

MASSA TRANSFUSIE BELEID IN NEDERLANDSE ZIEKENHUIZEN

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INTRODUCTIE

- Hoge mortaliteit
- 2 miljoen doden verbloeding
- V.S.: belangrijkste doodsoorzaak
- 10-20% mortaliteit is te voorkomen



MASSA TRANSFUSIE PROTOCOL

- 2007 MTP Defensie
- Betere uitkomst patiënt
- 2011 MTP in Nationale richtlijn → huidig advies: 3:3:1
- Tim Rijnhout et al.



Massive transfusion protocols in the Netherlands. Consensus or confusion?

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Original research

Massive transfusion in The Netherlands

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► Additional material is published online only. To view please visit the journal online (<http://dx.doi.org/10.1136/ememed-2019-208665>).

ABSTRACT

Objectives Massive transfusion protocols (MTPs) may improve survival in patients with uncontrolled haemorrhage. An MTP was introduced into the Dutch transfusion guidelines in 2011, the ninth edition of the advanced trauma life support course in 2012 and the third version of the European guideline in 2013. This is the first survey of MTPs in Dutch trauma centres.

Methods The aim of the study was to compare MTP strategies in level 1 trauma centres in The Netherlands, and with (inter)national guidelines. A contact in each government assigned level 1 trauma centre in The Netherlands and the Dutch Ministry of Defence was approached to share their MTPs and elucidate their protocol in a survey and oral follow-up interview.

Results All 11 level 1 trauma centres responded. The content of the packages and transfusion ratios (red blood cells/plasma/platelets) were 3:3:1, 5:5:1, 5:3:1, 2:3:1, 4:4:1, 5:2:1, 2:2:1 and 4:3:1. Tranexamic acid was used in all centres and an additional dose was administered in eight centres. Fibrinogen was given directly (n=4), with persistent bleeding (n=3), based on Clauss fibrinogen (n=3) or rotational thromboelastometry (n=1). All

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Key messages

What is already known on this subject

► Introduction of hospital specific massive transfusion protocols (MTPs) has increased survival and decreased the total use of blood components during hospital stay. However, 8 years after the introduction of a national guideline for massive transfusion, there is no uniform massive transfusion practice in The Netherlands.

What this study adds

► Previous research was mostly restricted to a few hospitals. This study has analysed MTPs in all Dutch level 1 trauma centres and compared the MTPs with the latest edition of the advanced trauma life support course, the European guideline and Dutch national guidelines. In addition, this study provides a detailed overview of the composition of the blood components.

PLASMA PRODUCT

- Gebruik in het leger
- Gevriesdroogd plasma
- Bruikbaar in 5-10 minuten



ONDERZOEKSDOEL

➤ Werkgroep:

- Nationaal transfusie beleid
- Introductie nieuw plasma product
- Transfusie kwaliteit verbeteren

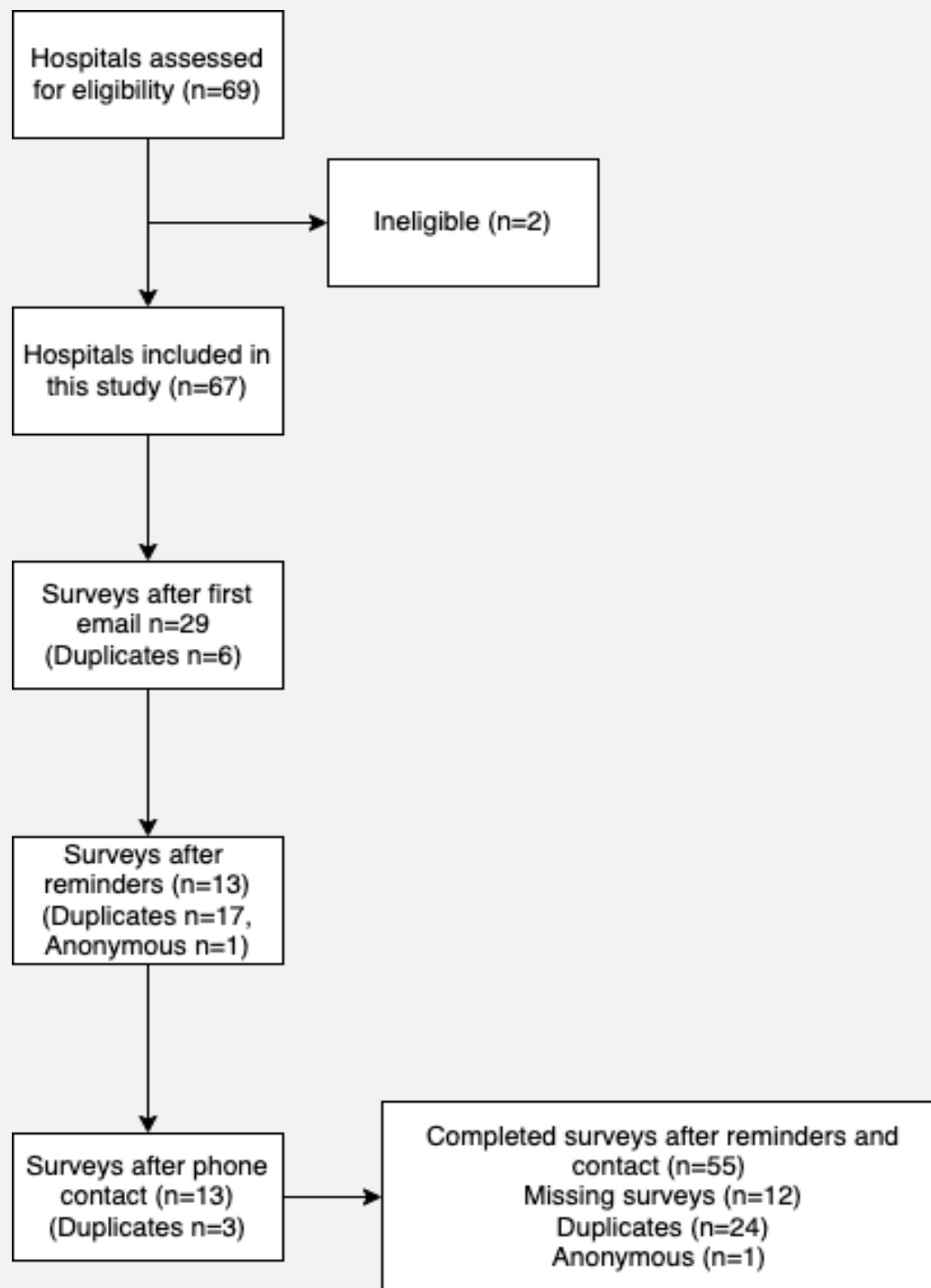
➤ Ons onderzoek:

- Vaststellen transfusie strategie in NL
- Evaluatie interesse nieuw plasma product

STUDIE DESIGN

- Cross-sectioneel onderzoek
- Survey aan Nederlandse ziekenhuizen verbonden met transfusie laboratoria
- Vragenlijst
 - Transfusie strategie
 - Beschikbare middelen
 - Gebruik transfusieproducten
 - Belangstelling nieuw plasma product

- Data verzameling
- Januari-April 2022

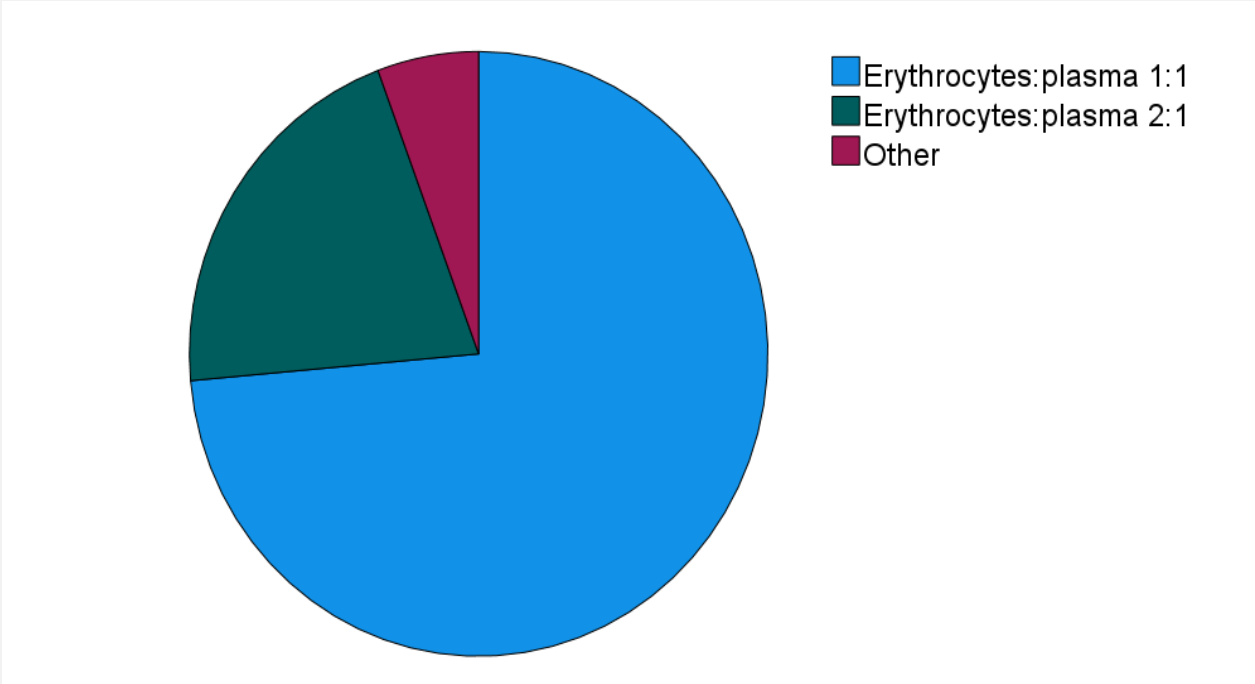
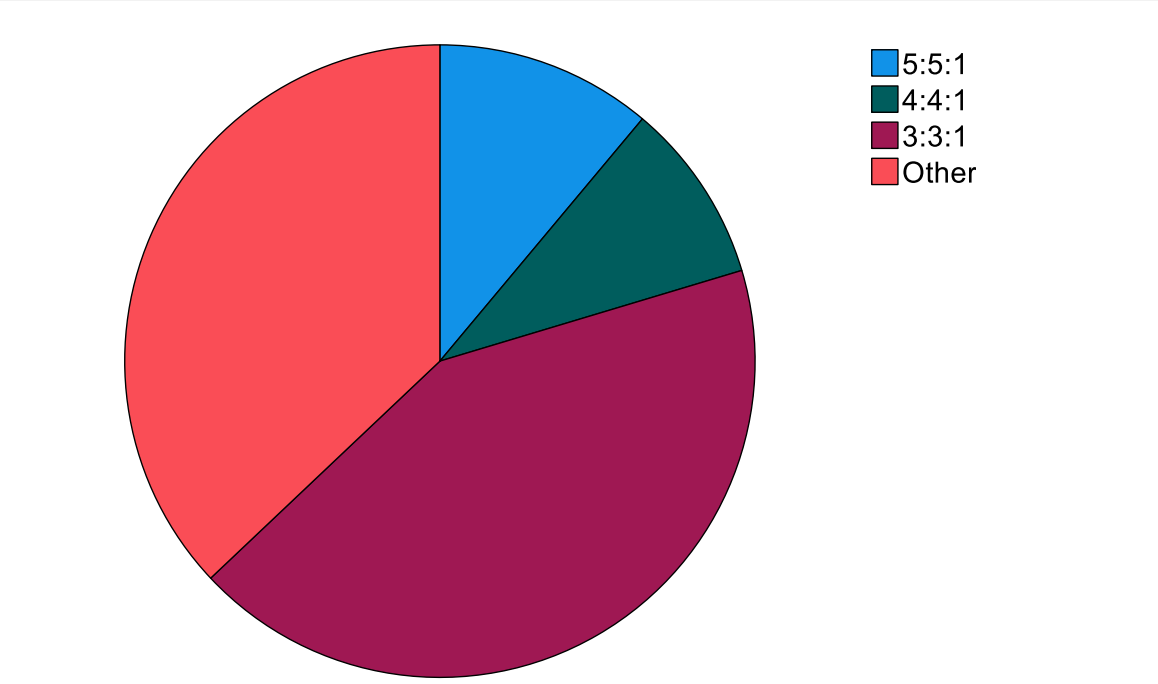


RESULTATEN

- MTP voor alle ziekenhuizen
- 93% begint met erythrocyten transfusie bij massaal bloedverlies
- Onafhankelijk van de plasma beschikbaarheid
- Geen relatie tussen transfusie strategie en beschikbare middelen

TRANSFUSIE RATIO'S

Transfusie ratio: erythrocyten: plasma: trombocyten



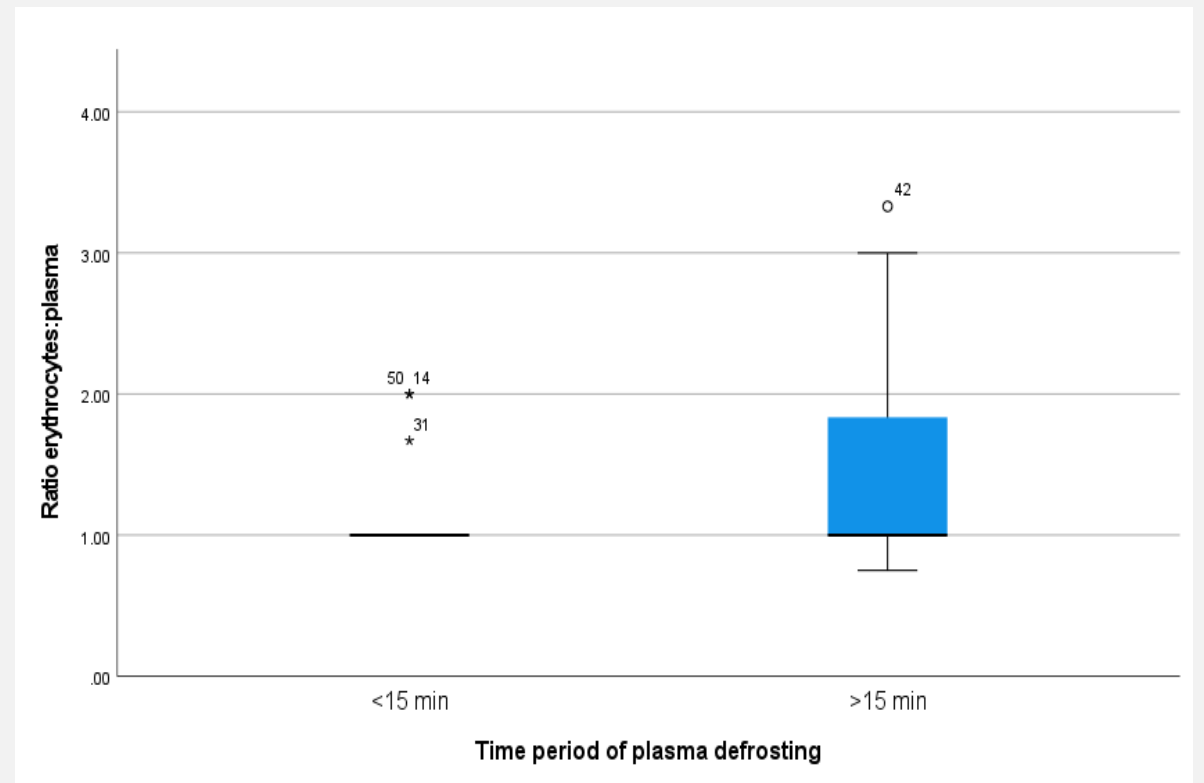
ERYTHROCYTEN/PLASMA RATIO

Plasma ontdooitijd > 15 minuten:

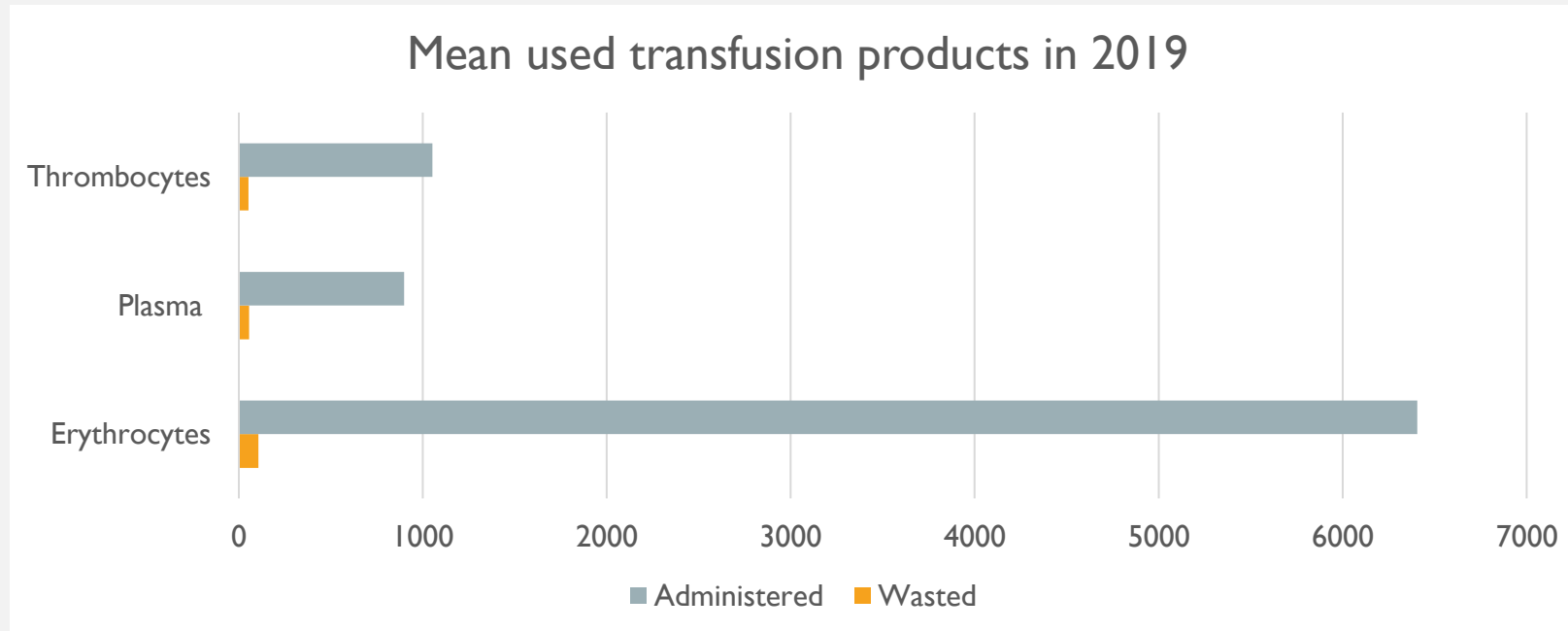
- Hogere ratio erythrocyten/plasma
- Variatie tussen ratio's

Correlatie trend:

- Beschikbaarheid plasma and erythrocyten/plasma ratio
- 1.21 vs 1.34, $p=0.09$

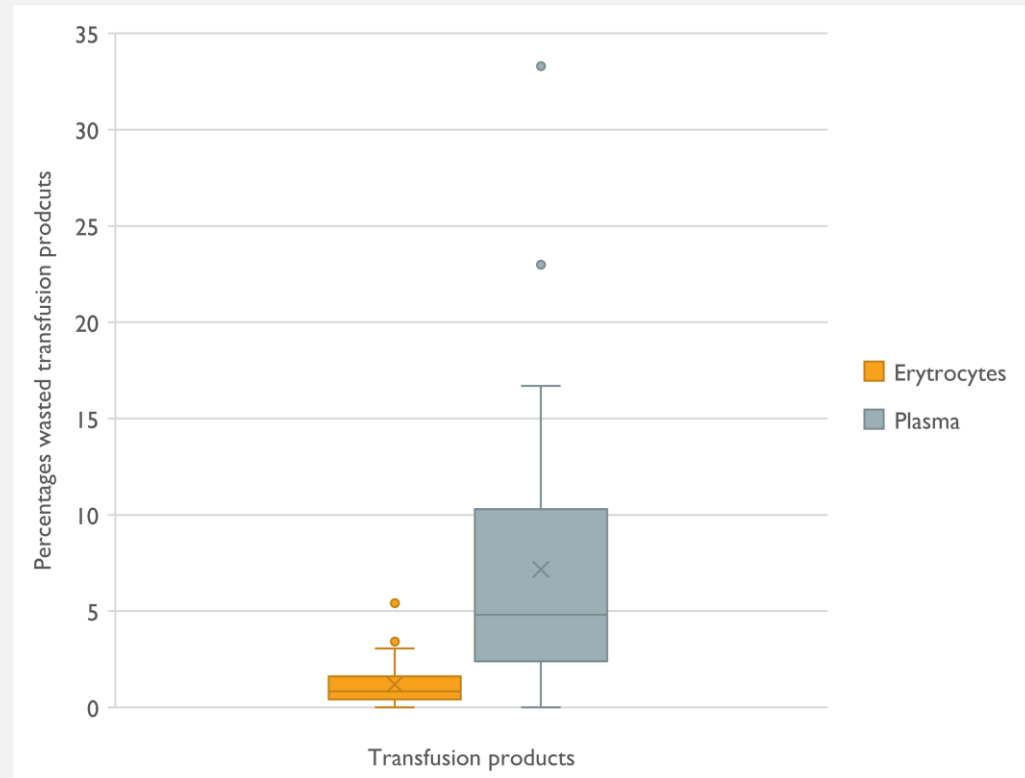


VERBRUIK TRANSFUSIEPRODUCTEN



VERSPILLING TRANSFUSIEPRODUCTEN

- Erytrocyten: 1.21%
- Plasma: 7.2%
- Plasma verspilling 7 keer zo hoog



INTERESSE NIEUW PLASMA PRODUCT

- 62% interesse nieuw plasma product
- 47.3% interesse wanneer gebaseerd op een single donor product
- Relatie tussen interesse en beschikbaarheid plasma



CONCLUSIE

- Weinig uniformiteit in transfusiebeleid
- Meeste ziekenhuizen voldoen aan richtlijnen
- Recent onderzoek: betere uitkomsten in patiënten bij eerder en liberaal plasma gebruik
- Transfusie cultuur: focus en starten met erythrocyten transfusie



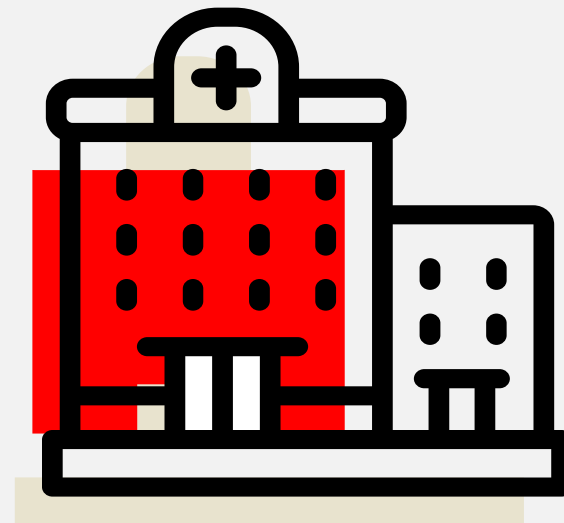
CONCLUSIE

- Interesse in nieuw plasma product
- Relatie beschikbaarheid plasma en interesse
- Uitkomst bij beperkte plasma beschikbaarheid
- Rol in plasma verspilling tegengaan



DANKWOORD

- Deelnemende ziekenhuizen
- Werkgroep



VRAGEN?

