

Journal: Drug Safety

Optimizing Signal Management in a Vaccine Adverse Event Reporting System: A Proof-of-Concept with COVID-19 Vaccines Using Signs, Symptoms, and Natural Language Processing

Guojun Dong¹, Andrew Bate^{2,3}, François Haguinet², Gabriel Westman⁴, Luise Dürlich^{5,6}, Anders Hviid^{1,7}, Maurizio Sessa¹

¹ Department of Drug Design and Pharmacology, University of Copenhagen, Copenhagen, Denmark

² Global Safety, GSK, Brentford, UK.

³ Department of Non- Communicable Disease Epidemiology, London School of Hygiene and Tropical Medicine, London, UK.

⁴ Department of Medical Sciences, Uppsala University, Uppsala, Sweden.

⁵ Department of Linguistics and Philology, Uppsala University, Uppsala, Sweden.

⁶ Department of Computer Science, RISE Research Institutes of Sweden, Kista, Sweden.

⁷ Department of Epidemiology Research, Statens Serum Institut, Copenhagen, Denmark.

Corresponding author:

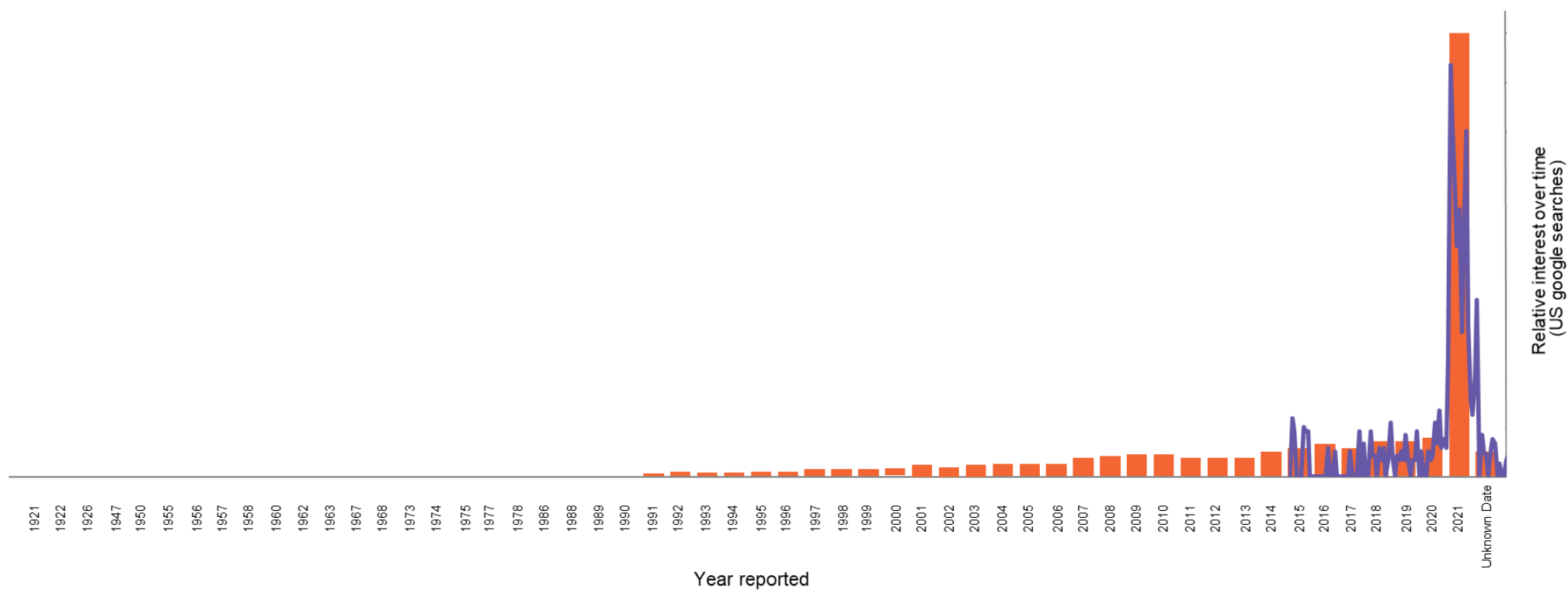
Maurizio Sessa, MPharm, PhD

Department of Drug Design and Pharmacology,

University of Copenhagen,

Jagtvej 160 Copenhagen 2100, Denmark

Email: maurizio.sessa@sund.ku.dk



Online Resource 1. The trends in Individual Case Safety Reports (ICSRs) within VAERS, juxtaposed with Google Trends data reflecting U.S. search activity related to the Vaccine Adverse Event Reporting System. Data for the Google Trends portion were retrieved on May 24, 2023, from trends.google.com. Acknowledgement: Harry Seifert..