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ESWI Member

Spaarne  Gasthuis

Disclosures M. Goeijenbier

- **Relevant financial relationships:**

Consultation honoraria: Moderna, Pfizer, GSK

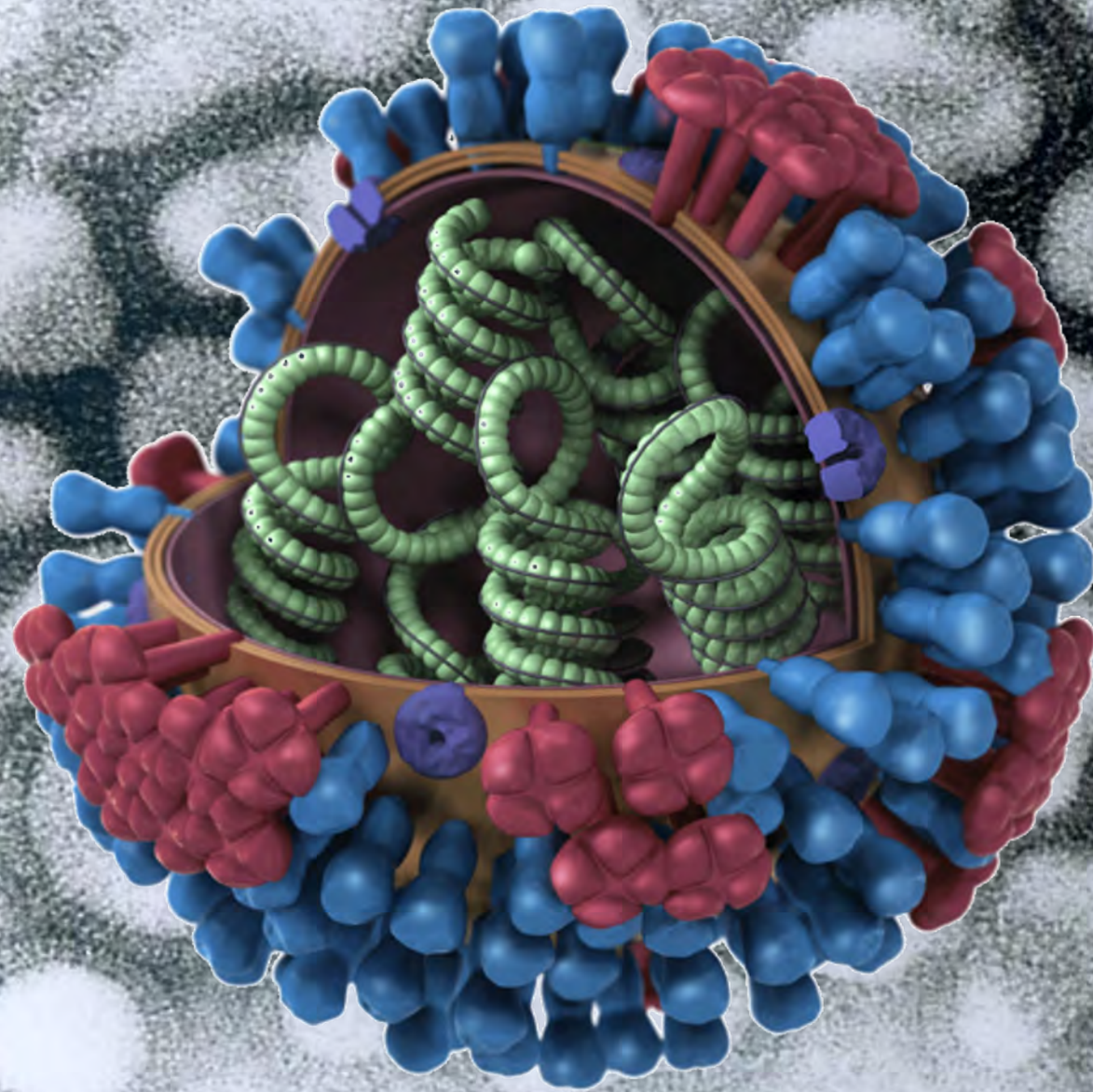
Relevant non financial:

Editor in chief for Tropical medicine, Travel Diseases and Vaccines (Nature Springer)

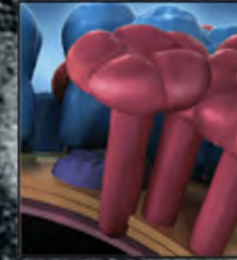
Eswi Member

Board member OHRES and Cirion foundation

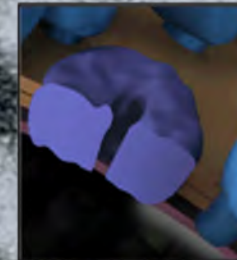




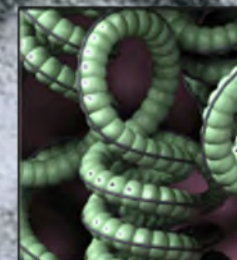
Hemagglutinin



Neuraminidase

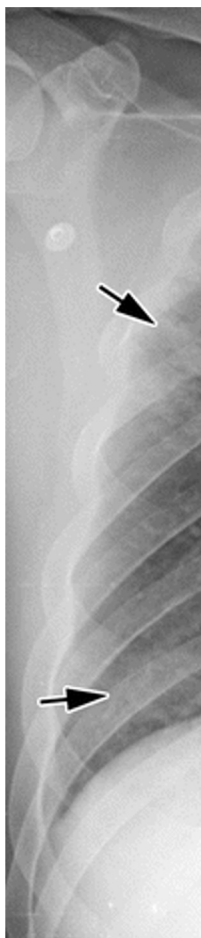


M2 Ion Channel



RNP



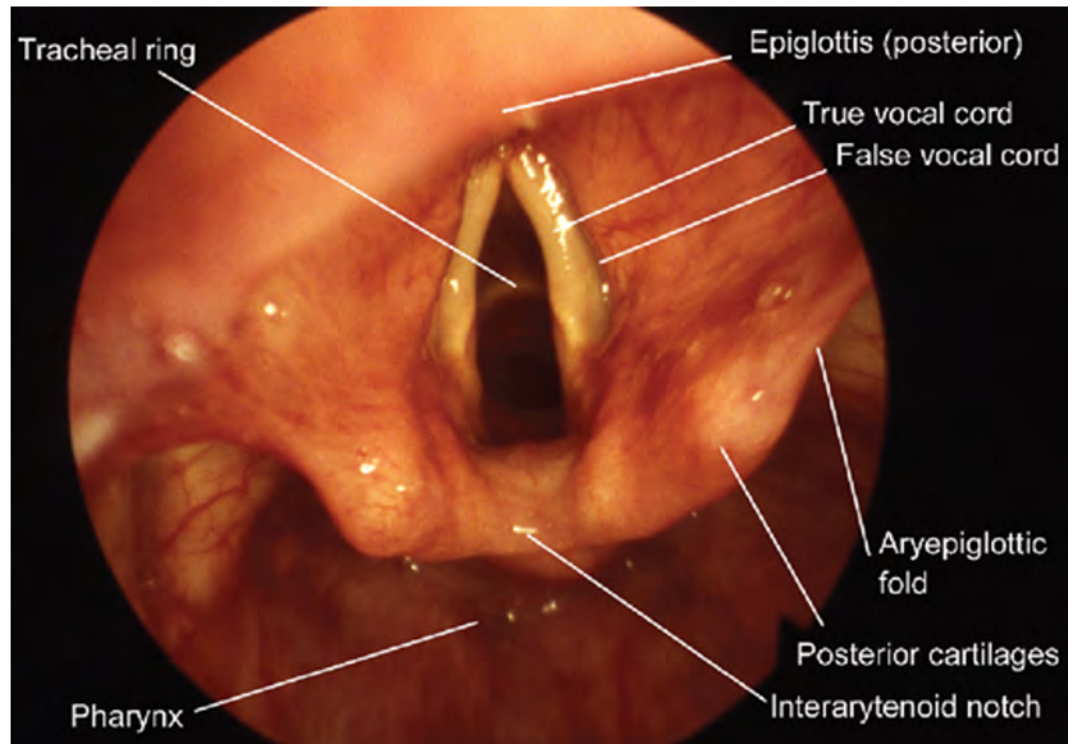
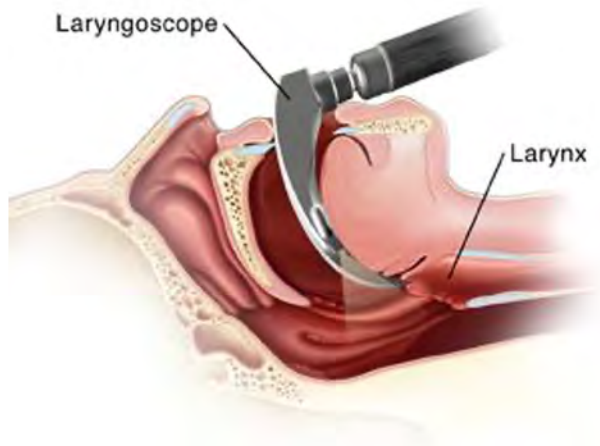


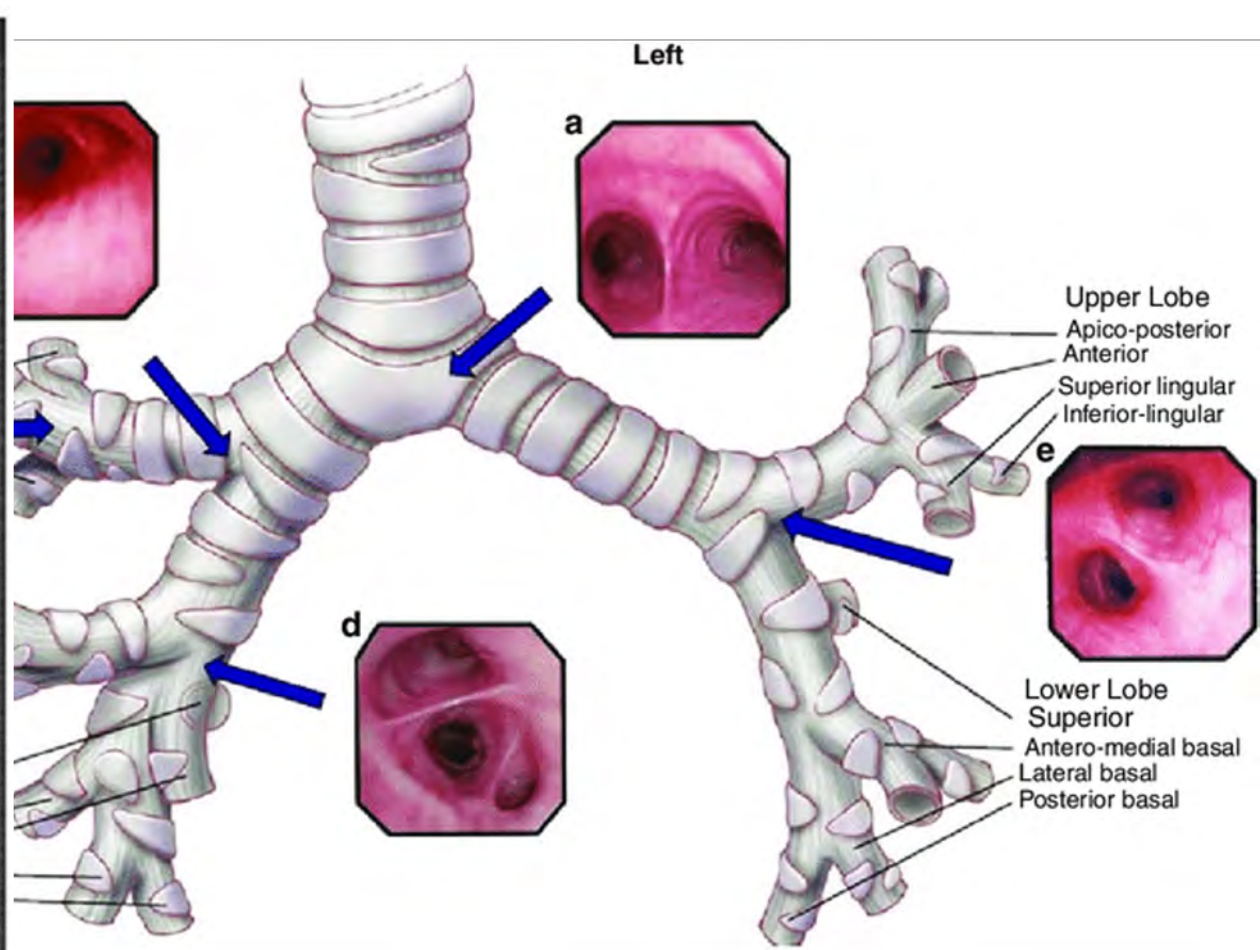
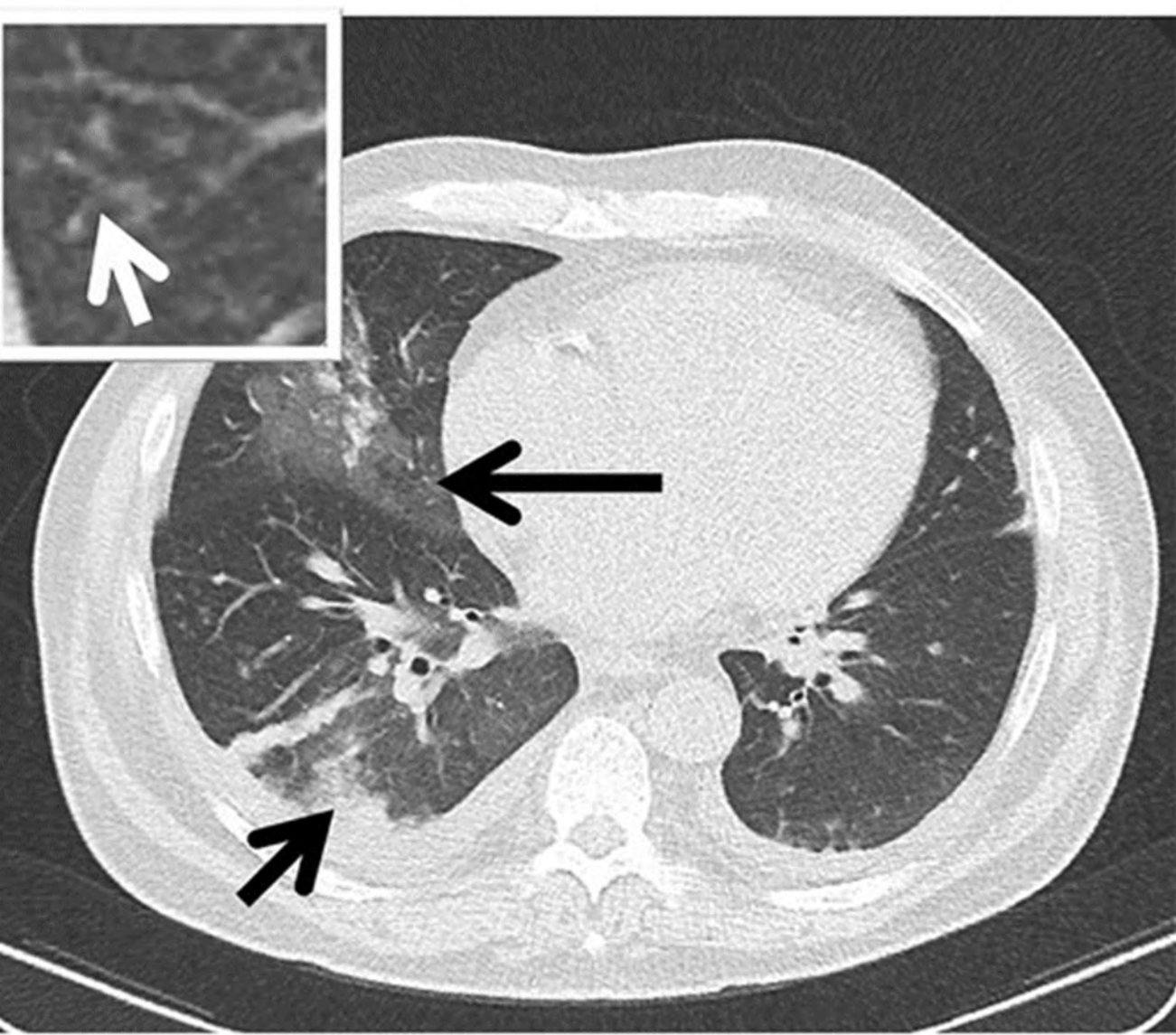




Summarize

- 43 year old male, medical history blanco, BMI 32
- Influenza A pneumonia and urinary test positive for pneumococcal antigen
- Admitted to high flow unit at pulmonology department
- On day 8 transfer to intensive care unit





Case summary

- 43 year old male, medical history blanco, BMI 32
- Influenza A pneumonia and urinary test positive for pneumococcal antigen
- Admitted to high flow unit at pulmonology department
- On day 8 transfer to intensive care unit
- Day 9 intubation
- Day 10 CT scan shows a cavity of 6cm×5cm. *Aspergillus fumigatus* grew in a sputum sample and the galactomannan antigen (AGA) tested positive in BAL fluid.

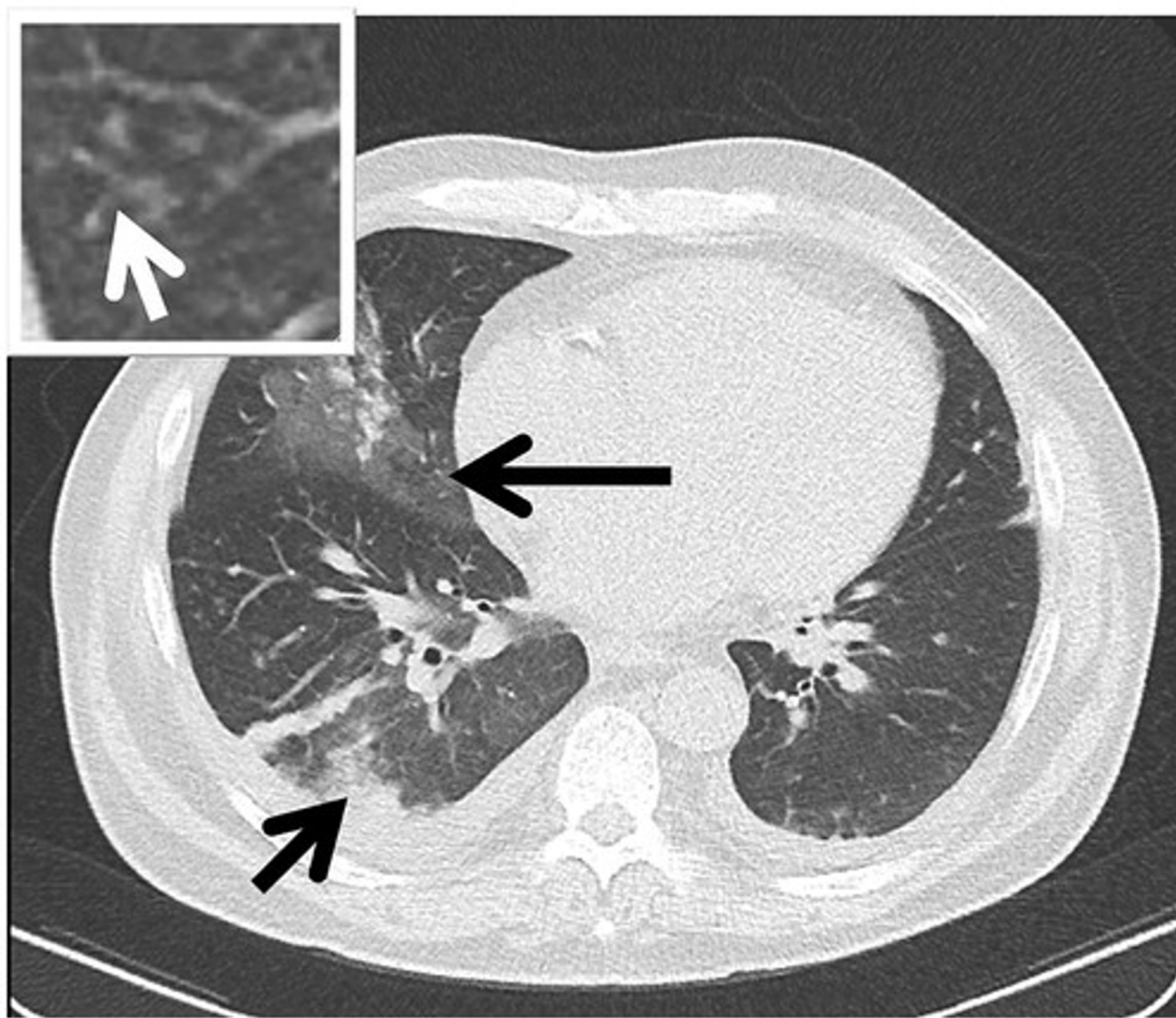
- Prolonged IC admittance
- Treated with antibiotics, antivirals and voriconazole
- ICU acquired weakness
- Tracheostoma
- Weaned of IMV via tracheostoma

Flu snapshot

- Anti-virals (oseltamivir, baloxavir)
- Vaccination (trivalent, quadrivalent, mrna?)
- Diagnostics: PCR or direct antigen; serology a challenge
- Risk groups: 65+, diabetes, immune compromised

Human Metapneumovirus (HMPV)

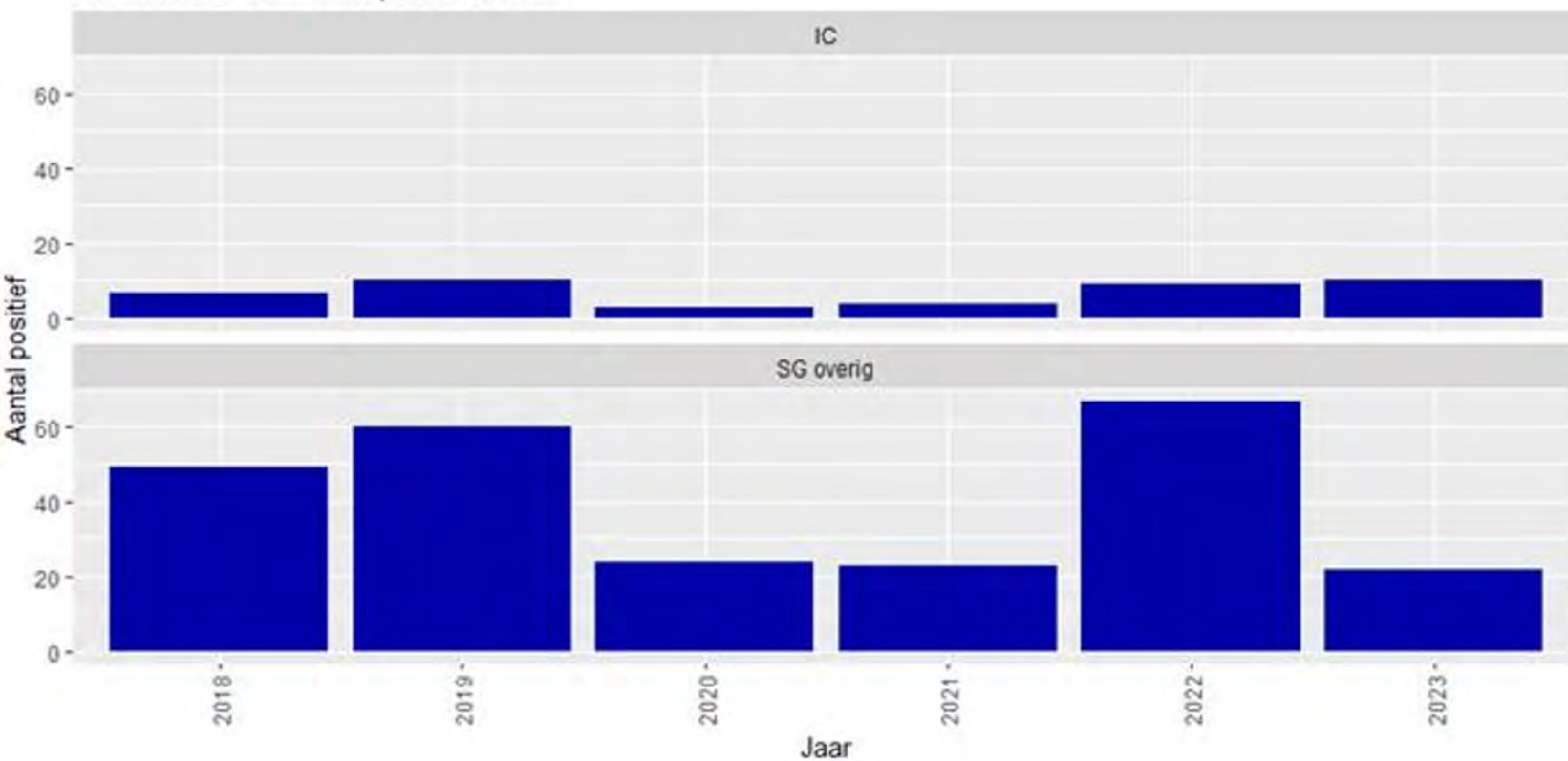
- no vaccin
- No anti virals
- Probably missed a lot



**Mortality hospitalized patients (6%)
ICU up to 15%
Co circulation with covid
Risk groups: stem cell transplants, COPD,
low BMI, astma & COPD**

Negative RNA pneumoviridae

Aantal Humaan Metapneumovirus



	Jaar	groep_IC	Negatief	Positief
1	2018	IC	390	7
2	2018	SG overig	1516	49
3	2019	IC	298	10
4	2019	SG overig	1484	60
5	2020	IC	316	3
6	2020	SG overig	1703	24
7	2021	IC	147	4
8	2021	SG overig	848	23
9	2022	IC	227	9
10	2022	SG overig	1203	67
11	2023	IC	225	10
12	2023	SG overig	1190	22

Case 1 RSV & COPD

67 year old female, medical history COPD gold III, DM type 2

E3M5V1 at emergency department

Arterial blood gas: Ph 7.11 PCO₂ 13

X-ray: no clear infiltration

MLPA: RSV pos COVID neg Influenza neg

Started on NIV

Ph <7 persistent hypercapnia, intubation started on IMV

Periods of complete bronchoconstriction and low tidal volumes

Started on steroids and cephalosporins recovered in 10 days

New Immunizations to Protect Against Severe RSV



Adults 60
and over

RSV vaccine

Talk to your doctor first



Babies

RSV antibody given
to baby

All infants entering or born during
RSV season. Small group of
older babies for second season.

OR



Babies

RSV vaccine given
during pregnancy

Can get if you are 32–36 weeks
pregnant during September–January

www.cdc.gov/rsv



RSV lower incidence compared to flu
however still very significant

COPD & cancer significantly increase the risk of
RSV hospital admittance (Lelyveld en Dore 2023)

C: 35.0, W: 350

Fi

CONTRAST

CT Angiogram Pulmonar

L013856211

6862

0°

5 mm

ns

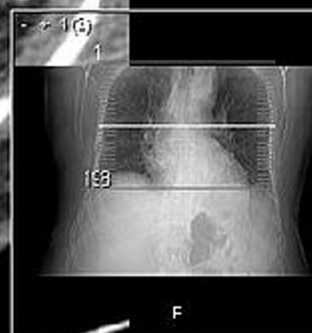
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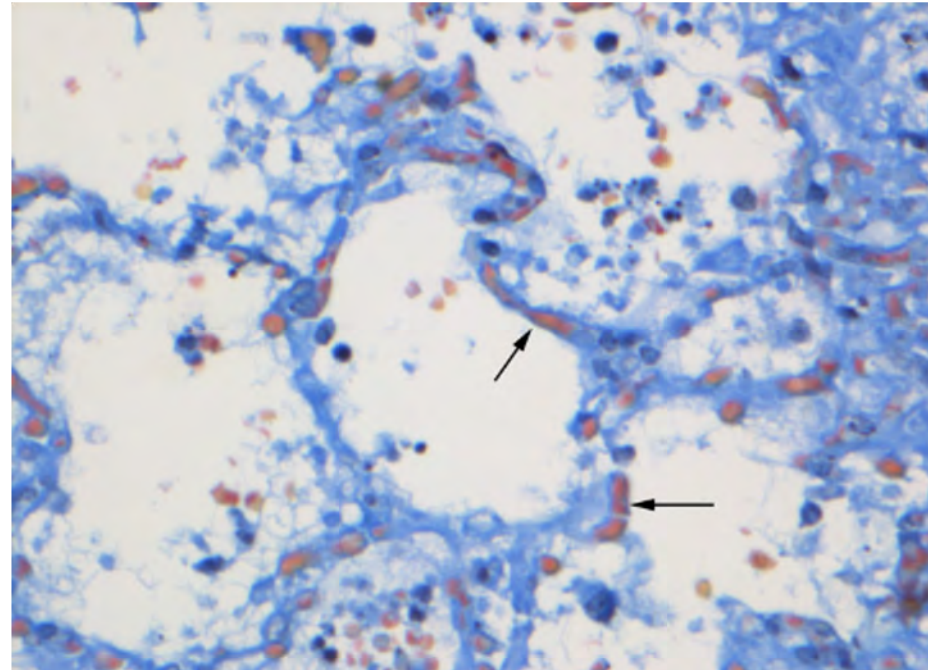
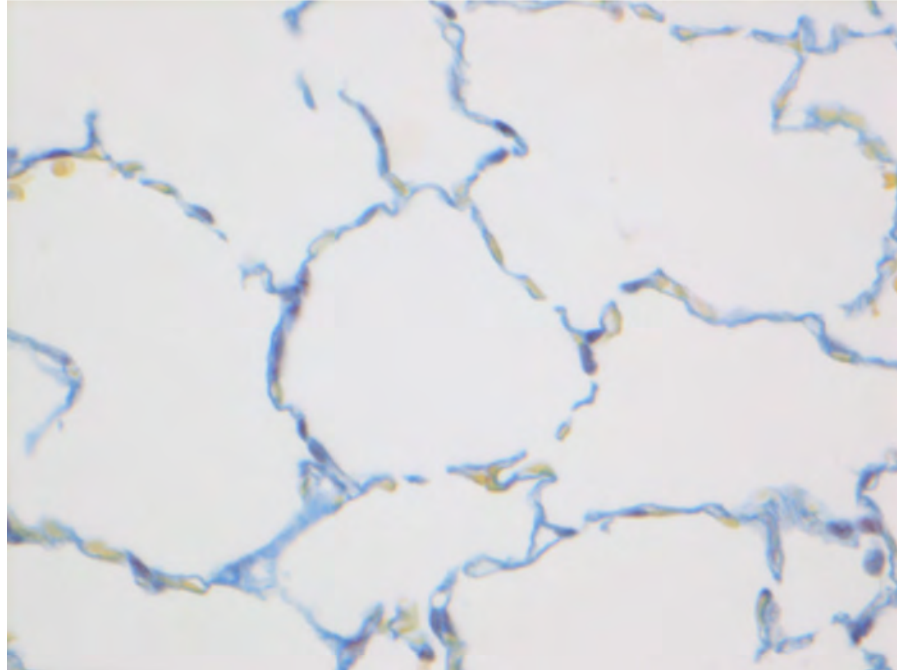
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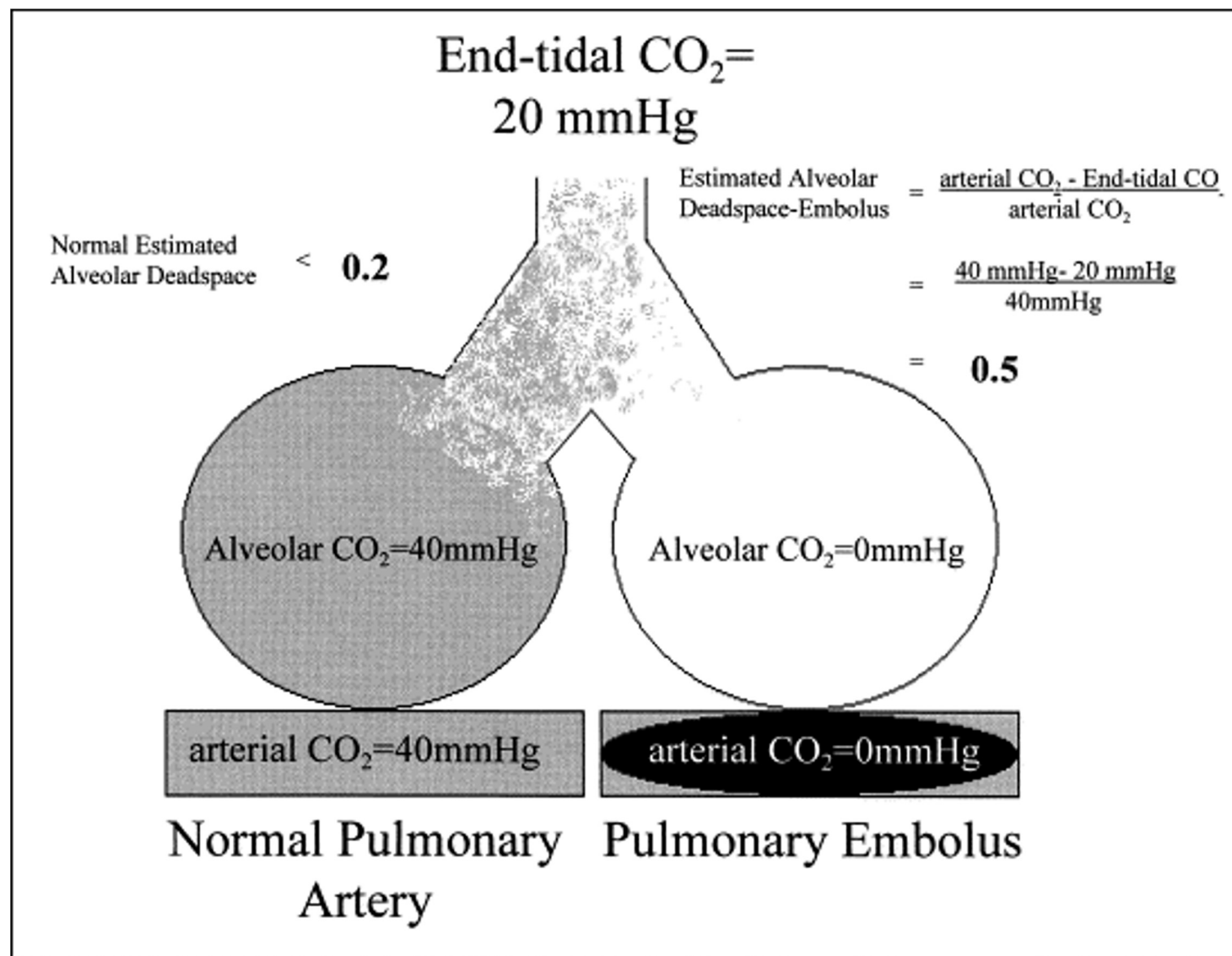
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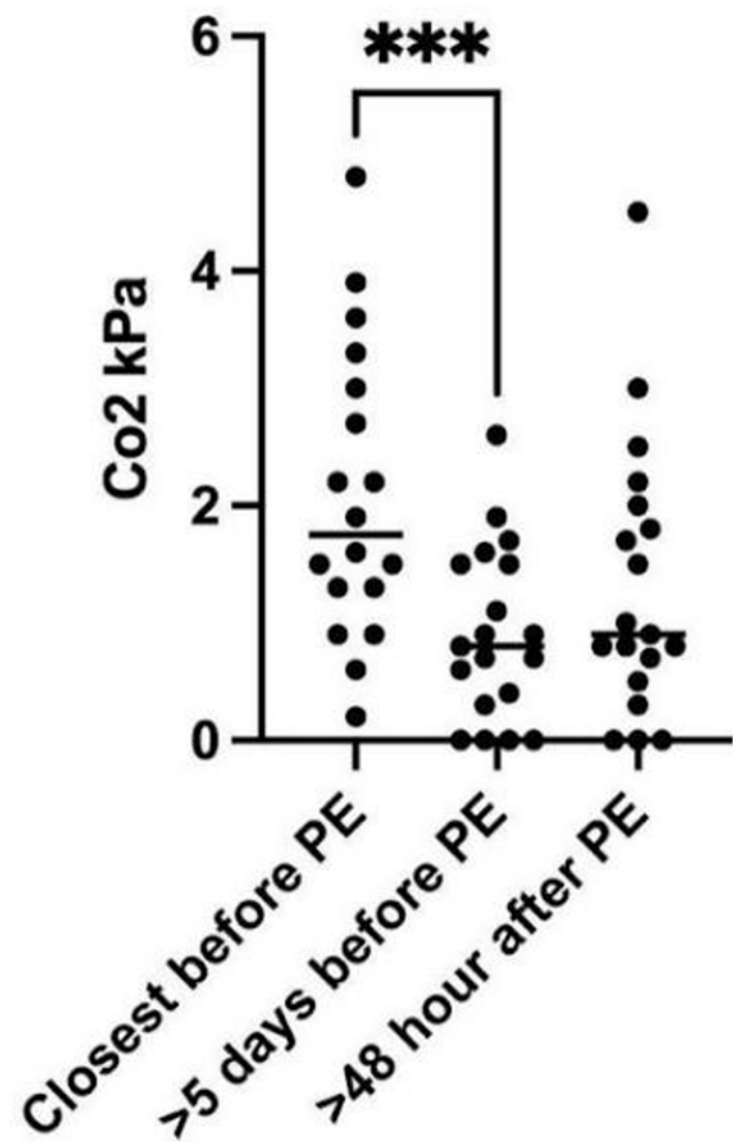




Lendrum staining for fibrin deposits



ET Co2 PaCo2



Monocyte TGT

