

COVID-19 VACCINES: ADVERSE EVENTS AFTER A SECOND DOSE OF PFIZER OR ASTRAZENECA VACCINES IN HEALTHCARE WORKERS WHO RECEIVED A FIRST DOSE OF ASTRAZENECA VACCINE

R. ANDRADE¹, D. MENDES², M. LOBO ALVES¹, M. FALCÃO², P. CAVACO¹, J. SOARES¹, E. VIEGAS¹, H. FARINHA^{2,4}, F. FALCÃO^{3,4}.

¹ Pharmacy HSFX-CHLO; ² Pharmacy HEM-CHLO; ³ Pharmacy Department CHLO; ⁴ Faculty of Pharmacy - UNIVERSITY OF LISBON

Abstract number: 5PSQ-074 ATC code: 4. Historical research

Background and importance

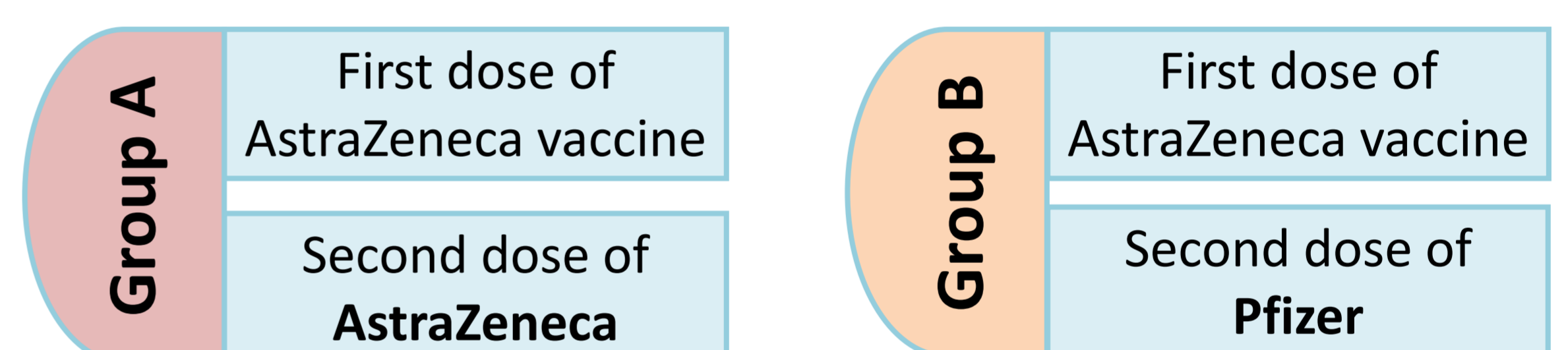
The COVID-19 vaccines have shown excellent safety and efficacy profile. Healthcare workers (HCW), a priority group for vaccination in Portugal, were probably the firsts receiving mixed vaccines for COVID-19. A previous study reported more adverse events (AE) after using two different COVID-19 vaccines in 50 years and older adults. To our knowledge, there's no data about younger individuals.

Aim and objectives

To identify and compare self-reported AE after second dose of Pfizer or AstraZeneca vaccines in HCW who received first dose of AstraZeneca vaccine.

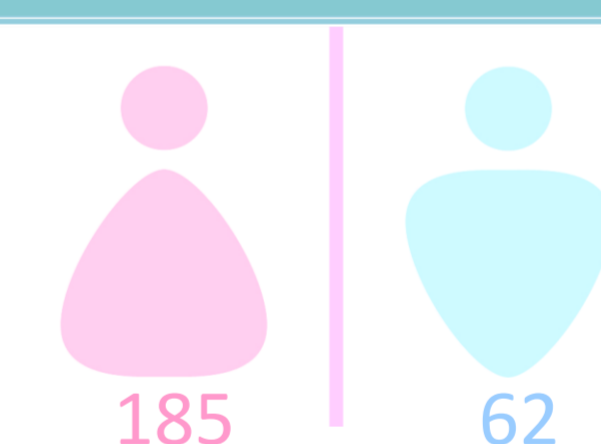
Material and methods

Prospective, cohort study, including hospital HCW who received first dose of AstraZeneca vaccine, second dose of AstraZeneca (group A) or Pfizer (group B) and completed pharmacovigilance monitoring plan. Specific local reactions and systemic events were assessed until 10 days after each dose of the vaccine by means of a questionnaire. Data was processed using SPSS 26.0.

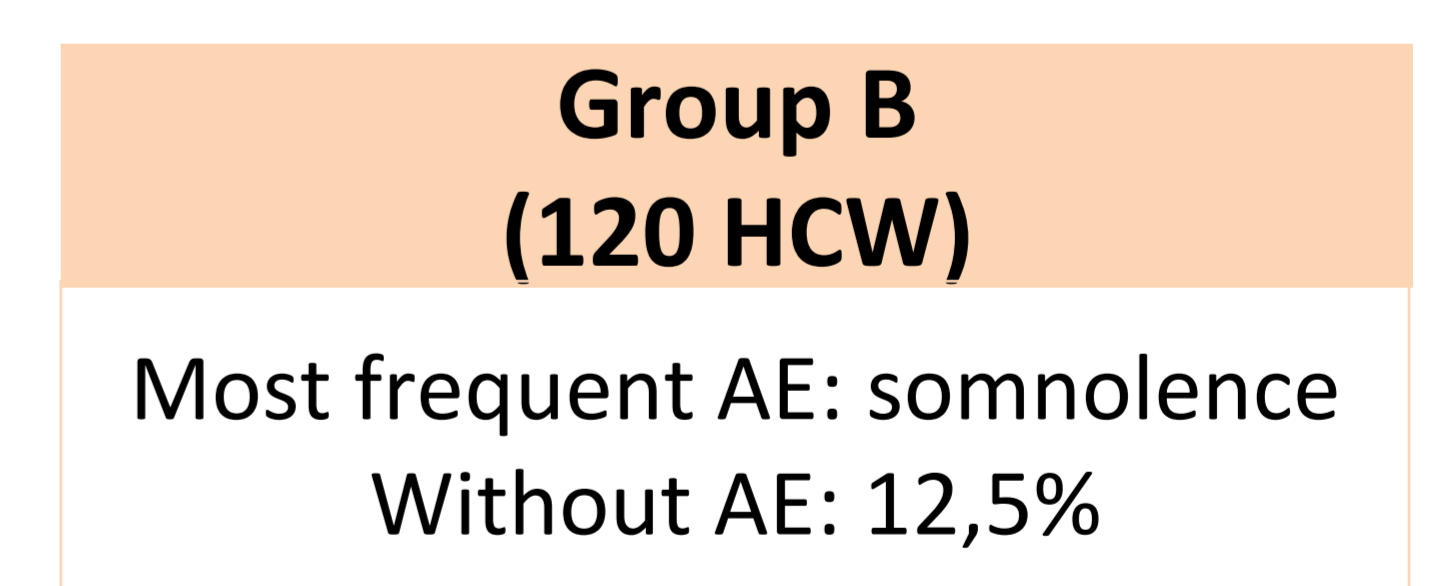
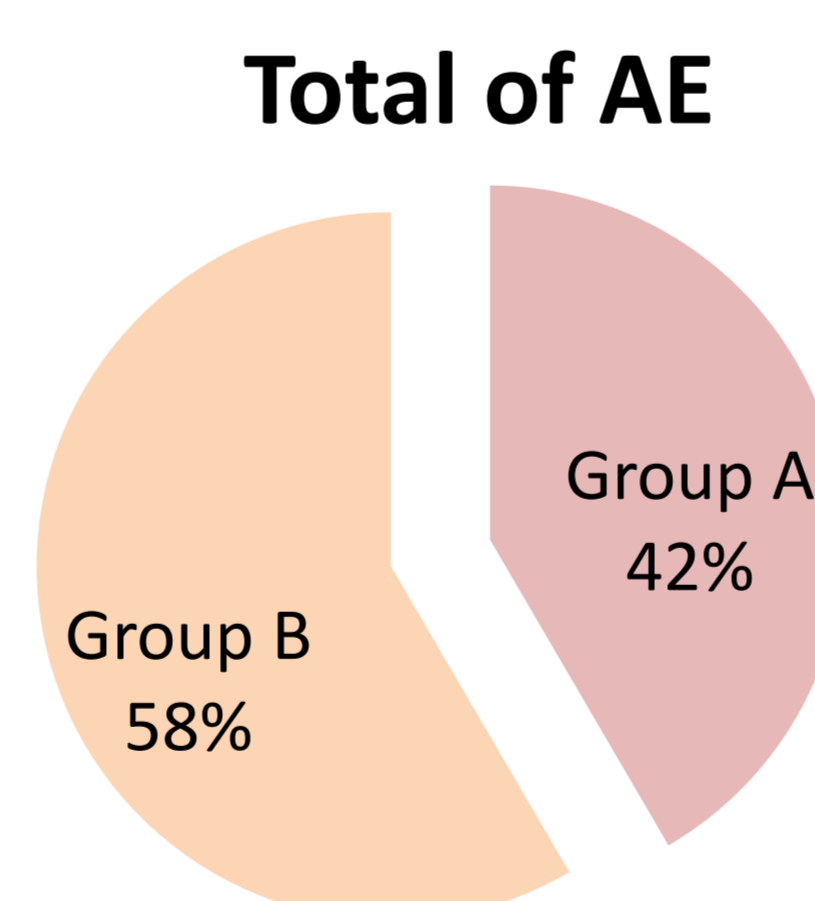
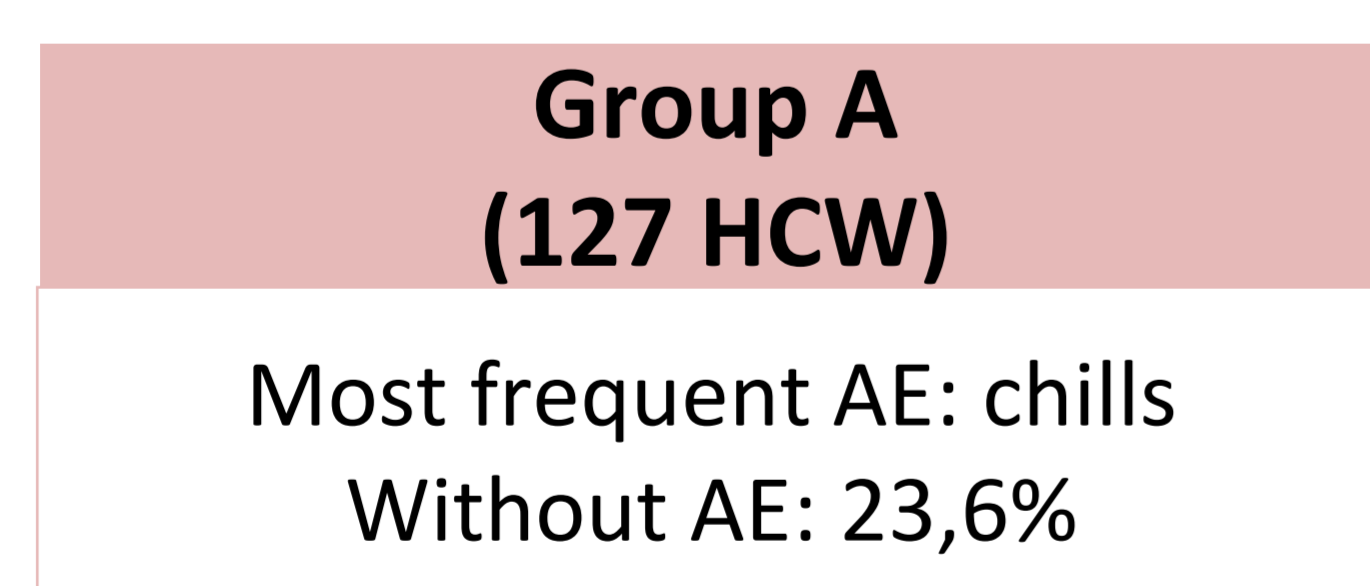


Results

The study included 247 HCW, mean age 41.7 ± 10.8 years, with 75% being female.



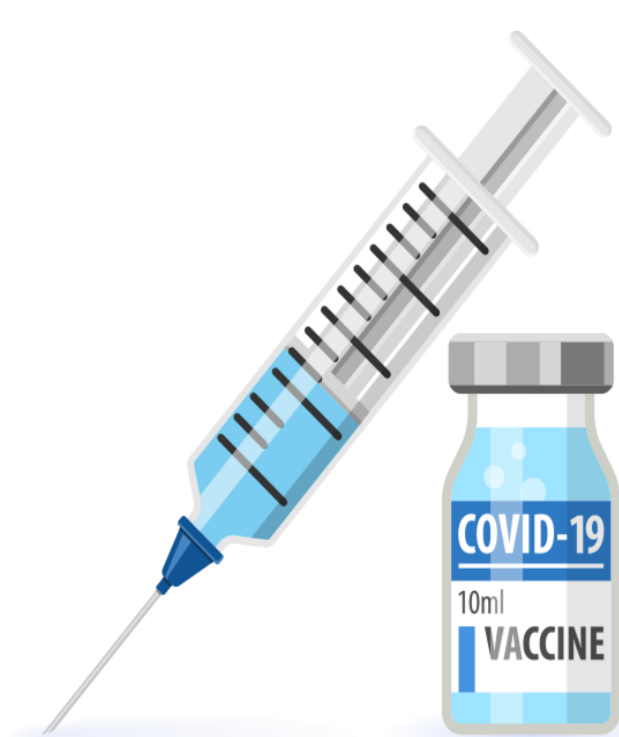
Of them, 127 were included in group A and 120 in B. In group A, 76.4% reported at least 1 AE, with a total of 423 AE and a median of 3 (0-15). In group B, 87,5% reported at least 1 AE, with a total of 594 AE and a median of 5 (0-17). The systemic AE with higher incidence were fatigue, malaise and headache in both groups, chills for group A and somnolence for group B.



- Most frequent AE in both groups:
- Fatigue, malaise and headache

We found statistically significant difference in the occurrence of AE ($p < 0,05$; OR 0,462 [0,234;0,910]) and in the number of AE in both groups ($p < 0,05$).

Conclusion and relevance



The reported AE frequency in this study is in agreement with what was described by other authors. In this study, HCW receiving second dose of Pfizer were more likely to have an AE and higher number of AE. However, there are some limitations, namely, post-vaccination symptoms data that were self-reported but not verified. Active surveillance should continue to check vaccine's risk/ benefit ratio over time. This safety profile knowledge in younger individuals may contribute to boost trust in vaccines.

References

Shaw RH, Stuart A, Greenland M, Liu X, Van-Tam JSN, Snape MD. Heterologous prime-boost COVID-19 vaccination: initial reactogenicity data. Lancet. 2021;397(10289):2043–6.