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Introduction

Albuterol was selected because it is one of the most common drugs prescribed for the treatment of COPD and its symptoms. 300 tweets were randomly collected as a sample on 02/20/2017 with tweets dating between 01/01/2017 and 02/20/2017.

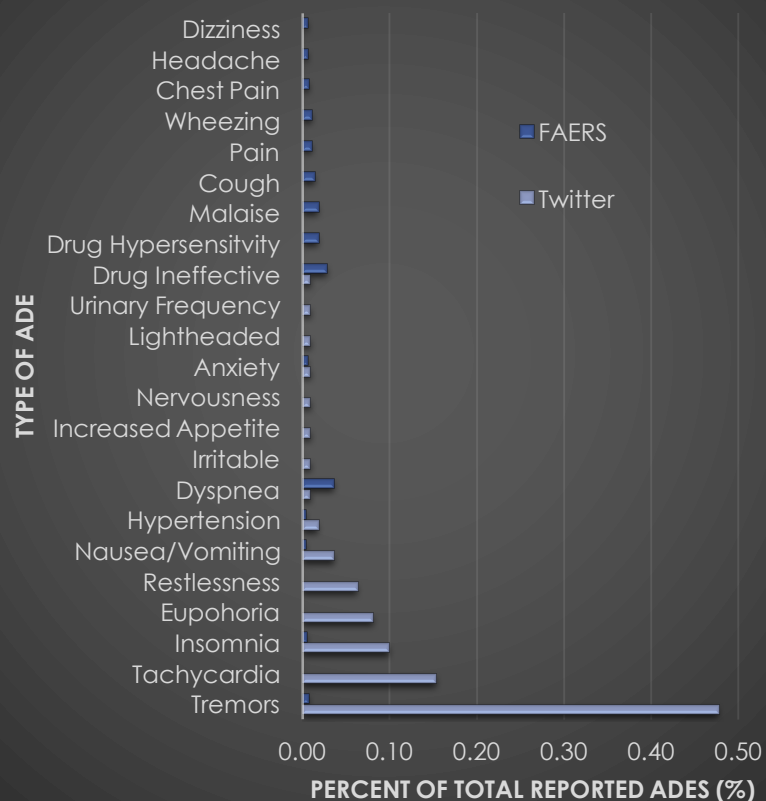
Twitter Data

- 84/300 tweets stated at least 1 adverse effect (28%)
- 111 adverse events were reported
 - 20 tweets stated 2 or more adverse events

Top 15 Twitter ADE's Reported

Event	Number of Events
Tremors	53
Tachycardia	17
Insomnia	11
Euphoria	9
Restlessness	7
Nausea/Vomiting	4
Hypertension	2
Dyspnea	1
Irritable	1
Increased Appetite	1
Nervousness	1
Anxiety	1
Lightheaded	1
Urinary Frequency	1
Drug Ineffective	1

Comparison of Top 15 ADEs Reported Twitter vs. FAERS



FAERS Data

Of 861 entries on FAERS for Albuterol, there were 2,949 adverse drug events reported.

Top 15 FAERS ADE's Reported

Event	Number of Events
Dyspnea	108
Drug Ineffective	84
Drug Hypersensitivity	56
Malaise	54
Cough	43
Pain	34
Wheezing	32
Chest Pain	23
Tremor	21
Headache	19
Anxiety	17
Dizziness	17
Insomnia	15
Vomiting	13
Hypertension	12

Conclusion

- Many of the ADEs reported from FAERS were not reported on Twitter.
- In comparing the two data sources, it is interesting that the more reliable data source did not have the most reported Twitter effect ranked higher.
- Due to the limited data collected on Twitter, the percentages varied greatly among the two sources, making it difficult to truly compare the results.