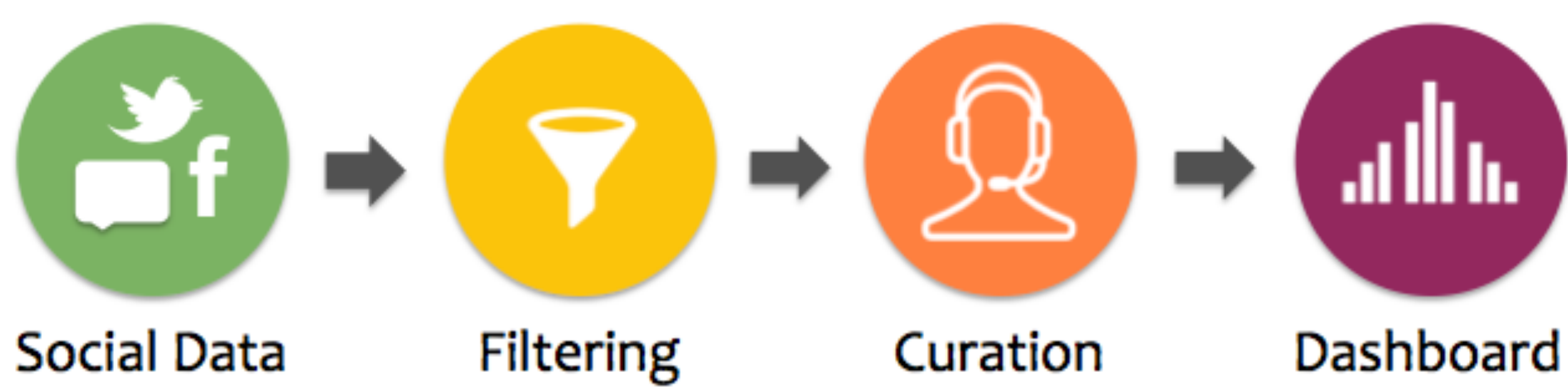


Background: Social media and online health forums provide patients with a platform for sharing experiences with medical products. Natural language processing and machine learning algorithms can be used to acquire public posts, filter out noise, and classify patient discussions for insights into product safety.

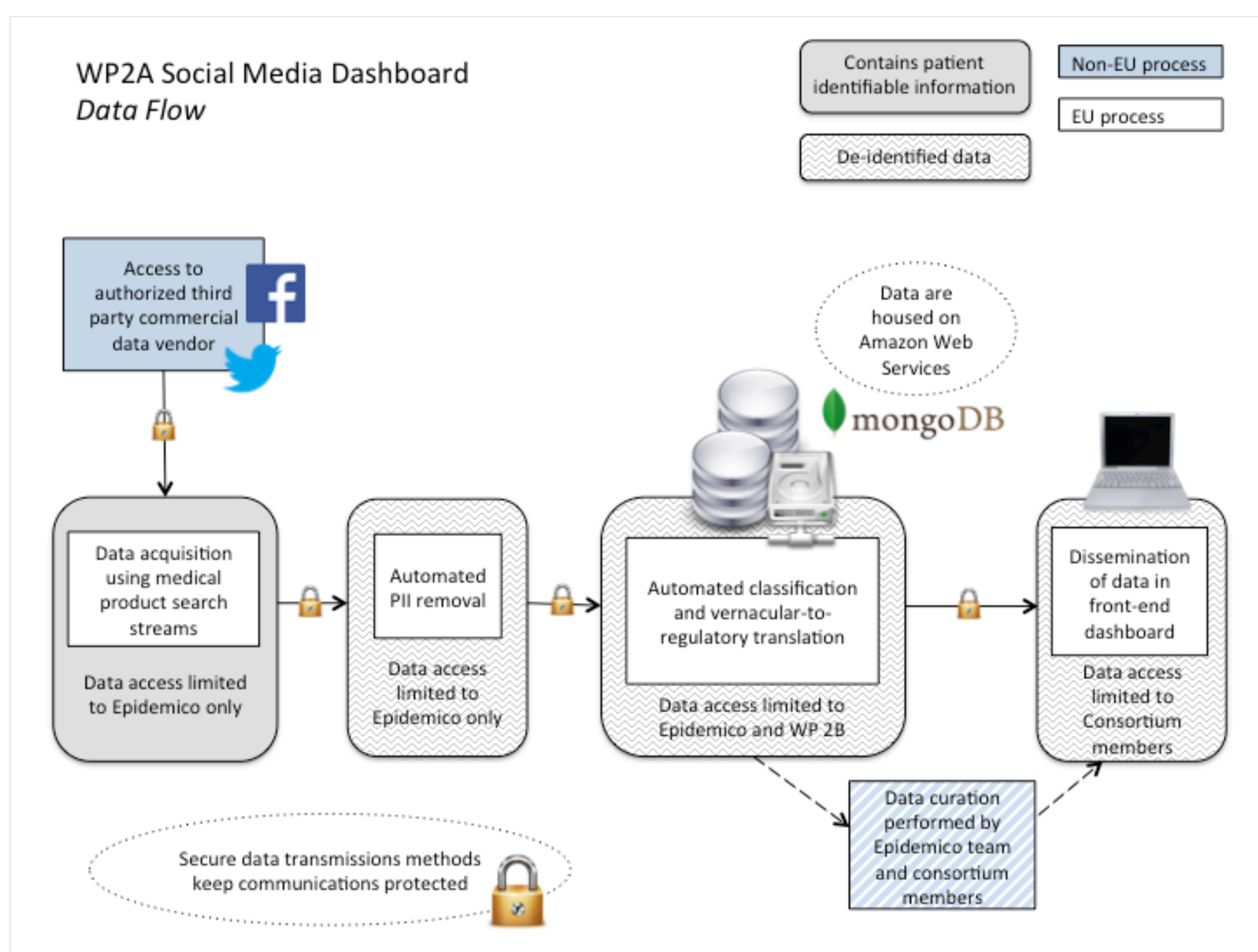
Objective: To provide access to classified social media data via a visualization platform for signal identification and/or confirmation.

Partners: Astra-Zeneca, EMA, Epidemico, EURORDIS, JNJ, MHRA, Novartis, Sanofi, SRDC, UCB

BACK END DATA FLOW

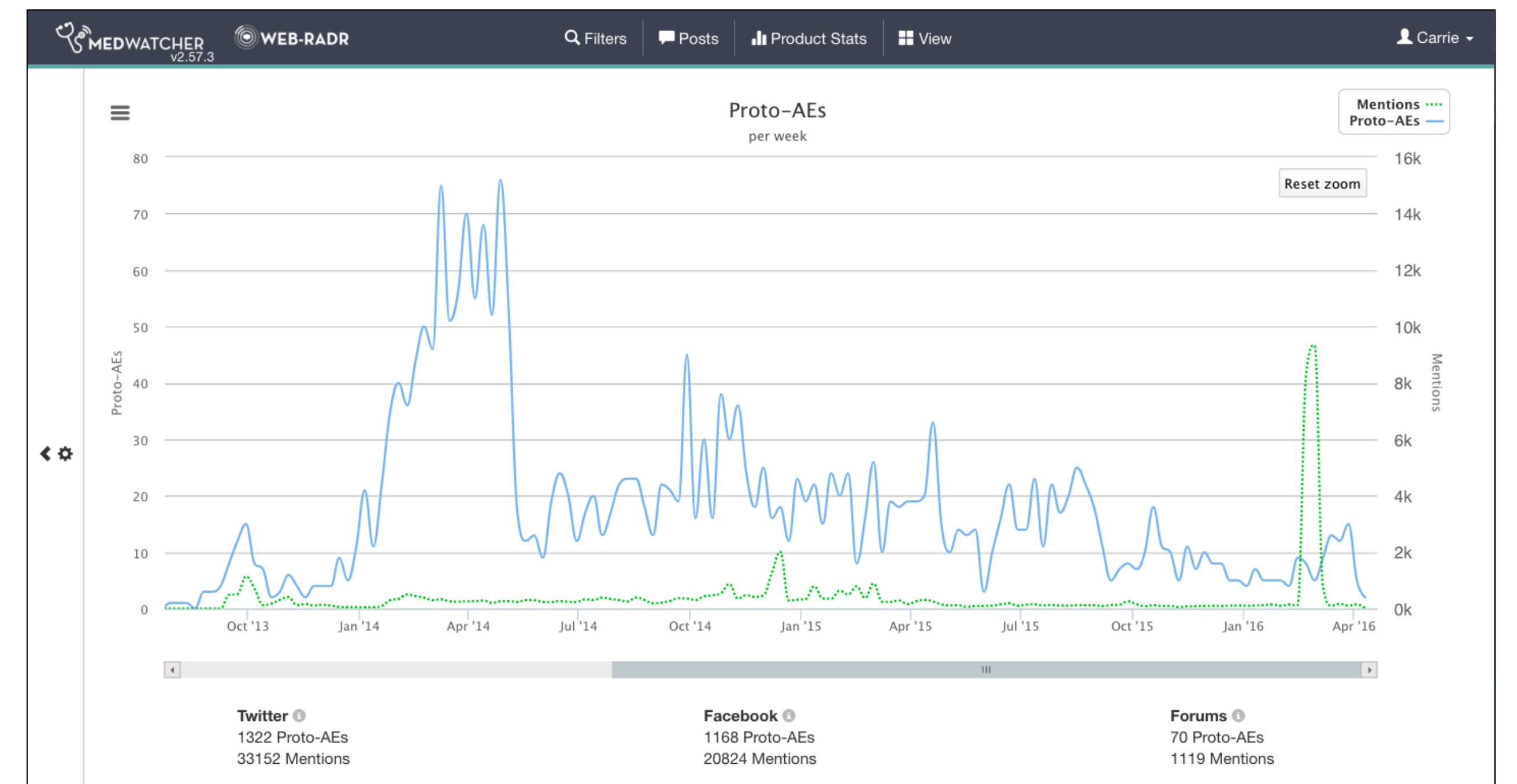


- Acquire relevant public posts on Twitter and Facebook for list of 118 products contributed by EFPIA partners
- Classify and visualize “Posts with Resemblance to an Adverse Event” (Proto-AEs) on interactive dashboard
- Interpret social media discussions in English, Spanish and French
 - Product & symptom vernacular-to-regulatory translation: slang, typos, variations tagged to standardized brand/generic names and MedDRA v18 Preferred Terms
- Remove duplicates and personally identifiable information
- Disseminate data to <http://webradr.medwatcher.org>

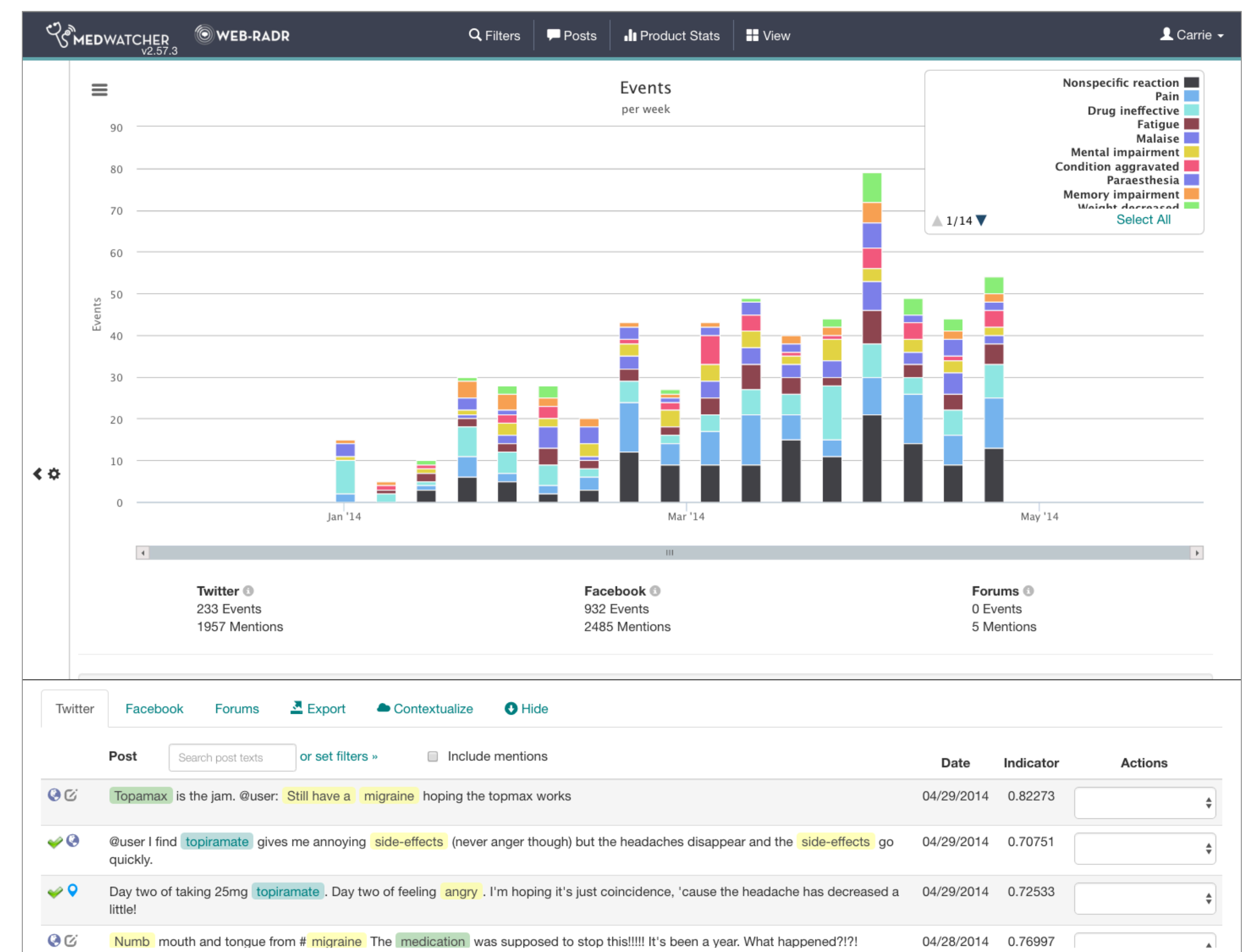


FRONT-END INTERFACE

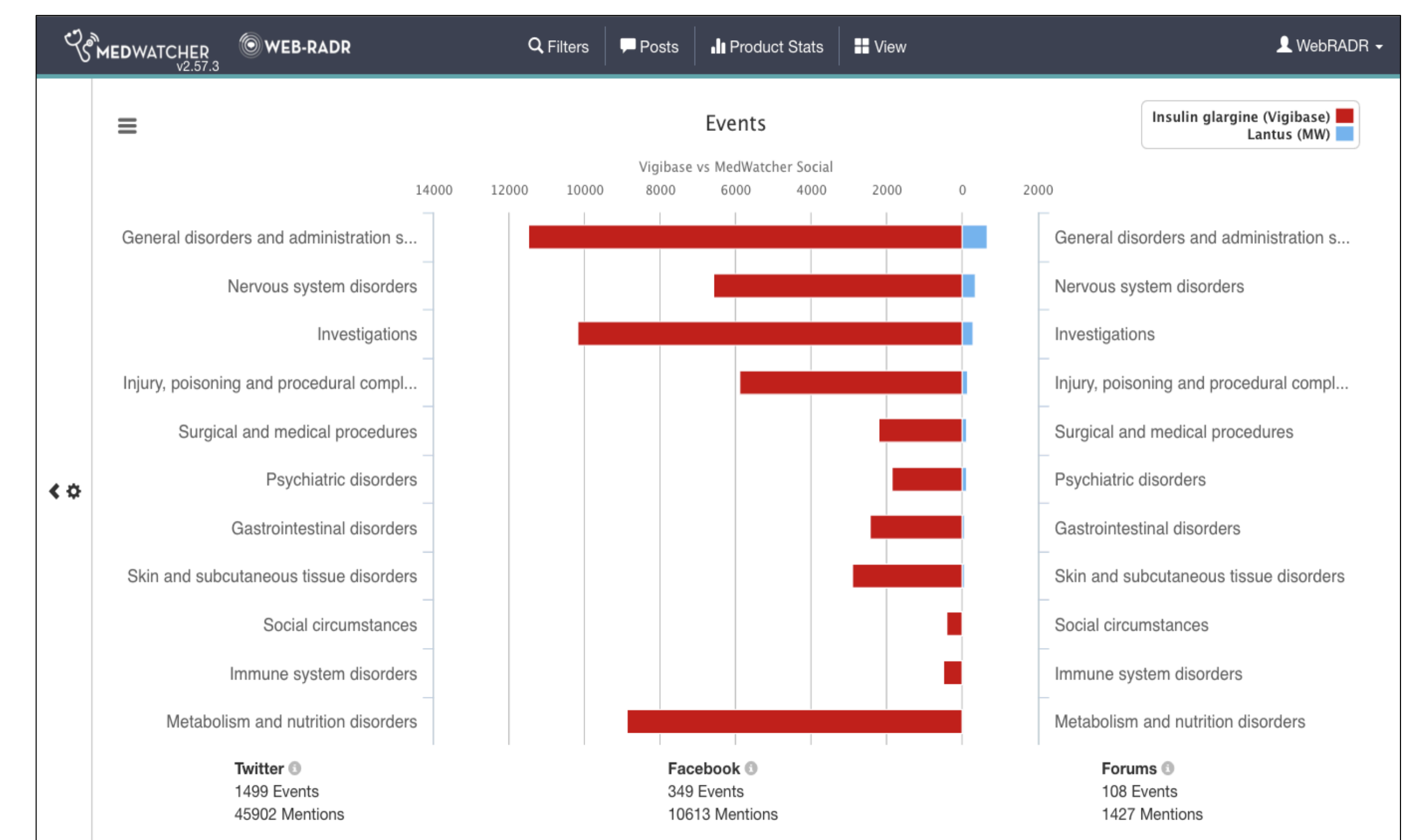
- The interactive dashboard is updated with data in real time to display time trends, stratification by data source, and events of interest at various MedDRA hierarchy levels



- Users can also drill down to view de-identified, original post content to understand how events are described



- Data from UMC’s vigiBase is juxtaposed with social data for contextual and comparison purposes.



DATA COLLECTION

- Over the course of the WEB-RADR project, over 1.6 million Twitter and Facebook posts have been collected – about 1% of which are Proto-AEs. These data have been provided to WEB-RADR WP2B and WP4 for evaluation.

