CERVICAL DYSTONIA PATIENT PROFILE

MEET GWEN*

AGE: 71

HISTORY:

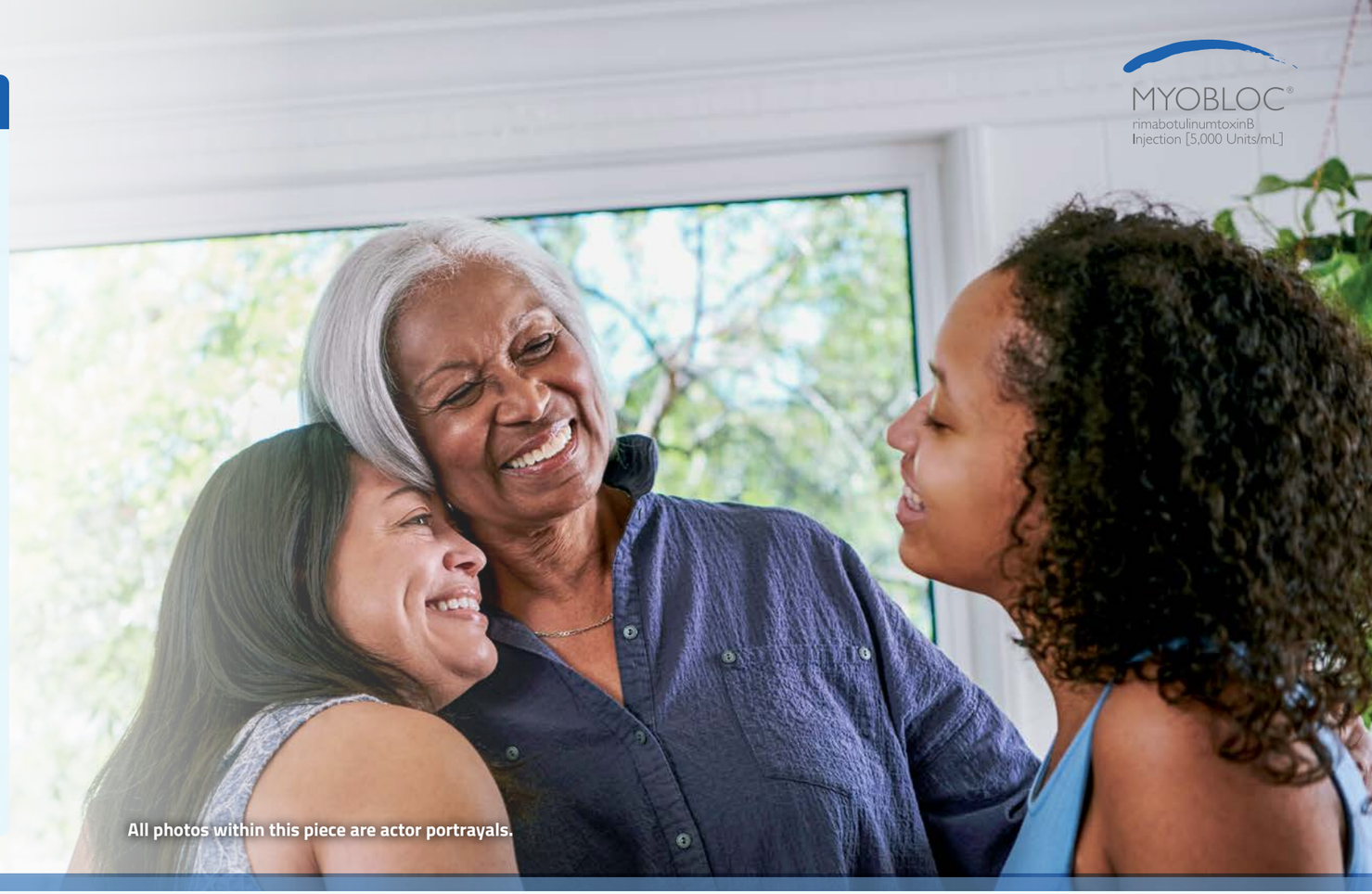
- Active grandmother with suspected degenerative disc disease
- Has been experiencing prolonged idiopathic neck pain and tightness
- PCP referred her to a physical therapist

EXAMINATION:

- Patient complains of tightness and neck pain limiting movement and causing discomfort
- After palpating muscles, physical therapist noted persistent anterocollis

DIAGNOSIS:
Suspected Cervical Dystonia

Do you have adult patients like Gwen in your practice?



All photos within this piece are actor portrayals.

*This is not a real patient. This representation was not designed to reflect efficacy for an individual patient subgroup. Individual results may vary.

INDICATIONS

MYOBLOC® injection is indicated for the treatment of cervical dystonia (CD) to reduce the severity of abnormal head position and neck pain associated with CD in adults

IMPORTANT SAFETY INFORMATION

WARNING: DISTANT SPREAD OF TOXIN EFFECT

See full prescribing information for complete boxed WARNING.

The effects of MYOBLOC® and all botulinum toxin products may spread from the area of injection to produce symptoms consistent with botulinum toxin effects. These symptoms have been reported hours to weeks after injection. Swallowing and breathing difficulties can be life threatening and there have been reports of death. The risk of symptoms is probably greatest in children treated for spasticity but symptoms can also occur in adults, particularly in those patients who have an underlying condition that would predispose them to these symptoms.

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CONTRAINDICATIONS

MYOBLOC is contraindicated in patients with:

- A known hypersensitivity to any botulinum toxin product or to any of the components in the formulation
- Infection at the proposed injection site(s)

WARNINGS AND PRECAUTIONS

- **Lack of Interchangeability Between Botulinum Toxin Products**
  The potency units of MYOBLOC are specific to the preparation and biological activity assay method utilized. Due to differences in the aspects of this assay such as the vehicle, dilution scheme, and laboratory protocols for various potency assays, potency units are not interchangeable with other preparations of botulinum toxin products and, therefore, units of biological activity of MYOBLOC cannot be compared to or converted into units of any other botulinum toxin products assessed with any other specific assay method.
- **Hypersensitivity Reactions**
  Serious hypersensitivity reactions have been reported with botulinum toxin products. Angioedema, urticaria, and rash have occurred with MYOBLOC treatment. Hypersensitivity reactions can also include anaphylaxis, serum sickness, soft tissue edema, and dyspnea. If serious and/or immediate hypersensitivity reactions occur, discontinue further injection of MYOBLOC and institute appropriate medical therapy immediately. The use of MYOBLOC in patients with a known hypersensitivity to any botulinum neurotoxin or to any of the excipients (human albumin, sucrose), could lead to a life-threatening allergic reaction.
- **Dysphagia and Breathing Difficulties**
  Treatment with MYOBLOC and other botulinum toxin products can result in swallowing or breathing difficulties. Patients with pre-existing swallowing or breathing difficulties may be more susceptible to these complications. In most cases, this is a consequence of weakening of muscles in the area of injection that are involved in breathing or swallowing. When distant effects occur, additional respiratory muscles may be involved. Deaths as a complication of severe dysphagia have been reported after treatment with botulinum toxin. Dysphagia may persist for several months and require use of a feeding tube to maintain adequate nutrition and hydration. Aspiration may result from severe dysphagia and is a particular risk when treating patients in whom swallowing or respiratory function is already compromised.
  - **Cervical Dystonia:** Treatment of cervical dystonia with botulinum toxins may weaken neck muscles that serve as accessory muscles of ventilation. This may result in a critical loss of breathing capacity in patients with respiratory disorders who may have become dependent upon these accessory muscles. There have been postmarketing reports of serious breathing difficulties, including respiratory failure, in cervical dystonia patients. Patients treated with botulinum toxin may require immediate medical attention should they develop problems with swallowing, speech or respiratory disorders. These reactions can occur within hours to weeks after injection with botulinum toxin.
  - **Pre-Existing Neuromuscular Disorders:** Individuals with peripheral motor neuropathic diseases, amyotrophic lateral sclerosis, or neuromuscular junctional disorders (e.g., myasthenia gravis or Lambert-Eaton syndrome) should be monitored particularly closely when given botulinum toxin. Patients with neuromuscular disorders may be at increased risk of clinically significant effects including severe dysphagia and respiratory compromise from typical doses of MYOBLOC.
- **Human Albumin and Transmission of Viral Diseases**
  This product contains albumin, a derivative of human blood. Based on effective donor screening and product manufacturing processes, it carries an extremely remote risk for transmission of viral diseases and variant Creutzfeldt-Jakob disease (vCJD). There is a theoretical risk for transmission of Creutzfeldt-Jakob disease (CJD), but if that risk actually exists, the risk of transmission would be considered extremely remote. No cases of transmission of viral diseases, CJD, or vCJD have ever been identified for licensed albumin or albumin contained in other licensed products.

MOST COMMON ADVERSE REACTIONS (>5% of patients and >5% more than placebo)

Cervical Dystonia: dry mouth, dysphagia, injection site pain, headache

DRUG INTERACTIONS

Aminoglycosides and Other Agents Interfering with Neuromuscular Transmission: Co-administration of MYOBLOC and aminoglycosides or other agents interfering with neuromuscular transmission (e.g., curare-like compounds) should only be performed with caution as the effect of the toxin may be potentiated. **Anticholinergic Drugs:** Use of anticholinergic drugs after administration of MYOBLOC may potentiate systemic anticholinergic effects. **Other Botulinum Neurotoxin Products:** The effect of administering different botulinum toxin products at the same time or within several months of each other is unknown. Excessive neuromuscular weakness may be exacerbated by administration of another botulinum toxin prior to the resolution of the effects of a previously administered botulinum toxin. **Muscle Relaxants:** Excessive weakness may also be exaggerated by administration of a muscle relaxant before or after administration of MYOBLOC.

Please refer to the full Prescribing Information.

MY Focus: To find a botulinum toxin injection to help patients like Gwen

TREATMENT DILEMMA: CERVICAL DYSTONIA IS OFTEN UNDERRECOGNIZED[1]

In one survey, 43% of people with CD had visited 4 or more physicians before a diagnosis of CD was made[2]

The average time from symptom onset to diagnosis[1]

- Patients with mild symptoms may not seek medical advice[3]
- Patients see ~3 providers before being correctly diagnosed[1]
- More common conditions are often suspected or diagnosed instead of CD, at least initially[3]

By recognizing characteristic clinical features, an informed provider can make a more rapid diagnosis.

Please refer to the full Prescribing Information including Boxed WARNING, and additional Important Safety Information on second page.

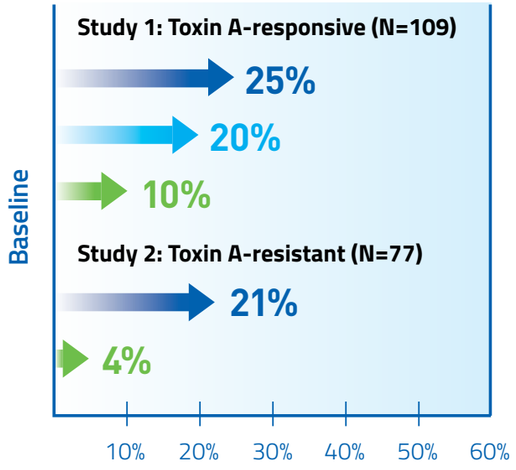
MY Goal: A treatment that works for Gwen and similar patients in my practice

MYOBLOC®
rimabotulinumtoxinB
Injection [5,000 Units/mL]

SIGNIFICANT IMPROVEMENT OF TWSTRS-TOTAL SCORE AT WEEK 4[4-6]

Primary endpoint

TWSTRS-total scores: % improvement from baseline at Week 4



At Week 4 in both Toxin A-responsive and Toxin A-resistant patients, MYOBLOC significantly improved TWSTRS-total score:

- Mean change from baseline was 4.3 and 2 for placebo (Study 1 and Study 2, respectively); 9.3* for 5,000 U (Study 1), and 11.7* and 11.1* for 10,000 U (Study 1 and Study 2, respectively)

Tertiary endpoint

TWSTRS-pain scores: MYOBLOC provided significant pain reduction for both Toxin A-responsive and Toxin A-resistant patients at Week 4

- Study 1, Week 4: Placebo 0.5; 5,000 U 3.6†; 10,000 U 4.2.†
- Study 2, Week 4: Placebo 0.2; 10,000 U 3.6.†

*P<0.05 vs. placebo. †P<0.005 vs. placebo.

Study 1 was a randomized, double-blind, multicenter, placebo-controlled, 16-week trial to determine the safety and efficacy of MYOBLOC in patients with CD who were responsive to Toxin Type A; 109 patients enrolled across 3 dose arms: MYOBLOC 5,000 U (n=36) or 10,000 U (n=37) vs. placebo (n=36). **Study 2** was a randomized, double-blind, multicenter, placebo-controlled, 16-week trial to determine the safety and efficacy of MYOBLOC in patients with CD who were resistant to Toxin Type A; 77 patients enrolled across 2 dose arms: MYOBLOC 10,000 U (n=39) vs. placebo (n=36).

Abbreviation: TWSTRS, Toronto Western Spasmodic Torticollis Rating Scale.

DEMONSTRATED TOLERABILITY

Studies 1, 2, and 4

Most commonly reported adverse reactions in >5% of MYOBLOC-treated patients at any dose and >5% more common than placebo[4]

Adverse Reaction	MYOBLOC (%)			PLACEBO (%)
	2,500 U (N=31)	5,000 U (N=67)	10,000 U (N=67)	(N=106)
Dry mouth	3	12	34	3
Dysphagia	16	10	25	3
Injection-site pain	16	12	15	9
Headache	10	16	11	8

Study 4 was a randomized, double-blind, multicenter, placebo-controlled, 16-week trial to determine the safety and efficacy of MYOBLOC in both Toxin A-responsive and Toxin A-resistant patients with CD; 122 patients enrolled across 4 dose arms: 2,500 Units (n=31), 5,000 Units (n=31), or 10,000 Units (n=30) vs. placebo (n=30).

IMPORTANT SAFETY INFORMATION (cont'd)

CONTRAINDICATIONS

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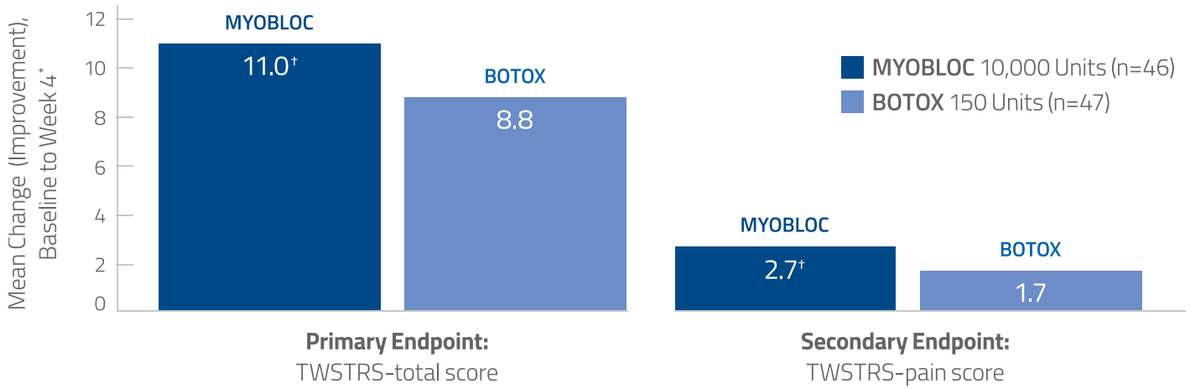
MY Goal: A treatment that works for Gwen and similar patients in my practice (cont'd)

MYOBLOC®
rimabotulinumtoxinB
Injection [5,000 Units/mL]

PROVEN TREATMENT FOR CERVICAL DYSTONIA

Non-inferiority of MYOBLOC vs. BOTOX was established in a head-to-head study[7]



*Per-protocol population.
†Not statistically significant.

Study 402: A randomized, double-blind, multicenter, noninferiority trial (N=93) comparing the efficacy, safety, and duration of effect of BOTOX with MYOBLOC in toxin-naïve patients with CD.[6] Two dose arms were studied: BOTOX 150 Units (n=47) or MYOBLOC 10,000 Units (n=46).

IMPORTANT SAFETY INFORMATION (cont'd)

WARNINGS AND PRECAUTIONS

- **Hypersensitivity Reactions**

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SAFETY PROFILE COMPARABLE TO BOTOX‡,7

Event	TREATMENT		
	BOTOX (N=55) n (%)	MYOBLOC (N=56) n (%)	*P* value
Total adverse events	26 (47.3)	37 (66.1)	0.06
Treatment-related adverse events	16 (29.1)	29 (51.8)	0.02
Serious adverse events	2 (3.6)	1 (1.8)	0.62
Dysphagia‡ (total)	8 (14.5)	9 (16.1)	1.00
Dry mouth‡			
Mild dry mouth	3 (5.5)	18 (32.1)	0.0005
Moderate/severe dry mouth	1 (1.8)	4 (7.1)	0.36
Injection-site pain‡ (total)	3 (5.5)	0 (0.0)	0.12

ADDITIONAL DATA:

No significant difference in serious adverse events.

Mild dry mouth was increased with MYOBLOC.

Dysphagia, moderate/severe dry mouth, and injection-site pain were similar to BOTOX.

‡Categories of interest have been defined as "dry mouth," "dysphagia," and "injection-site pain" because they represent frequent adverse events that have been associated with both botulinum toxin serotypes; treatment-related incidence is the same as overall incidence for these events. No other treatment-related adverse events occurred in >10% in either BOTOX or MYOBLOC in the intent-to-treat population.

See all the clinical efficacy data to support using MYOBLOC to treat cervical dystonia here.

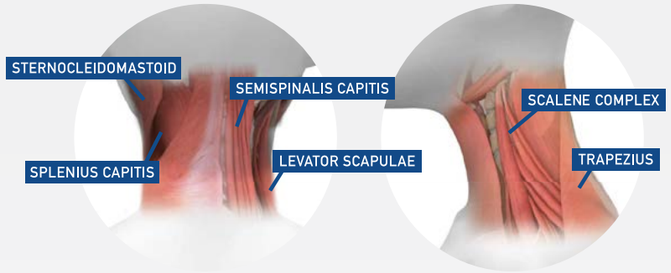
Please refer to the full Prescribing Information including Boxed WARNING, and additional Important Safety Information on second page.

MY Criteria: A treatment option with demonstrated tolerability

MYOBLOC®
rimabotulinumtoxinB
Injection [5,000 Units/mL]

DOSING AND ADMINISTRATION

TOTAL DOSE DIVIDED AMONG 2 TO 4 AFFECTED MUSCLES[4]



Muscle	Starting Dose Range	Undiluted Volume
LEVATOR SCAPULAE	1,000 – 2,500 Units	0.2 – 0.5 mL
SCALENE COMPLEX	500 – 1,000 Units	0.1 – 0.2 mL
SEMISPINALIS CAPITIS	1,000 – 2,500 Units	0.2 – 0.5 mL
SPLENIUS CAPITIS	1,000 – 2,500 Units	0.2 – 0.5 mL
STERNOCLEIDOMASTOID	1,000 – 2,500 Units	0.2 – 0.5 mL
TRAPEZIUS	1,000 – 2,500 Units	0.2 – 0.5 mL

READY TO USE AND REQUIRES NO MIXING[4]

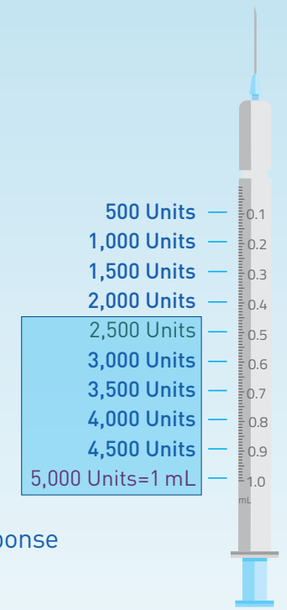
Dosing Considerations

- Cervical dystonia symptom severity
- Risk of swallowing or breathing difficulties in patients with neuromuscular disorders[4]
- Patient weight and muscle bulk

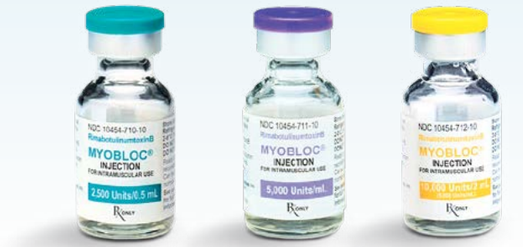
Dosing Recommendations

Recommended initial total dose divided among affected muscles[4]:

- Patients with a prior history of tolerating botulinum toxin injections is 2,500 to 5,000 Units
- Patients without a prior history of tolerating botulinum toxin injections should receive a lower initial dose
- Subsequent dosing should be optimized according to the patient's response



3 single-dose vial sizes for single-patient use



2,500 Units/0.5 mL 5,000 Units/1 mL 10,000 Units/2 mL

To sign up for MYOBLOC injection training, visit MYOBLOCHCP.com.

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MYOBLOC®
rimabotulinumtoxinB
Injection [5,000 Units/mL]

MY PATIENTS.
MY CHOICE.
MYOBLOC.

IF YOU HAVE ADULT PATIENTS LIKE GWEN YOU THINK MAY BENEFIT FROM MYOBLOC, CLICK HERE FOR EASY ORDERING.

LEARN MORE ABOUT MYOBLOC, DOWNLOAD ADDITIONAL RESOURCES, OR REQUEST A SUPERNUS REPRESENTATIVE AT MYOBLOC.COM/GWEN.

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References:

1. Tiderington E, Goodman EM, Rosen AR, et al. How long does it take to diagnose cervical dystonia? *J Neurol Sci.* 2013;335(1-2):72-74. **2.** Jankovic J, Tsui J, Bergeron C. Prevalence of cervical dystonia and spasmodic torticollis in the United States general population. *Parkinsonism Relat Disord.* 2007;13(7):411-416. **3.** Lalli S, Albanese A. The diagnostic challenge of primary dystonia: evidence from misdiagnosis. *Mov Disord.* 2010;25(11):1619-1626. **4.** MYOBLOC. Prescribing Information. Solstice Neurosciences, LLC. **5.** Brashear A, Lew MF, Dykstra DD, et al. Safety and efficacy of NeuroBloc (botulinum toxin type B) in type A-responsive cervical dystonia. *Neurology.* 1999;53(7):1439-1446. **6.** Brin MF, Lew MF, Adler CH, et al. Safety and efficacy of NeuroBloc (botulinum toxin type B) in type A-resistant cervical dystonia. *Neurology.* 1999;53(7):1431-1438. **7.** Pappert EJ, Germanson T. NeuroBloc botulinum toxin type B vs type A in toxin-naïve patients with cervical dystonia: randomized, double-blind, noninferiority trial. *Mov Disord.* 2008;23(4):510-517.

Supernus® Pharmaceuticals

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