## Inclusion

Record ID

Hospital based surveillance of Influenza and COVID-19 cases in Switzerland

Each new record is a distinct COVID-19 OR Influenza Episode related to a patient.

In case a patient undergoes one Influenza episode and one COVID-19 episode, please create two separate records: one for influenza, and one for COVID-19.

A new episode is defined as a new hospitalisation separated by at minimum 30 days from the previous hospitalisation. In case a specific patient undergoes more than one episode, please create a new record to report each additional episode.

Whenever possible, make sure that you fill the Inclusion, Demography, Case Declaration, and Admission forms within 72h. The other forms can be filled later but ASAP.

Is this another episode of the same virus (COVID-19 or Influenza) from a same patient ?

<ul> <li>No (this is the patient's first episode)</li> <li>Yes (the first episode record has been already reported)</li> <li>Still to be confirmed</li> </ul>	
ID of first episode of this patient	
ID is the number on the right of the full CenterID-ID identifier, e.g. 123-456	([0-9999])
Was the first episode of this patient recorded in the old COVID-19 database?	⊖ Yes ⊖ No



Center (or consortium) where the first episode was created	<ul> <li>CHUV (Lausanne) EOC (Lugano)</li> <li>HFR (Fribourg) Hirslanden AG ZH</li> <li>(Zurich) Hirslanden Klinik St. Anna</li> <li>(Luzern) Hopital VS (Sion)</li> <li>HUG (Geneva) Inselspital (Bern)</li> <li>UKBB (Kinderspital Basel)</li> <li>KISPI (Zurich) KSA (Aarau)</li> <li>KSGR (Graubuenden)</li> <li>KSNW (Niedwalden) KSSG (St.Gallen) &amp; consortium KSW (Winterthur)</li> <li>LUKS (Luzern) OKS (St.Gallen)</li> <li>Spitaeler SH (Schaffhausen)</li> <li>STGAG KSM (Muensterlingen)</li> <li>USB (Basel) USZ (Zurich)</li> <li>(your current center: [user-dag-label])</li> </ul>	
Center (or consortium) where the first episode was created - Old Database	<ul> <li>CHUV (Lausanne) EOC (Lugano)</li> <li>HFR (Fribourg) Hirslanden AG ZH</li> <li>(Zurich) Hopital VS (Sion)</li> <li>HUG (Geneva) Inselspital (Bern)</li> <li>KISPI (Basel) KISPI (Zurich)</li> <li>KSA (Aarau) KSGR (Graubuenden)</li> <li>KSNW (Niedwalden) KSSG (St.Gallen) &amp; consortium KSW (Winterthur)</li> <li>LUKS (Luzern) OKS (St.Gallen)</li> <li>Spitaeler SH (Schaffhausen)</li> <li>STGAG KSM (Muensterlingen)</li> <li>USB (Basel) USZ (Zurich)</li> <li>(your current center: [user-dag-label])</li> </ul>	
Checking inclusion criteria		
This entry reports:	<ul> <li>A laboratory-confirmed Influenza diagnosis</li> <li>A laboratory-confirmed COVID-19 diagnosis (e.g. RT-PCR/Antigenic test)</li> <li>A clinical COVID-19 diagnosis (e.g. CT-scan/radio/serology)</li> </ul>	
Hospitalised for more than 24 hours	⊖ Yes ⊖ No	
Patient's inclusion		
Confirm inclusion ?	Yes (include patient)	
If the inclusion cannot be confirmed, please do not report this episode: either have the Pl delete the entry, or replace it with an episode that fulfills the inclusion criteria.		
Inclusion date		
ID of user checking the inclusion		



Demography	Page 1
Record ID	
Demography	
Year of birth	
Age Category	<pre>     &lt; 1 month     1 month - 1 year     1 - 2 years     3 - 5 years     6 - 12 years     13 - 19 years     20 - 29 years     30 - 39 years     40 - 49 years     50 - 59 years     60-64 years     65-69 years     70 - 79 years     80 - 89 years     90 - 100 years     &gt; 100 </pre>
Gender	○ Male ○ Female ○ Other

Height, Weight and BMI will be evaluated during each individual hospitalisation event



#### **Case Declaration**

Record ID	
Did the patient show any COVID-19/Influenza related symptoms?	○ Yes ○ No
Starting date of symptoms	
Exposure factors	
Type of exposure	<ul> <li>Community acquired</li> <li>Nosocomial (&gt; 3 days) from this hospital</li> <li>Nosocomial (&gt; 3 days) from another institution</li> <li>Unknown</li> </ul>
Type of exposure	<ul> <li>Community acquired</li> <li>Nosocomial (&gt; 5 days) from this hospital</li> <li>Nosocomial (&gt; 5 days) from another institution</li> <li>Unknown</li> </ul>
Diagnosis method	
Date and time of collection of diagnosis method (CT scan/Serology/Lab sample)	
Type of sample	<ul> <li>Nasal swab</li> <li>Throat swab</li> <li>Nasopharyngeal swab</li> <li>Tracheal aspiration</li> <li>Broncho-alveolar lavage</li> <li>Other</li> </ul>
please, specify sample type	
Confirmation method	<ul> <li>PCR (RT-PCR/POCT-PCR)</li> <li>Antigenic Rapid Flu test</li> <li>Viral culture</li> <li>Immunofluorescence</li> <li>Other</li> </ul>
Confirmation method	<ul> <li>PCR (RT-PCR/POCT-PCR)</li> <li>CT Scan or radiology compatible with COVID-19 diagnosis</li> <li>Serology compatible with COVID-19 diagnosis</li> <li>Antigenic test</li> <li>Other</li> </ul>
please, specify confirmation method	



Influenza virus type	<ul> <li>○ A</li> <li>○ B</li> <li>○ Unknown</li> </ul>
Was the patient's sample sequenced?	<ul> <li>○ No</li> <li>○ Yes</li> <li>○ Unknown</li> </ul>
Please provide the EPI ISL reference number from the sequencing using in the GISAID database	(as example EPI_ISL_402124)
COVID-19 Virus strain	
	(Pango-lineage)
Was a multiplex PCR used?	<ul> <li>○ No</li> <li>○ Yes</li> <li>○ Unknown</li> </ul>
Were concomitant viruses identified?	<ul> <li>○ No</li> <li>○ Yes</li> <li>○ Unknown</li> </ul>
Which concomitant viruses were identified ?	<ul> <li>Adenovirus</li> <li>Coronavirus 229E</li> <li>Coronavirus HKU1</li> <li>Coronavirus OC43</li> <li>Coronavirus NL63</li> <li>Mers-CoV</li> <li>SARS-CoV-2</li> <li>Human Metapneumovirus</li> <li>Human Rhinovirus</li> <li>Human Enterovirus</li> <li>Influenza A</li> <li>Influenza B</li> <li>Parainfluenza 1</li> <li>Parainfluenza 3</li> <li>Parainfluenza 4</li> <li>RSV</li> <li>Bocavirus</li> <li>Other</li> </ul>



## Admission

Record ID	
Entry date into the hospital	
Please confirm that the patient is rehospitalised following complications of this same episode!	🗌 same episode
The difference between this first hospitalisation and the sample accurate!	e date is more than 14 days: please make sure this is
I confirm that the Hospital Entry Date and the Sample Date are correct because this hospitalisation is either:	confirmed
a follow-up of an hospitalisation due to COVID-19/Influenza, or an hospitalisation due to complications of COVID-19/Influenza A nosocomial case	
Patient's admission	
[Only applicable for hospital consortia]	$\bigcirc 1$
Please provide the ID of the hospital in your consortium.	$\bigcirc 2 \\ \bigcirc 3 \\ \bigcirc 4 \\ \bigcirc 5 \\ \bigcirc 6 \\ \bigcirc 7 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$
	○ 7 ○ 8
	○ 9 ((optional))
code of Unit/Building	
	(optional)
Origin (pre-hospitalisation)	<ul> <li>Domicile</li> <li>Long term care</li> <li>Other hospital</li> <li>Other</li> </ul>

...please, specify origin



Where was the patient hospitalised ?	<ul> <li>Medicine</li> <li>Geriatrics</li> <li>Intensive Care</li> <li>Surgery</li> <li>Paediatrics</li> <li>Emergency Room</li> <li>NICU/PICU</li> <li>Obstetrics</li> <li>Other</li> </ul>
please, specify where the patient was hospitalised	
Height and Weight during hospitalisation	
Height	
previously reported height (if applicable): [height][previous-instance]	([cm])
Weight	
	([kg])
BMI	
	([kg/m2])
Obesity	🔿 No 🔿 Yes 🔿 Unknown
This is only a warning message: the BMI calculation and obesity status do not match. Please check the given values. Note that the WHO classification based on BMI is lacking subtlet awareness on a possible error. It does not imply that there is ind	ies, so this warning is only present to raise leed an error.
Severity at admission	
Peripheral oxygen saturation (SpO2) at admission	
	(unit [%])
Respiration rate at admission	
	(unit [# respiration per minutes])
received extracorporeal membrane oxygenation (ECMO) during the first 24h?	<ul> <li>○ No</li> <li>○ Yes</li> <li>○ Unknown</li> </ul>
admitted to an Intensive Care Unit (ICU) during the first 24h?	<ul> <li>No</li> <li>Yes</li> <li>Unknown</li> </ul>



received oxygen therapy and either invasive or non-invasive ventilation during the first 24h?	<ul> <li>○ No</li> <li>○ Yes</li> <li>○ Unknown</li> </ul>
Inotrope or vasopressor	<ul> <li>○ No</li> <li>○ Yes</li> <li>○ Unknown</li> </ul>
Systolic blood pressure (SPB) at admission	
	(unit [mm Hg])
Seizures	<ul> <li>○ No</li> <li>○ Yes</li> <li>○ Unknown</li> </ul>
Confusion	<ul> <li>○ No</li> <li>○ Yes</li> <li>○ Unknown</li> </ul>
Stroke	<ul> <li>○ No</li> <li>○ Yes</li> <li>○ Unknown</li> </ul>
Fraction of inspired oxygen (FiO2) at admission	
	(FiO2 without oxygen support is $0.21$ )
Vaccination status AT ADMISSION	
Vaccination status AT ADMISSION Vaccinated for the current influenza season	<ul> <li>No</li> <li>Yes</li> <li>Unknown</li> </ul>
	○ Yes
Vaccinated for the current influenza season	○ Yes
Vaccinated for the current influenza season Vaccination date (influenza)	<ul> <li>Yes</li> <li>Unknown</li> <li></li> <li>No</li> <li>Yes</li> <li>Not applicable (patient &gt;9 years old)</li> </ul>
Vaccinated for the current influenza season Vaccination date (influenza) Had the second dose of influenza vaccine	<ul> <li>Yes</li> <li>Unknown</li> <li></li> <li>No</li> <li>Yes</li> <li>Not applicable (patient &gt;9 years old)</li> </ul>

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Was the mother immunized against influenza during this child's pregnancy?	<ul> <li>No</li> <li>Yes</li> <li>Not applicable (patient &gt;6 months old)</li> <li>Unknown</li> </ul>
Vaccinated against COVID-19	<ul> <li>○ No</li> <li>○ Yes</li> <li>○ Unknown</li> </ul>
How many doses did the patient received	<ul> <li>1</li> <li>2</li> <li>3</li> <li>4</li> <li>5</li> <li>6</li> <li>7</li> <li>Unknown</li> </ul>
Vaccine name of the last dose	<ul> <li>Comirnaty©</li> <li>Moderna</li> <li>Astra-Zeneca</li> <li>Janssen (J&amp;J)</li> <li>Comirnaty©/Pfizer</li> <li>Comirnaty© Bivalent Original/Omicon</li> <li>Spikevax®/Moderna</li> <li>Spikevax®Bivalent Original/Omicron</li> <li>Nuvaxovid®</li> <li>Comirnaty® Omicron XBB.1.5</li> <li>Spikevax® Omicron XBB.1.5</li> <li>Nuvaxovid® Omicron XBB.1.5</li> <li>Unknown</li> <li>Other</li> </ul>
please specify vaccine name	
Date of last injection (COVID-19)	
	(if day is unknown, give month and year if available)
Last injection received (COVID-19)	<ul> <li>&lt; 3 months ago</li> <li>3-5months ago</li> <li>6-12 months ago</li> <li>&gt; 12 months ago</li> <li>Unknown</li> </ul>
Reason for hospitalisation	
Based on the information available at admission, is the patient hospitalised	<ul> <li>Because of COVID-19/Influenza</li> <li>With COVID-19/Influenza</li> <li>No determination possible</li> <li>Not documented</li> </ul>

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# **Clinical Complementary Information**

Record ID
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Co-morbidities	
Does the patient have comorbidities?	
○ No ○ Yes	
Chronic respiratory disease (including COPD, asthma)	○ No ○ Yes ○ Unknown
COPD	🔿 No 🔿 Yes 🔿 Unknown
Asthma	○ No ○ Yes ○ Unknown
Diabetes Mellitus	🔿 No 🔿 Yes 🔿 Unknown
Diabetes Mellitus stage	<ul> <li>Diet controlled</li> <li>Uncomplicated</li> <li>End-organ damage</li> <li>Unknown</li> </ul>
Hypertension	○ No ○ Yes ○ Unknown
Chronic cardiovascular disease (including CHF)	○ No ○ Yes ○ Unknown
Congestive heart failure	<ul> <li>No</li> <li>Yes</li> <li>Unknown</li> <li>(Exertional or paroxysmal nocturnal dyspnea and has responded to digitalis, diuretics, or afterload reducing agents)</li> </ul>
Peripheral Vascular Disease	$\bigcirc$ No $\bigcirc$ Yes $\bigcirc$ Unknown (Intermittent claudication or past bypass for chronic arterial insufficiency, history of gangrene or acute arterial insufficiency, or untreated thoracic or abdominal aneurysm ( $\geq$ 6 cm))
Myocardial infraction	<ul> <li>No</li> <li>Yes</li> <li>Unknown</li> <li>(History of definite or probable MI (EKG changes and/or enzyme changes))</li> </ul>
Cerebrovascular accident or transient ischemic attack	<ul> <li>No</li> <li>Yes</li> <li>Unknown</li> <li>(History of a cerebrovascular accident with minor or no residua and transient ischemic attacks)</li> </ul>
Hemiplegia	○ No ○ Yes ○ Unknown
Dementia	○ No ○ Yes ○ Unknown (Chronic cognitive deficit)



Peptic ulcer disease	<ul> <li>No</li> <li>Yes</li> <li>Unknown</li> <li>(Any history of treatment for ulcer disease or history of ulcer bleeding)</li> </ul>
Chronic kidney disease	<ul> <li>No</li> <li>Yes</li> <li>Unknown</li> <li>(if "yes" please chose only one from mild or moderate to severe)</li> </ul>
Mild chronic kidney disease	○ No ○ Yes
Moderate to severe chronic kidney disease	$\bigcirc$ No $\bigcirc$ Yes (Severe = on dialysis, status post kidney transplant, uremia; Moderate = creatinine >3 mg/dL (0.27 mmol/L))
Chronic liver disease	<ul> <li>No</li> <li>Yes</li> <li>Unknown</li> <li>(if "yes" please chose only one from mild or moderate to severe)</li> </ul>
Mild liver disease	$\bigcirc$ No $\bigcirc$ Yes (Mild = chronic hepatitis (or cirrhosis without portal hypertension))
Severe liver disease	<ul> <li>No</li> <li>Yes</li> <li>(Severe = cirrhosis and portal hypertension with variceal bleeding history; Moderate = cirrhosis and portal hypertension but no variceal bleeding history)</li> </ul>
Chronic neurological impairment	○ No ○ Yes ○ Unknown
Immunosuppression	○ No ○ Yes ○ Unknown
Hematological pathology with immuno-suppression	○ No ○ Yes ○ Unknown
Leukemia	○ No ○ Yes ○ Unknown
Lymphoma	○ No ○ Yes ○ Unknown
Solid organ transplantation	○ No ○ Yes ○ Unknown
Immuno-suppressive treatment	○ No ○ Yes ○ Unknown
Oncological pathologies	○ No ○ Yes ○ Unknown
Solid tumor	<ul> <li>None</li> <li>Localized</li> <li>Metastatic</li> </ul>
Connective tissue disease	○ No ○ Yes ○ Unknown
HIV-positive	○ No ○ Yes ○ Unknown
AIDS	🔿 No 🔿 Yes 🔿 Unknown



Other risk factors	
Pregnancy	○ No ○ Yes ○ Unknown
Postpartum < 4 weeks	<ul> <li>○ No</li> <li>○ Yes</li> <li>○ Unknown</li> <li>(Women who gave birth in the 4 weeks before the episode)</li> </ul>
Premature < 24 months	$\bigcirc$ No $\bigcirc$ Yes $\bigcirc$ Unknown (Premature children aged < 24 months)
please specify the gestational week the child was born in	(Number between 0 and 38)
please specify weight at birth	
	(in kg)
Charlson Comorbidity Index (Automated) Note: in the computation of this score "unknown" responses in comorbidities will be considered as "no".	
Antiviral Treatment	○ No ○ Yes ○ Unknown
Name of the treatment	<ul> <li>Oseltamivir</li> <li>Zanamivir</li> <li>Baloxavir</li> <li>Other</li> </ul>
Name of the treatment	<ul> <li>Chloroquine</li> <li>Interferon</li> <li>Lopinavir/Ritonavir</li> <li>Remdesivir</li> <li>Tenofovir</li> <li>Ribavirin</li> <li>Dexamethason (PLEASE REPORT DEXAMETHASON UNDE CORTICO-STEROID TREATMENTS, NOT HERE)</li> <li>Paxlovid</li> <li>Other</li> </ul>
please, specify (name of treatment)	
Monoclonal antibodies treatment against COVID-19	
Monoclonal antibodies treatment	○ No ○ Yes ○ Unknown
Name of the antibody treatment	<ul> <li>Bamlanivimab/Etesevimab</li> <li>Casirivimab/Imdevimab</li> <li>Tixagevimab/Cilgavimab (Evusheld)</li> <li>Sotrovimab</li> <li>Other antibodies</li> </ul>
please specify (other monoclonal antibody treatment)	



Immune-modulating strategies against COVID-19	
Cortico-steroids or another immune-modulating strategy	🔿 No 🔿 Yes 🔿 Unknown
Name of cortico-steroids or another immune-modulating strategy	<ul> <li>Systemic corticoids (dexamethasone, prednisone, other systemic corticoids)</li> <li>Inhaled corticoids (budesonide, other inhaled corticoids)</li> <li>Tocilizumab</li> <li>Baricitinib</li> <li>Other immune-modulating strategy</li> </ul>
please specify (other immune-modulating strategy)	
Stay in Intermediate care unit	
Did the patient stay in intermediate care unit ?	🔿 No 🔿 Yes 🔿 Unknown
Intermediate care unit (first stay)	
Intermediate care unit entry date	
	((if available))
Intermediate care unit exit date	
	((if available))
Non-invasive ventilation	🔿 No 🔿 Yes 🔿 Unknown
Any additional stay in intermediate care unit to report ?	○ No ○ Yes
Intermediate care unit (second stay)	
Intermediate care unit entry date	
	((if available))
Intermediate care unit exit date	
	((if available))
Non-invasive ventilation	🔿 No 🔿 Yes 🔿 Unknown
Any additional stay in intermediate care unit to report ?	○ No ○ Yes



Intermediate care unit (third stay)		
Intermediate care unit entry date		
	((if available))	
Intermediate care unit exit date		
	((if available))	
Non-invasive ventilation	🔿 No 🔿 Yes 🔿 Unknown	
Stay in Intensive care unit		
Did the patient stay in intensive care unit ?		
🔿 No 🔿 Yes 🔿 Unknown		
Intensive care unit (first stay)		
Intensive care unit entry date		
	((if available))	
Intensive care unit exit date		
	((if available))	
Non-invasive ventilation	🔿 No 🔿 Yes 🔿 Unknown	
Invasive ventilation	🔿 No 🔿 Yes 🔿 Unknown	
Extra-Corporeal Membrane Oxygenation (ECMO)	🔿 No 🔿 Yes 🔿 Unknown	
Any additional stay in intensive care unit to report ?	○ No ○ Yes	
Intensive care unit (second stay)		
Intensive care unit entry date		
	((if available))	
Intensive care unit exit date		
	((if available))	
Non-invasive ventilation	🔿 No 🔿 Yes 🔿 Unknown	
Invasive ventilation	🔿 No 🔿 Yes 🔿 Unknown	
Extra-Corporeal Membrane Oxygenation (ECMO)	🔿 No 🔿 Yes 🔿 Unknown	
Any additional stay in intensive care unit to report ?	○ No ○ Yes	



	((if available))
Intensive care unit exit date	
	((if available))
Non-invasive ventilation	🔿 No 🔿 Yes 🔿 Unknown
Invasive ventilation	🔿 No 🔿 Yes 🔿 Unknown
Extra-Corporeal Membrane Oxygenation (ECMO)	🔿 No 🔿 Yes 🔿 Unknown
Complications (probably related to Influenza/COVID-19)	
Did the patient have any complications ?	
○ No ○ Yes ○ Unknown	
Respiratory diseases	○ No ○ Yes ○ Unknown
Acute respiratory distress syndrome	🔿 No 🔿 Yes 🔿 Unknown
Pneumonia	🔿 No 🔿 Yes 🔿 Unknown
pneumonia code [see pneumonia classification]	○ PN1 ○ PN2 ○ PN3 ○ PN4 ○ PN5
was the pneumonia associated with the reported infection?	🔿 No 🔿 Yes 🔿 Unknown
Pneumonia (2nd event)	🔿 No 🔿 Yes 🔿 Unknown
pneumonia code (2nd event)	○ PN1 ○ PN2 ○ PN3 ○ PN4 ○ PN5
was the pneumonia associated with the reported infection?	🔿 No 🔿 Yes 🔿 Unknown
Paediatric Multisystem Inflammatory Syndrome (PIMS/PMIS)	🔿 No 🔿 Yes 🔿 Unknown
Cardiac disease	🔿 No 🔿 Yes 🔿 Unknown
Myocarditis	🔿 No 🔿 Yes 🔿 Unknown

...Myocardiac infarction

Intensive care unit (third stay)

Intensive care unit entry date

 $\bigcirc$  No  $\bigcirc$  Yes  $\bigcirc$  Unknown



Arrhythmia	○ No ○ Yes ○ Unknown
Heart failure	○ No ○ Yes ○ Unknown
Thrombosis/Embolism	○ No ○ Yes ○ Unknown
Neurological complication	○ No ○ Yes ○ Unknown
Encephalitis/Encephalopathy	○ No ○ Yes ○ Unknown
Fungal infections	○ No ○ Yes ○ Unknown



## **Patient Follow Up**

Record ID	
Patient's destination	
Deceased	🔿 Yes 🔿 No 🔿 Unknown
Date of death	
Was the death caused by Influenza/COVID-19?	○ No ○ Yes ○ Unknown
Destination	<ul> <li>Domicile</li> <li>LTC Facility</li> <li>Another hospital</li> <li>Rehabilitation</li> <li>Other</li> <li>Unknown</li> </ul>
please specify destination	
Was the patient transferred to an hospital participating to this surveillance system?	○ No ○ Yes
In which participating hospital was the patient transferred? Make sure you give the patient ID to the hospital he/she is being transferred to in order to ease the follow-up process!	<ul> <li>CHUV (Lausanne)</li> <li>EOC (Lugano)</li> <li>HFR (Fribourg)</li> <li>Hirslanden AG ZH (Zurich)</li> <li>Hirslanden Klinik St. Anna (Luzern)</li> <li>Hopital VS (Sion)</li> <li>HUG (Geneva)</li> <li>Inselspital (Bern)</li> <li>UKBB (Kinderspital Basel)</li> <li>KISPI (Zurich)</li> <li>KSA (Aarau)</li> <li>KSGR (Graubuenden)</li> <li>KSSG (St.Gallen) &amp; consortium</li> <li>KSW (Winterthur)</li> <li>LUKS (Luzern)</li> <li>OKS (St.Gallen)</li> <li>Spitaeler SH (Schaffhausen)</li> <li>STGAG KSM (Muensterlingen)</li> <li>USB (Basel)</li> <li>USZ (Zurich)</li> </ul>
Discharging date from hospital	
Based on all the information available at discharge, was the patient hospitalised	<ul> <li>Because of COVID-19/Influenza</li> <li>With COVID-19/Influenza</li> <li>No determination possible</li> <li>Not documented</li> </ul>

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#### Comments

Comments

