**OBJECTIVE**

Can visualization and temporal network analysis predict therapeutic and safety related issues in medical products and procedures from the automated analysis of large amounts of structured and unstructured data from diverse data sources including social media?

**DATA SOURCES**

- **Epilepsy.com** 5353
- **Epilepsyfoundation.com** 8853
- **VNSmessageboard.com** 13115
- **Healthyplace.com** 11272
- **PUBMED** 2180
- **MAUDE** 17152
- **TOTAL** 57726

**Correlation on Clusters**

- **PubMed**
  - 1964 and 2012
  - 2181 Abstracts
  - 78 unique Labeled AE terms were identified for a total of 2312 counts

- **FDA**
  - 1994 and 2012
  - 13,878 unique reports related to the product of interest.
  - 89 Labeled AE terms were identified for 10417 counts.
  - 55 reports contained 10 or more Labeled AE’s.

- **Correlation**
  - 2008 to November 2012
  - 24,998 documents were processed
  - 4243 authors
  - 15,621 AE’s identified