

# BIOS 667 Group Project

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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	Overall N = 109	Placebo N = 36	BotB		p-value
			5000U N = 36	10000U N = 37	
Sex					0.0706
Female	67 (61%)	21 (58%)	18 (50%)	28 (76%)	
Male	42 (39%)	15 (42%)	18 (50%)	9 (24%)	
Age (years)					0.6198
No. obs.	109	36	36	37	
Mean (SD)	56 (12)	54 (12)	57 (12)	56 (12)	
Median	56	56	57	54	
Min, Max	26, 83	26, 79	35, 83	34, 76	
TWSTRS total score at baseline					0.3307
Mean (SD)	46 (10)	44 (9)	46 (10)	47 (10)	

<sup>1</sup> n (%)

<sup>2</sup> Pearson's Chi-squared test; Kruskal-Wallis rank sum test

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

## Introduction

The purpose of this project is to examine the effects of botulinum 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.

Table 2. TWSTRS scores for 109 patients with CD at weeks 2,4,8,12,16

<b>ID</b>	<b>Group</b>	<b>Age</b>	<b>Sex</b>	<b>Week 2</b>	<b>Week 4</b>	<b>Week 8</b>	<b>Week 12</b>	<b>Week 16</b>
1	5000U	65	Female	30	24	37	39	36
2	10000U	70	Female	26	27	41	65	67
3	5000U	64	Female	20	23	26	35	35
4	Placebo	59	Female	61	64	62		
5	10000U	76	Female	35	48	49	41	51
6	10000U	59	Female	34	43	48	48	51
7	5000U	72	Male	32	32	43	42	46
8	Placebo	40	Male	33	21	27	32	38
9	5000U	52	Female	32	34	35	37	36
10	Placebo	47	Male	10	31	32	6	14

**Methods**

**References**