# Bericht zum spitalbasierten COVID-19-Sentinel-Überwachungssystem

***Datenstand: 21. November 2022***

# 1. Einleitende Zusammenfassung

Das spitalbasierte COVID-19-Sentinel-Überwachungssystem (CH-SUR) wurde im Jahr 2018 gegründet, um grippebedingte Hospitalisationen zu erfassen. Bereits am 1. März 2020, vier Tage nach der Meldung des ersten bestätigten COVID-19 Falls in der Schweiz, stand das angepasste Programm bereit, um auch Hospitalisationen im Zusammenhang mit einer laborbestätigten SARS-CoV-2-Infektion zu registrieren.

Zurzeit nehmen 19 Spitäler aktiv teil, darunter die meisten Kantons- und Universitätsspitäler, welche einen grossen Teil der hospitalisierten pädiatrischen und erwachsenen Patientinnen und Patienten in der ganzen Schweiz abdecken. Die CH-SUR-Statistik gibt unter anderem die Anzahl und Dauer der Hospitalisationen sowie die Aufenthalte auf der Intensivpflegestation an. Ersichtlich ist in CH-SUR ebenfalls, ob die Patientin oder der Patient während der Hospitalisation an oder mit COVID-19 verstorben ist. Weitere Definitionen und Einzelheiten zu den Daten sind im Kapitel «Glossar und ergänzende Informationen» am Ende dieses Berichts zu finden.

Der aktuelle Bericht deckt den Zeitraum vom 1. Januar 2022, als die Omikron-Variante dominant wurde, bis zum 20. November 2022 ab. In diesem Zeitraum wurden die Daten zu 16 223 Hospitalisationsepisoden gesammelt. Im gleichen Zeitraum wurden dem BAG im Rahmen der gesamtschweizerischen Meldepflicht 20 949 Hospitalisierungsepisoden mit laborbestätigter SARS-CoV-2-Infektion gemeldet. Damit erfasste das CH-SUR-System rund 77,4 Prozent aller in der Schweiz gemeldeten Hospitalisierungen im Zusammenhang mit SARS-CoV-2. Eine entsprechende Übersicht über die letzten beiden Monate, für die bereits genügend Daten vorliegen, ist in Abbildung 1 dargestellt.

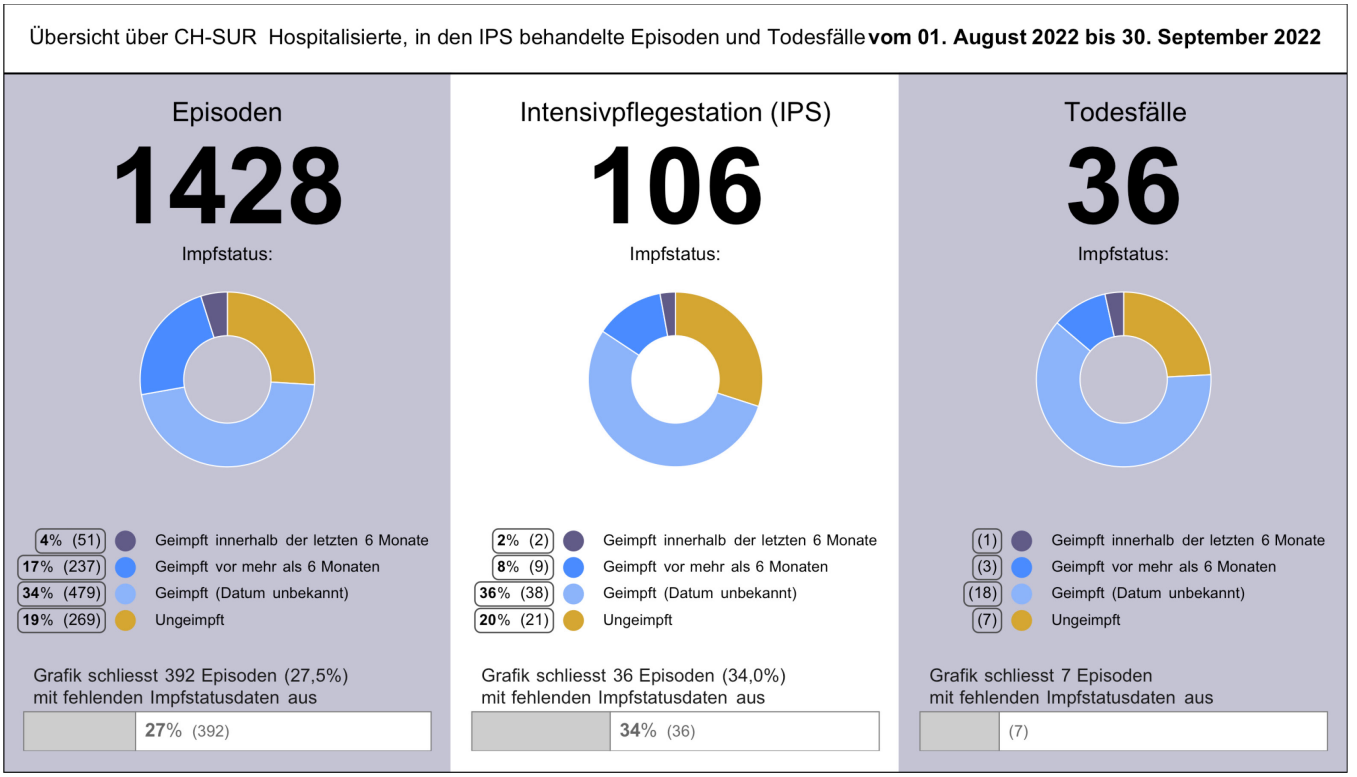


***Figure 1**: Übersicht über die neuesten Daten zu Hospitalisierungsepisoden. Die Daten der letzten beiden Monate werden aufgrund von Verzögerungen bei der Dateneingabe als vorläufig betrachtet und wurden daher nicht berücksichtigt.*

# 2. Hospitalizations and patient characteristics

Between January 01, 2022 and November 20, 2022 and among the 19 hospitals actively participating in CH-SUR, 16,223 episodes were registered, accounting for a total of 16,640 hospitalizations. There were more hospitalizations than episodes because some episodes include multiple hospitalizations (for more details see section glossary and supplemental information).

Most patients (97.6% [15,840 of 16,223]) were hospitalized only once during an episode, while 2% of the registered episodes (383 of 16,223) included two to four hospitalizations. Only one episode included five hospitalizations.

Among all episodes, the majority (52% [8,435 of 16,223]) of the episodes concerned male patients (Figure **2**a), and the age distribution was skewed towards older persons (Figure **2**b). The largest age category corresponded to patients aged 80 and above (35.0% [5,608]).

Figures **2**c and **2**d show the sex and age distribution ratio over time. During most months, more men than women were admitted. During the period of observation, the proportion of episodes concerning patients aged 50 years old and above was the lowest in February 2022 with 67.8% (1,514 of 2,232) and was relatively constant from April to September 2022, ranging between 82.1% (1,179 of 1,436) and 84.3% (576 of 683). In October 2022, 88.5% (1,287 of 1,454) of episodes concerned patients 50 years old and above (Figure **2**d).

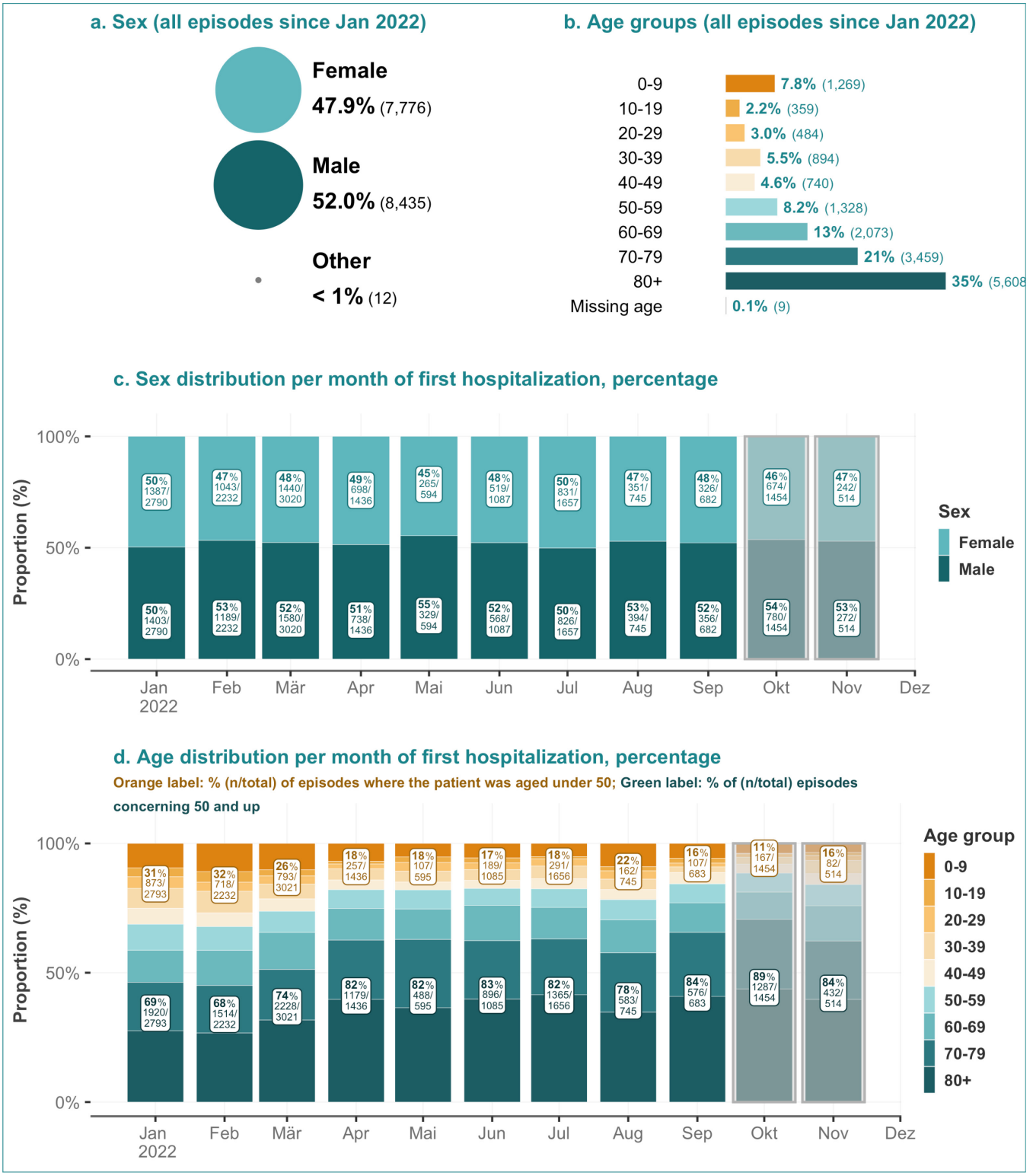


***Figure 2**: Demographic characteristics: sex and age distribution of admitted hospitalized patients, overall and per month. For episodes with multiple hospitalizations, the admission date of the first hospitalization was used. Data from the last two months (highlighted gray) is considered provisional due to entry delays. The 'other' sex category was removed from panel c, and the missing age group was removed from panel d.*

## 2.1. Origin of infection

From January 01, 2022 to November 20, 2022, the overall percentage of nosocomial infections among all documented episodes was 19.8% (3,208 von 16,223) while episodes linked to community acquired infections accounted for 77.0% (12,503 von 16,223) (Figure **3**). 3.1% of the episodes could not be classified either as nosocomial or community acquired.

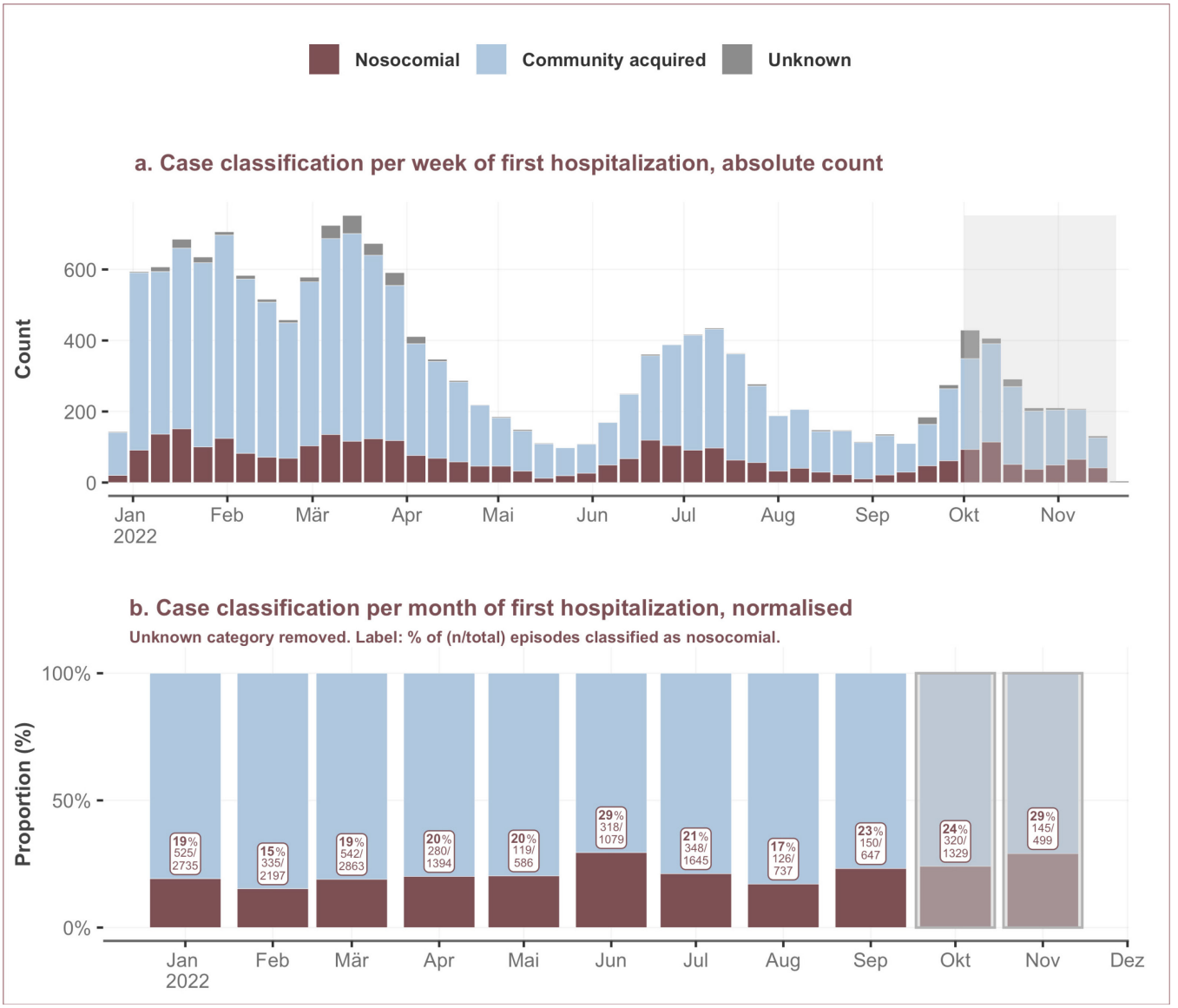


***Figure 3**: Case classification (infection source) of the episodes. The absolute count of episodes over time (panel a) and the proportion (normalized in %) of episodes by infection source (panel b). For episodes with multiple hospitalizations, the case classification of the first hospitalization was considered. Data from the last two months (highlighted gray) are considered provisional due to data entry delays.*

Compared to the other age groups, the nosocomial infections affected the patients aged 80 years and above the most, accounting for 1,433 (45%) of the nosocomial episodes. In comparison, 4,045 (32%) of episodes with community-acquired infections corresponded to patients aged 80 years and above (Figure **4**).

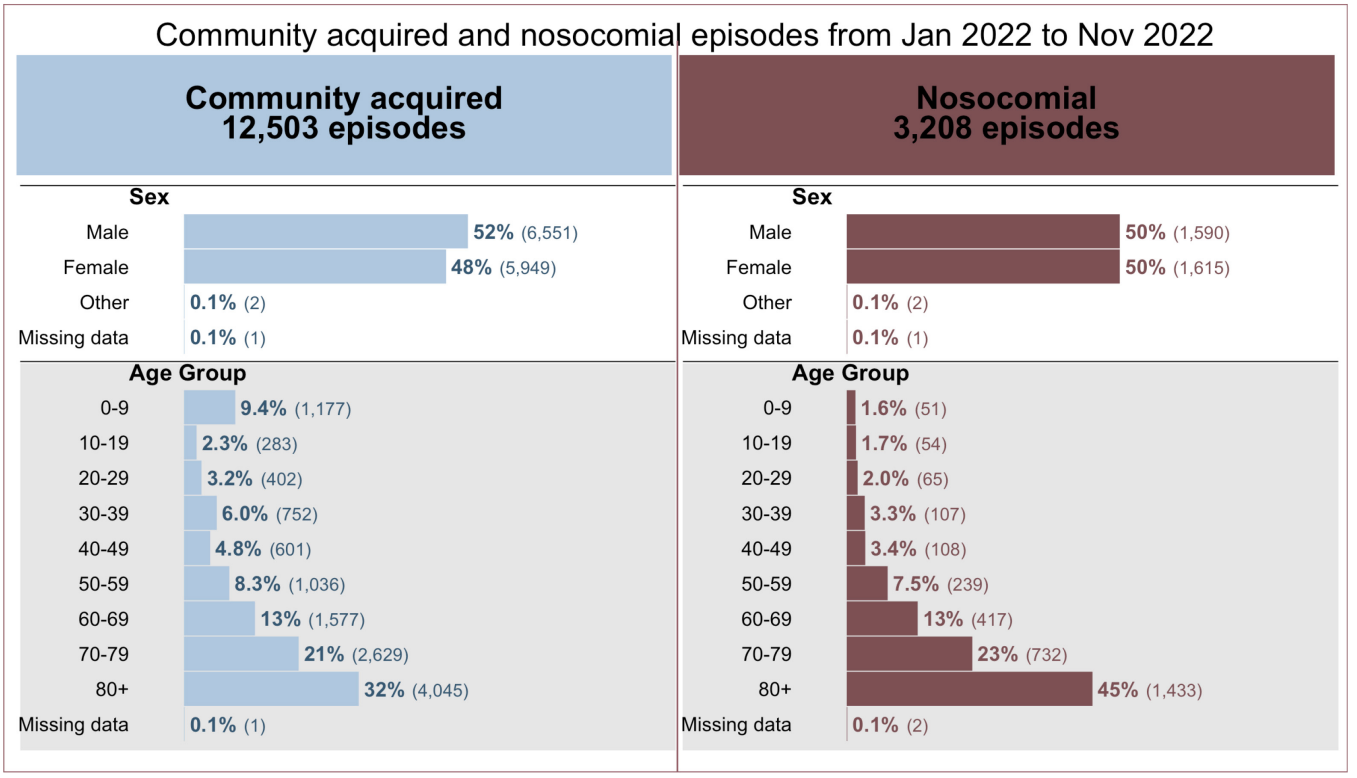


***Figure 4**: Comparison of community acquired and nosocomial cases by demographic characteristics.*

## 2.2. Vaccination status at admission over time

For these analyses, the vaccination status of a patient considers the vaccine doses received up to the time of a positive COVID-19 test, specifically up to the time when the sample for the test was collected.

As of November 20, 2022, 69.7% of the Swiss population was vaccinated with at least one dose and 10.7% were vaccinated within the last 6 months. It is important to note that we can know the percentage of the population which is vaccinated (through administrative records), but only approximate the proportion of the population which is immunized. Recent studies from Corona Immunitas are indicating that the population immunization (by vaccination and/or previous infection) is nearing 100%.

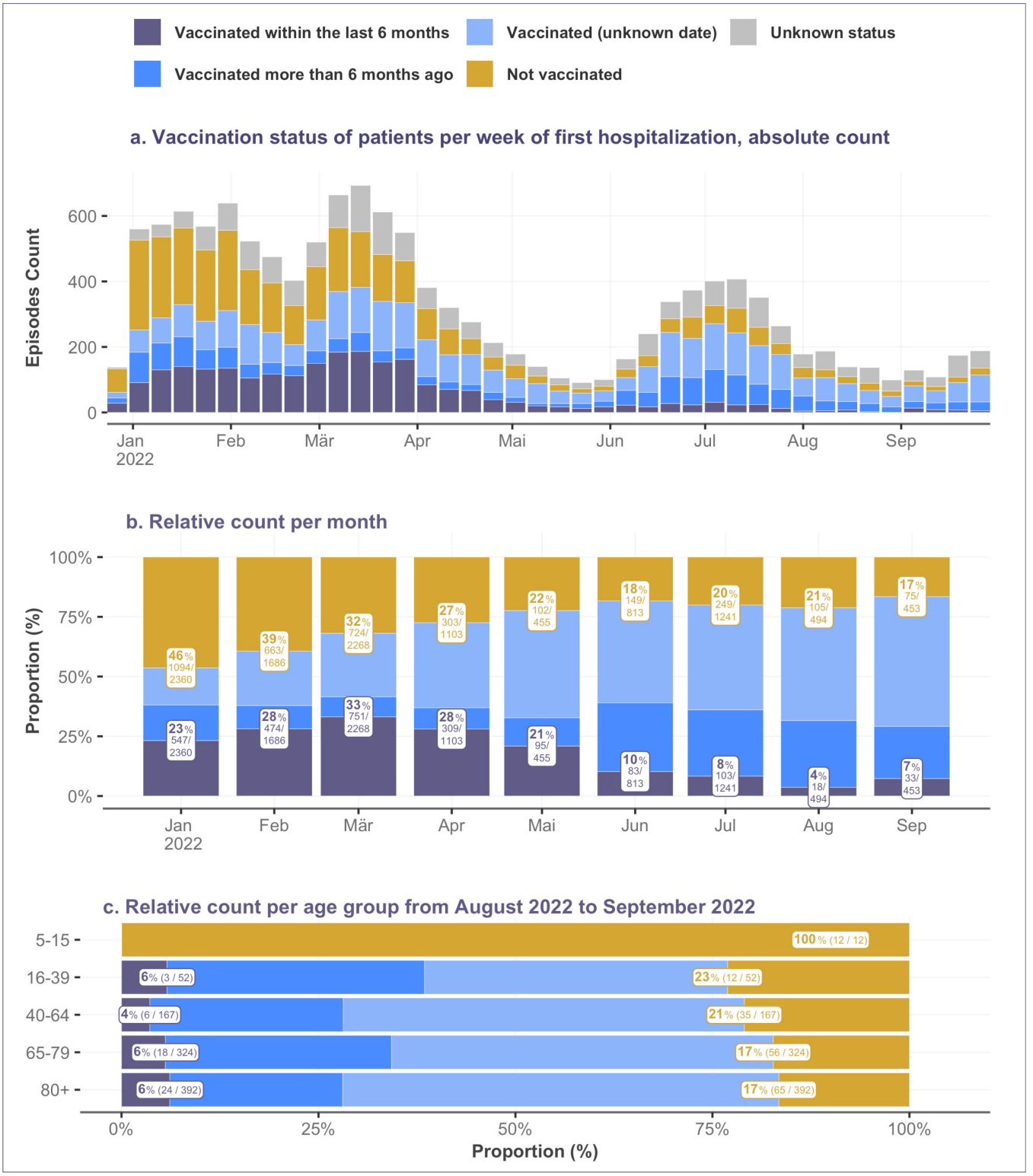


***Figure 5**: Episodes by vaccination status over time and by age group. For episodes with multiple hospitalizations, the vaccination status for the first hospitalization was considered. Episodes with first admission date after September 30, 2022 were excluded due to data completeness considerations. For Figure 5c only: Episodes with missing ages and children between 0 to 4 years old (following vaccination recommendations) were excluded from the analysis.*

## 2.3. Severity at admission

During the period of observation, the percentage of episodes with a severity scores of 2 and more ranged between 24.3% (541 of 2,222) (Feb 2022) and 32.3% (207 of 641) (Sep 2022). The periods with higher severity scores (Figure **6**) are mirrored by older patients' ages (Figure **2**d) during these periods. This may be partly due to the nature of the CURB-65 score, which attributes one point for those aged 65 and above. Figure **7** highlights the more frequent occurrence of severe cases in older age groups. Among those aged 65 and above, the percentage of severe cases decreased from January to March 2022 and tended to increase again slightly in the more recent months.

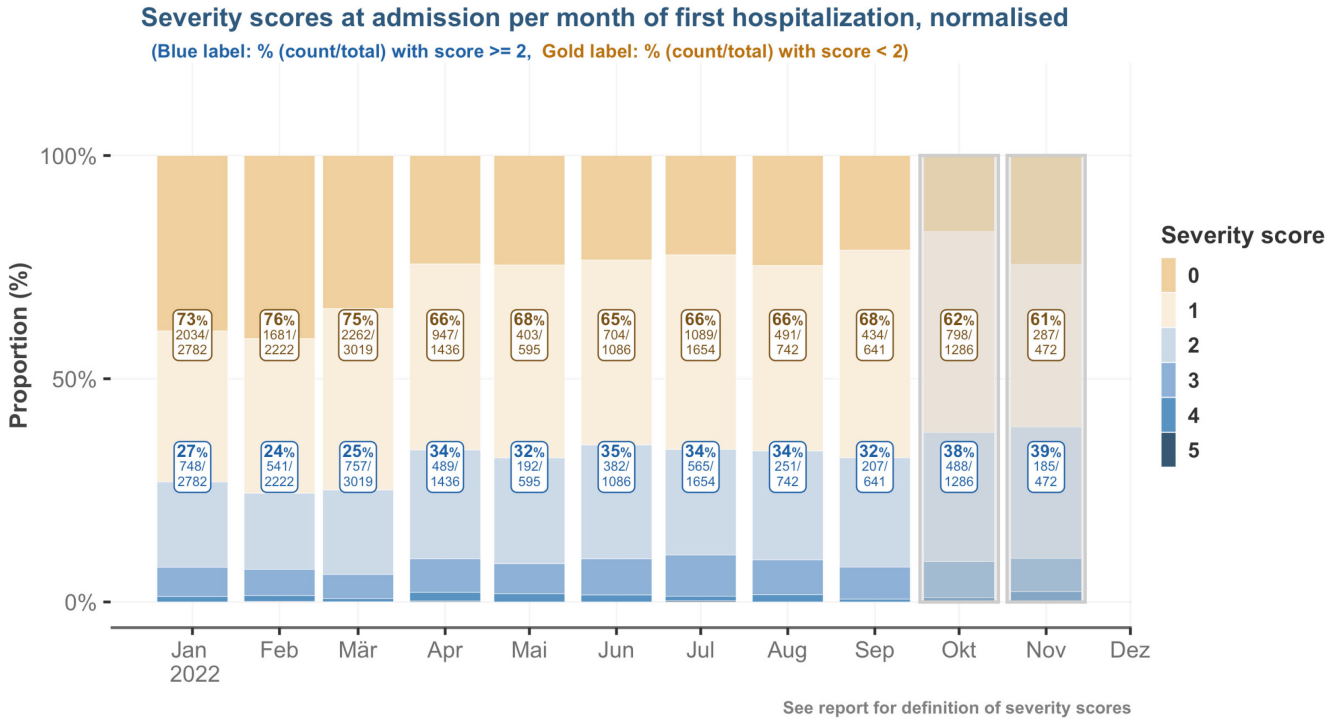


***Figure 6**: Episodes' severity scores at admission for COVID-19 hospitalizations over time. Includes records up to November 20, 2022. Data from the two last months (highlighted in gray) are considered provisional due to data entry delays.*

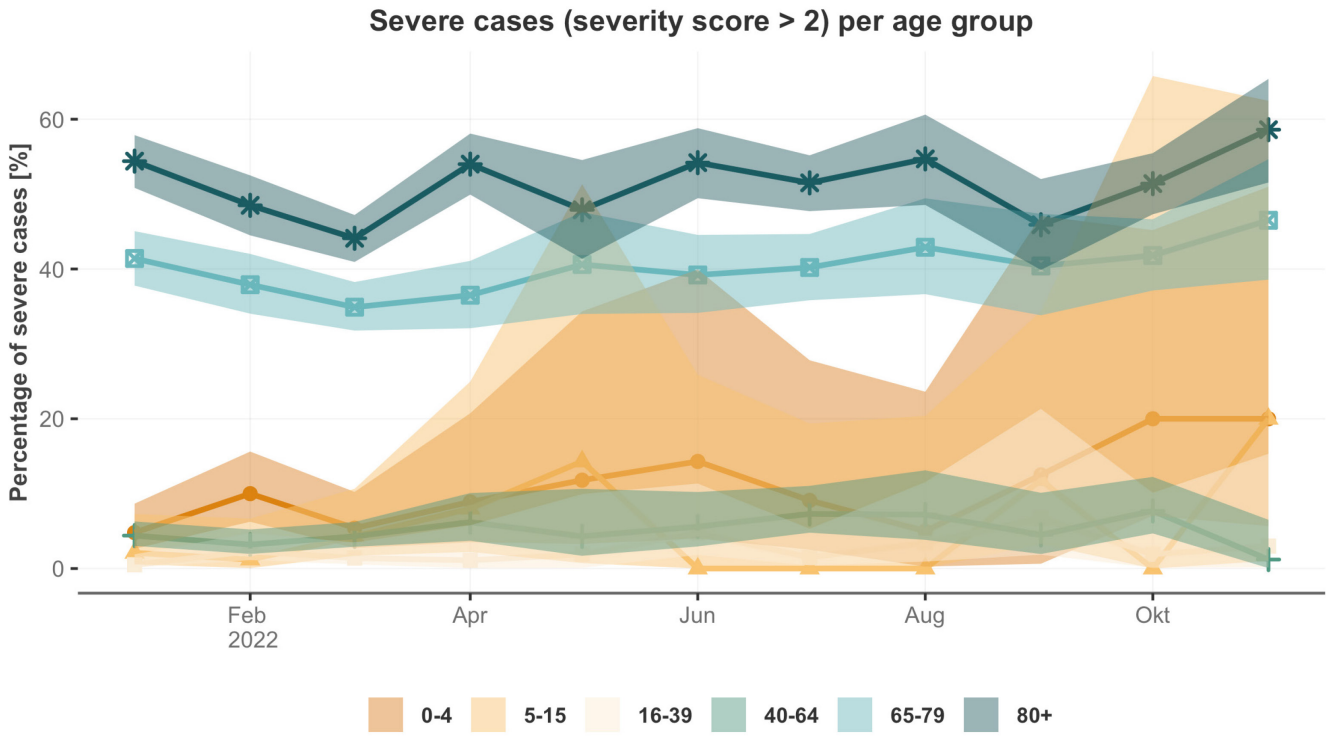


***Figure 7**: Percentage of episodes with severity score two and above at admission over time by age groups.*

# 3. Outcomes

## 3.1. Outcomes overview

Figure **8** shows the final outcomes of CH-SUR episodes over three time intervals. Episodes resulting in death, for which COVID-19 was the cause of death (died *of* COVID-19) are shown separately from those with an alternative cause of death (died *with* COVID-19, but not *of* COVID-19). A medical doctor at the hospital for each CH-SUR participating center determined whether a patient died of COVID-19 or another cause. Episodes where the cause of death was not certain, but there was a COVID-19 diagnosis (in conformity with inclusion criteria for CH-SUR) were counted as died of COVID-19 or suspected death of COVID-19. The outcome "discharged" includes patients who were transferred out of the CH-SUR system. Episodes with "pending or missing outcomes" correspond to either patients who were still hospitalized or whose outcomes were not yet recorded in the database at the date of data extraction. Because of the higher proportion of incomplete data during the most recent months, case fatality rates from these months should be interpreted with caution.

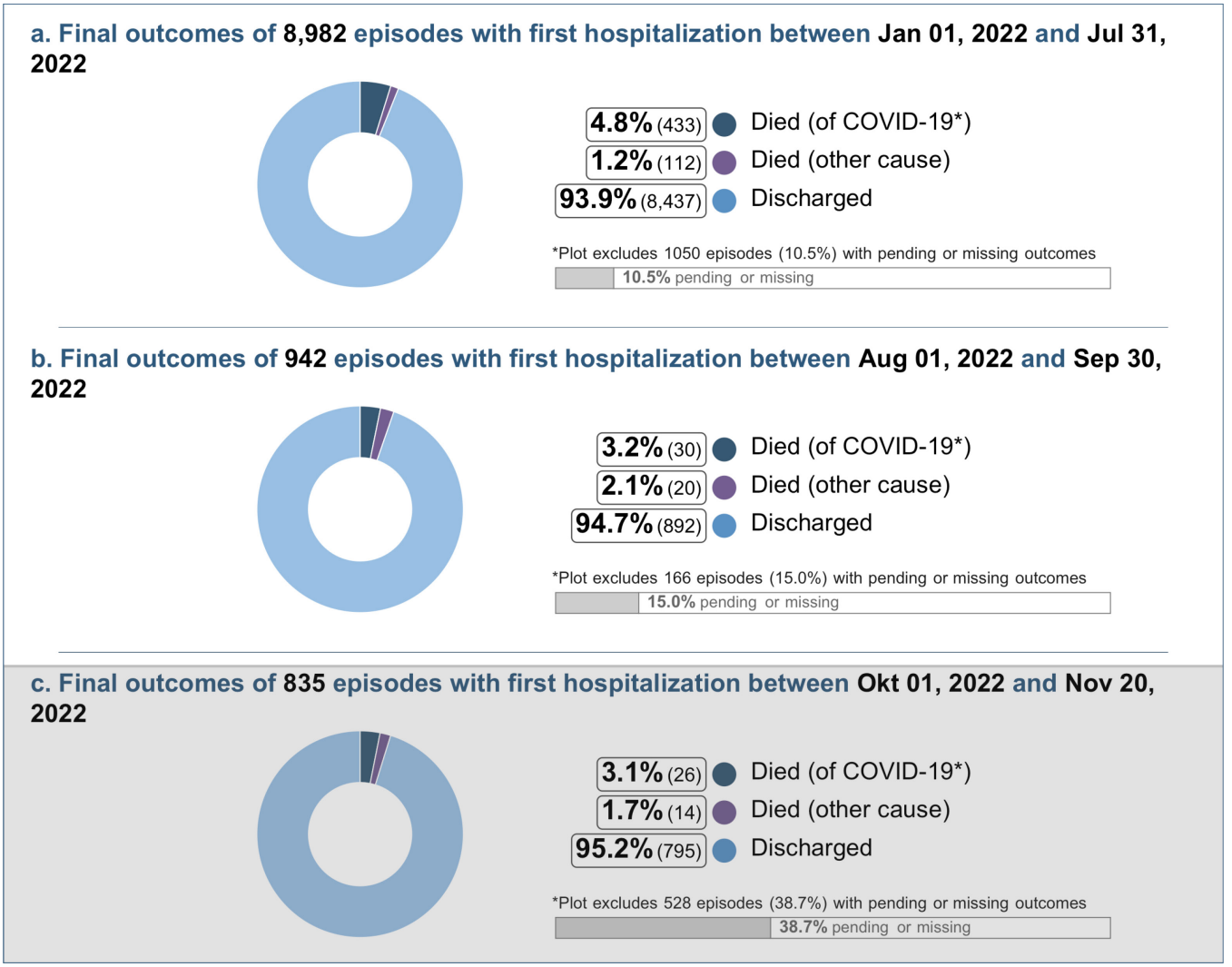


***Figure 8**: Outcomes for COVID-19 related episodes in CH-SUR hospitals. Includes records up to November 20, 2022. For episodes with multiple hospitalizations, only the final outcome is considered. Patients where the cause of death was not certain, but there was a COVID-19 diagnosis (in conformity with inclusion criteria for CH SUR) were counted as died of COVID-19 or suspected death of COVID. Data from the last two months (highlighted gray) is considered provisional due to entry delays. (* Died of COVID-19 as a confirmed or suspected cause of death)*

## 3.2. Outcomes over time

Figure **9** shows the final outcomes of episodes over time (Figure **9**a & **9**b).Since the month of March 2022, mortality has remained at low levels: 5% of episodes or less resulted in death each month.

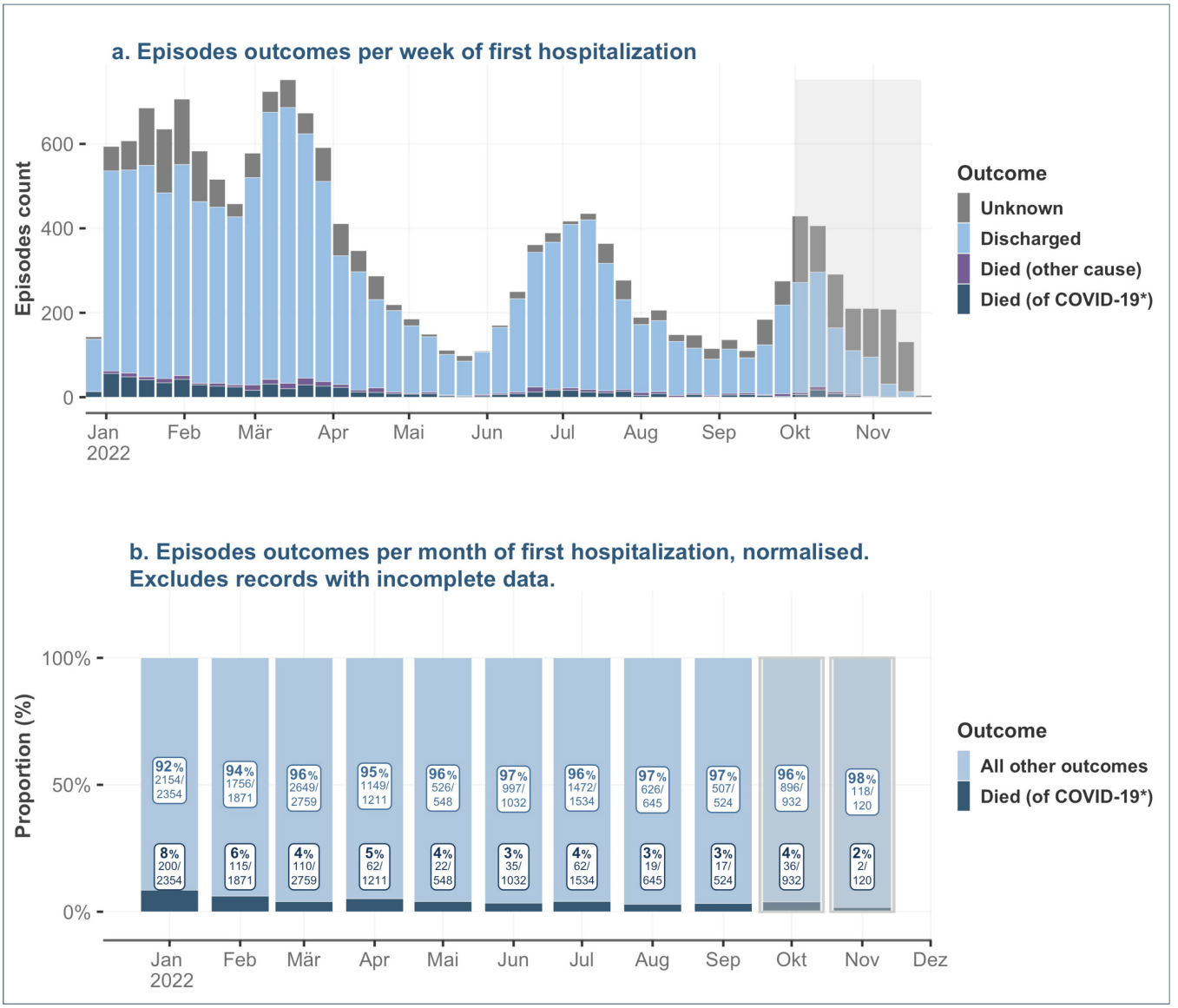


***Figure 9**: Outcomes for COVID-19 related episodes over time. Includes records up to November 20, 2022. Data from the two last months (highlighted in gray) are considered provisional due to data entry delays. Episodes where the cause of death was not certain, but there was a COVID-19 diagnosis (in conformity with inclusion criteria for CH SUR) were counted as Died of COVID-19 or suspected death of COVID. (* Died of COVID-19 as a confirmed or suspected cause of death)*

## 3.3. Case fatality rate (CFR) across demographic and risk groups

Since Januar 2022 and until September 2022, the case fatality rate (CFR) increased with increasing age, from 0% (0 of 1,035) in episodes of patients aged 0-9, to 3.2% (30 of 939) in episodes of patients aged 50-59, and to 9.4% (347 of 3,698) in episodes of patients aged 80+. CFR% was greater in men than in women: 6.2% (363 of 5,898) vs 4.5% (243 of 5,407) respectively. In addition, the CFR% was greater for episodes with higher severity scores at admission: 0.8% (30 of 3,704) of the episodes with severity score 0 resulted in death of COVID-19, while 27.3% (3 of 11) of the episodes with severity score 5 resulted in death of COVID-19 (Figure **10**a).

The overall CFR% of the most recent period for which enough data is available (months August and September 2022, Figure **10**b) was lower than the CFR% from Januar 2022 until September 2022 (3.1% vs. 5.4%). The CFR% of the age groups 70-79 and 80 and above in the most recent period compared to the previous months (Figure **10**).

Of note, there was no clear mortality difference across different BMI groups. Data regarding CFR% and vaccination status can be found in section 4.

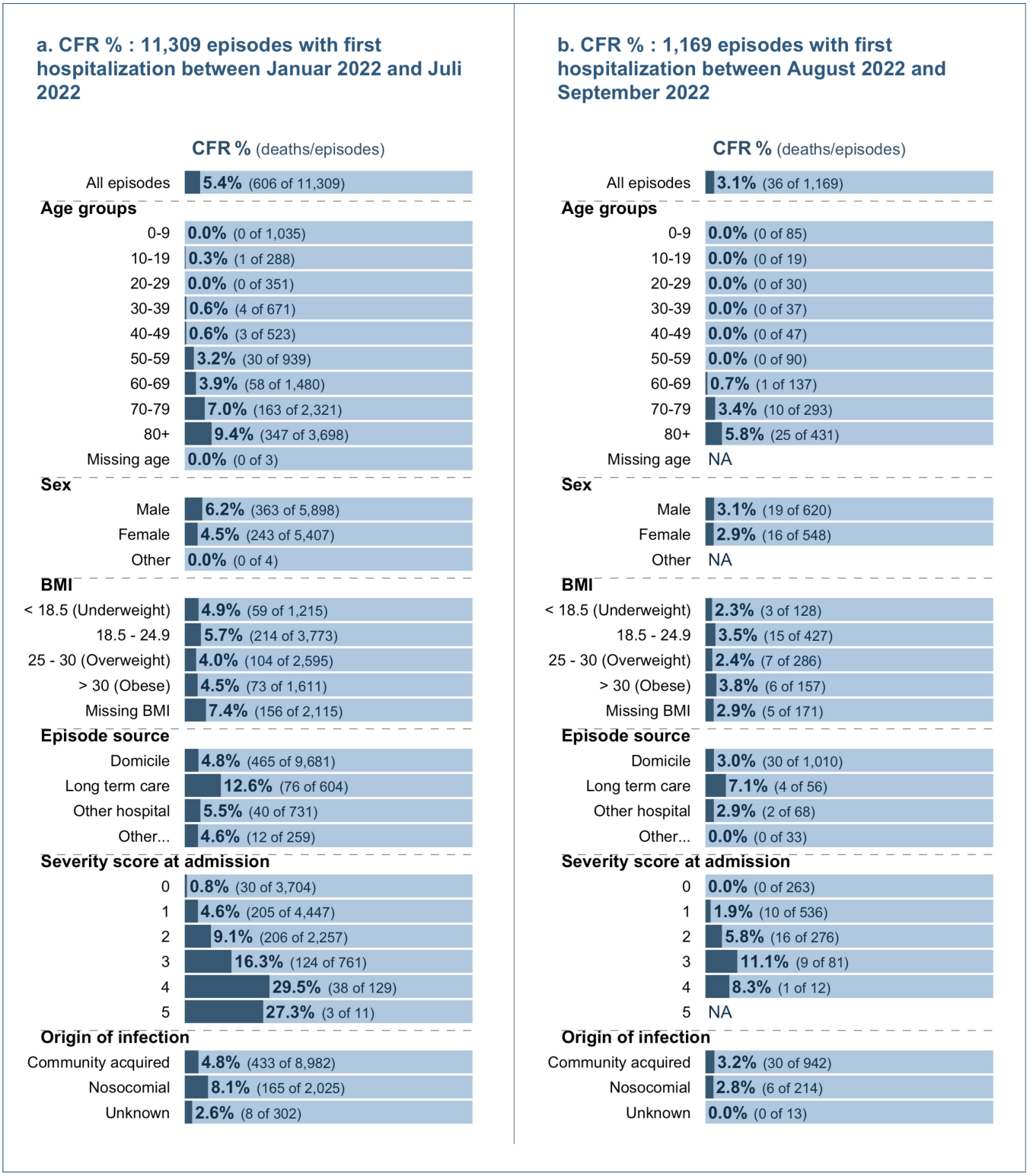


***Figure 10**: Case fatality rate (CFR) % among demographic and risk groups: percentage of hospitalization episodes, which ended in the death of the patient of COVID-19 in hospital. Both figures include records up to September 30 2022 but records with incomplete data (ongoing hospitalization episodes or with a pending outcome in the database) were not included.*

## 3.4. Case fatality rate by age group and vaccination status

For the most recent time period for which reliable data is available, the case fatality rate is displayed by age group and vaccination status (Figure **11**).

The data should be interpreted with caution, as local peaks most often result from a small number of cases (for example, the peak in CFR% concerning 80 and above patients in August 2022 is due to 1 death out of 6 episodes).

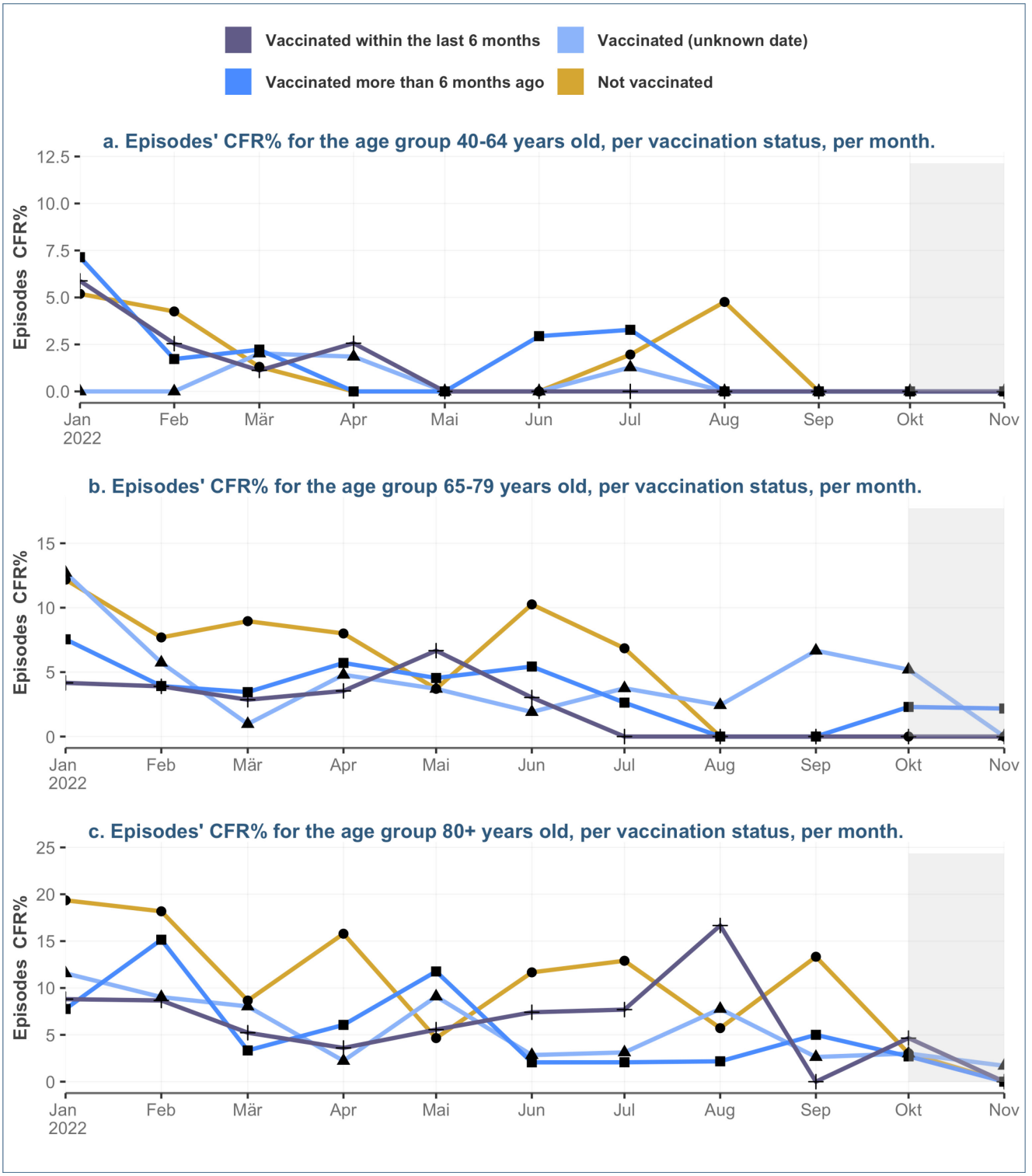


***Figure 11**: Case fatality rate (CFR%) by age and by vaccination status over time: percentage of episodes, which ended in the death of the patient of COVID-19 in hospital. Records with incomplete data were not included. Includes records up to November 20, 2022. Data from the two last months (highlighted in gray) are considered provisional due to data entry delays.*

# 4. Intensive care unit (ICU) admission

## 4.1. ICU admission over time

Figure **12** shows that the proportion (in %) of ICU admission has remained relatively stable over time since Januar 2022.

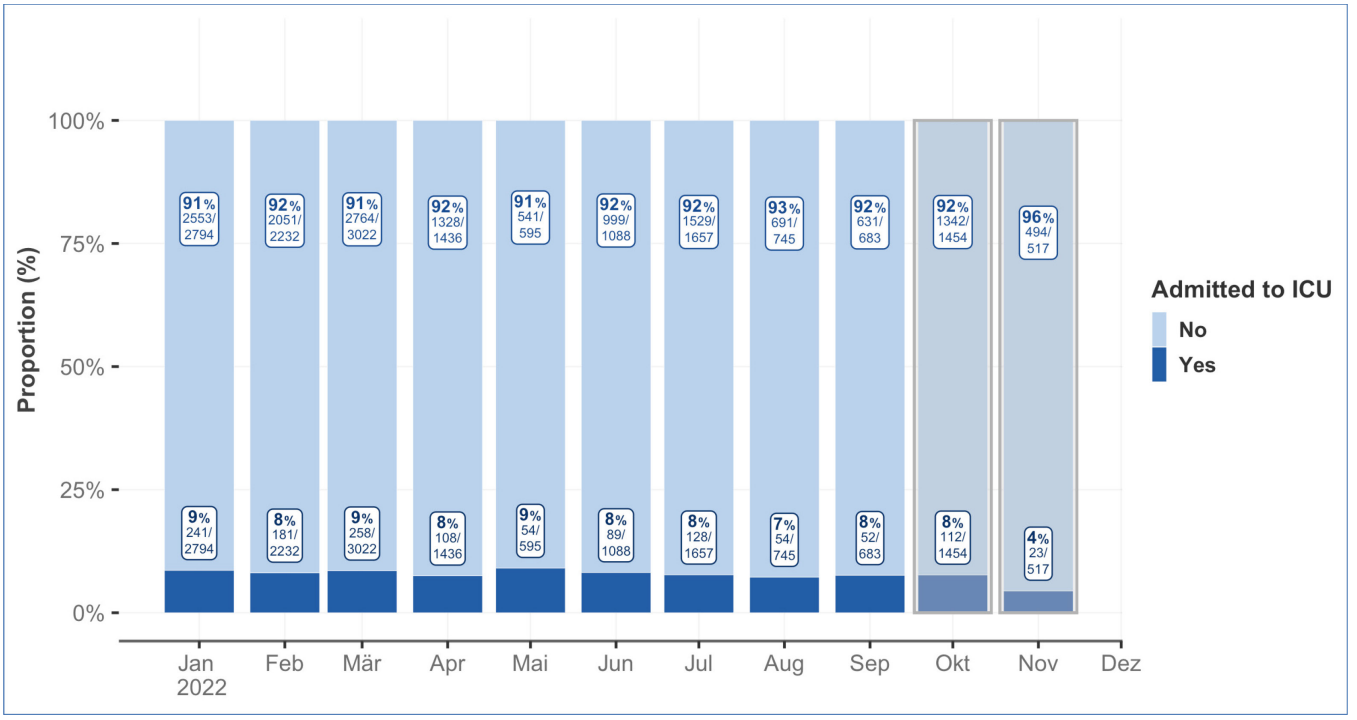


***Figure 12**: Percentage and proportion of episodes with at least one ICU admission over time. Records with incomplete data (ongoing episodes or with a pending outcome in the database) were not included. Data from the last two months (highlighted gray) are considered provisional due to data entry delays.*

## 4.2. ICU admission across demographic and risk groups

From Januar 2022 to September 2022, ICU admission probability across ages was roughly bimodal with a peak for the 10-19-year age group and for the 60-69 age group. The 60-69 age group had the highest probability of admission to the ICU, with 13.9% (233 of 1,677) of episodes including at least one ICU admission. During the same period, individuals aged 80 and above were least likely to be admitted to the ICU, with 4.3% (184 of 4,230) of the episodes including at least one ICU admission. Males were more likely to be admitted to the ICU than females. Overall, admissions to the ICU were registered for 9.9% of the episodes concerning males, compared to 6.5% of the episodes concerning females. Episodes of patients transferred from other hospitals had a high probability of ICU admission: 24% of such episodes (196 of 818) required at least one ICU admission, compared to an overall admission rate of 8.3%. ICU admission probability also increased with increasing admission severity scores (Figure **13**a).

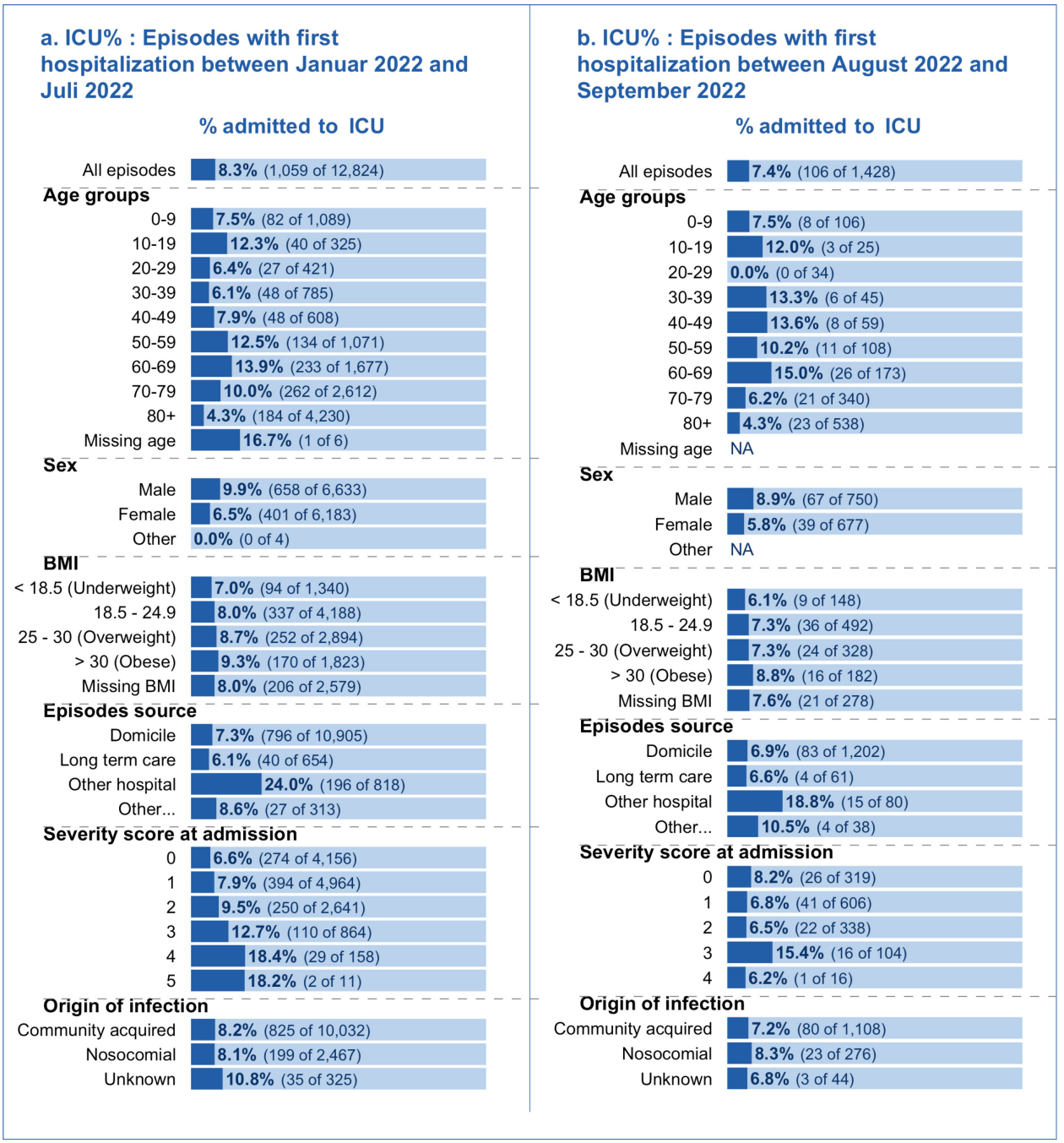


***Figure 13**: Percentage of hospitalization episodes with at least one ICU admission, grouped by demographic and risk factors, over two time intervals. For episodes with multiple hospitalizations, we considered whether they were admitted to the ICU during any of their hospitalizations. Both panels include records up to Sep 30, 2022 due to data completeness considerations. Records with incomplete data were not included.*

## 4.3. ICU admission rate by vaccination status

Figure **14** shows the ICU admission rate, which is the number of episodes requiring an admission to the ICU over all episodes registered, stratified by vaccination status.

The percentage of not vaccinated patients among episodes with ICU stay decreased sharply from January to April from 62% to 27% and has fluctuated since then. In the beginning of 2022 (January-March) the percentage of not vaccinated patients was clearly higher among those with ICU stay compared to all episodes at admission. This difference seems no longer apparent since April 2022. In recent months, the distribution of patients by vaccination status in ICU seems to be similar to all episodes at admission. (Figure **14**b)

The relative counts for the age groups of 5-15 and 16-39 have to be interpreted with caution due to low numbers. (Figure **14**b)

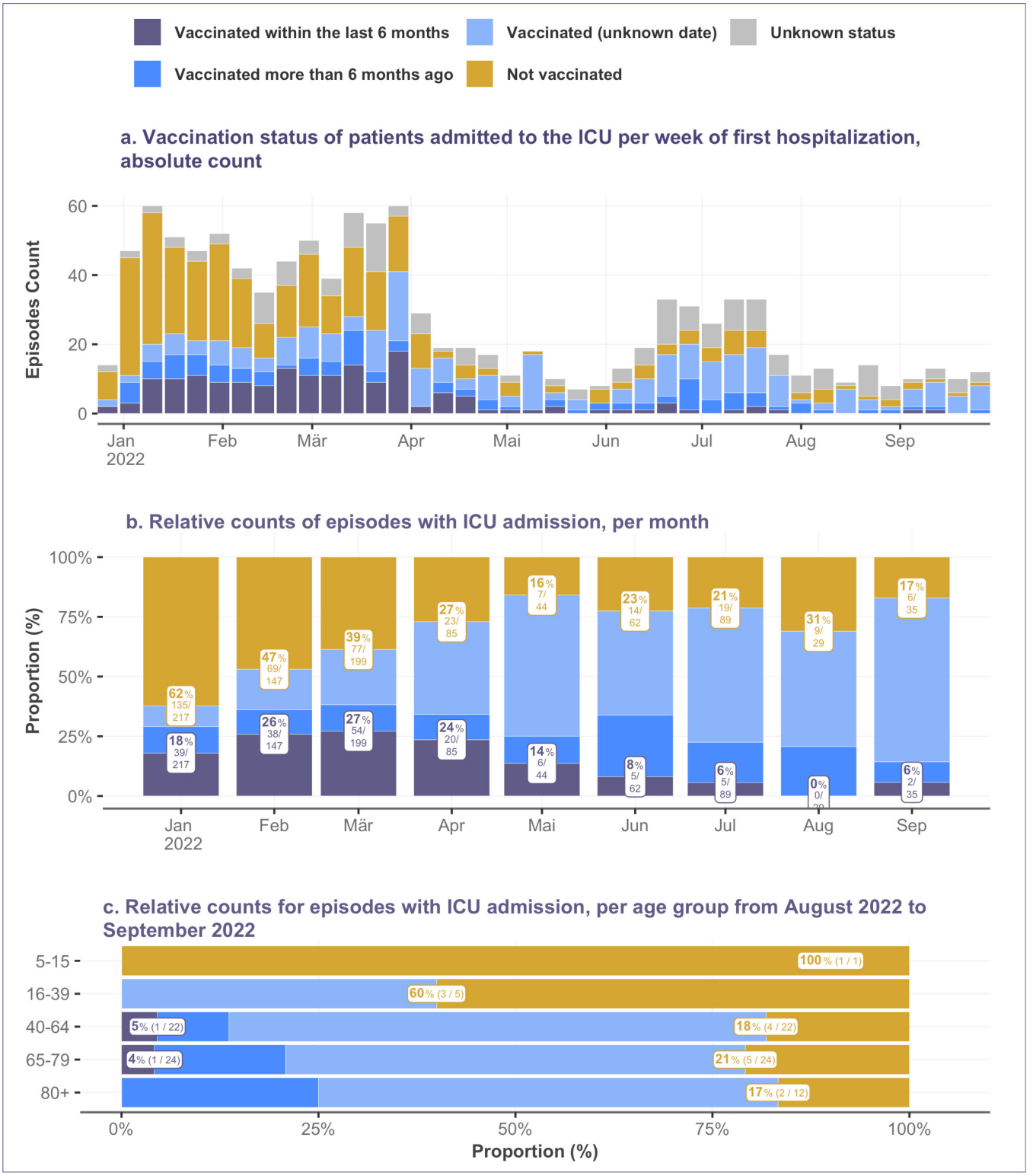


***Figure 14**: Demographic characteristics of hospitalized patients by immune status and immune status of patients over time. For episodes with multiple hospitalizations, the immune status for the first hospitalization was considered. Episodes with first admission date afterSep 30, 2022were excluded due to data completeness considerations. For Figure 5c only: Episodes with missing ages and children between 0 to 4 years old (following vaccination recommendations) were excluded from the analysis.*

## 4.4. ICU admission rate by age group and vaccination status

For the most recent time period where reliable data is available, the ICU admission rate is displayed by age group and by vaccination status (Figure **15**). Plots for the age groups 5-15 and 16-39 should be interpreted with caution, as the ICU% is calculated on a small number of episodes. The same caution applies in recent months, where peaks may be due to low number of episodes.

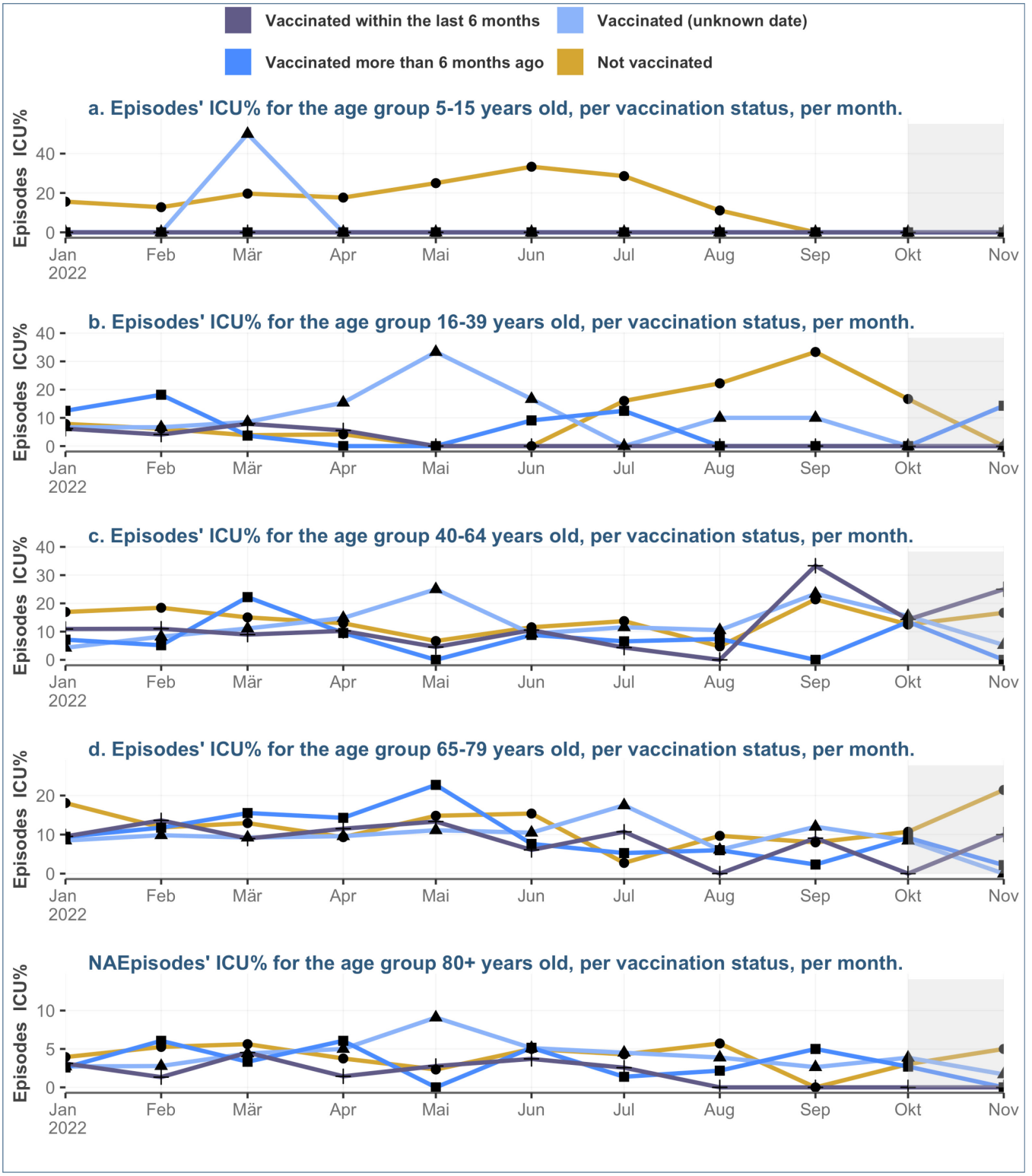


***Figure 15**: ICU admission rate (ICU%) by age and by vaccination status over time: percentage of episodes, which resulted in ICU admission of the patient in hospital. Records with incomplete data were not included. Includes records up to November 20, 2022. Data from the two last months (highlighted in gray) are considered provisional due to data entry delays.*

# 5. Treatments

Several treatments have been used since the beginning of the pandemic and guidelines for COVID-19 treatment evolve according to the current state of knowledge. Therapeutic strategies may vary across centers, contributing to the heterogeneity of data. For clarity purpose, the treatments were classified into three categories: antivirals [1], monoclonal antibodies [2] and immune-modulating strategies [3]. In this section, combinations of treatments are explored: combinations are defined as the co-administration or the sequential administration of treatments during the same episode. Over all episodes (14218) from Januar 2022 to September 2022, 6.6% received monoclonal antibodies, 26.1% were administered immune-modulating strategies, and 15.7% were treated with antivirals.

Figure **16** represents the categories of treatments (including combinations) over time, starting February 2020. This figure illustrates the changes in the overall treatment strategy as well as the increasing proportion of episodes during which no anti-COVID treatment was administered. This may be in line with the increasing proportion of non-severe cases over time.

In the Figure **17**, treatments are analyzed at the drug-level. The most commonly used drugs and their different combinations are presented.

Figure **18** represents the use of treatments across different patient groups from Januar 2022 to September 2022.

[1] Antivirals comprise: nirmatrevir/ritonavir, remdesivir and other antivirals (chloroquine, lopinavir/ritonavir, ribavirin, tenofovir, etc.).

[2] Monoclonal antibodies comprise: tixagevimab/cilgavimab, sotrovimab, casirivimab/imdevimab, bamlanivimab/etesevimab, and others (convalescent plasma, etc.).

[3] Immune-modulating strategies comprise: corticoids (dexamethasone, prednisone), inhaled corticoids (budesonide), tocilizumab, baricitinib, and others (interferon, etc.).

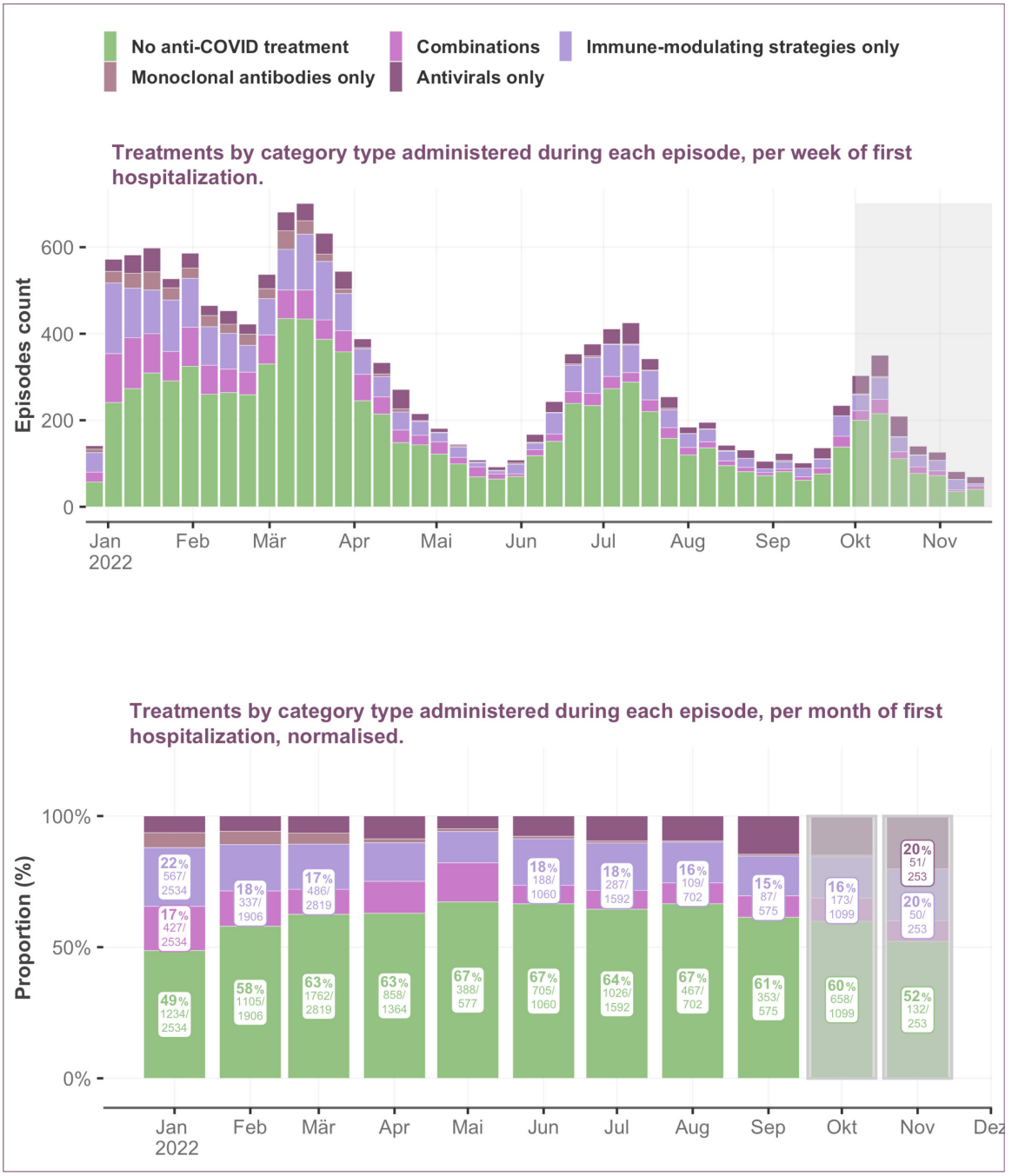


***Figure 16**: Anti-COVID treatments administered over time. Absolute counts are displayed per week of first hospitalization. Relative counts are presented by month of first hospitalization. Only treatment categories accounting for above 15% are displayed. Incomplete records were excluded.*

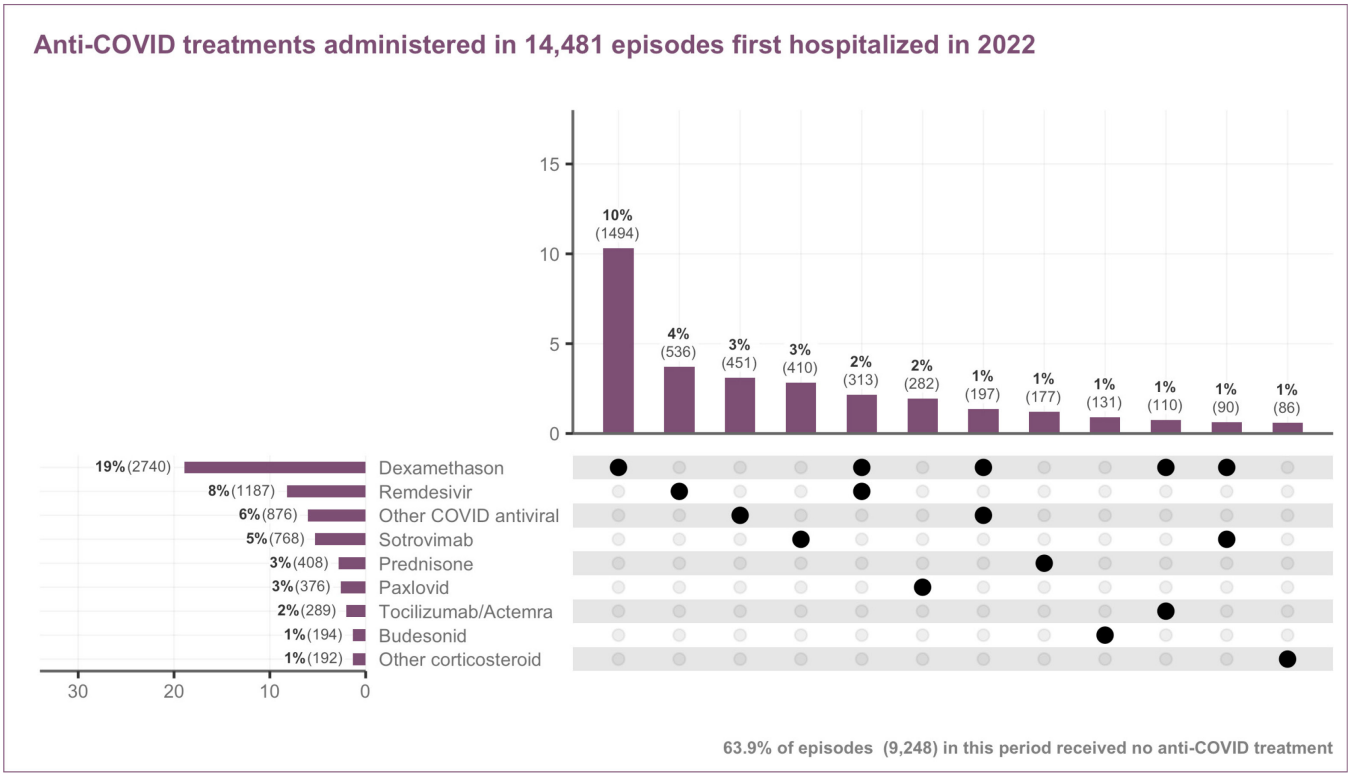


***Figure 17**: Anti-COVID treatments administered. Horizontal bars to the left represent the % of episodes who received a specific drug. Vertical bars show the % of episodes who received the combination of drugs indicated with the black dot(s) directly below the bar. Only the top 12 combinations are shown for each time period.*

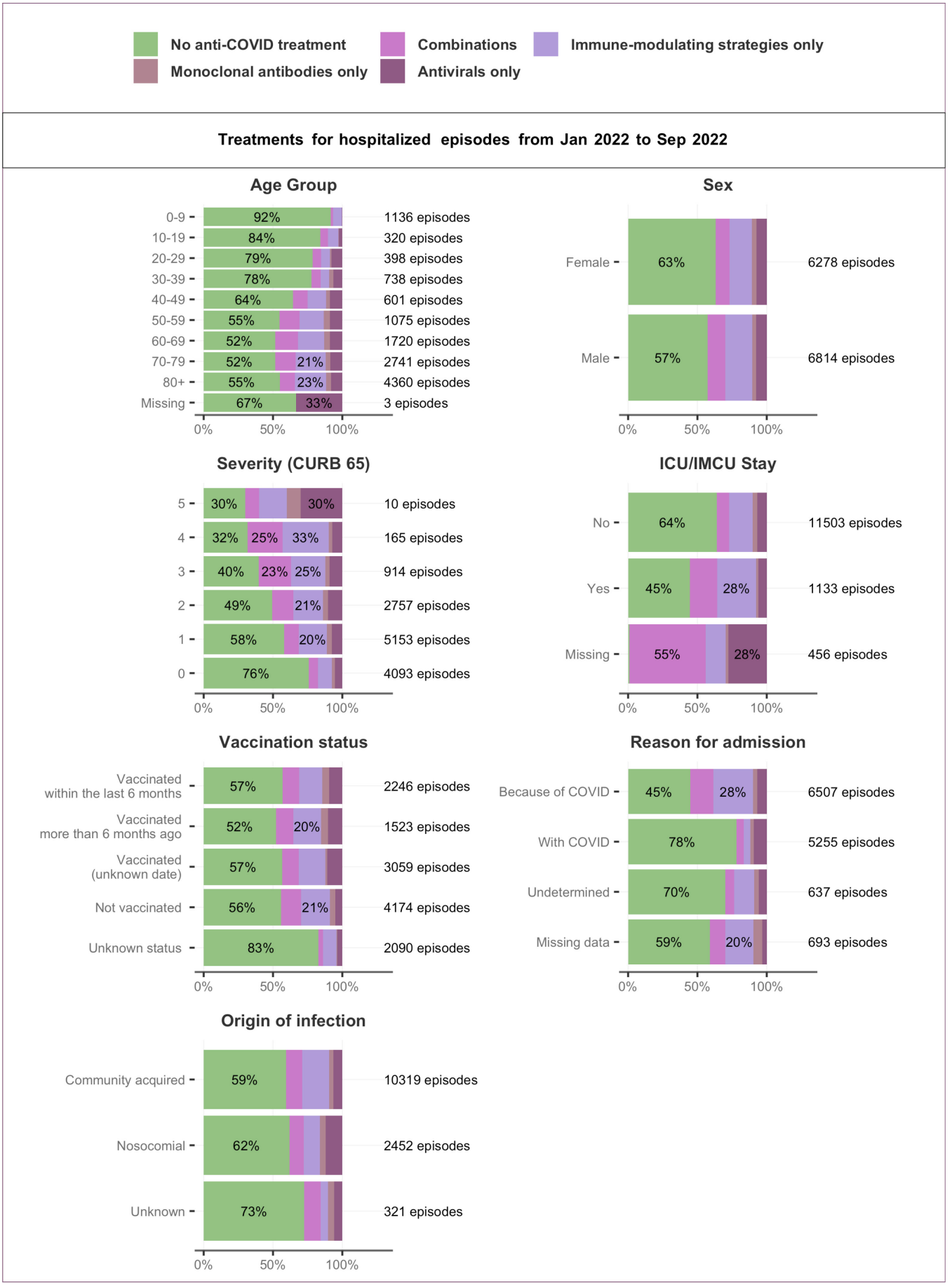


***Figure 18**: Anti-COVID treatments administered stratified across different demographic and risk groups.*

# 6. Influenza

The influenza's seasonal data begins its collection each November. In the Figure **19**, the current, developing influenza epidemic curve can be compared and contrasted with past seasons' epidemic curves. Essential demographic information for the ongoing influenza season is also displayed. Epidemic curves should be compared with caution, due to a varying number of hospitals which reported data over each specific season. For additional weekly updates about the current influenza season please refer to Saisonale Grippe – Lagebericht Schweiz.

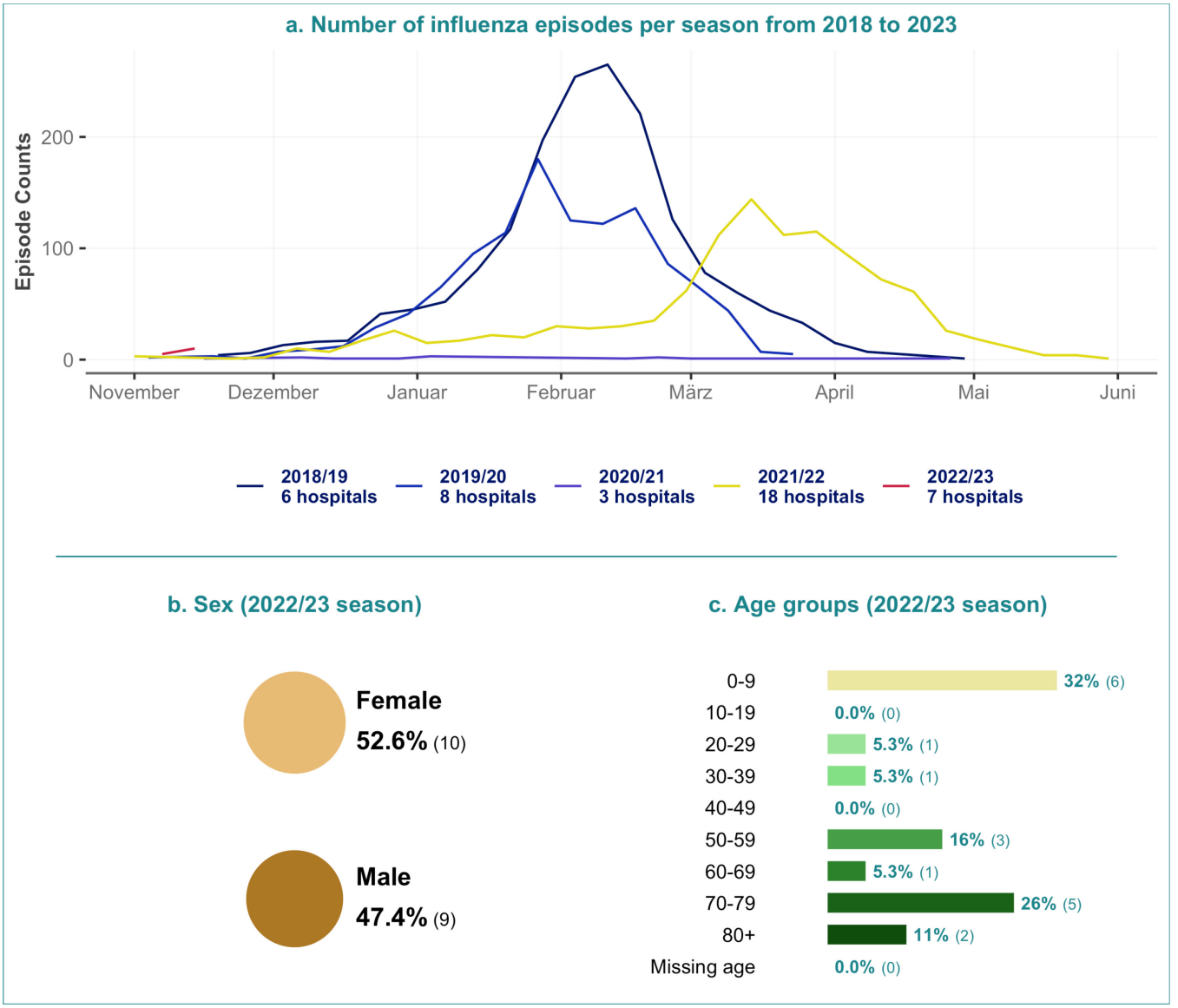


***Figure 19**: Number of episodes per influenza seasons, with the age and sex demographic characteristics of the ongoing season.*

# 7. Glossar und ergänzende Informationen

CH-SUR erfasst Daten von Patientinnen und Patienten, welche mit einer dokumentierten Infektion mit SARS-CoV-2 hospitalisiert wurden und deren Spitalaufenthalt länger als 24 Stunden andauert. Als Bestätigung für eine Infektion gilt ein positiver PCR-Test (Polymerase Chain Reaction) oder ein positiver Antigen-Schnelltest wie auch ein klinischer Befund für COVID-19. Nosokomiale SARS-CoV-2-Infektionen werden in der Datenbank ebenfalls erfasst und in einem separaten Kapitel am Schluss dieses Berichts aufgeführt.

**Hospitalization / Hospitalisation**:

Bei der Hospitalisation handelt es sich um die kleinste Datenanalyseeinheit. Sie ergibt sich aus jeweils einem Ein- und Austritt in einem an CH-SUR teilnehmenden Spital, wenn der Aufenthalt länger als 24 Stunden andauert. Jede Aufnahme einer Person in ein Spital wird als neue Hospitalisation gezählt. Da es innerhalb desselben Krankheitsverlaufs (einer einzelnen Infektion) häufig zu mehreren Hospitalisationen (Wiedereintritten) kommt, erfolgt die Analyse in diesem Bericht anhand der Anzahl Episoden und nicht anhand der Anzahl Hospitalisationen.

**Episode / Episode**:

Bei jeder Neuaufnahme in ein Spital, die mindestens 30 Tage nach einer früheren Hospitalisation erfolgt und zu einem Aufenthalt von mehr als 24 Stunden führt, wird eine Episodennummer vergeben. Wird eine Person innerhalb von 30 Tagen nur einmal oder mehrfach hospitalisiert, wird in beiden Fällen nur eine Episode gezählt. Wird eine Person im Abstand von über 30 Tagen zweimal hospitalisiert, werden zwei unterschiedliche Episodennummern vergeben. Wird eine Person innerhalb von 30 Tagen nach der letzten Entlassung zwischen zwei an CH-SUR teilnehmenden Spitälern transferiert, werden diese Hospitalisationen zur selben Episode gezählt. Eine Episode kann deshalb mehrere Hospitalisationen und jede Hospitalisation kann mehrere IPS-Aufnahmen umfassen.

**Reason for the hospitalization / Hospitalisationsgrund**:

- *Hospitalization because of COVID-19 / Hospitalisation aufgrund von COVID-19*: Basierend auf den bei der Aufnahme verfügbaren Informationen wird die Person hospitalisiert, weil sie Symptome aufgrund von COVID-19 aufweist oder an einer offensichtlich durch COVID-19 verursachten Dekompensation einer chronischen Krankheit leidet.
- *Hospitalization with a SARS-CoV-2 infection / Hospitalisation mit einer SARS-CoV-2-Infektion*: Basierend auf den bei der Aufnahme verfügbaren Informationen weist die Person einen positiven SARS-CoV-2-Test auf, wird aber ohne COVID-19-Symptome aus einem nicht mit COVID-19 zusammenhängenden Grund hospitalisiert. Das Hauptproblem ist also ein Unfall oder eine Erkrankung, die nicht mit COVID-19 in Verbindung steht.

**Origin of the infection / Infektionsursprung**:

- *Community acquired infection: / Ambulant erworbene Infektion*: Die SARS-CoV-2 Infektion wurde vor der Aufnahme in das Spital oder innerhalb der ersten fünf Tage nach der Aufnahme festgestellt.
- *Nosocomial infection / Nosokomiale Infektion*: Eine Episode gilt als «nosokomial», wenn die SARS-CoV-2 Infektion nach fünf oder mehr Tagen nach der Aufnahme in das Spital festgestellt wird.

**Severity score at admission / Schweregrad bei der Aufnahme**:

Bei Erwachsenen wird zur Beurteilung des Schweregrads der CURB-65 Score angewendet. Für jedes der folgenden Kriterien wird jeweils 1 Punkt gezählt: Verwirrtheit (Abbreviated Mental Test Score < 9), Serumharnstoff > 19 mg/dl, Atemfrequenz > 30 pro Minute, tiefer Blutdruck (diastolisch < 60 oder systolisch < 90 mmHg), Alter > 65 Jahre. Bei Kindern wird je ein Punkt für folgende Kriterien gezählt: Atemnot, Sauerstoffsättigung < 92%, Anzeichen schwerer klinischer Dehydratation oder eines klinischen Schocks und ein veränderter Bewusstseinszustand. Der Schweregrad entspricht der Summe der jeweiligen gezählten Punkte.

**Intermediate care unit (intermediate care or IMC) / Intermediate Care Unit (IMC)**: Pflegestation für Personen, die an einer Störung einer lebenswichtigen Funktion leiden oder deren Pflegelast keine Rückkehr in eine Bettenstation erlaubt. Die Intermediate Care Unit bildet das Bindeglied zwischen Intensivpflegestation und Bettenstation.

**Intensive care unit (ICU) / Intensivpflegestation (IPS)**: Pflegestation für Personen, die eine schwerwiegende Störung einer oder mehrerer lebenswichtiger Funktionen haben oder bei denen das Risiko schwerer Komplikationen besteht.

**Vaccination status / Impfstatus**:

Die Definition des Impfstatus basiert auf der letzten verabreichten Impfdosis, sofern der Patient oder die Patientin eine solche erhalten hat. Der Impfstatus umfasst folgende Kategorien:

a) *Geimpft innerhalb der letzten 6 Monate*: Patient/-innen, die ihre letzte Impfdosis innerhalb von 6 Monaten vor dem Zeitpunkt des positiven SARS-CoV-2-Tests erhalten haben.

b) *Geimpft vor mehr als 6 Monaten*: Patient/-innen, die ihre letzte Impfdosis mehr als 6 Monate vor dem Zeitpunkt des positiven SARS-CoV-2-Tests erhalten haben.

c) *Geimpft (Datum unbekannt)*: Patient/-innen, die vor dem positiven Test mindestens eine Dosis der von der WHO zugelassenen Impfstoffe erhalten haben, wobei jedoch nicht bekannt ist, wann die letzte Dosis verabreicht wurde.

d) *Ungeimpft*: Patient/-innen, die zum Zeitpunkt des positiven SARS-CoV-2-Tests keine einzige Dosis eines von der WHO zugelassenen Impfstoffs erhalten hatten.

e) *Status unbekannt*: Patient/-innen, für die keine Angaben zur Impfung vorlagen.

**Wichtiger Hinweis: Besondere Bevölkerungsgruppen:** Kinder unter 5 Jahren sind in keiner altersspezifischen Analyse zum Impfstatus erfasst, da für sie keine Impfung empfohlen wird

**Discharge / Entlassung**: Ein Spitalaustritt gilt als «Entlassung», wenn die Person das Spital mit einem der folgenden Zielorte verlässt: 1. nach Hause; 2. Langzeitpflegeeinrichtung; 3. anderes Spital; 4. andere Einrichtung, die sich nicht am CH-SUR-Überwachungssystem beteiligt; 5. Rehabilitationseinrichtung; 6. unbekannter Zielort

**Reason of death / Todesursache**: : Personen, bei denen COVID-19 die Todesursache war (died of COVID-19 / verstorben an COVID-19), werden getrennt aufgeführt von den COVID-19-Patientinnen und -Patienten, die wegen anderer Todesursachen verstarben (died with COVID-19, but not of COVID-19 / verstorben mit COVID-19, aber nicht an COVID-19). Ob eine Person an COVID-19 oder aus einem anderen Grund verstarb, wird auf Spitalebene im betreffenden am CH-SUR-System teilnehmenden Zentrum von einer Ärztin oder einem Arzt beurteilt. Fälle, in denen die Todesursache nicht sicher ist, aber eine COVID-19-Diagnose vorliegt (in Übereinstimmung mit den Einschlusskriterien für CH-SUR), werden als «verstorben an COVID-19» oder «vermuteter COVID-19-Todesfall» gezählt.

**Dealing with missing data / Umgang mit fehlenden Daten**: Wenn im Text erwähnt, werden fehlende Daten von der Analyse ausgeschlossen. Andernfalls werden Datensätze mit fehlenden Daten in der Gesamtanzahl berücksichtigt und entsprechend analysiert. Dies kann dazu führen, dass die Denominatoren der verschiedenen analysierten Kategorien nicht dieselbe Gesamtsumme ergeben. In einigen Abbildungen werden die Daten der letzten beiden Monate aufgrund von Verzögerungen bei der Datenerfassung als provisorisch betrachtet und grau markiert, wobei dies jeweils angegeben wird.

Report prepared by:

***University of Geneva, Institute of Global Health (IGH):*** Vancauwenberghe, Laure; Suveges, Maria; Sobel, Jonathan; Botero Mesa, Sara; Keiser, Olivia

***Infection Control Program, University of Geneva Hospitals (HUG):*** Zanella, Marie-Celine; Iten, Anne

***Bundesamt für Gesundheit, Bern (BAG):*** Roder, Ursina; Greiner, Clara; Resenterra-Charrière, Véronique; Fesser, Anna; Vonlanthen, Jasmin;