# LETTER TO THE EDITOR

Initiation of the COVID-19 vaccination program in Poland: vaccination of the patient "zero" and first experience from the Central Clinical Hospital of the Ministry of Internal Affairs and Administration

> To the editor On December 15, 2020, the National Vaccination Program for the prevention of coronavirus disease 2019 (COVID-19) was adopted in Poland.<sup>1</sup> The first vaccine supplies secured by the European Union arrived in Poland on December 26, 2020. On December 27, 2020, the first Polish citizen, the "participant zero," was vaccinated against COVID-19 at the Central Clinical Hospital of the Ministry of Internal Affairs and Administration in Warsaw (FIGURE 1), which initiated one of the largest vaccination programs in the Polish history, as a response to the serious pandemic threat.<sup>2</sup>

> The first vaccinee was a 52-year-old female nurse, who joined the community of over 3.3 million individuals already vaccinated against COVID-19 throughout the world.<sup>3</sup> Overall, on day "0," 170 members of the medical staff were vaccinated in our hospital. No serious adverse events were noted. A single person reported transient mild maculopapular rash on the chest that appeared 24 hours after vaccination, and another person reported mild dyspnea accompanied by bronchospasm within 15 minutes after vaccination, which quickly resolved following corticosteroid administration.

> All patients received the Pfizer BioNTech mRNA Comirnaty vaccine (EMEA/H/C/005735), which was granted conditional marketing authorization by the European Commission on December 21, 2020.<sup>4</sup> Its approval was preceded by the publication of a large randomized clinical trial that evaluated its efficacy and safety in over 40 thousand vaccination program participants<sup>5</sup> and was based on over 20 years of work on mRNA vaccines development.<sup>6</sup>

As the current vaccination program is one of the greatest medical and logistic endeavors in the history of contemporary medicine, we would like to share our initial experience with establishing a vaccination program at our center. The vaccination program at the Central Clinical Hospital of the Ministry of Internal Affairs and Administration in Warsaw was developed by the dedicated expert Program Coordination Group. It involved 10 major steps managed by the Vaccine Program Coordinators and Hospital Pharmacy. The organizational chain is presented in Supplementary material, *Figure S1*.

Vaccine receipt, storage, and preparation for use were handled by the Hospital Pharmacy team, according to the local storage and preparation protocol. A vaccination program participant list was established by the Hospital Patients Care Coordinators, who, in the phase 0 (vaccination of the hospital staff), prepared lists and invited the personnel from particular hospital units, on hourly basis, based on the capacity data provided by the Vaccination Program Coordinator. Vaccination Program capacity (the daily number of participants) was defined based on the vaccine availability and program capacity. The daily numbers were based on an assumption that each Vaccination Unit is able to vaccinate 15 participants per hour (4 minutes per participant). The upper limit of daily vaccinations was calculated based on the availability of vaccines as well as the need to double the number of participants starting from week 4 in order to timely administer the second vaccine dose to all program participants while sustaining the capacity of the first vaccination program.

In order to ensure the ability to perform vaccination in 4-minute intervals in a Vaccination Unit, each patient received information relevant to the vaccination process before entering the Unit. All questions were answered by the support personnel. Informed consent forms were signed in the physician's presence, who also ensured that all questions were answered as well as FIGURE 1 Vaccination of the Polish participant "zero" at the Central Clinical Hospital of the Ministry of Internal Affairs and Administration, Warsaw, Poland. The individuals depicted in the photograph provided consent for publication.



that vaccine program inclusion criteria were fulfilled and no exclusion criteria were met. Participants were vaccinated by the dedicated nurse or physician. Following vaccination, all participants were monitored for 15 minutes and received necessary information on the second vaccination dose by Hospital Patients Care Coordinators. To ensure the safety of vaccination, an emergency group and procedure were established to provide appropriate emergency care in case of severe anaphylaxis that occurs rarely.<sup>7</sup>

We hope that our experience could be useful for other centers that will initiate vaccination against COVID-19 in order to combat and control the disease in Poland and worldwide.

### SUPPLEMENTARY MATERIAL

Supplementary material is available at www.mp.pl/paim.

### **ARTICLE INFORMATION**

AUTHOR NAMES AND AFFILIATIONS Agnieszka Szarowska, Artur Zaczyński, Piotr Szymański, Beata Borawska, Iwona Szarek, Irena Szoszkiewicz, Sławomir Butkiewicz, Dorota Szydlarska, Robert Gil, Andrzej Śliwczyński, Alicja Jakubowska, Zbigniew Król, Waldemar Wierzba, on behalf of the Central Clinical Hospital of the Ministry of Internal Affairs and Administration Program Coordination Group (AS, AZ, BB, ISza, ISzo, SB, AŚ, AJ, ZK, and WW: Central Clinical Hospital of the Ministry of Internal Affairs and Administration, Warsaw, Poland; PS: Center of Postgraduate Medical Education and Central Clinical Hospital of the Ministry of Internal Affairs and Administration, Warsaw, Poland; DS, Department and Chair of Family Medicine, Medical University of Warsaw, Warsaw, Poland and Central Clinical Hospital of the Ministry of Internal Affairs and Administration, Warsaw, Poland; RG: Mossakowski Medical Research Centre, Polish Academy of Sciences and Central Clinical Hospital of the Ministry of Internal Affairs and Administration, Warsaw, Poland)

CORRESPONDENCE TO Prof. Piotr Szymański, MD, FESC, Central Clinical Hospital of the Ministry of Internal Affairs and Administration, Centre of Postgraduate Medical Education, ul. Wołoska 137, 02-507 Warszawa, Poland, phone: +48225081100, email: pszymanski@ptkardio.pl

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## CONFLICT OF INTEREST None declared.

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3 Our World in Data – Coronavirus (COVID-19) Vaccinations. https://ourworldindata.org/covid-vaccinations. Accessed December 27, 2020.

4 Comirnaty European Public Assessment Report (EPAR). https://www. ema.europa.eu/en/medicines/human/EPAR/comirnaty. Accessed December 27, 2020.

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