	Prochlorperazine Maleate	Prochlorperazine maleate 15mg modified release capsul
Y		3024		PROCHLORPERAZINE MALEATE 3 MG TAB
Y		5510	Prochlorperazine Mesilate	Prochlorperazine mesilate 12.5mg/ml injection
Y		3197	Promazine Hydrochloride	Promazine 100mg tablet
Y		15395	Promazine Hydrochloride	Promazine 12.5mg/5ml oral solution
Y		46945	Promazine hydrochloride	Promazine 25mg Tablet (Biorex Laboratories Ltd)
Y		2972	Promazine hydrochloride	Promazine 25mg tablets
Y		6443	Promazine hydrochloride	Promazine 25mg/5ml oral solution
Y		40390	Promazine hydrochloride	Promazine 25mg/5ml syrup (Rosemont Pharmaceuticals Lt
Y		3228	Promazine hydrochloride	Promazine 50mg tablets
Y		41732	Promazine hydrochloride	Promazine 50mg tablets (Teva UK Ltd)
Y		55890	Promazine Hydrochloride	Promazine 50mg/5ml Liquid (Rosemont Pharmaceuticals L
Y		10780	Promazine Hydrochloride	Promazine 50mg/5ml oral solution
Y		17634	Promazine hydrochloride	Promazine 50mg/5ml oral solution
Y		14610	Promazine Hydrochloride	Promazine 50mg/5ml oral solution sugar free
Y		38089	Promazine hydrochloride	Promazine 50mg/5ml syrup (Rosemont Pharmaceuticals Lt
Y		15161	Promazine Hydrochloride	Promazine 50mg/ml injection
Y		43654	Promazine Hydrochloride	Promazine 50mg/ml injection
Y		41995	Promazine Hydrochloride	Promazine 50mg/ml Injection (Genus Pharmaceuticals Ltd)
Y		8988		PROMAZINE HCl 25 MG TAB
Y		26660		PROMAZINE HYDROCHLORIDE
Y		13607	Prochlorperazine maleate	Proziere 5mg tablets (Ashbourne Pharmaceuticals Ltd)
Y		57170	Flupentixol decanoate	Psytixol 100mg/1ml solution for injection ampoules (Generi
Y		57762	Flupentixol decanoate	Psytixol 40mg/2ml solution for injection ampoules (Generics
Y		8044	Fluspirilene	Redeptin 2mg/ml Injection (Janssen-Cilag Ltd)
Y		8979	Haloperidol	Serenace 1.5mg tablets (Teva UK Ltd)

Y		13484	Haloperidol	Serenace 10mg tablets (Teva UK Ltd)
Y		13391		SERENACE 20 MG INJ
Y		13483	Haloperidol	Serenace 20mg tablets (Teva UK Ltd)
Y		28968	Haloperidol	Serenace 20mg/2ml solution for injection ampoules (IVAX P
Y		8153	Haloperidol	Serenace 2mg/ml liquid (Teva UK Ltd)
Y		5545	Haloperidol	Serenace 500microgram capsules (Teva UK Ltd)
Y		13338	Haloperidol	Serenace 5mg tablets (Teva UK Ltd)
Y		7436	Haloperidol	Serenace 5mg/1ml solution for injection ampoules (IVAX Ph
Y		33493	Promazine Hydrochloride	Sparine 100mg Tablet (Wyeth Pharmaceuticals)
Y		12193	Promazine hydrochloride	Sparine 25mg Tablet (Wyeth Pharmaceuticals)
Y		3226	Promazine hydrochloride	Sparine 50mg Tablet (Wyeth Pharmaceuticals)
Y		3227	Promazine Hydrochloride	Sparine 50mg/5ml Liquid (Wyeth Pharmaceuticals)
Y		13311	Promazine Hydrochloride	Sparine 50mg/ml Injection (Wyeth Pharmaceuticals)
Y		8445	Isopropamide Iodide	Stelabid Tablet (GlaxoSmithKline Consumer Healthcare)
Y		27582		STELAZINE
Y		1735	Trifluoperazine hydrochloride	Stelazine 10mg Spansules (Mercury Pharma Group Ltd)
Y		18289	Trifluoperazine Hydrochloride	Stelazine 10mg/ml Concentrate (Goldshield Pharmaceutica
Y		8042	Trifluoperazine hydrochloride	Stelazine 15mg Spansules (Mercury Pharma Group Ltd)
Y		57605	Trifluoperazine hydrochloride	Stelazine 1mg tablets (Lexon (UK) Ltd)
Y		1318	Trifluoperazine hydrochloride	Stelazine 1mg tablets (Mercury Pharma Group Ltd)
Y		8985	Trifluoperazine hydrochloride	Stelazine 1mg/5ml syrup (Mercury Pharma Group Ltd)
Y		7479	Trifluoperazine Hydrochloride	Stelazine 1mg/ml Injection (Goldshield Pharmaceuticals Ltd
Y		2713	Trifluoperazine hydrochloride	Stelazine 2mg Spansules (Mercury Pharma Group Ltd)
Y		1316	Trifluoperazine hydrochloride	Stelazine 5mg tablets (Mercury Pharma Group Ltd)
Y		29838		STELAZINE CONCENTRATE 10mg/ml
Y		29948	Trifluoperazine hydrochloride	Stelazine Forte 1mg/ml oral solution (Mercury Pharma Grou
Y		8775		STELAZINE TAB
Y		24243		STEMETIL
Y		19824		STEMETIL (1ML)
Y		14356	Prochlorperazine mesilate	Stemetil 12.5mg/1ml solution for injection ampoules (Sanofi
Y		3246	Prochlorperazine Mesilate	Stemetil 12.5mg/ml Injection (Castlemead Healthcare Ltd)
Y		7985		STEMETIL 2.5 MG SUP
Y		1234	Prochlorperazine maleate	Stemetil 25mg suppositories (Sanofi)
Y		5497	Prochlorperazine maleate	Stemetil 25mg tablets (Sanofi)
Y		227	Prochlorperazine maleate	Stemetil 5mg suppositories (Sanofi)
Y		512	Prochlorperazine maleate	Stemetil 5mg Tablet (Castlemead Healthcare Ltd)
Y		50462	Prochlorperazine maleate	Stemetil 5mg tablets (Doncaster Pharmaceuticals Ltd)
Y		49170	Prochlorperazine maleate	Stemetil 5mg tablets (Lexon (UK) Ltd)
Y		51551	Prochlorperazine maleate	Stemetil 5mg tablets (Mawdsley-Brooks & Company Ltd)
Y		39887	Prochlorperazine maleate	Stemetil 5mg tablets (Sanofi)
Y		51579	Prochlorperazine maleate	Stemetil 5mg tablets (Sigma Pharmaceuticals Plc)
Y		54429	Prochlorperazine maleate	Stemetil 5mg tablets (Waymade Healthcare Plc)
Y		7593	Prochlorperazine mesilate	Stemetil 5mg/5ml Oral solution (Castlemead Healthcare Ltd
Y		40001	Prochlorperazine mesilate	Stemetil 5mg/5ml syrup (Sanofi)

Y		3738	Prochlorperazine mesilate	Stemetil Eff 5mg sachets (Sanofi)
Y		9215	Cinnarizine	Stugeron 15mg tablets (Janssen-Cilag Ltd)
Y		1355	Cinnarizine	Stugeron 15mg tablets (McNeil Products Ltd)
Y		9304	Cinnarizine	Stugeron Forte 75mg capsules (Janssen-Cilag Ltd)
Y		28147	Chlorprothixene	Taractan 15mg Tablet (Roche Products Ltd)
Y		16667	Thiethylperazine	Thiethylperazine 10mg Tablet
Y		15343	Thiethylperazine	Thiethylperazine 6.5mg/ml injection
Y		7969	Thiethylperazine	Thiethylperazine suppository
Y		23517		THIOPROPAZATE HCl 10 MG TAB
Y		29445		THIOPROPERAZINE MESYLATE 10 MG TAB
Y		21675		THIOPROPERAZINE MESYLATE 25 MG TAB
Y		28979		THIORIDAZINE 100mg/5ml
Y		45860	Thioridazine hydrochloride	Thioridazine 100mg Tablet (IVAX Pharmaceuticals UK Ltd)
Y		3021	Thioridazine hydrochloride	Thioridazine 100mg tablets
Y		10675	Thioridazine	Thioridazine 100mg/5ml oral suspension
Y		15598	Thioridazine Hydrochloride	Thioridazine 100mg/5ml sugar free Oral solution
Y		1192	Thioridazine hydrochloride	Thioridazine 10mg tablets
Y		2801	Thioridazine Hydrochloride	Thioridazine 10mg/5ml Oral solution
Y		47361	Thioridazine Hydrochloride	Thioridazine 10mg/5ml Oral solution (Rosemont Pharmaceu
Y		34905	Thioridazine hydrochloride	Thioridazine 25mg Tablet (IVAX Pharmaceuticals UK Ltd)
Y		1218	Thioridazine hydrochloride	Thioridazine 25mg tablets
Y		43424	Thioridazine hydrochloride	Thioridazine 25mg tablets (A A H Pharmaceuticals Ltd)
Y		20668		THIORIDAZINE 25mg/5ml
Y		26082		THIORIDAZINE 25mg/5ml
Y		3605	Thioridazine hydrochloride	Thioridazine 25mg/5ml oral solution
Y		47881	Thioridazine hydrochloride	Thioridazine 25mg/5ml oral solution (Rosemont Pharmaceu
Y		9387	Thioridazine	Thioridazine 25mg/5ml oral suspension
Y		10405	Thioridazine Hydrochloride	Thioridazine 25mg/5ml sugar free Oral solution
Y		35787	Thioridazine hydrochloride	Thioridazine 50mg Tablet (IVAX Pharmaceuticals UK Ltd)
Y		1314	Thioridazine hydrochloride	Thioridazine 50mg tablets
Y		34902	Thioridazine hydrochloride	Thioridazine 50mg tablets (A A H Pharmaceuticals Ltd)
Y		17399	Thioridazine Hydrochloride	Thioridazine 50mg/5ml Oral solution
Y		42816	Thioridazine Hydrochloride	Thioridazine 50mg/5ml Oral solution (Rosemont Pharmaceu
Y		52143		THIORIDAZINE CONCENTRATE 750MG/5ML 750 MG ELI
Y		10870		THIORIDAZINE S/F 50 MG/5ML SYR
Y		16668	Thiethylperazine	Torecan 10mg Tablet (Novartis Pharmaceuticals UK Ltd)
Y		22053	Thiethylperazine	Torecan 6.5mg/ml Injection (Novartis Pharmaceuticals UK L
Y		7970	Thiethylperazine	Torecan Suppository (Novartis Pharmaceuticals UK Ltd)
Y		3955	Trifluoperazine Hydrochloride	Tranlycpromine with trifluoperazine Tablet
Y		2714	Trifluoperazine hydrochloride	Trifluoperazine 10mg modified-release capsules
Y		22245		TRIFLUOPERAZINE 10mg/ml
Y		18668	Trifluoperazine Hydrochloride	Trifluoperazine 10mg/ml concentrate
Y		3937	Trifluoperazine hydrochloride	Trifluoperazine 15mg modified-release capsules
Y		1857	Trifluoperazine hydrochloride	Trifluoperazine 1mg tablets

Y		40162	Trifluoperazine hydrochloride	Trifluoperazine 1mg tablets (A A H Pharmaceuticals Ltd)
Y		13145	Trifluoperazine hydrochloride	Trifluoperazine 1mg/5ml oral solution sugar free
Y		55382	Trifluoperazine hydrochloride	Trifluoperazine 1mg/5ml oral solution sugar free (Mercury P
Y		8537	Trifluoperazine Hydrochloride	Trifluoperazine 1mg/ml Injection
Y		1159	Trifluoperazine hydrochloride	Trifluoperazine 2mg modified-release capsules
Y		19645		TRIFLUOPERAZINE 5.00mg/ml
Y		10535		TRIFLUOPERAZINE 5.00MG/ML 5 MG SYR
Y		1245	Trifluoperazine hydrochloride	Trifluoperazine 5mg tablets
Y		41663	Trifluoperazine hydrochloride	Trifluoperazine 5mg tablets (A A H Pharmaceuticals Ltd)
Y		11531	Trifluoperazine hydrochloride	Trifluoperazine 5mg/5ml oral solution sugar free
Y		28965		TRIFLUOPERAZINE HCL/ISOPROP.IODIDE FORTE TAB
Y		10356		TRIFLUOPERAZINE TAB
Y		24890	Trifluoperazine Hydrochloride	Trifluoperazine with tranlycypromine 1mg + 10mg Tablet
Y		23659	Trifluperidol	Trifluperidol 0.5mg Tablet
Y		22814	Trifluperidol	Trifluperidol 1mg Tablet
Y		17877		TRIFLUPERIDOL 2 MG TAB
Y		21047	Trifluperidol	Triperidol 0.5mg Tablet (Lagap)
Y		21027	Trifluperidol	Triperidol 1mg Tablet (Lagap)
Y		1453	Amitriptyline hydrochloride/Pe	Triptafen m 2mg+10mg Tablet (Goldshield Pharmaceuticals)
Y		1208	Amitriptyline hydrochloride/Pe	Triptafen tablets (Mercury Pharma Group Ltd)
Y		38827	Amitriptyline hydrochloride/Pe	Triptafen-M tablets (Mercury Pharma Group Ltd)
Y		21339	Levomepromazine maleate	Veractil 25mg Tablet (Rhone-Poulenc Rorer Ltd)
Y		8689	Prochlorperazine Maleate	Vertigon spansule 10 10mg Spansule (GlaxoSmithKline Co
Y		17849	Prochlorperazine Maleate	Vertigon spansule 15 15mg Spansule (GlaxoSmithKline Co
Y		9686	Zuclopenthixol dihydrochloride	Zuclopenthixol 10mg tablets
Y		13600	Zuclopenthixol dihydrochloride	Zuclopenthixol 25mg tablets
Y		12707	Zuclopenthixol dihydrochloride	Zuclopenthixol 2mg tablets
Y		31537	Zuclopenthixol acetate	Zuclopenthixol acetate 100mg/2ml solution for injection amp
Y		24270	Zuclopenthixol acetate	Zuclopenthixol acetate 50mg/1ml solution for injection ampo
Y		14576	Zuclopenthixol Acetate	Zuclopenthixol acetate 50mg/ml oily injection
Y		28355	Zuclopenthixol decanoate	Zuclopenthixol decanoate 200mg/1ml solution for injection a
Y		3775	Zuclopenthixol Decanoate	Zuclopenthixol decanoate 200mg/ml oily injection
Y		12224	Zuclopenthixol decanoate	Zuclopenthixol decanoate 500mg/1ml solution for injection a
Y		25635		ZUCLOPENTHIXOL DIHYDROCHLORIDE
N		37644	Chlorhexidine Gluconate	Chloraprep solution (CareFusion U.K. Ltd)
N		50098		ChloraPrep solution 0.67ml applicators (CareFusion U.K. Lt
N		49473	Isopropyl alcohol/Chlorhexidin	ChloraPrep solution 1.5ml applicators (CareFusion U.K. Ltd
N		53840		ChloraPrep solution 10.5ml applicators (CareFusion U.K. Lt
N		49393	Chlorhexidine gluconate/Isop	ChloraPrep solution 3ml applicators (CareFusion U.K. Ltd)
N		46656	Chlorhexidine Gluconate	Chloraprep with tint solution (CareFusion U.K. Ltd)
N		49359	Chlorhexidine gluconate/Isop	ChloraPrep with Tint solution 3ml applicators (CareFusion U
N		6209	Insulin aspart	NovoRapid 100units/ml solution for injection 10ml vials (Nov
N		53118	Insulin aspart	NovoRapid FlexPen 100units/ml solution for injection 3ml p
N		5892	Insulin aspart	NovoRapid FlexPen 100units/ml solution for injection 3ml p

N		46666	Insulin aspart	NovoRapid FlexTouch 100units/ml solution for injection 3ml
N		11337	Insulin aspart	NovoRapid Novolet 100units/ml solution for injection (Novo
N		53251	Insulin aspart	NovoRapid Penfill 100units/ml solution for injection 3ml cart
N		49108	Insulin aspart	NovoRapid Penfill 100units/ml solution for injection 3ml cart
N		5021	Insulin aspart	NovoRapid Penfill 100units/ml solution for injection 3ml cart
N		51743	Insulin aspart	NovoRapid Penfill 100units/ml solution for injection 3ml cart
N		2277	Piperazine phosphate/Senna	Piperazine 4g / Senna 15.3mg oral powder sachets sugar fr
N		7470	Pipã©razine Dã©rivã©s	Piperazine 500mg tablet
N		2005	Pipã©razine Dã©rivã©s	Piperazine 750mg/5ml oral solution
N		4500		PIPERAZINE CITRATE 12.6 % SYR
N		32248	Medroxyprogesterone Acetate	Piperazine oestrone sulphate 1.5mg with medroxyprogester
N		243	Piperazine phosphate/Senna	Pripsen powder (Thornton & Ross Ltd)
N		23173	Methylphenidate hydrochlorid	Tranquilyn 10mg tablets (Genesis Pharmaceuticals Ltd)
N		23161	Methylphenidate hydrochlorid	Tranquilyn 5mg tablets (Genesis Pharmaceuticals Ltd)

Reviewed by [REDACTED] for drugs known to induce Parkinsonism (including “typical” antipsych

formulation	bnfchapter	bnfcode
Tablet	Unknown	00000000
Tablet	Tricyclic And Related Antidepressant Drugs	04030100
Tablet	Antipsychotic Drugs	04020100
Tablet	First-generation Antipsychotic Drugs	04020101
Tablet	Drug Used In Nausea And Vertigo - Antihistamines	04065400
Powder	Non-opioid And Compound Analgesics	04070100
Tablet	First-generation Antipsychotic Drugs	04020101
Tablet	Antipsychotic Drugs	04020100
Buccal tablet	Antipsychotic Drugs/-	04020100/40120000
Buccal tablet	Drug Used In Nausea And Vertigo - Antihistamines	04065400
Buccal tablet	Drug Used In Nausea And Vertigo - Antihistamines	04065400
Tablet	Antipsychotic Drugs/-	04020100/40120000
Tablet	Antipsychotic Drugs/-	04020100/40120000
Tablet	Antipsychotic Drugs/-	04020100/40120000
Suppository	Antipsychotic Drugs/-	04020100/40120000
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
Oral suspension	Unknown	00000000
Suspension	Antipsychotic Drugs/-	04020100/40120000
Tablet	Unknown	00000000
	Unknown	00000000
	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs/-	04020100/40120000
Oral solution	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
Injection	Antipsychotic Drugs/-	04020100/40120000
Injection	Antipsychotic Drugs/-	04020100/40120000
	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100

Tablet	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
	Unknown	00000000
	Unknown	00000000
	Unknown	00000000
	Unknown	00000000
	Unknown	00000000
	Unknown	00000000
	Unknown	00000000
Tablets	Antipsychotic Drugs	04020100
Tablet	Drug Used In Nausea And Vertigo - Antihis	04065400
	Unknown	00000000
Tablet	Drug Used In Nausea And Vertigo - Antihis	04065400
Tablet	Drug Used In Nausea And Vertigo - Antihis	04065400
Tablet	Drug Used In Nausea And Vertigo - Antihis	04065400
Tablet	Drug Used In Nausea And Vertigo - Antihis	04065400
Tablet	Drug Used In Nausea And Vertigo - Antihis	04065400
	Peripheral Vasodilators And Related Drugs	02060400/03040103
Capsule	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Oily Injection	Antipsychotic Drugs/Antipsychotic Depot In	04020100/04020200
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Oily Injection	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
	Unknown	00000000
Solution for injection	Antipsychotic Depot Injections	04020200
Injection	Antipsychotic Depot Injections	04020200
Tablet	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
Injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
	Unknown	00000000
Tablets	Peripheral Vasodilators And Related Drugs	02060400/03040103
Oral Solution	Antipsychotic Drugs/-	04020100/40120000
Oral solution	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs/Benzodiazepines (peri	04020100/15010401

Oral Solution	Antipsychotic Drugs/Benzodiazepines (peri	04020100/15010401
Injection	Antipsychotic Drugs/Benzodiazepines (peri	04020100/15010401
	Unknown	00000000
Tablets	Antipsychotic Drugs/Benzodiazepines (peri	04020100/15010401
Liquid	Antipsychotic Drugs/Benzodiazepines (peri	04020100/15010401
Solution for injection	Drug Used In Nausea And Vertigo - Antihis	04065400
	Unknown	00000000
	Drug Used In Nausea And Vertigo - Antihis	04065400
Injection	Antipsychotic Drugs/Benzodiazepines (peri	04020100/15010401
	Antipsychotic Drugs/Benzodiazepines (peri	04020100/15010401
Oral Liquid	Antipsychotic Drugs/Benzodiazepines (peri	04020100/15010401
Injection	Benzodiazepines (peri-operative)	15010401
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Injection	Antipsychotic Drugs/-	04020100/40120000
	Unknown	00000000
	Unknown	00000000
Tablet	Other Antidepressant Drugs	04030400
Tablet	Other Antidepressant Drugs	04030400
Tablet	Other Antidepressant Drugs	04030400
Solution for injection	Antipsychotic Depot Injections	04020200
Tablet	Other Antidepressant Drugs	04030400
Solution for injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
Tablet	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Depot Injections	04020200
Tablet	Other Antidepressant Drugs	04030400
Solution for injection	Antipsychotic Depot Injections	04020200
Injection	Antipsychotic Depot Injections	04020200
Injection	Antipsychotic Depot Injections	04020200
Liquid	Antipsychotic Drugs/Other Antidepressant	04020100/04030400
Tablet	Antipsychotic Drugs	04020100
Tablet	Unknown	00000000
Tablet	Unknown	00000000
Solution for injection	Antipsychotic Depot Injections	04020200
Injection	Antipsychotic Depot Injections	04020200
	Unknown	00000000
Solution for injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
Injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200

Injection	Antipsychotic Depot Injections	04020200
	Unknown	00000000
Tablet	Tricyclic And Related Antidepressant Drugs	04030100
	Unknown	00000000
Injection	Antipsychotic Depot Injections	04020200
Modified-release tablet	Motility Stimulants/Drug Used In Nausea And Vomiting	01020300/04065500
	Unknown	00000000
Modified-release tablet	Unknown	00000000
Tablet	Drug Used In Nausea And Vertigo - Domperidone	04065500
Modified-release Capsule	Motility Stimulants/Drug Used In Nausea And Vomiting	01020300/04065500
	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Liquid	Antipsychotic Drugs/-	04020100/40120000
	Unknown	00000000
Oral solution	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Injection	Antipsychotic Drugs/-	04020100/40120000
Solution for injection	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
	Antipsychotic Drugs	04020100
Oral Solution	Antipsychotic Drugs/-	04020100/40120000
	Unknown	00000000
	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
Oral Solution	Antipsychotic Drugs/-	04020100/40120000
Oral solution	Antipsychotic Drugs	04020100
Oral suspension	Antipsychotic Drugs	04020100
Oral Solution	Antipsychotic Drugs/-	04020100/40120000
Liquid	Antipsychotic Drugs/-	04020100/40120000
Liquid	Antipsychotic Drugs/-	04020100/40120000
Oral Solution	Antipsychotic Drugs/-	04020100/40120000
Oral Solution	Antipsychotic Drugs/-	04020100/40120000
Tablet	Antipsychotic Drugs	04020100
Solution for injection	Unknown	00000000
Oral Suspension	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
Oral suspension	Antipsychotic Drugs	04020100

Oral Solution	Antipsychotic Drugs/-	04020100/40120000
Liquid	Antipsychotic Drugs/-	04020100/40120000
Liquid	Antipsychotic Drugs/-	04020100/40120000
Oral Solution	Antipsychotic Drugs/-	04020100/40120000
Liquid	Antipsychotic Drugs/-	04020100/40120000
	Unknown	00000000
Capsule	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs/-	04020100/40120000
Tablet	Unknown	00000000
Tablet	Unknown	00000000
Tablet	Unknown	00000000
Tablet	Antipsychotic Drugs/-	04020100/40120000
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
Injection	Antipsychotic Drugs/-	04020100/40120000
Injection	Antipsychotic Drugs/-	04020100/40120000
Solution for injection	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Oral Solution	Antipsychotic Drugs/-	04020100/40120000
Suppository	Antipsychotic Drugs/-	04020100/40120000
Tablet	Antipsychotic Drugs/-	04020100/40120000
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs/-	04020100/40120000
Tablet	Unknown	00000000
Tablet	Antipsychotic Drugs/-	04020100/40120000
Tablet	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs/-	04020100/40120000
Oral solution	Antipsychotic Drugs	04020100
	Unknown	00000000
Tablet	Antipsychotic Drugs/-	04020100/40120000
Tablet	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Oral suspension	Antipsychotic Drugs/-	04020100/40120000
	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100

Tablet	Antipsychotic Drugs	04020100
Capsule	Unknown	00000000
Capsule	Unknown	00000000
Capsule	Unknown	00000000
Capsule	Unknown	00000000
Capsule	Unknown	00000000
Capsule	Unknown	00000000
	Unknown	00000000
Tablet	Motility Stimulants/Drug Used In Nausea A	01020300/04065500
Tablet	Drug Used In Nausea And Vertigo - Dompe	04065500
Solution for injection	Motility Stimulants/Drug Used In Nausea A	01020300/04065500
Solution for injection	Drug Used In Nausea And Vertigo - Dompe	04065500
	Unknown	00000000
Tablet	Unknown	00000000
Oral solution	Motility Stimulants/Drug Used In Nausea A	01020300/04065500
Oral solution	Drug Used In Nausea And Vertigo - Dompe	04065500
Solution for injection	Drug Used In Nausea And Vertigo - Dompe	04065500
Oral solution	Drug Used In Nausea And Vertigo - Dompe	04065500
Modified-release capsule	Drug Used In Nausea And Vertigo - Dompe	04065500
Tablet	Unknown	00000000
	Unknown	00000000
Oral suspension	Unknown	00000000
Tablet	Unknown	00000000
Tablet	Unknown	00000000
	Unknown	00000000
	Unknown	00000000
Oral suspension	Unknown	00000000
Oral solution	Unknown	00000000
Tablet	Unknown	00000000
Tablet	Drug Used In Nausea And Vertigo - Dompe	04065500
Solution for injection	Drug Used In Nausea And Vertigo - Dompe	04065500
Tablet	Motility Stimulants/Drug Used In Nausea A	01020300/04065500
Tablet	Drug Used In Nausea And Vertigo - Dompe	04065500
Tablet	Drug Used In Nausea And Vertigo - Dompe	04065500
Tablet	Drug Used In Nausea And Vertigo - Dompe	04065500
Tablet	Drug Used In Nausea And Vertigo - Dompe	04065500
Tablet	Drug Used In Nausea And Vertigo - Dompe	04065500
Injection	Motility Stimulants/Drug Used In Nausea A	01020300/04065500
Solution for injection	Drug Used In Nausea And Vertigo - Dompe	04065500
Solution for injection	Drug Used In Nausea And Vertigo - Dompe	04065500
Solution for injection	Drug Used In Nausea And Vertigo - Dompe	04065500
Oral solution	Drug Used In Nausea And Vertigo - Dompe	04065500
Modified-release capsule	Drug Used In Nausea And Vertigo - Dompe	04065500
Modified-release tablet	Unknown	00000000

Oral Solution	Motility Stimulants/Drug Used In Nausea A	01020300/04065500
Modified-release Capsule	Motility Stimulants/Drug Used In Nausea A	01020300/04065500
	Unknown	00000000
Tablet	Unknown	00000000
Oral Solution	Motility Stimulants/Drug Used In Nausea A	01020300/04065500
Oral solution	Drug Used In Nausea And Vertigo - Dompe	04065500
Oral solution	Drug Used In Nausea And Vertigo - Dompe	04065500
Oral solution	Drug Used In Nausea And Vertigo - Dompe	04065500
Oral solution	Drug Used In Nausea And Vertigo - Dompe	04065500
Oral solution	Drug Used In Nausea And Vertigo - Dompe	04065500
Injection	Motility Stimulants/Drug Used In Nausea A	01020300/04065500
	Unknown	00000000
	Unknown	00000000
Effervescent Tablet	Drug Used In Nausea And Vertigo - Dompe	04065500/04070401
Effervescent Tablet	Drug Used In Nausea And Vertigo - Dompe	04065500/04070401
Oral Solution	Drug Used In Nausea And Vertigo - Dompe	04065500/04070401
Sachets	Drug Used In Nausea And Vertigo - Dompe	04065500/04070401
Tablet	Drug Used In Nausea And Vertigo - Dompe	04065500/04070401
Tablet	Motility Stimulants/Drug Used In Nausea A	01020300/04065500
Powder	Non-opioid And Compound Analgesics	04070100
Effervescent Tablet	Drug Used In Nausea And Vertigo - Dompe	04065500/04070401
Effervescent Tablet	Drug Used In Nausea And Vertigo - Dompe	04065500/04070401
	Unknown	00000000
	Unknown	00000000
Solution for injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
Injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
	Unknown	00000000
Solution for injection	Antipsychotic Depot Injections	04020200
Injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
	Unknown	00000000
	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Tablet	Unknown	00000000
Tablet	Unknown	00000000
Injection	Antipsychotic Depot Injections	04020200
	Unknown	00000000
Tablet	Unknown	00000000
Tablet	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100

Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
	Unknown	00000000
Oral solution	Antipsychotic Drugs	04020100
Tablet	Unknown	00000000
Tablet	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Effervescent powder	Treatment Of Acute Migraine	04070401
Tablet	Treatment Of Acute Migraine	04070401
Effervescent powder	Treatment Of Acute Migraine	04070401
Tablet	Treatment Of Acute Migraine	04070401
Tablet	Antipsychotic Drugs/Monoamine-oxidase In	04020100/04030200
	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Tablets	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablets	Antipsychotic Drugs/Tricyclic And Related A	04020100/04030100
Tablets	Antipsychotic Drugs/Tricyclic And Related A	04020100/04030100
Syrup Sugar-free	Antipsychotic Drugs/-	04020100/40120000
Tablet	Antipsychotic Drugs	04020100
Syrup Sugar-free	Antipsychotic Drugs/-	04020100/40120000
Injection	Antipsychotic Drugs/-	04020100/40120000
	Unknown	00000000
Tablets	Antipsychotic Drugs	04020100
Tablet	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Depot Injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
Depot Injection	Antipsychotic Depot Injections	04020200
Tablet	Motility Stimulants/Drug Used In Nausea A	01020300/04065500
Oral solution	Motility Stimulants/Drug Used In Nausea A	01020300/04065500
Injection	Motility Stimulants/Drug Used In Nausea A	01020300/04065500
Solution for injection	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400

Solution for injection	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Suppository	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Unknown	00000000
Buccal tablet	Drug Used In Nausea And Vertigo - Antihis	04065400
	Unknown	00000000
Effervescent granules	Unknown	00000000
Suppository	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Antipsychotic Drugs/-	04020100/40120000
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Oral solution	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Modified Release Capsules	Antipsychotic Drugs/-	04020100/40120000
Modified Release Capsules	Antipsychotic Drugs/-	04020100/40120000
	Unknown	00000000
Injection	Antipsychotic Drugs/-	04020100/40120000
Tablets	Antipsychotic Drugs	04020100
Syrup	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Liquid	Antipsychotic Drugs	04020100
Suspension	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
Syrup Sugar-free	Antipsychotic Drugs	04020100
Oral solution	Antipsychotic Drugs	04020100
Injection	Antipsychotic Drugs	04020100
Injection	Antipsychotic Drugs	04020100
Injection	Antipsychotic Drugs	04020100
	Unknown	00000000
	Unknown	00000000
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Solution for injection	Antipsychotic Depot Injections	04020200
Solution for injection	Antipsychotic Depot Injections	04020200
Injection	Antipsychotic Depot Injections	04020200
Tablet	Antipsychotic Drugs	04020100

Tablet	Antipsychotic Drugs	04020100
	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Solution for injection	Unknown	00000000
Oral solution	Antipsychotic Drugs	04020100
Capsule	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Liquid	Antipsychotic Drugs	04020100
Injection	Antipsychotic Drugs	04020100
Tablet	Antimuscarinics/Antipsychotic Drugs	01020100/04020100
	Unknown	00000000
Modified-release capsule	Unknown	00000000
Concentrate	Antipsychotic Drugs/-	04020100/40120000
Modified-release capsule	Unknown	00000000
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Oral solution	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Injection	Antipsychotic Drugs/-	04020100/40120000
Modified-release capsule	Unknown	00000000
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
	Unknown	00000000
Oral solution	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
	Unknown	00000000
	Unknown	00000000
	Unknown	00000000
Solution for injection	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Injection	Antipsychotic Drugs/-	04020100/40120000
	Unknown	00000000
Suppository	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Unknown	00000000
Suppository	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Antipsychotic Drugs/-	04020100/40120000
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
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Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Oral solution	Antipsychotic Drugs/-	04020100/40120000
Oral solution	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400

Effervescent granules	Unknown	00000000
Tablet	Drug Used In Nausea And Vertigo - Antihis	04065400
Tablet	Drug Used In Nausea And Vertigo - Antihis	04065400
Capsule	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Tablet	Antihistamines In Nausea And Vomiting	03040103
Injection	Antihistamines In Nausea And Vomiting	03040103
Suppository	Antihistamines In Nausea And Vomiting	03040103
	Unknown	00000000
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	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Oral suspension	Unknown	00000000
Oral Solution	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Oral Solution	Antipsychotic Drugs	04020100
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Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Unknown	00000000
	Unknown	00000000
	Unknown	00000000
Oral solution	Antipsychotic Drugs	04020100
Oral solution	Unknown	00000000
Oral suspension	Unknown	00000000
Oral Solution	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Unknown	00000000
Oral Solution	Antipsychotic Drugs	04020100
Oral Solution	Antipsychotic Drugs	04020100
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Tablet	Antihistamines In Nausea And Vomiting	03040103
Injection	Antihistamines In Nausea And Vomiting	03040103
Suppository	Antihistamines In Nausea And Vomiting	03040103
Tablet	Antipsychotic Drugs/Monoamine-oxidase In	04020100/04030200
Modified-release capsule	Unknown	00000000
	Unknown	00000000
Concentrate	Antipsychotic Drugs/-	04020100/40120000
Modified-release capsule	Unknown	00000000
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400

Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Oral solution	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Oral solution	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Injection	Antipsychotic Drugs/-	04020100/40120000
Modified-release capsule	Unknown	00000000
	Unknown	00000000
	Unknown	00000000
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Tablet	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
Oral solution	Antipsychotic Drugs/Drug Used In Nausea	04020100/04065400
	Unknown	00000000
	Unknown	00000000
Tablet	Antipsychotic Drugs/Monoamine-oxidase In	04020100/04030200
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs/Tricyclic And Related A	04020100/04030100
Tablet	Tricyclic And Related Antidepressant Drugs	04030100
Tablet	Unknown	00000000
Tablet	Antipsychotic Drugs	04020100
Spansule	Antipsychotic Drugs/-	04020100/40120000
Spansule	Antipsychotic Drugs/-	04020100/40120000
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Tablet	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Oily Injection	Antipsychotic Drugs	04020100
Solution for injection	Antipsychotic Drugs	04020100
Oily Injection	Antipsychotic Drugs/Antipsychotic Depot In	04020100/04020200
Solution for injection	Antipsychotic Drugs	04020100
	Unknown	00000000
Oral Solution	Antibacterial Preparations Only Used Topic	13100101/13110200
	Chlorhexidine Salts	13110200
Liquid	Chlorhexidine Salts	13110200
	Chlorhexidine Salts	13110200
Liquid	Chlorhexidine Salts	13110200
Oral Solution	Antibacterial Preparations Only Used Topic	13100101/13110200
Liquid	Chlorhexidine Salts	13110200
Solution for injection	Short-acting Insulins	06010101
Solution for injection	Short-acting Insulins	06010101
Solution for injection	Short-acting Insulins	06010101

Solution for injection	Short-acting Insulins	06010101
Solution for injection	Unknown	00000000
Solution for injection	Short-acting Insulins	06010101
Solution for injection	Short-acting Insulins	06010101
Solution for injection	Short-acting Insulins	06010101
Solution for injection	Short-acting Insulins	06010101
Powder	Drugs For Threadworms	05050100
Tablets	Drugs For Threadworms/Ascaricides	05050100/05050200
Elixir	Drugs For Threadworms/Ascaricides	05050100/05050200
	Unknown	00000000
Tablets	Oestrogens And Hrt	06040101
Powder	Drugs For Threadworms	05050100
Tablet	Cns Stimulants And Drugs Used For Attent	04040000
Tablet	Cns Stimulants And Drugs Used For Attent	04040000

hotic drugs, metoclopramide, or cinnarizine)

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review	comments	medcode	read_code	clinical_pats	desc
Y	secondary PD	52589	A94y100	15	Syphilitic parkinsonism
Y	secondary PD	51105	F123.00	10	Postencephalitic parkinsonism
Y	secondary PD	100128	F124.00	360	Vascular parkinsonism
Y	secondary PD	24001	F12W.00	28	Secondary parkinsonism due to other external agents
Y	secondary PD	26181	F12X.00	349	Secondary parkinsonism, unspecified
Y	secondary PD	97170	Fyu2100	6	[X]Other secondary parkinsonism
Y	secondary PD	86062	Fyu2200	8	[X]Parkinsonism in diseases classified elsewhere
Y	secondary PD	72879	Fyu2900	7	[X]Secondary parkinsonism, unspecified
Y	drug-induced PD	33544	F121.00	276	Parkinsonism secondary to drugs
Y	drug-induced PD	19478	F121.11	1917	Drug induced parkinsonism
Y	drug-induced PD	5443	F122.00	236	Malignant neuroleptic syndrome
Y	drug-induced PD	105947	Fyu2000	1	[X]Other drug-induced secondary parkinsonism
N		4321	F12..00	36061	Parkinson's disease
N		1691	F120.00	15293	Paralysis agitans
N		14912	F12z.00	2776	Parkinson's disease NOS

Reviewed by [REDACTED] for Drug-induced parkinsonism or secondary Parkinsonism

matching_terms
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review	comments	medcode	read_code	clinical_p
Y	Tremor	10718	297A.00	3216
Y		20242	2944.00	781
Y		18660	2944.11	551
Y		53655	2987.00	56
Y		17004	2987.11	540
Y		59824	2994.00	100
Y		16860	2994.11	522
Y		10795	2994.12	191
Y		7572	F116.00	1130
N		10653	2975.00	2065
N		20102	2977.00	2128
N		31695	1B22.00	3981
N		5912	1B22.11	39385
N		2778	1B22.12	28032
N		53212	297B.00	148
N		6948	F131.00	2260
N		3051	F131000	15756
N		2512	F131100	999
N		52748	F131200	52
N		34349	F131z00	324
N		59082	Fyu2500	13
N		2508	R010300	46132
N		7557	13CD.00	13698
N		2539	13CE.00	49521
N		13133	13CP.00	387
N		1512	1B52.00	6724
N		7417	1B52.11	23823
N		2042	29L8.00	10407
N		2555	29L8.11	2118
N		18963	29LB.00	684
N		93421	29LD.00	1659
N		103567	29LF.00	193
N		6375	N097.00	13317
N		28112	N097z00	151
N		39784	R00A.00	611
N		405	R012.00	25983
N		14714	R012z00	22461
N		21024	R013.00	1126
N		2003	R013.11	1887
N		95777	Ryu3100	6
N		95802	Ryu3200	12
N		94162	Ryu3300	8
N		9638	ZO51.00	912

N		9458	ZV4L000	3884
N		9305	ZV4L011	1356
N		54339	297C.00	10
N		2928	1D12.00	21277
N		74741	2944	0
N		13125	13C..00	87219
N		8490	13c..00	8537
N		44966	13cD.00	75
N		25925	13cE.00	1297
N		97148	13cP.00	692
N		67936	Ryu3000	5
N		45237	Ryu3400	4

Reviewed by [REDACTED] Parkinson's disease sympto

desc	matching_terms
O/E - Parkinsonian tremor	% 297A%
O/E - muscle rigid - cogwheel	% 2944%
O/E - cog wheel rigidity	% 2944%
O/E -Parkinson flexion posture	% 2987%
O/E - Parkinson posture	% 2987%
O/E-festination-Parkinson gait	% 2994%
O/E - Parkinson gait	% 2994%
O/E - festination	% 2994%
Lewy body disease	% F116%
O/E - fine tremor	% 2975%
O/E - intention tremor	% 2977%
Has a tremor	% 1B22%
Tremor symptom	% 1B22%
Shaking	% 1B22%
O/E - tremor outstretched hands	% 297B%
Essential and other specified forms of tremor	% F131%
Benign essential tremor	% F131%
Familial tremor	% F131%
Drug-induced tremor	% F131%
Essential and other specified forms of tremor NOS	% F131%
[X]Other specified forms of tremor	% Fyu25%
[D]Tremor NOS	% R0103%
Mobility very poor	% 13CD%
Mobility poor	% 13CE%
Impaired mobility	% 13CP%
Unsteadiness present	% 1B52%
Feels off balance	% 1B52%
O/E - generally unsteady	% 29L8%
O/E - generally off balance	% 29L8%
Unable to balance	% 29LB%
Disorder of gait and/or balance present	% 29LD%
Worsening balance	% 29LF%
Difficulty in walking	% N097.00%
Difficulty in walking NOS	% N097z%
[D] Poor mobility	% R00A%
[D]Gait abnormality	% R012.00%
[D]Gait abnormality NOS	% R012z%
[D]Lack of coordination	% R013.%
[D]Dyskinesia	% R013.%
[X]Difficulty in walking, not elsewhere classified	% Ryu3%
[X]Other and unspecified abnormalities of gait and mobility	% Ryu3%
[X]Other and unspecified lack of coordination	% Ryu3%
Impaired mobility	% ZO51%

[V]Reduced mobility	% ZV4L0%
[V] Poor mobility	% ZV4L0%
O/E - tremor of tongue	% 297C%
C/O: stiffness	% 1D12%
	% 2944%
Mobility - social functioning	% 13C..00%
Drug user	% 13C..00%
Episodic use of drugs	% 13CD%
Prolonged high dose use of cannabis	% 13CE%
Does not misuse drugs	% 13CP%
[X]Other and unspecified abnormal involuntary movements	% Ryu3%
[X]Oth/unspecif sympt & signs involv nerv/musculosk systems	% Ryu3%

ims (to determine year of PD diagnosis)