Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Spotlight on Special Topics

COVID-19 VACCINES AND ATRIAL FIBRILLATION RISK: A PHARMACOVIGILANCE ANALYSIS

Moderated Poster Contributions
Special Topics Moderated Poster Theater_Hall C
Sunday, April 3, 2022, 3:30 p.m.-3:40 p.m.

Session Title: COVID-19 Vaccines: The Good, the Bad and the Ugly!
Abstract Category: 61. Spotlight on Special Topics: Coronavirus Disease (COVID-19)
Presentation Number: 1096-03

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Background: The COVID-19 vaccines were developed in record times and have proven to be safe and efficacious in reducing transmissibility and severe infection. As these vaccines are new, there is a need for understanding potential adverse effects (AE) and to take appropriate measures to reduce untoward disease burden.

Methods: The FDA Adverse Event Reporting System (FAERS) is a publicly available database that collects AE reports for drugs and therapeutic biological products from around the world. This database was used to search for atrial fibrillation (AF) reported as an AE with the use of Moderna, Pfizer, Johnson & Johnson, AstraZeneca, and Influenza virus vaccines. The Proportional Reporting Ratio (PRR) was used to detect disproportionate reporting of AF amongst the various COVID vaccines and Influenza virus vaccine.

Results: The percentages of all reported AE attributable to AF were: Pfizer 2.6%, Moderna 1.8%, AstraZeneca 0.6 %, Influenza virus vaccine 0.4%. The PRR for reported AF events was highest with Pfizer (4.19, p<0.001), followed by Moderna (2.38, p=0.01), AstraZeneca (0.73, p=0.26) and Influenza virus vaccine (0.3, p<0.001). Among all drugs reported to FAERS, the PRR for total AE attributable to AF with Pfizer was 7.7. There were no AF events reported with Johnson & Johnson vaccine.

Conclusion: Reported data shows a possible correlation between the Pfizer COVID vaccine and AF. Further studies are indicated to better understand this correlation, and its effect on cardiovascular disease burden.