

BIOS 667 Group Project

Lily Bai

Nathalie Blasco

Yihao Peng

Lauren Rackley

Sirui Wu

2025-11-10

week	site	id	treat	age	sex	twstrs
0	1	1	2	65	1	32
2	1	1	2	65	1	30
4	1	1	2	65	1	24
8	1	1	2	65	1	37
12	1	1	2	65	1	39
16	1	1	2	65	1	36

Table 1: Patient Characteristics at Baseline

Characteristic	BotB			p-value
	Placebo N = 36	5000U N = 36	10000U N = 37	
Sex				0.0706
Female	21 (58%)	18 (50%)	28 (76%)	
Male	15 (42%)	18 (50%)	9 (24%)	
Age (years)				0.6198
No. obs.	36	36	37	
Mean (SD)	54 (12)	57 (12)	56 (12)	
Median	56	57	54	
Min, Max	26, 79	35, 83	34, 76	
TWSTRS total score at baseline				0.3307
Mean (SD)	44 (9)	46 (10)	47 (10)	

¹ n (%)

² BotB = botulinum toxin type B; TWSTRS = Toronto Western Spasmodic Torticollis Rating Scale.

³ Pearson's Chi-squared test; Kruskal-Wallis rank sum test

Introduction

The purpose of this project is to examine the effects of botulism toxin type B (BotB) to treat cervical dystonia over time. The data comes from a multicenter randomized clinical trial for cervical dystonia patients with 9 U.S. sites. The treatment groups included in the study were placebo, 5000U BotB, and 10000U BotB. The response variable is Toronto Western Spasmodic Torticollis Rating Scale (TWSTRS). The TWSTRS score was measured at week 0 (baseline), and 2,4,6,8,12, and 16 weeks after treatment start.

Methods

References