

# COVID-19 DOPO OLTRE 3 ANNI, COME È CAMBIATO

Dr. Lorenzo Ball

#### **CONFLICTS OF INTEREST**





# DO WE STILL NEED THE INTENSIVIST?

#### IN OTHER WORDS: WHAT AM I DOING HERE?

- PNEUMONIA IN IMMUNOCOMPROMISED
- PNEUMONIA IN UNVACCINATED
- PNEUMONIA IN COMORBID PATIENTS
- "INCIDENTAL" COVID IN CRITICALLY ILL

• WE MAY STILL NEED INTENSIVISTS



# THERE IS A TIME WINDOW FOR NON-INVASIVE SUPPORT

# BROCHARD L., SEMIN RESPIR CRIT CARE MED. 2014;35(4):492-500.

Papoutsi *et al. Crit Care* (2021) 25:121 https://doi.org/10.1186/s13054-021-03540-6

#### RESEARCH

# Effect of timing of intubation on clinical outcomes of critically ill patients with COVID-19: a systematic review and meta-analysis of non-randomized cohort studies

**Conclusions:** The synthesized evidence suggests that timing of intubation may have no effect on mortality and morbidity of critically ill patients with COVID-19. These results might justify a wait-and-see approach, which may lead to fewer intubations. Relevant guidelines may therefore need to be updated.

## **Critical Care**

#### **Open Access**

# WE BETTER INVESTIGATED THE EFFECTS OF NRS FAILURE

#### BALL L ET AL., RESP PHYSIOL NEUROBIOL 2022

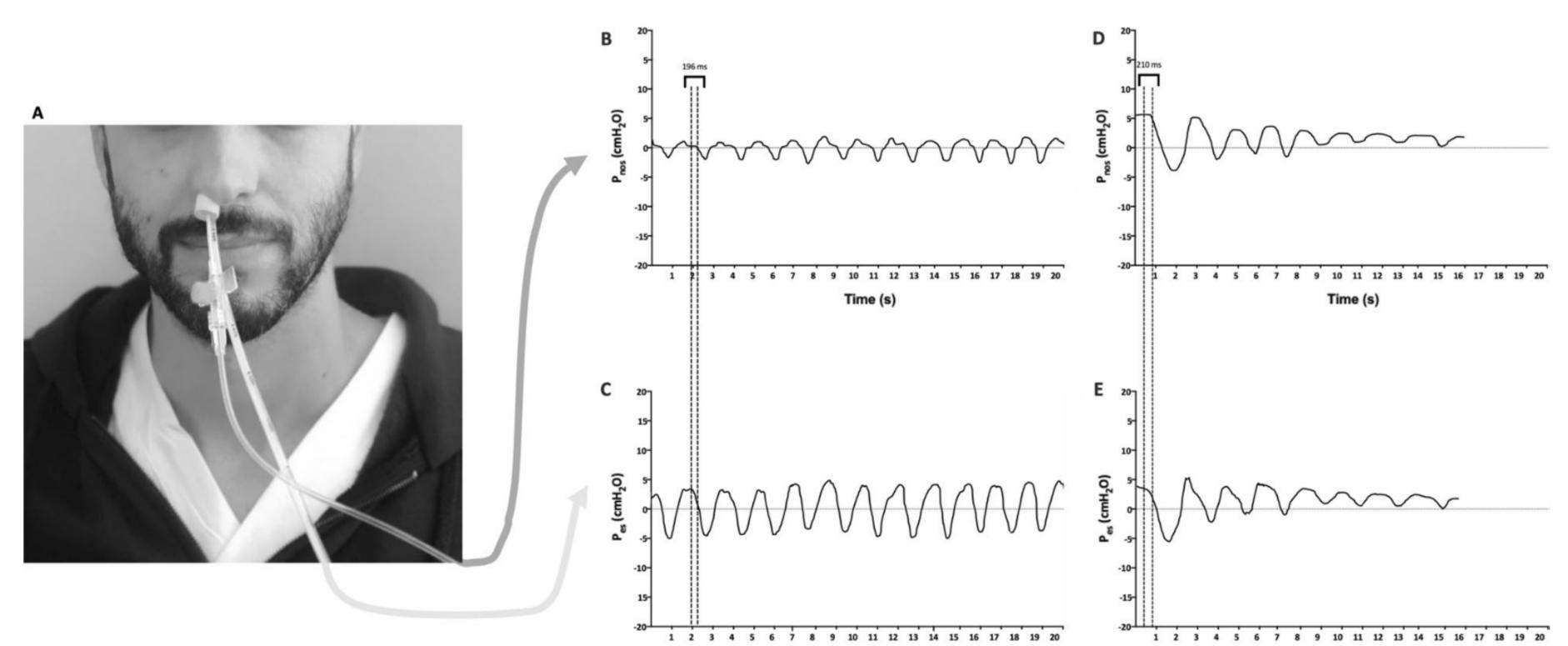
**Critically ill COVID-19** patients who failed helmet CPAP and required intubation (n = 52)The ICU mortality in the very late (> 7 days of h-CPAP) compared to the early-intermediate intubation group was 12/16 (75%) versus 16/36(44%), p = 0.07



### CAN WE ESTIMATE INSPIRATORY EFFORT NON-INVASIVELY?

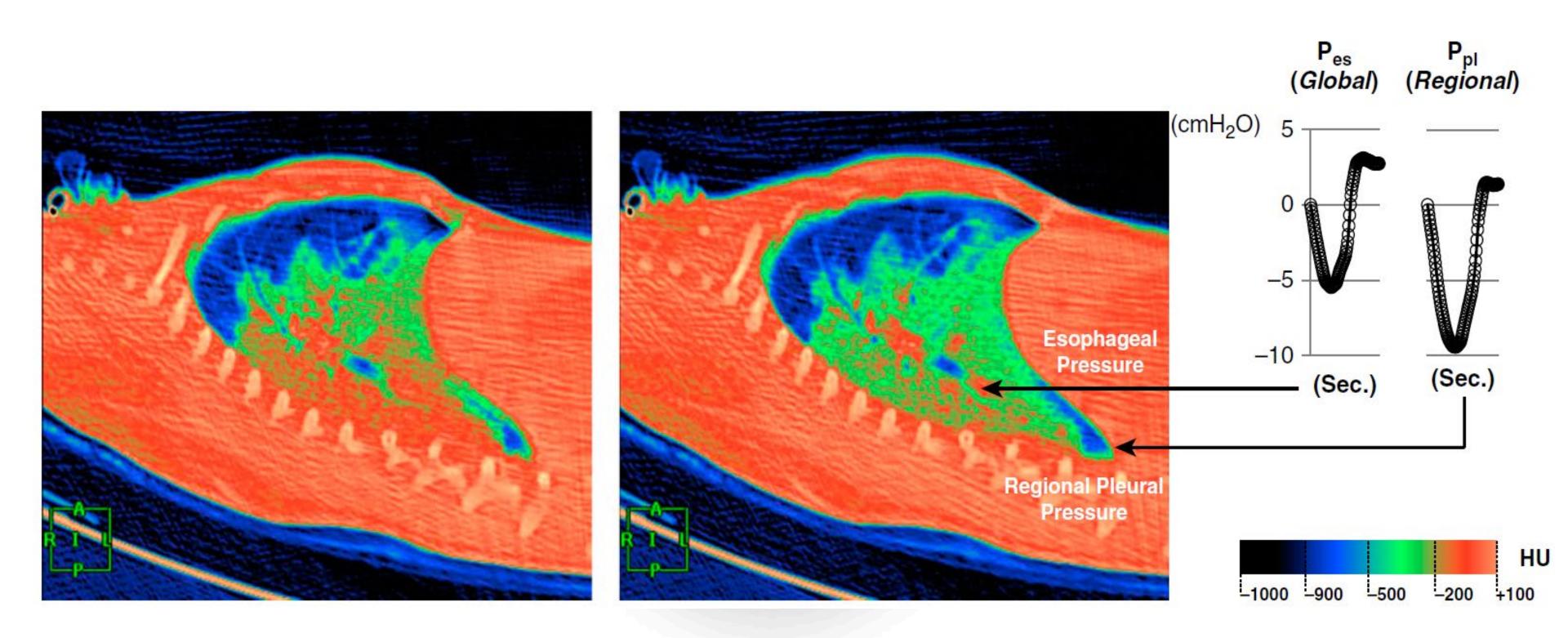
# BATTAGLINI D. ET AL., BR J ANAESTH. 2021 SEP;127(3):353-364.

### TONELLI R ET AL., CRITICAL CARE 2022



# RESEARCH QUESTION: CAN I USE INTRA-TIDAL P<sub>NOS</sub> VARIATIONS?

#### YOSHIDA T ET AL., AM J RESP CRIT CARE MED 2017



# CAN AP<sub>NOS</sub> PREDICT THE NEED FOR INTUBATION?

#### TONELLI, BALL ET AL. AJRCCM 2023

Variable	Overall	Failure	Success	
	n=102	n=35	N=67	p
Age, years (IQR)	69 (56–75)	67 (56–78)	70 (56–75)	0.6
Diagnosis				
COVID-19, n (%)	91 (89.2)	33 (94.3)	58 (86.6)	0.3
Non COVID-19, n (%)	11 (10.7)	2 (5.7)	9 (13.4)	0.3
Baseline				
PaO <sub>2</sub> /FiO <sub>2</sub> , mmHg (IQR)	133 (115–152)	125 (102–141)	140 (123–160)	0.1
ΔP <sub>es</sub> , cmH <sub>2</sub> O (IQR)	13.5 (11–16.3)	15.2 (12.6–18)	12.2 (10–15.8)	0.04
ΔP <sub>nose</sub> , cmH <sub>2</sub> O (IQR)	6 (4.6–8)	6.8 (5.6–8.2)	5.6 (4.2–7)	0.03
At 2 hours after HFNO				
ROX index, score (IQR)	7.9 (5.9–10.9)	5.6 (5.2–6)	9.2 (8–11.6)	<0.0001
PaO <sub>2</sub> /FiO <sub>2</sub> , mmHg (IQR)	131 (112–152)	111 (101–127)	144 (130–175)	<0.0001
ΔP <sub>es</sub> , cmH <sub>2</sub> O (IQR)	8 (6–14)	16 (14–17)	6.5 (5–8)	0.010
ΔP <sub>nose</sub> , cmH <sub>2</sub> O (IQR)	3.2 (2.7–6)	7 (6–8)	3 (2.1–3.2)	<0.0001

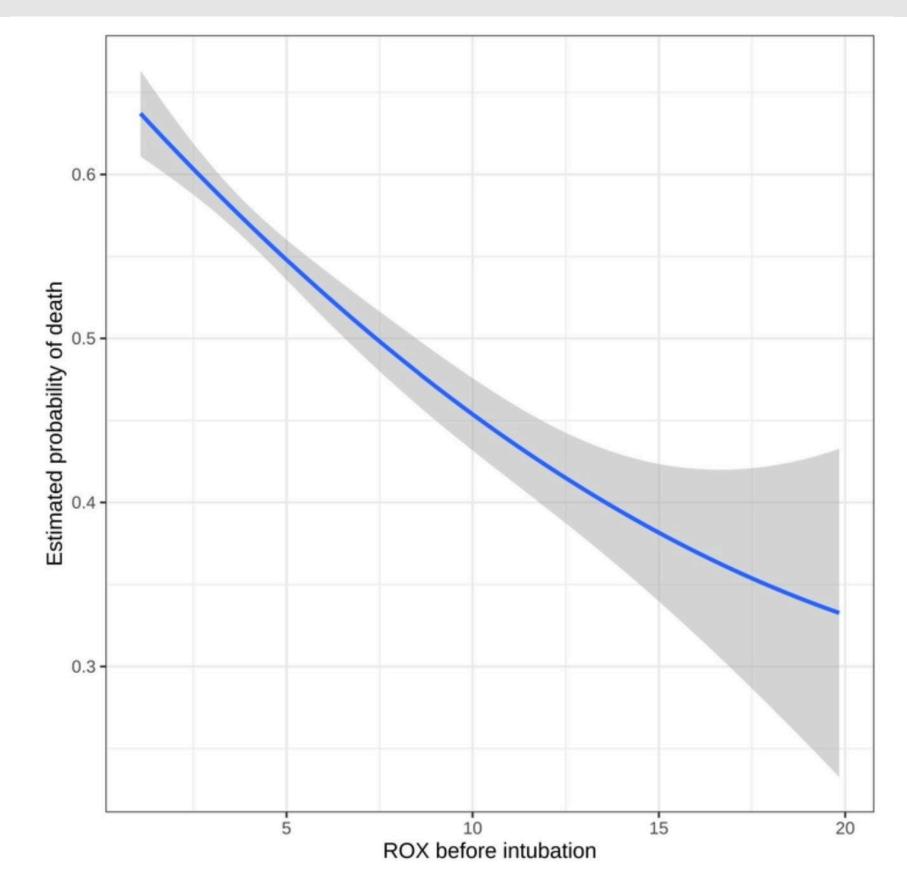
# DO WE HAVE SIMPLE CLINICAL TOOLS?

# VEST MT ET AL., RESPIR CARE. 2022 MAR 17

$$ROX = \frac{SpO_2/FiO_2}{RR}$$

#### **Analysis Sample of 1087 patients**

"Among a cohort of COVID-19 subjects who were ultimately intubated, higher ROX at time of intubation was positively associated with survival."



# TAKE **HOME** MESSAGES... OR MESSAGES FOR THE FUTURE?



# **TSARDS**

**YES, BUT**....

#### **NEED FOR STRICT RESPIRATORY MONITORING!**

#### COMMENTARY

# lesson

L. Gattinoni<sup>1,2\*</sup> and J. J. Marini<sup>1,2</sup>

#### A VERY HOMOGENEOUS SUBGROUP OF ARDS

#### WITH INITIALLY HIGHER COMPLIANCE

#### WITH EARLY DIFFUSE VASCULAR INVOLVMENT









#STOP COVID

SE NO MI FANNO VESTINE DA TELETUBBIE



