

# Drug Policy

<b>Policy:</b>	<b>Nuedexta (dextromethorphan/quinidine)</b>	<b>Annual Review Date:</b> <b>01/18/2024</b>
		<b>Last Revised Date:</b> <b>01/18/2024</b>

## OVERVIEW

Nuedexta, a combination product containing dextromethorphan hydrobromide (DM) and quinidine sulfate, is indicated for the treatment of pseudobulbar affect (PBA). DM is a sigma-1 receptor agonist and an uncompetitive *N*-methyl-D-aspartate (NMDA) receptor antagonist. Quinidine increases plasma levels of DM by competitively inhibiting cytochrome P450 (CYP) 2D6, which catalyzes a major biotransformation pathway for DM. The mechanism by which DM exerts therapeutic effects in patients with PBA is unknown.

## POLICY STATEMENT

This policy involves the use of Nuedexta. Prior authorization is recommended for pharmacy benefit coverage of Nuedexta. Approval is recommended for those who meet the conditions of coverage in the **Criteria and Initial/Extended Approval** for the diagnosis provided. **Conditions Not Recommended for Approval** are listed following the recommended authorization criteria. Requests for uses not listed in this policy will be reviewed for evidence of efficacy and for medical necessity on a case-by-case basis.

Because of the specialized skills required for evaluation and diagnosis of patients treated with Nuedexta as well as the monitoring required for adverse events and long-term efficacy, initial approval requires Nuedexta be prescribed by or in consultation with a physician who specializes in the condition being treated. All approvals for initial therapy are provided for the initial approval duration noted below; if reauthorization is allowed, a response to therapy is required for continuation of therapy unless otherwise noted below.

## RECOMMENDED AUTHORIZATION CRITERIA

Coverage of Nuedexta is recommended in those who meet the following criteria:

### Food and Drug Administration (FDA)-Approved Indications

- 1. Treatment of Pseudobulbar Affect (PBA).** Approve if the patient meets both of the following criteria:
  - a) Patient has PBA associated with a chronic neurological condition (e.g., amyotrophic lateral sclerosis [ALS], multiple sclerosis [MS], stroke, dementia, traumatic brain injury); AND
  - b) Nuedexta is prescribed by or in consultation with a neurologist.

### Initial Approval/ Extended Approval.

**A) Initial Approval:** 90 days (3 months)

**B) Extended Approval:** 365 days (1 year)

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## CONDITIONS NOT RECOMMENDED FOR APPROVAL

Nuedexta has not been shown to be effective, or there are limited or preliminary data or potential safety concerns that are not supportive of general approval for the following conditions. (Note: This is not an exhaustive list of Conditions Not Recommended for Approval).

- 1. Neuropathic Pain.** Limited published data are available in patients (n = 36) with diabetic peripheral neuropathic (DPN) pain (open-label tolerability study). The available study was conducted with the DM 30 mg/quinidine 30 mg formulation, using daily doses up to DM 120 mg/quinidine 120 mg (dose cannot be achieved with Nuedexta capsules). Higher daily doses of DM and quinidine (60 mg/60 mg and 90 mg/60 mg [doses cannot be achieved with Nuedexta capsules]) have also been evaluated in patients with DPN pain (n = 379) in one Phase III, randomized, placebo-controlled 13-week study. Both DM/quinidine treatment groups had significant reductions in mean daily pain scores vs. placebo overall, as well as at Day 30, 60, and 90. More data are needed to define the place in therapy of Nuedexta in the treatment of neuropathic pain.
- 2. Heroin Detoxification.** Limited published data are available in patients undergoing heroin detoxification. The available study was conducted with the DM 30 mg/quinidine 30 mg formulation, using daily doses of DM 60 mg/quinidine 60 mg (dose cannot be achieved with Nuedexta capsules). There were no differences between DM/quinidine and placebo with regard to reducing opioid withdrawal symptoms.
- 3. Levodopa-Induced Dyskinesia in Parkinson's Disease.** A single pilot study demonstrated benefit with dextromethorphan/quinidine for treating levodopa-induced dyskinesia in Parkinson's disease.<sup>12</sup> Larger studies with a longer treatment duration are needed to define the place in therapy for Nuedexta in this condition.
- 4. Psychosis-Related Aggression.** A case series (n = 4) supports dextromethorphan/quinidine as a potential alternative to conventional regimens for treating aggression and impulsive behavior in patients with psychotic disorder.<sup>11</sup> More data are needed to define the place in therapy of Nuedexta in the treatment of psychosis-related aggression.
- 5. Treatment-Resistant Depression.** A Phase II, open-label, proof-of-concept study (n = 20) demonstrated preliminary efficacy for dextromethorphan 45 mg/quinidine 10 mg every 12 hours. This dosing could not be achieved with Nuedexta capsules.<sup>13</sup> Additional data are needed to define the place in therapy for Nuedexta in the treatment of treatment-resistant depression.
- 6.** Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

## Documentation Requirements:

The Company reserves the right to request additional documentation as part of its coverage determination process. The Company may deny reimbursement when it has determined that the drug provided or services performed were not medically necessary, investigational or experimental, not within the scope of benefits afforded to the member and/or a

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pattern of billing or other practice has been found to be either inappropriate or excessive. Additional documentation supporting medical necessity for the services provided must be made available upon request to the Company. Documentation requested may include patient records, test results and/or credentials of the provider ordering or performing a service. The Company also reserves the right to modify, revise, change, apply and interpret this policy at its sole discretion, and the exercise of this discretion shall be final and binding.

## REFERENCES

- Nuedexta [prescribing information]. Aliso Viejo, CA: Avanir Pharmaceuticals, Inc.; January 2016
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- Hammond FM, Alexander DN, Cutler AJ, et al. PRISM II: an open-label study to assess effectiveness of dextromethorphan/quinidine for pseudobulbar affect in patients with dementia, stroke or traumatic brain injury. *BMC Neurology.* 2016;16:89.