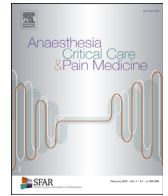




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## Letter to the Editor

**Lack of vaccination in ventilated patients for SARS-CoV-2 in France**

To date, observational and randomised publications demonstrated that vaccination significantly reduce the number of patients victims of SARS-CoV-2 and requiring critical care [1–4]. A broad vaccination policy has been implemented worldwide and particularly in France since December 2020. Access to free vaccination, initially reserved for caregivers and persons at risk, was extended from May 2021 to all adults, up to 12 years of age from June 2021, and the booster dose of vaccine began in September 2021 for persons at risk and was enlarged in November in view of the expected aggressiveness of the Delta variant during the 5<sup>th</sup> wave (<https://www.service-public.fr/particuliers/actualites/A14557>) [5,6]. In spite of this facilitated access, only 13% of the population had received 3 doses of vaccine at the beginning of December and fake COVID-19 health passes were circulating in France, while the medical community was constantly recommending vaccination to limit health system saturation. As most intensivists had the subjective observation of a majority of unvaccinated patients admitted in critical care units (ICU) at the

beginning of the 5<sup>th</sup> wave, the French Society of Anaesthesia and Intensive Care (SFAR) wished to quantify this impression. After approval by the SFAR Ethics Committee (IRB 00010254-2022-002), a retrospective survey of anaesthetists-intensivists, SFAR members, was conducted on the number and vaccination profile of ventilated patients with SARS-CoV-2 in critical care on the 29<sup>th</sup> of December 2021 [7]. The number of patients with a complete or incomplete vaccination schedule (complete = at least two doses of Pfizer/Moderna vaccine or one dose of ARNm vaccine with previous COVID-19 infection), unvaccinated patients and those with a fake COVID-19 health pass were recorded. The survey (Google form, Google, USA) included 5 questions and was sent to all SFAR members. Only one answer per ICU was requested. Data from 165 French ICUs were collected, representing 2882 critical care beds. A total of 896 ventilated patients with SARS-CoV-2 were identified (31%), from whom 717 (80%) were unvaccinated or had an incomplete vaccination profile, including 41 patients with fake COVID-19 health passes (4.5%), and only 179 patients (20%) with a complete vaccination profile (Fig. 1). This survey confirms that the majority of ventilated patients with SARS-CoV-2 during the 5<sup>th</sup> wave were unvaccinated or partially vaccinated at the time of the

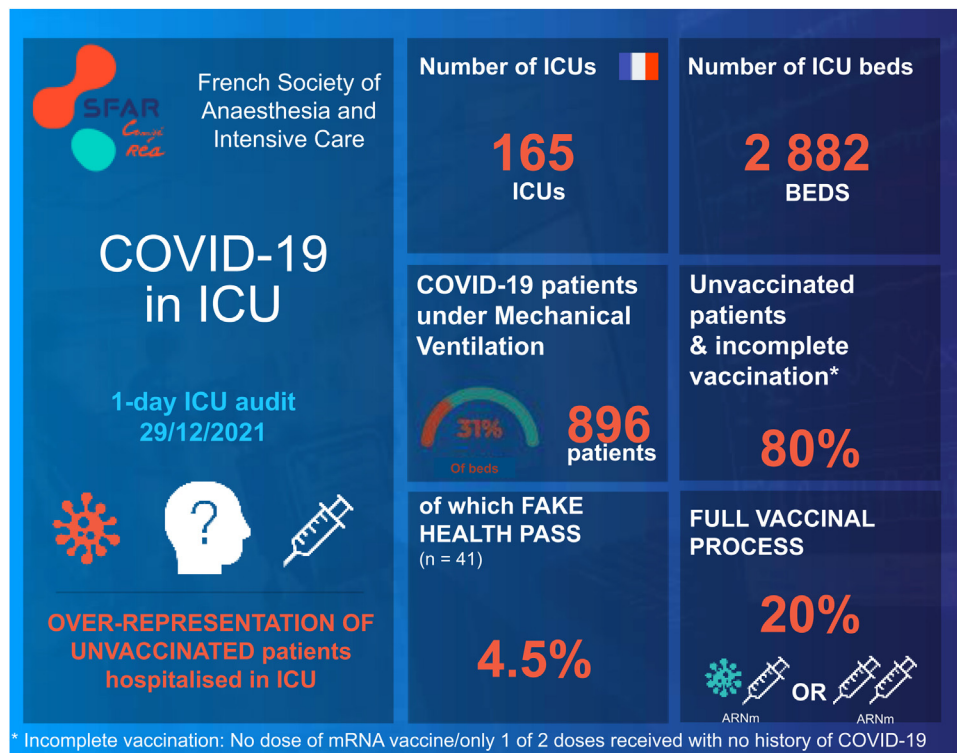


Fig. 1. Over-representation of unvaccinated patients and incomplete vaccination in French ICUs.

study. These data differ substantially from those of the DREES in December for several possible reasons: only mechanically ventilated patients and therefore the most serious are taken into account here. It seems that vaccinated patients have less severe forms of COVID-19 and shorter stays in the ICU, and therefore may be more frequent on data reported in a sliding week, whereas it will be the opposite on a given day. Last but not least, patients with a fake COVID-19 health pass are counted as vaccinated for the DREES, whereas they represent almost 5% of the patients in our survey (Data.drees.solidarites-sante.gouv.fr). Nevertheless, the results of this survey should be confirmed, as its main limitation is the lack of exhaustiveness of the results and its declarative nature. Despite its limitations, this work highlights the significant proportion of patients with fake COVID-19 health passes, probably underestimated, and confirms that the majority of ventilated patients with SARS-CoV-2 are patients with incomplete or absent vaccination schedule.

### Conflicts of interest

Olivier Joannes-Boyau reports links of interest, which are not related to the study, with Jafron, Baxter and BBraun (consulting activities), and reports personal fees for lectures and teaching activities from Baxter, BBraun and Fresenius.

Claire Dahyot-Fizelier reports links of interest, which are not related to the study, with Integra (moderation and presentation).

Laurent Delaunay reports links of interest, which are not related to the study, with Medtronic, Grunenthal, and Sanofi.

Jean-Michel Constantin reports links of interest, which are not related to the study, with Dräger, GE Healthcare, Sedana Medical, Baxter, and Amomed; personal fees from Fisher and Paykel Healthcare, Orion, Philips Medical, Guilead, GSK, Infiplast, and Fresenius Medical Care; and non-financial support from LFB and Bird Corporation.

Pierre Albaladejo reports links of interest with Sanofi, Pfizer, BMS, Portola, and Branchet Solutions.

Marc Leone reports links of interest with Amomed, and Aspen (symposium), Ambu, and Gilead (consulting).

Emmanuel Besnie reports links of interest, which are not related to the study, with Orion Pharma, and Baxter (congress presentations) and Amomed (expertise).

Nicolas Mongardon reports links of interest with Amomed (consulting).

Benjamin Chousterman reports links of interest with Roche Diagnostics, and Baxter (consulting).

Pierre Trouiller reports links of interest with MACSF.

Vincent Degos reports links of interest with MSD, AIR Liquide, and JEPU.

The other authors have no conflicts of interest to declare.

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