POLICY: Botulinum Toxins – Myobloc® (rimabotulinumtoxinB injection – Solstice Neurosciences

DATE REVIEWED: 06/03/2020

OVERVIEW

Myobloc® (rimabotulinumtoxinB) is indicated for the treatment of patients with cervical dystonia to reduce the severity of abnormal head position and neck pain associated with cervical dystonia.[1] It is also indicated for the treatment of chronic sialorrhea. There are published studies and case reports supporting the use of botulinum toxin type B for other medical conditions.

Like the botulinum toxin type A products (Botox® and Botox® Cosmetic [onabotulinumtoxinA], Dysport® [abobotulinumtoxinA]), and Xeomin® [incobotulinumtoxinA]), Myobloc has also been used to treat cosmetic conditions such as glabellar rhytides, crow's feet, and platysmal bands, and it has been used in brow lifts.

Albeit rare, repeated injections of botulinum toxin type A products can lead to the formation of neutralizing antibodies which can result in clinical resistance. It is important to note that the presence of botulinum toxin type A antibodies are not equivalent to clinical nonresponse. Myobloc is antigenically distinct from botulinum toxin type A and, therefore, in some cases may be used as an alternative to botulinum toxin type A in type A-resistant patients.[2] Studies have attempted to establish a conversion ratio between botulinum toxin products, with variable results. In general, conversion ratios of 1:1 for Botox to Xeomin, 1:3 for Botox to Dysport, and 1:50 to 1:100 for Botox to Myobloc have been suggested.[3,4]

Other Uses with Supportive Evidence

Botulinum toxins, including Myobloc, have been studied in a variety of indications outside of FDA-approved uses. Literature is available to support use of Myobloc in the following conditions:

- **Bladder Dysfunction:** Botulinum toxin type B was shown to be effective in improving symptoms of overactive bladder in one small randomized, double-blind, placebo-controlled study (formulation not specified) in patients unresponsive to oral antimuscarinic agents.[5] Oral pharmacologic therapy with antimuscarinic agents is the mainstay of drug therapy in the treatment of overactive bladder.[6,7,]
- **Hyperhidrosis, Palmar or Primary Axillary:** Myobloc was shown to be effective in treating palmar hyperhidrosis in one small, randomized, double-blind, placebo-controlled study and a second prospective, open, single-blind, multicenter study.[8,9,] Botulinum toxin type B was shown to be effective in treating axillary hyperhidrosis in one randomized, double-blind, placebo-controlled trial (using Myobloc) and one small, open-label study (using Neurobloc).[10,11,] There was no significant difference between Botox and Myobloc/Neurobloc in duration of effect in one small comparative study in patients with axillary hyperhidrosis.[12] In a small (n = 10), single-blind, comparative study, botulinum toxin type B (Neurobloc) was significantly more effective than Botox in decreasing sweat weight and area.[13] Topical antiperspirants (e.g., topical aluminum chloride) are recommended first-line therapies for the treatment of primary hyperhidrosis.[14-16,] In the setting of primary axillary hyperhidrosis, Qbrexza, a topical anticholinergic, may also be used first-line.[17] The AAN notes that botulinum toxin therapy is established safe and effective in axillary hyperhidrosis (Level A).[18] AAN guidelines state that botulinum toxins are probably safe and effective and should be considered for palmar hyperhidrosis (Level B).
- **Myofascial Pain:** Myobloc was effective in reducing myofascial pain associated with piriformis syndrome in a small open-label study; 95% of patients reported fair to excellent improvement in pain.[19]

- **Spasticity (i.e., spasticity or hypertonia due to cerebral palsy, stroke, brain injury, spinal cord injury, multiple sclerosis, hemifacial spasm):** Botulinum toxin type B was shown to be effective in reducing spasticity in one open-label study (formulation not specified) in children with spastic or dystonic movement disorders[20] and in a randomized, double-blind, placebo-controlled study (n = 24) in hemiparetic patients with disabling elbow flexor overactivity after stroke or traumatic brain injury.[21] In one small, randomized, double-blind, placebo-controlled study in patients with upper-limb post-stroke spasticity (n = 15), Myobloc reduced spasticity at 2 weeks but was not statistically significant at other follow-up visits.[22] Botulinum toxin type B was shown to be effective in treating hemifacial spasm in one small open-label study (formulation not specified).[23] Per American Academy of Neurology (AAN) guidelines, botulinum toxin is possibly effective and may be considered for hemifacial spasm (Level C).

Dosing Considerations

Definitive dosing has not been established for off-label uses of botulinum toxins, including Myobloc. Recommendations for maximum dosing and frequency for Myobloc are based on a suggested relative conversion of 50:1 between Myobloc and Botox units.**Error! Bookmark not defined.** Specific dosing considerations by indication are noted below. For other indications addressed in this policy, specific dosing guidance is not available. In these cases, dosing is based on the Botox prescribing information, which states not to exceed a total dose of 400 units in a 3-month interval.[24]

- **Bladder Dysfunction:** Botox is indicated for urinary incontinence associated with neurological conditions, up to a maximum dose of 200 units administered not more frequently than once every 12 weeks.[24]
- **Hyperhidrosis, Palmar or Primary Axillary:** Botox is indicated for primary axillary hyperhidrosis at a dose of 50 units per axilla, administered not more frequently than once every 3 months.[24] Dosing is not established for palmar hyperhidrosis, but in general, the Botox prescribing information states not to exceed a total dose of 400 units in a 3-month interval.
- **Spasticity (i.e., spasticity or hypertonia due to cerebral palsy, stroke, brain injury, spinal cord injury, multiple sclerosis, hemifacial spasm):** A maximum dose of 220 units of Dysport for hemifacial spasm is supported.[25] Recommendations for maximum dosing and frequency for Myobloc are based on a suggested relative conversion of 50:1 between Myobloc and Botox units and 3:1 for Dysport to Botox.**Error! Bookmark not defined.**

POLICY STATEMENT

Prior authorization is recommended for medical benefit coverage of Myobloc. Approval is recommended for those who meet the Criteria and Dosing for the listed indication(s). Requests for doses outside the established dosing documented in this policy will be considered on a case-by-case basis by a clinician (i.e., Medical Director or Pharmacist). All approvals are provided for 1 year in duration. In cases where the dosing interval is provided in months, 1 month is equal to 30 days.

Medical benefit coverage is not recommended for cosmetic conditions.

RECOMMENDED AUTHORIZATION CRITERIA

FDA-Approved Indications

1. Cervical Dystonia (spasmodic torticollis). Approve for 1 year.

Dosing. Approve up to a maximum dose of 5,000 units, administered not more frequently than once every 12 weeks.

2. Sialorrhea, Chronic. Approve for 1 year.

Dosing. Approve up to a maximum dose of 3,500 units (1,750 units per side), administered not more frequently than once every 12 weeks.

Other Uses with Supportive Evidence

3. Bladder Dysfunction. Approve for 1 year in patients who meet the following conditions (A and B):
- **A)** Patient has tried at least one other pharmacologic therapy (e.g., oral antimuscarinic agents [for example: oxybutynin, tolterodine tartrate, trospium chloride, Enablex, Toviaz, Vesicare]); AND
- **B)** Myobloc is being prescribed by or after consultation with a urologist.

Dosing. Approve up to a maximum dose of 10,000 units, administered not more frequently than once every12 weeks.

4. Hyperhidrosis, Palmar or Primary Axillary. Approve for 1 year in patients who meet the following conditions (A and B):
- **A)** Patient has tried at least one topical agent (e.g., topical aluminum chloride, Qbrexza™ [glycopyrronium cloth 2.4% for topical use]); AND
- **B)** Patient has tried Botox.

Dosing. Approve the following regimens (A or B):
- **A)** For primary axillary hyperhidrosis: Approve a maximum dose of 2,500 units per axilla, administered not more frequently than once every 3 months.
- **B)** For palmar hyperhidrosis: Approve a maximum dose of 20,000 units, administered not more frequently than once every 3 months.

5. Myofascial Pain. Approve for 1 year.

Dosing. Approve up to a maximum dose of 20,000 units, administered not more frequently than once every 3 months.

6. Spasticity (i.e., spasticity or hypertonia due to cerebral palsy, stroke, brain injury, spinal cord injury, multiple sclerosis, hemifacial spasm). Approve for 1 year.

Dosing. Approve one of the following dosing regimens (A or B):

A) Hemifacial spasm: Approve up to a maximum dose of 4,000 units, administered not more frequently than once every 3 months.

B) All other uses: Approve up to a maximum dose of 20,000 units, administered not more frequently than once every 3 months.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Myobloc 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. **Cosmetic Uses (e.g., facial and/or glabellar rhytides [wrinkles, lines], crow's feet, brow lifts, platysmal bands).** Cosmetic use is not recommended for coverage as this indication is excluded from coverage in a typical medical benefit.

2. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

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HISTORY

Type of Revision	Summary of Changes	Date Reviewed
New policy	--	08/08/2018
Selected revision	Migraine prophylaxis: Change to require verification of specific therapies that have been tried for migraine prophylaxis.	09/19/2018
Selected revision	Dosing updated throughout policy to simplify maximum approved dosing regimens.	12/05/2018
Early annual revision	**Spasticity (i.e., spasticity or hypertonia due to cerebral palsy, stroke, brain injury, spinal cord injury, multiple sclerosis):** Changed to "i.e" (previously written as "e.g.").	05/08/2019
Selected revision	**Sialorrhea (Salivary Hypersecretion), Chronic:** Moved to FDA-approved indications. "Chronic" added for clarification and to align with product labeling. Dosing updated to reflect FDA-labeled dose.	09/04/2019
Annual revision	**Other Uses with Supportive Evidence:** • "Hemifacial Spasm" rolled into the approval condition of "Spasticity". • "Anal Fissure", "Blepharospasm", "Migraine Headache Prophylaxis in Patients with Chronic Migraine", and "Speech/Voice Disorder (spasmodic dysphonias)" removed from policy. **Indications with minor wording changes to align with other policies:** • "Sialorrhea (Salivary Hypersecretion), Chronic" updated to "Sialorrhea, Chronic."	06/03/2020