

# CVVH circuit falen in COVID-19

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ST ANTONIUS

# Disclosures

Disclosure belangen spreker	
Geen (potentiële) belangenverstremgeling	Geen
Voor bijeenkomst mogelijk relevante relaties	Geen relaties
Sponsoring of onderzoeksgeld Honorarium of andere (financiële) vergoeding Aandeelhouder Andere relatie, namelijk...	Geen sponsoring

# Terug in de tijd.....

- Maart 2020
- Dagboek IC  
verpleegkundige

# Help, we hebben een probleem

- CVVH filters stolden
- Hele korte filterduur



# CVVH en antistolling

*Constant*

CVVH

Modaliteit: CVVH

Filter: Baxter ST150

UFR: 2300 / 2600 ml/u

Anticoagulantia

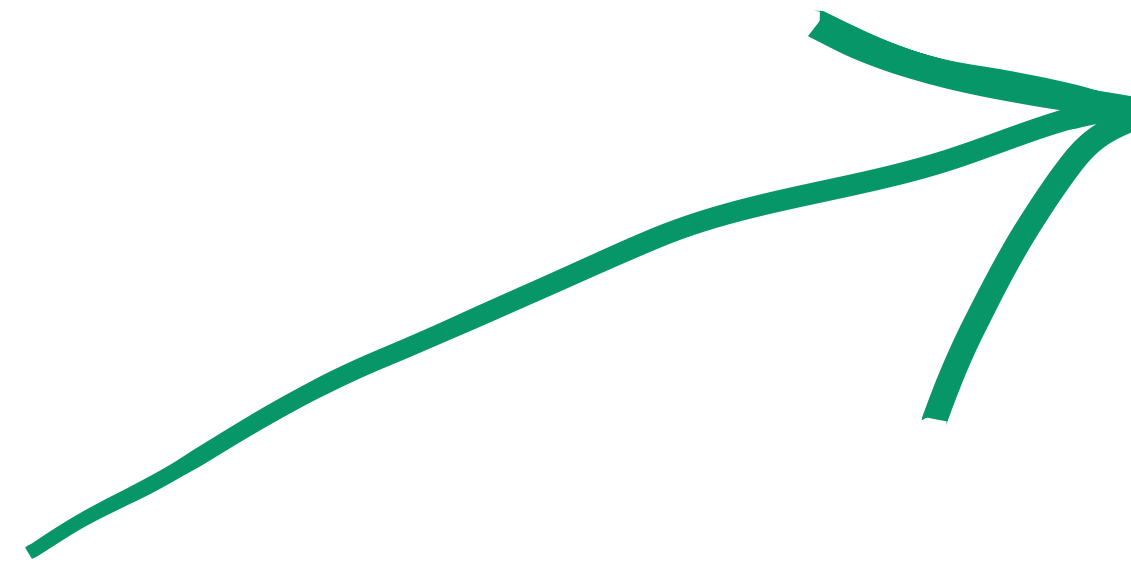
Regionaal:

Citraat **2.2 – 3.0 mmol/L**

Systemisch:

Fraxiparine **1d2850 IE**

*Oud*



*Nieuw*

Anticoagulantia

Regionaal:

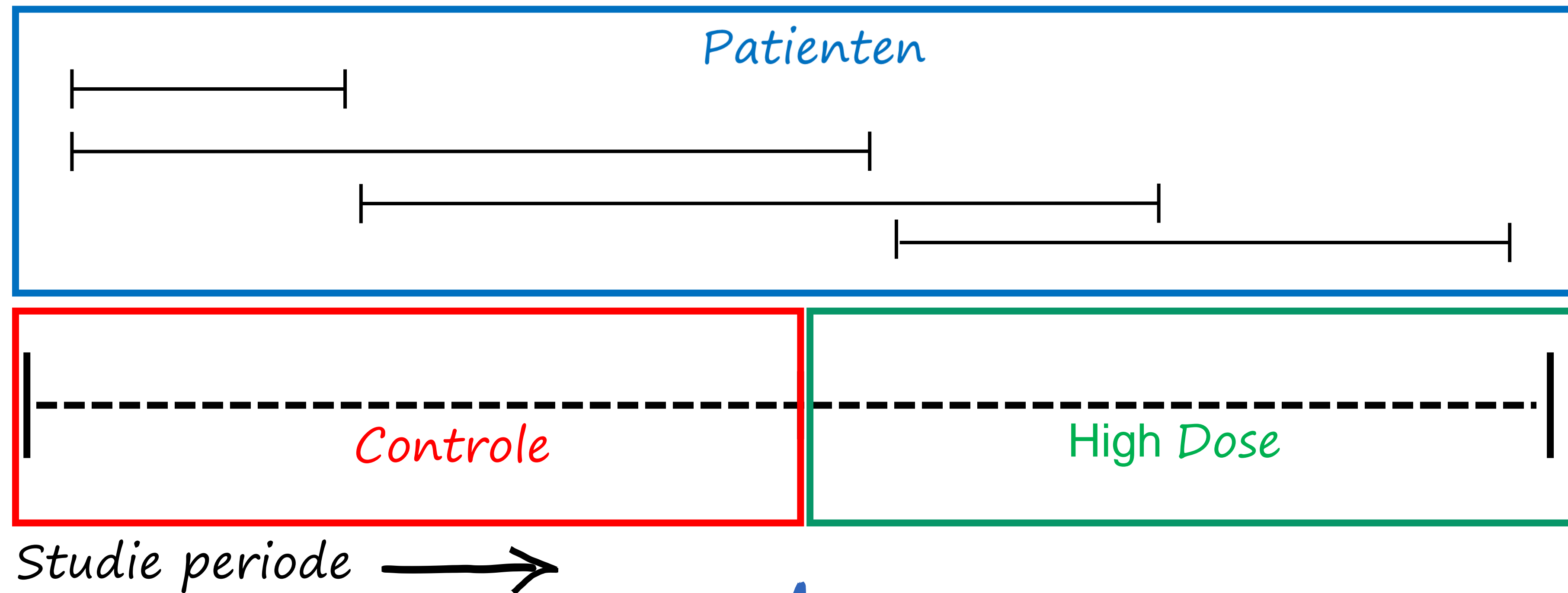
Citraat **3.0 – 3.5 mmol/L**

**Heparine priming 5000 IE/L**

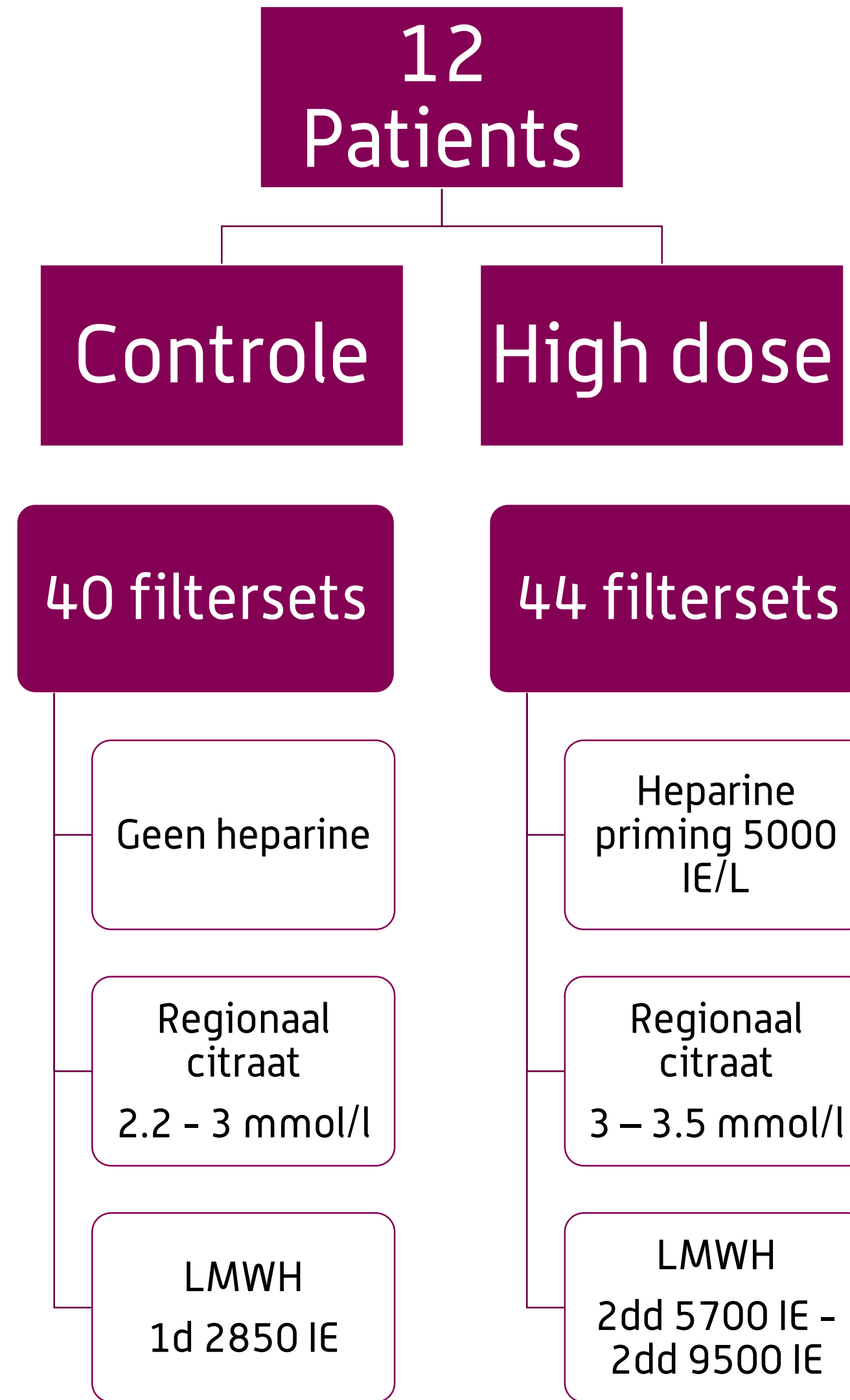
Systemisch:

Fraxiparine **2d5700 IE**

# Tijdslijn

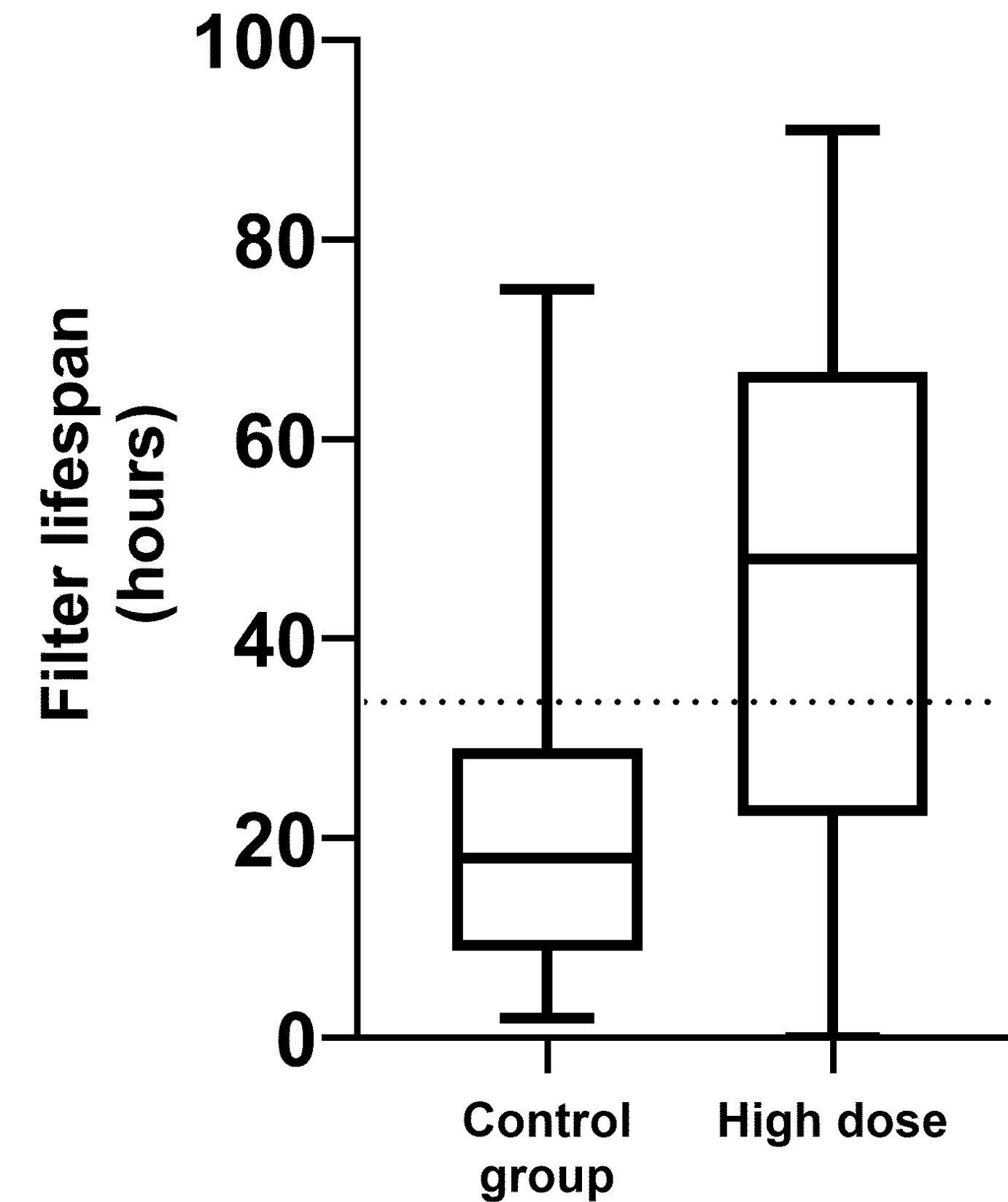


# Patienten



# En werkte het?

	Controle	High-dose	p
Niervervangende therapie (in uren)	985.5	1627.5	NA
Filter sets	42	37	NA
Mediane filteroverleving (IQR)	<b>18 (20.3)</b>	<b>48 (44.5)</b>	<b>&lt;0.001*</b>



# Veilig?

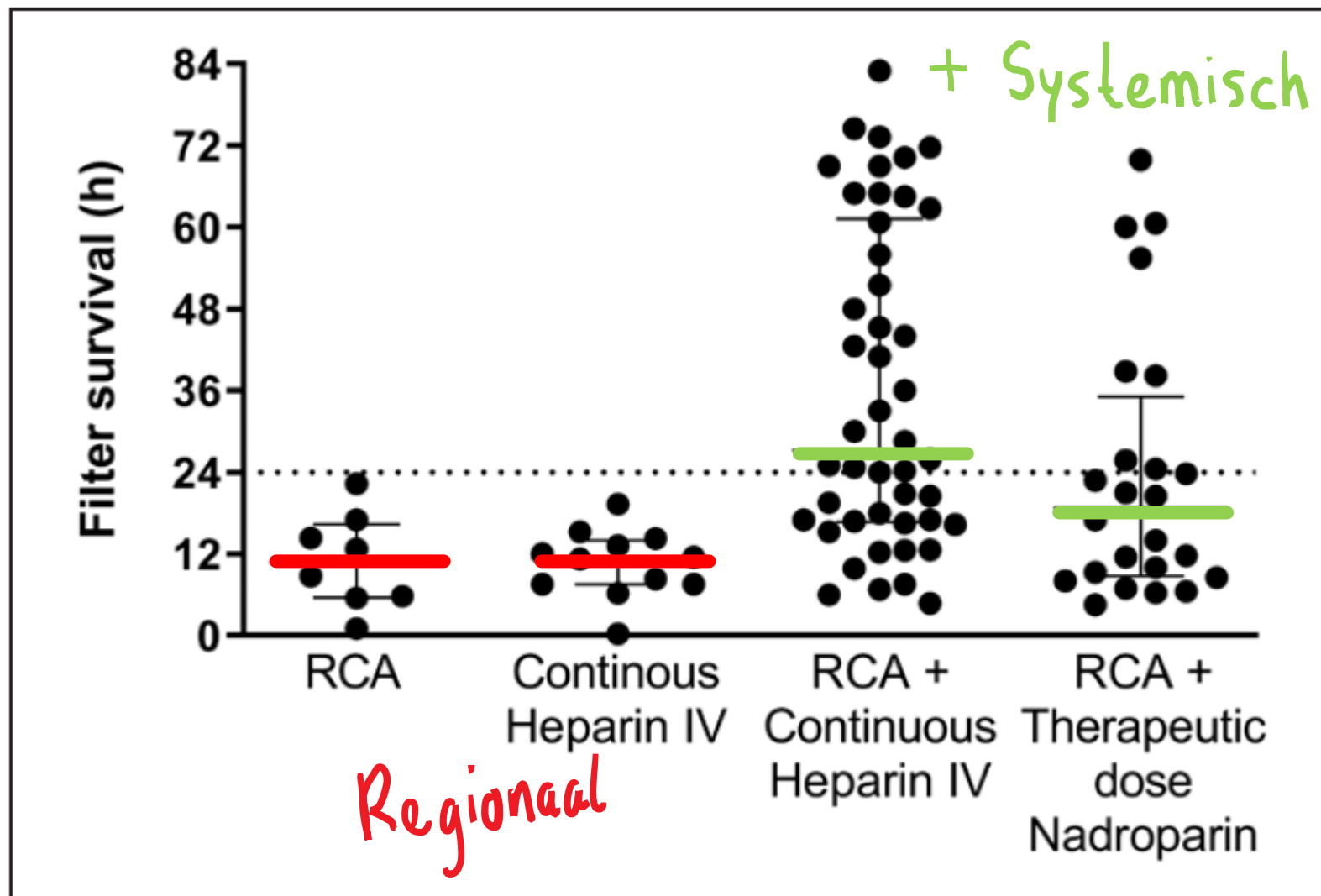
	Low dose group	High dose group
Serum calcium, mmol/l (range)	1.14 (0.35 – 1.28)	1.11 (0.32 – 1.25) <sup>1</sup>
pCO <sub>2</sub> , kPa (range)	7.41 (4 – 13)	7.40 (4 – 13)
Bicarbonate, mmol/l (range)	26.1 (18.2 – 32.7)	28.4 (20.6 – 38.7) <sup>1</sup>
pH (range)	7.30 (7.08 – 7.54)	7.34 (7.08 – 7.60) <sup>1</sup>

- Bloedingen?
  - 2 in high dose groep

# Hoe doen anderen het?

## A Method to Improve Continuous Renal Replacement Therapy Circuit Survival Time in Critically Ill Coronavirus Disease 2019 Patients With Acute Kidney Injury

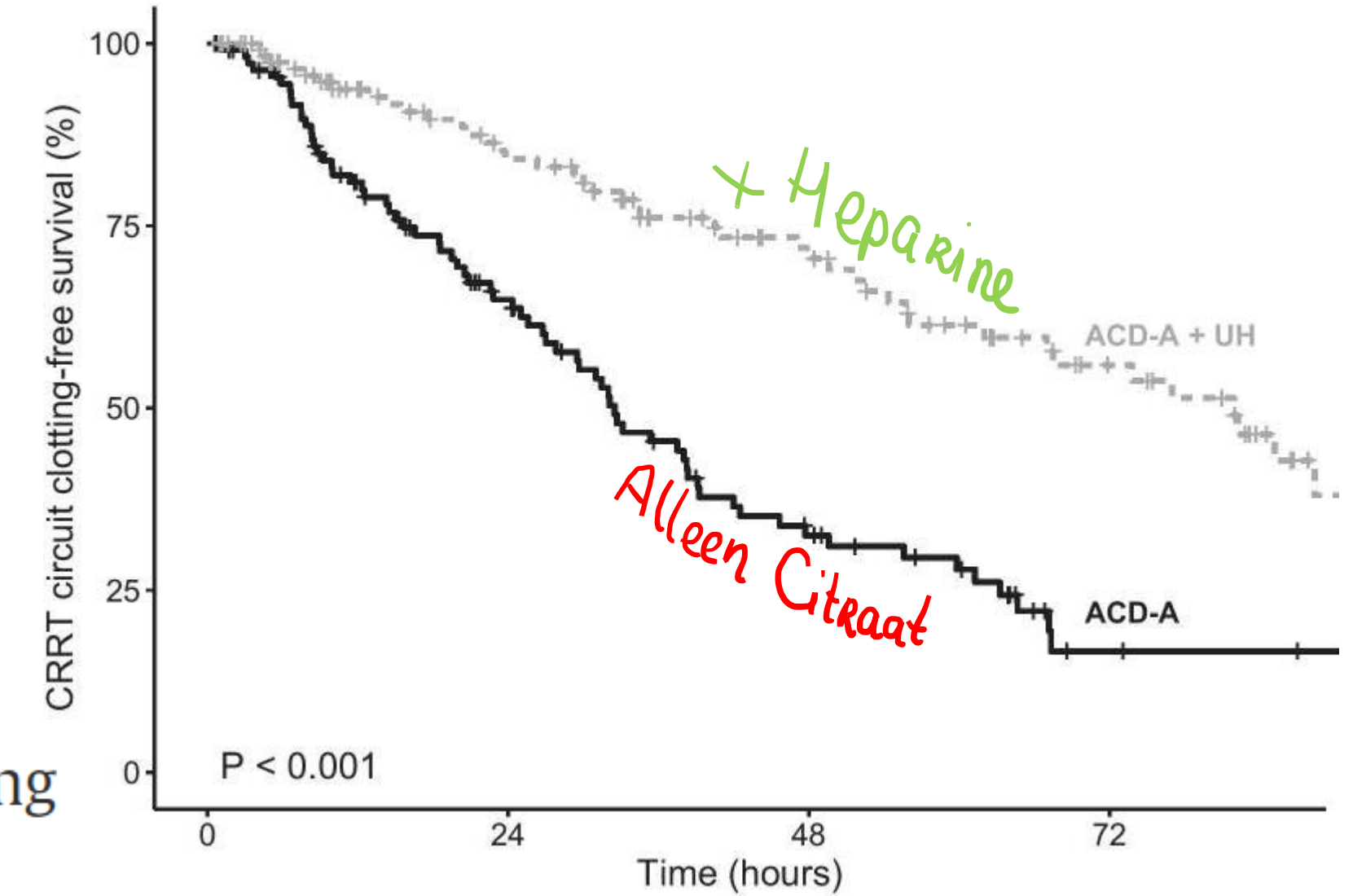
Meint Volbeda, MD<sup>1</sup>; Mark Londema, MD<sup>1</sup>; Matijs van Meurs, MD, PhD<sup>1</sup>; Coen A. Stegeman, MD, PhD<sup>2</sup>; Ron T. Gansevoort, MD, PhD<sup>2</sup>; Stefan P. Berger, MD, PhD<sup>2</sup>; Peter H. J. van der Voort, MD, PhD<sup>1</sup>; Casper F. M. Franssen, MD, PhD<sup>2</sup>



**Figure 1.** Filter survival. Median circuit patency's. Error bars indicate median and interquartile. RCA = regional citrate anticoagulation.

## Continuous renal replacement therapy in COVID-19—associated AKI: adding heparin to citrate to extend filter life—a retrospective cohort study

Eduardo de Oliveira Valle, Carla Paulina Sandoval Cabrera, Claudia Coimbra César de Albuquerque, Gioviano Vieira da Silva, Márcia Fernanda Arantes de Oliveira, Gabriel Teixeira Montezuma Sales, Igor Smolentzov, Bernardo Vergara Reichert, Lucia Andrade, Victor Faria Seabra, Paulo Ricardo Gessolo Lins & Camila Eleuterio Rodrigues



## Anticoagulation in COVID-19 patients requiring continuous renal replacement therapy

Nizar Attallah<sup>a, b</sup>, Sudeendra Gupta<sup>a</sup>, Rakesh Madhyastha<sup>a</sup>, Wasim S. El Nekidy<sup>b, c</sup>, Jihad Mallat<sup>b, d</sup>

Period	Number of patients	Number of treatment days	AGE (years)	SEX	Diabetes (number of patients)	HTN (number of patients)	Mean filter life (hours)	Median filter life (hours)	IQR
1	67	536	60 ± 8	Males (67.1%)	60	65	46 ± 10	45	39–51
2	23	489	61 ± 7	Males (69.5%)	20	22	16 ± 6	15.5	11.5–19.5
3	24	459	63 ± 7	Males (66.6%)	21	22	41 ± 6	42	37–47

Pre Covid

Regionaal

+ Systemisch

- INTENSIVISTENDAGEN 2023

# Afsluitend...

## Ons Team



'Ik heb geen geheim van succes. Gewoon je best doen, iets leuk vinden en goede mensen om je heen verzamelen. Want alleen kan je niks en met zijn allen kun je alles.'

*Johan Crujff*