COVID-19 and venous thromboembolism

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Disclosure

Speaker‘s name: Stefano Barco

I have the following potential conflicts of interest to report:

☒ Consulting: Boston Scientific, Bayer Healthcare

☐ Employment in industry

☐ Stockholder of a healthcare company

☐ Owner of a healthcare company

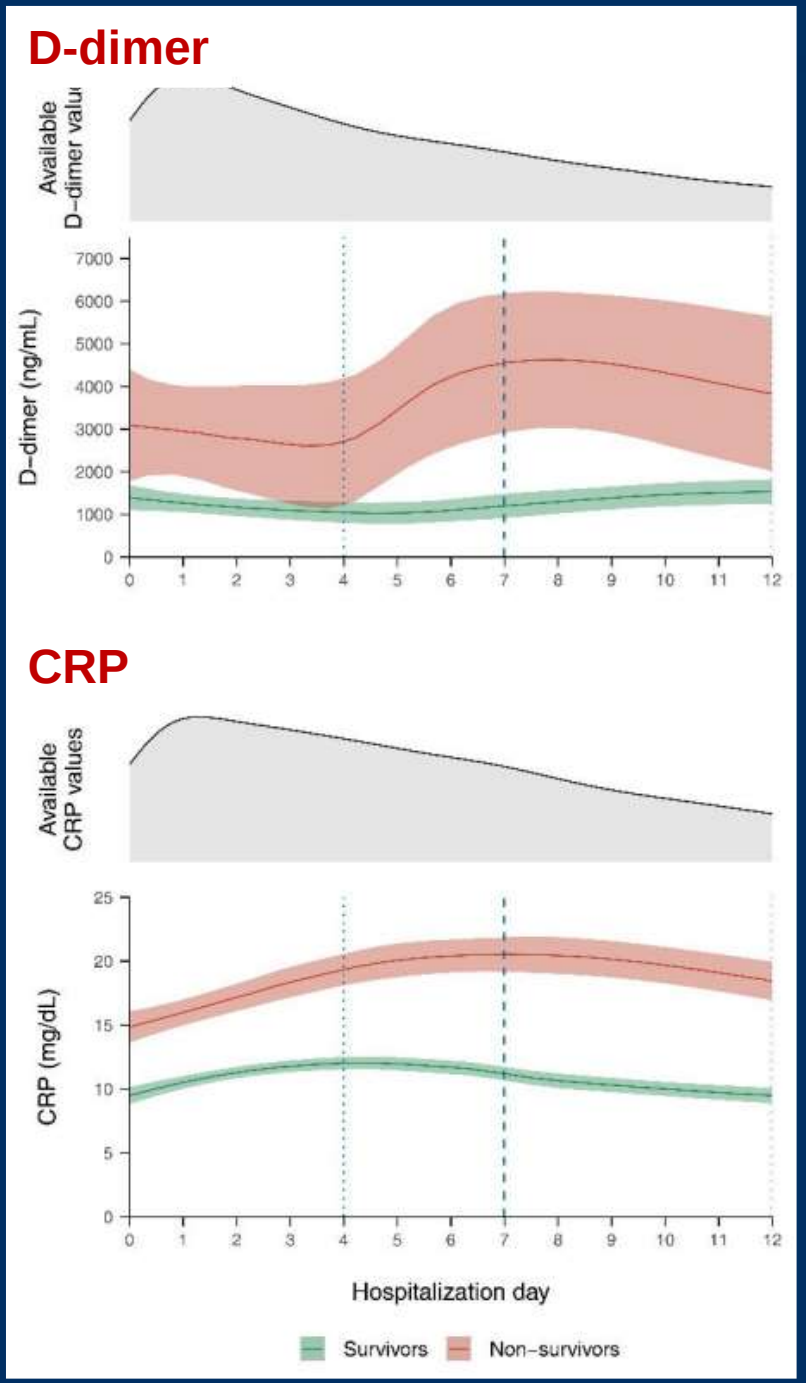
☒ Other(s): Daiichi Sankyo, Bayer (travel costs); Sanofi (institutional grant)

☐

COVID-19

- Wide clinical spectrum of severity
- Systemic inflammatory response
- Endothelial damage, coagulation activation

➢High risk of venous thromboembolism



Valerio L, *Thromb Haemost* 2021; Levi M, *Lancet Haematol* 2020
Manson JJ, *Lancet Rheumatol* 2020; Roncon L, *Eur J Intern Med* 2020

COVID-19 and VTE

- non-ICU patients 8%
- ICU patients 23%

- 1 of 3 angio-CT positive for PE → underdiagnosis
- Often subsegmental PEs

- 0.5-3% VTE risk after discharge

- 50% of VTE events diagnosed upon hospital admission

Lodigiani C, *Thromb Res* 2020; Levi M, *Lancet Haematol* 2020
Klok FA, Thromb Res 2020; Planquette, *Thromb Res* 2021;
Roncon L, *Eur J Intern Med* 2020; Rashidi F, *Thromb Res* 2021
Nopp S, *RPTH* 2020

Gaps of knowledge

- VTE diagnosis in COVID-19

➢ High- vs. standard-dose thromboprophylaxis in hospital
➢ Extended thromboprophylaxis (after discharge)
➢ Primary outpatient thromboprophylaxis

High- vs. standard-dose thromboprophylaxis (ICU)

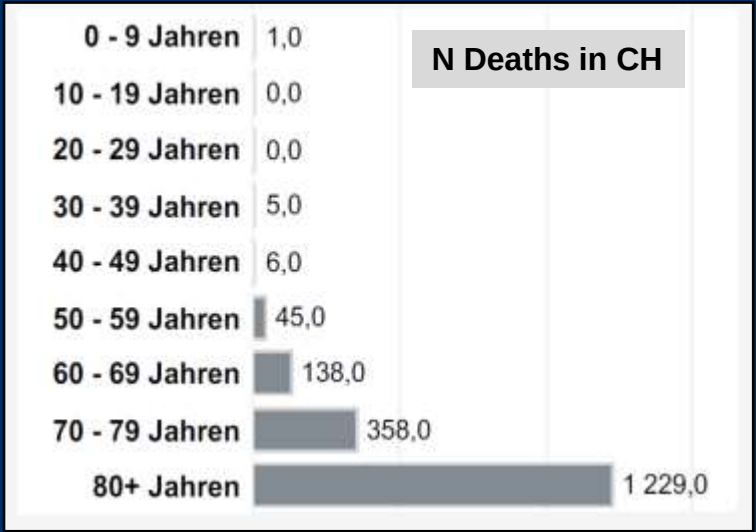
- Multiple-platform, randomized controlled REMAP-CAP, ACTIV-4, ATTACC prematurely stopped for futility/safety

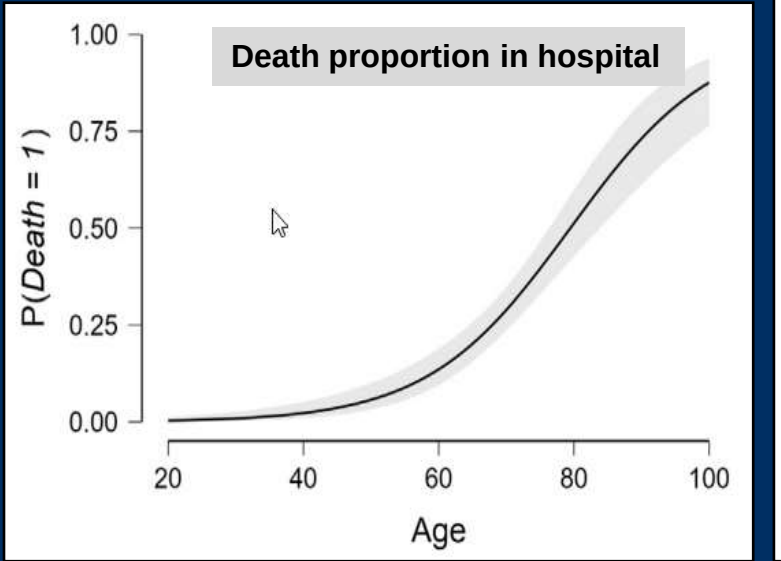
➢“Therapeutic anticoagulation drugs did not improve outcomes”

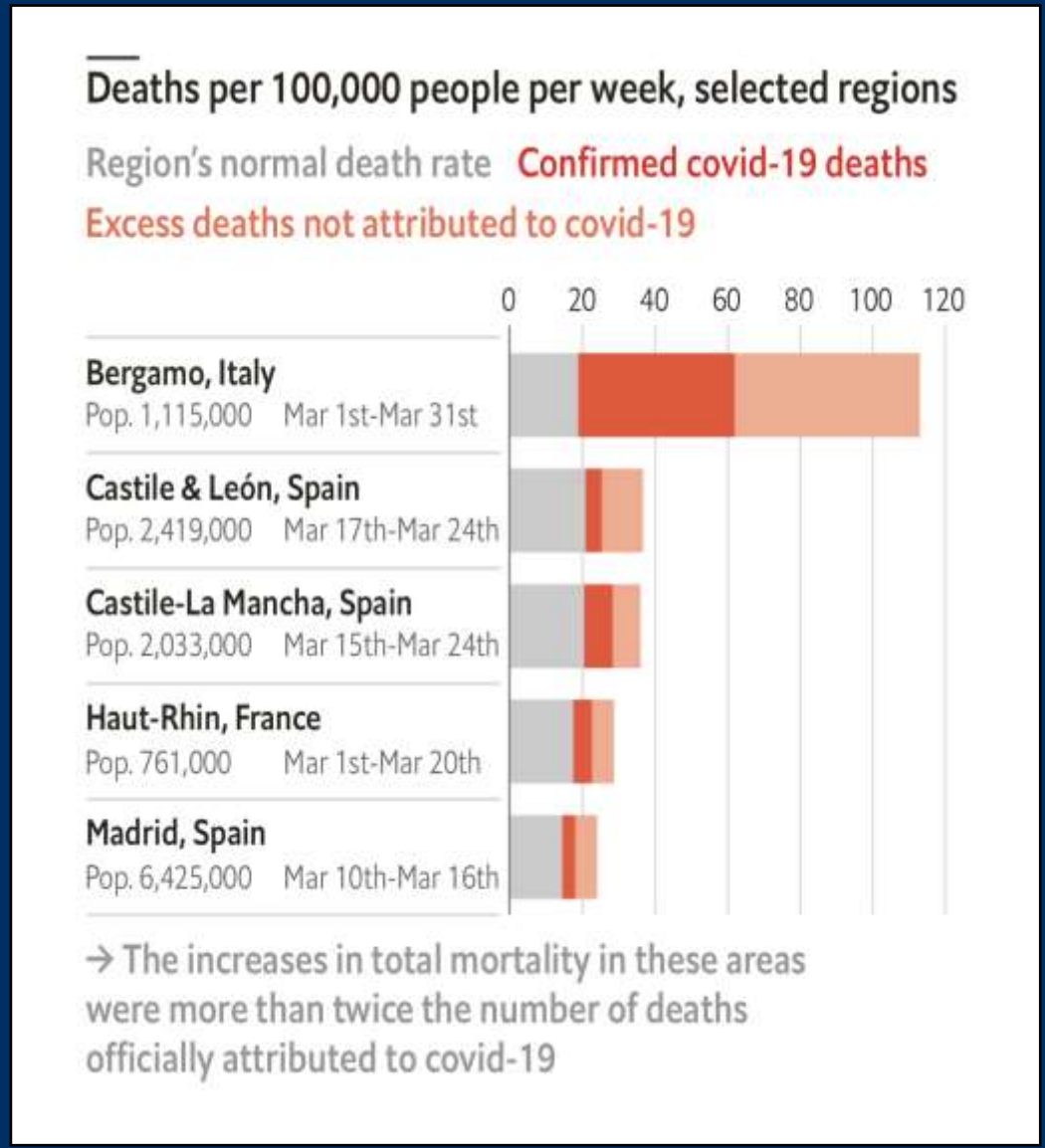
- No evidence supporting deviations from standard regimens

https://news.umanitoba.ca/international-trials-of-blood-thinners-in-critically-ill-covid-19-patients-pause-due-to-futility/

Home therapies







Source: BAG site and The Economist
Lodigiani C. et al., *Thromb Res* 2020

OVID phase III RCT

The OVID study will show whether a 14-day enoxaparin prophylaxis improves survival and reduces hospitalizations.

- >50 years and SARS-CoV2+ <5 days
- Eligible for ambulatory treatment
- Respiratory symptoms or Tc >37.5° C
- No contraindications to anticoagulation
- No other indications for an anticoagulant treatment

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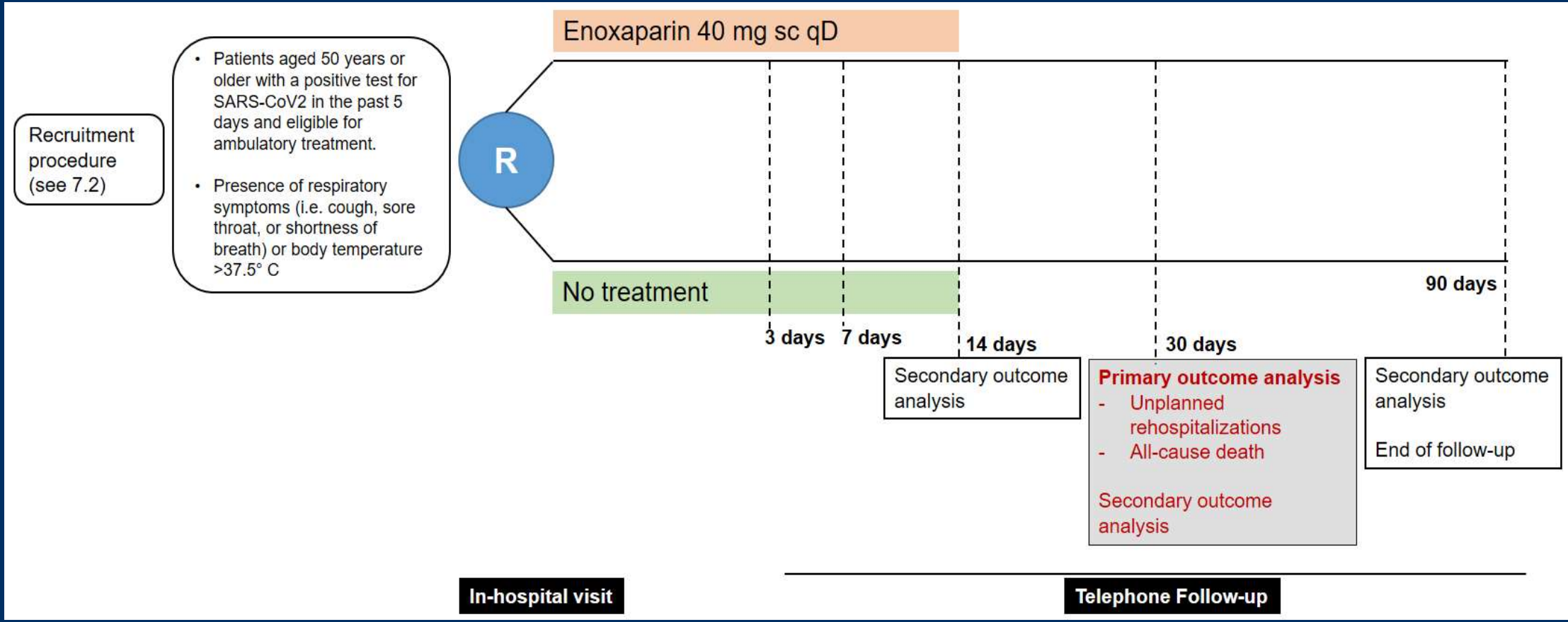
Barco S, *Trials* 2020

OVID phase III RCT



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Barco S, *Trials* 2020

OVID phase III RCT: status

- 6 active sites in Switzerland
- Approval in Germany and Italy pending

- Interim analysis (n=500) in ca. 3 months

Need for multinational cooperation and high-quality RCTs

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Barco S, *Trials* 2020

Many thanks for your attention