Provigil / Nuvigil

Description

Provigil (modafinil) / Nuvigil (armodafinil)

Background

Provigil and Nuvigil are central nervous system stimulants and share the well-known potential for abuse of this class of drugs. The Drug Enforcement Administration (DEA) has rated Provigil and Nuvigil as Schedule IV drugs. Provigil and Nuvigil produce psychoactive and euphoric effects, alterations in mood, perception, thinking and feelings typical of other CNS stimulants. Physicians should follow patients closely, especially those with a history of drug and/or stimulant abuse (1,2).

In obstructive sleep apnea (OSA), Provigil and Nuvigil are indicated as an adjunct to standard treatment(s) for the underlying obstruction. If continuous positive airway pressure (CPAP) is the treatment of choice for a patient, a maximal effort to treat with CPAP for an adequate period of time should be made prior to initiating Provigil. If Provigil is used adjunctively with CPAP, the encouragement of and periodic assessment of CPAP compliance is necessary (1).

A 12-week study of patients with excessive sleepiness (ES) associated with treated sleep apnea (OSA), shift work disorder (SWD), or narcolepsy evaluated the tolerability and efficacy of armodafinil for 12 months. The conclusion of the study was that armodafinil remained effective and was generally well tolerated. Armodafinil represents an option for long-term treatment of patients with ES associated with treated OSA, SWD, or narcolepsy (6).
Additional Evidence-Based Indications

Provigil has been found effective in the treatment of multiple sclerosis fatigue (3). Modafinil is a unique wake-promoting agent that is chemically distinct from traditional stimulants. Results of a placebo-controlled study showed it to significantly improve fatigue and sleepiness and to be well tolerated by patients with multiple sclerosis (MS) (3,4). For MS patients who experience significant fatigue there are several medications that have proven effective in this regard. Modafinil is among the most commonly used medications for fatigue associated with MS and according to expert opinion, is currently a first-line drug for MS patients (5).

Idiopathic hypersomnia, a condition similar to narcolepsy, is characterized by constant or recurrent daytime sleepiness with no other cause of sleepiness, prolonged nocturnal sleep, difficulty awakening with sleep drunkenness, and long unrefreshing naps with no history of cataplexy (7-10). Modafinil has proven effective in treating idiopathic hypersomnia in one case series and several open-label trials (7-10). The practice parameters for the treatment of narcolepsy and other hypersomnias of central origin, updated in 2007, state that modafinil may be effective for the treatment of daytime sleepiness due to idiopathic hypersomnia (11). As there may be underlying causes/behaviors associated with EDS, a sleep specialist physician has the training to correctly recognize and diagnose this condition. While armodafinil has not been studied for this use, expert opinion considers it to be interchangeable with modafinil for this condition (8-11).

Regulatory Status
FDA-approved indication: Provigil and Nuvigil are central nervous system stimulants that are indicated for: Improving wakefulness in adult patients with excessive sleepiness associated with narcolepsy, shift work disorder, and obstructive sleep disorder. Provigil and Nuvigil are also used as an adjunct to standard treatments for the underlying obstruction in OSA.

Related Policies
Amphetamines, dexamphetamine, methylphenidate,
This policy statement applies to clinical review performed for pre-service (Prior Approval, Precertification, Advanced Benefit Determination, etc.) and/or post-service claims.

Nuvigil and Provigil may be considered medically necessary in patients 16 years and older for the treatment of narcolepsy, idiopathic or primary hypersomnia (acute or persistent), multiple sclerosis fatigue, shift work sleep disorder, (SWSD), and excessive sleepiness due to obstructive sleep apnea.

Nuvigil and Provigil may be considered investigational in patients less than 16 years old and for the treatment of any condition other than narcolepsy, idiopathic or primary hypersomnia (acute or persistent), multiple sclerosis fatigue, shift work sleep disorder, (SWSD), and excessive sleepiness due to obstructive sleep apnea.

Prior-Approval Requirements

**Age**
16 years of age or older

**Diagnoses**

Patient must have **ONE** of the following:

1. Narcolepsy
2. Idiopathic or Primary Hypersomnia (acute or persistent)
3. Multiple Sclerosis Fatigue
4. Shift Work Sleep Disorder (SWSD) - Irregular sleep/wake rhythm
5. Excessive sleepiness due to obstructive sleep apnea (OSA)

AND **ONE** of the following:

a. Compliant with other standard OSA treatments (such as CPAP and oral appliances)

b. CPAP therapy is contraindicated

c. Standard OSA treatments found to be ineffective after history of compliant use.

Prior – Approval **Renewal** Requirements

Same as above
Policy Guidelines

Pre - PA Allowance
None

Prior - Approval Limits

Quantity
- Provigil 100mg – 540 tablets per 90 days
- Provigil 200mg – 270 tablets per 90 days

Maximum daily limit of any combination: 600mg

OR
- Nuvigil 50mg – 540 tablets per 90 days
- Nuvigil 150mg – 180 tablets per 90 days
- Nuvigil 200mg – 90 tablets per 90 days
- Nuvigil 250mg – 90 tablets per 90 days

Maximum daily limit of any combination: 300mg

Duration 12 months

Prior – Approval Renewal Limits

Quantity
- Provigil 100mg – 540 tablets per 90 days
- Provigil 200mg – 270 tablets per 90 days

Maximum daily limit of any combination: 600mg

OR
- Nuvigil 50mg – 540 tablets per 90 days
- Nuvigil 150mg – 180 tablets per 90 days
- Nuvigil 200mg – 90 tablets per 90 days
- Nuvigil 250mg – 90 tablets per 90 days

Maximum daily limit of any combination: 300mg

Duration 12 months

Rationale
**Summary**

Provigil and Nuvigil are central nervous system stimulants used to increase wakefulness in adult patients with narcolepsy, shift work sleep disorder and obstructive sleep apnea. The Drug Enforcement Administration (DEA) has rated Provigil and Nuvigil as Schedule IV drugs. Provigil and Nuvigil produce psychoactive and euphoric effects, alterations in mood, perception, thinking and feelings typical of other CNS stimulants and share the potential for abuse. Provigil has been found effective in the treatment of multiple sclerosis fatigue (3), improving wakefulness in adult patients with excessive sleepiness associated with narcolepsy, shift work disorder, and obstructive sleep disorder.

Prior authorization is required to ensure the safe, clinically appropriate and cost effective use of Provigil and Nuvigil while maintaining optimal therapeutic outcomes.

**References**


Policy History

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
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<tbody>
<tr>
<td>May 2009</td>
<td>Addition of Nuvigil (armodafinil), the active ingredient or R-enantiomer of Provigil (modafinil), which is a mixture of the R- and S-enantiomers. Nuvigil shares the same indications as Provigil. The concentration-time profiles of the pure R-enantiomer following administration of 50mg Nuvigil or 100mg Provigil are nearly superimposable. The recommended daily dose of Nuvigil is 150mg or 250mg.</td>
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<tr>
<td>May 2009</td>
<td>PA quantity limits of Provigil 600mg or Nuvigil 300mg per day is recommended to safeguard patient health. There is no consistent evidence that there is any additional benefit beyond that of 200mg Provigil or 150mg Nuvigil per day. However, doses up to Provigil 600 mg per day, given as a single dose or in divided dose, have been well tolerated. Doses of Provigil 800mg per day and above were shown to have higher incidence of side effects with no measurable improvement in symptom relief. Side effects include increased blood pressure and pulse rate (tachycardia). Due to the increased incidence of side effects with the increased dose, a change to the criteria is proposed to safeguard patient health.</td>
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<tr>
<td>October 2009</td>
<td>Addition of quantity limits.</td>
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<tr>
<td>August 2011</td>
<td>Documentation of acceptability of 600mg / day (modafinil). Some studies have shown additional benefit in daily doses greater than 400mg, up to 600mg / day (modafinil).</td>
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<tr>
<td>June 2012</td>
<td>Annual editorial review and reference update</td>
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<tr>
<td>June 2013</td>
<td>Annual editorial review</td>
</tr>
<tr>
<td>February 2014</td>
<td>Addition of maximum mg per day in limits</td>
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<tr>
<td></td>
<td>Reference update</td>
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<td>Addition of new strength of Nuvigil 200mg</td>
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</table>
Section: Prescription Drugs
Subsection: Endocrine and Metabolic Drugs
Subject: Provigil / Nuvigil

Effective Date: July 1, 2013
Original Policy Date: May 1, 2009
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Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on June 12, 2014 and is effective July 1, 2014.

Signature on File
Deborah M. Smith, MD, MPH