

Blood on Board in Lombardia



AREU

Sistema Socio Sanitario
Regione
Lombardia



Dr. Francesco Daminelli

f.daminelli@areu.lombardia.it



Team Work



Azienda Ospedaliera
Papa Giovanni XXIII
Bergamo





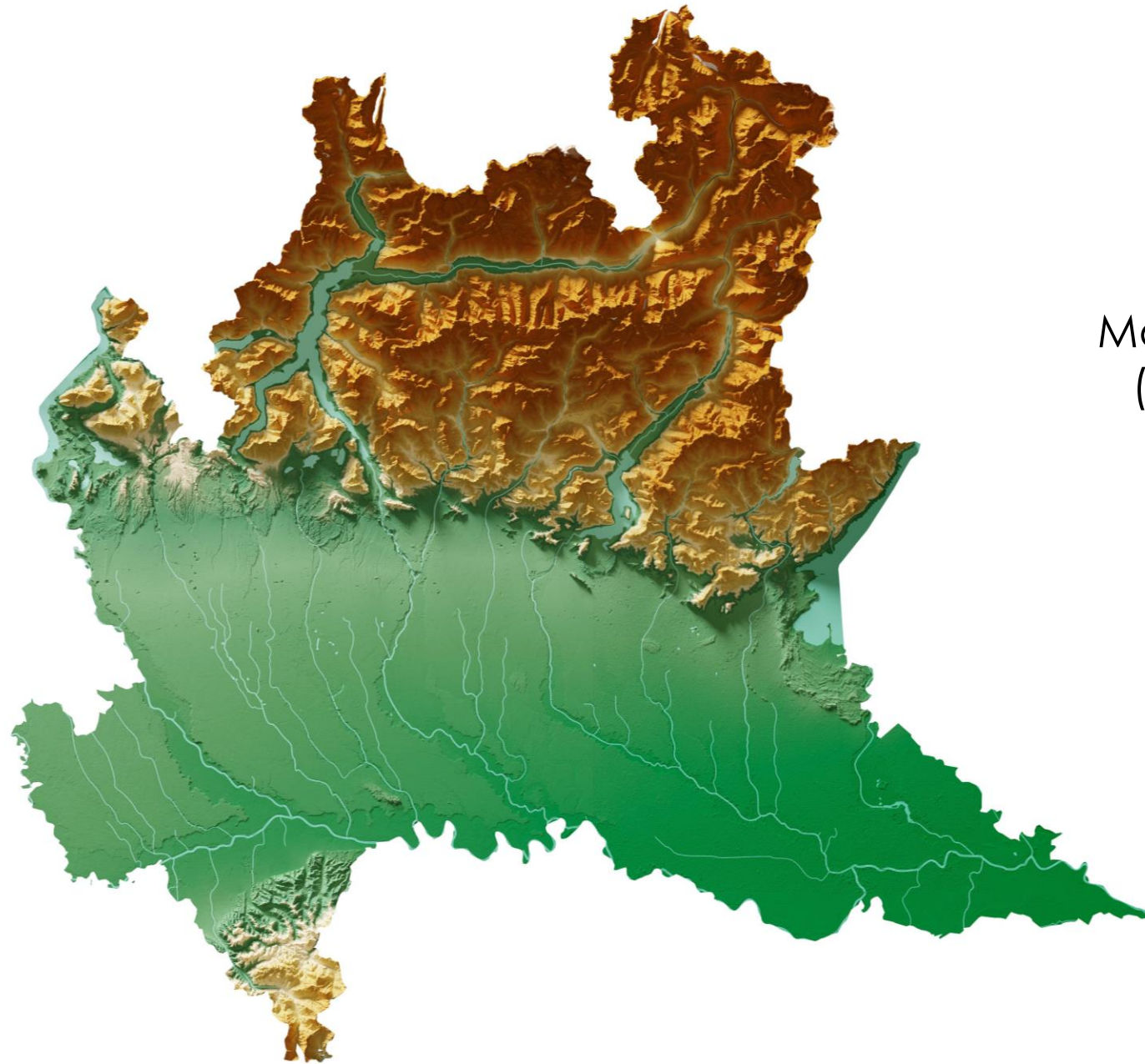
HEMS Team



Special Team-mates





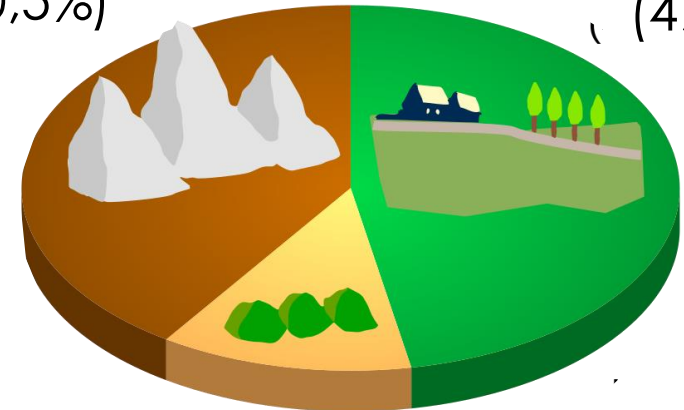


Lombardia

(~24000 Km²)

Mountains
(40,5%)

Planes
(47%)



Hills
(12,4%)



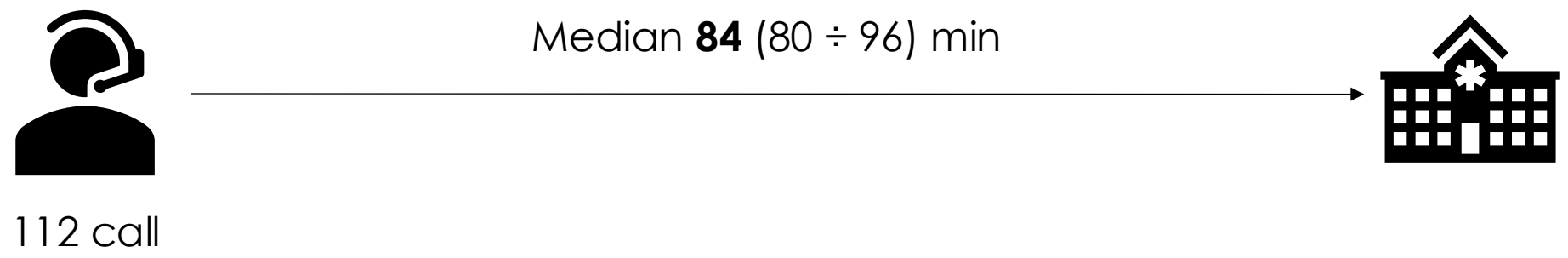
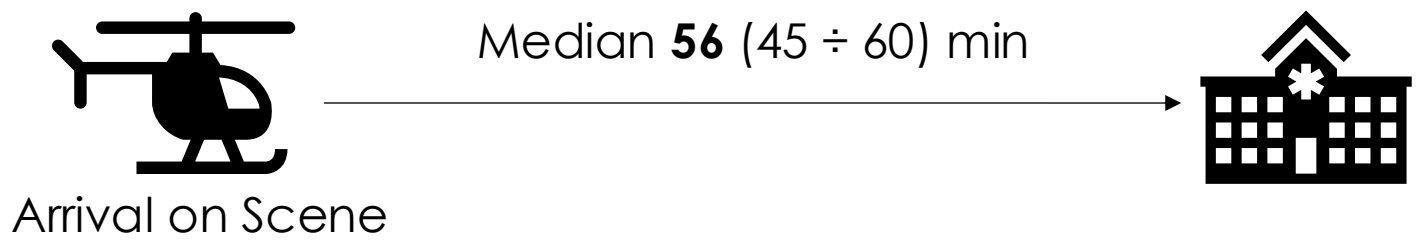
- **BERGAMO H145**
- **BRESCIA AW139**
- **COMO AW139**
- **MILANO H145**
- **SONDRIO H145**



NVG



- **BERGAMO H145**



The median time to death for traumatic haemorrhage is 1.65 hr
approximately **100** min



2019



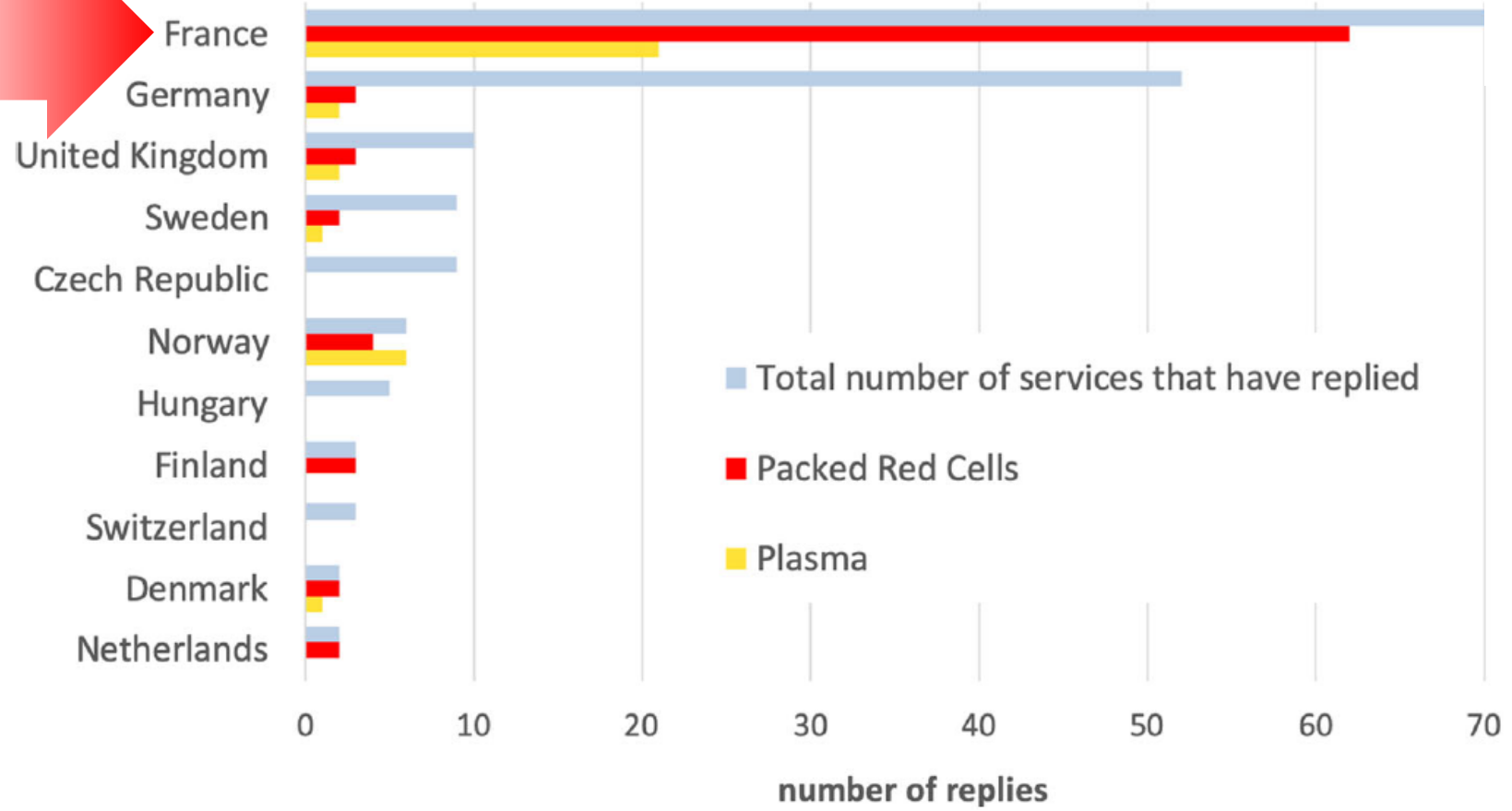
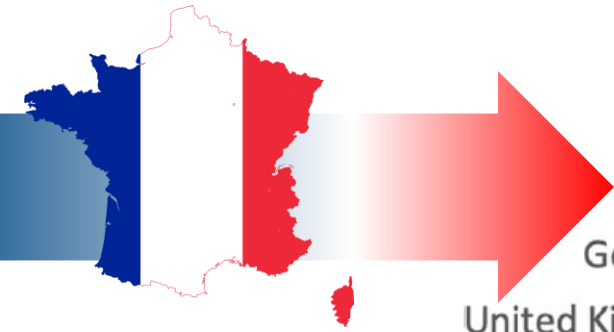
2019

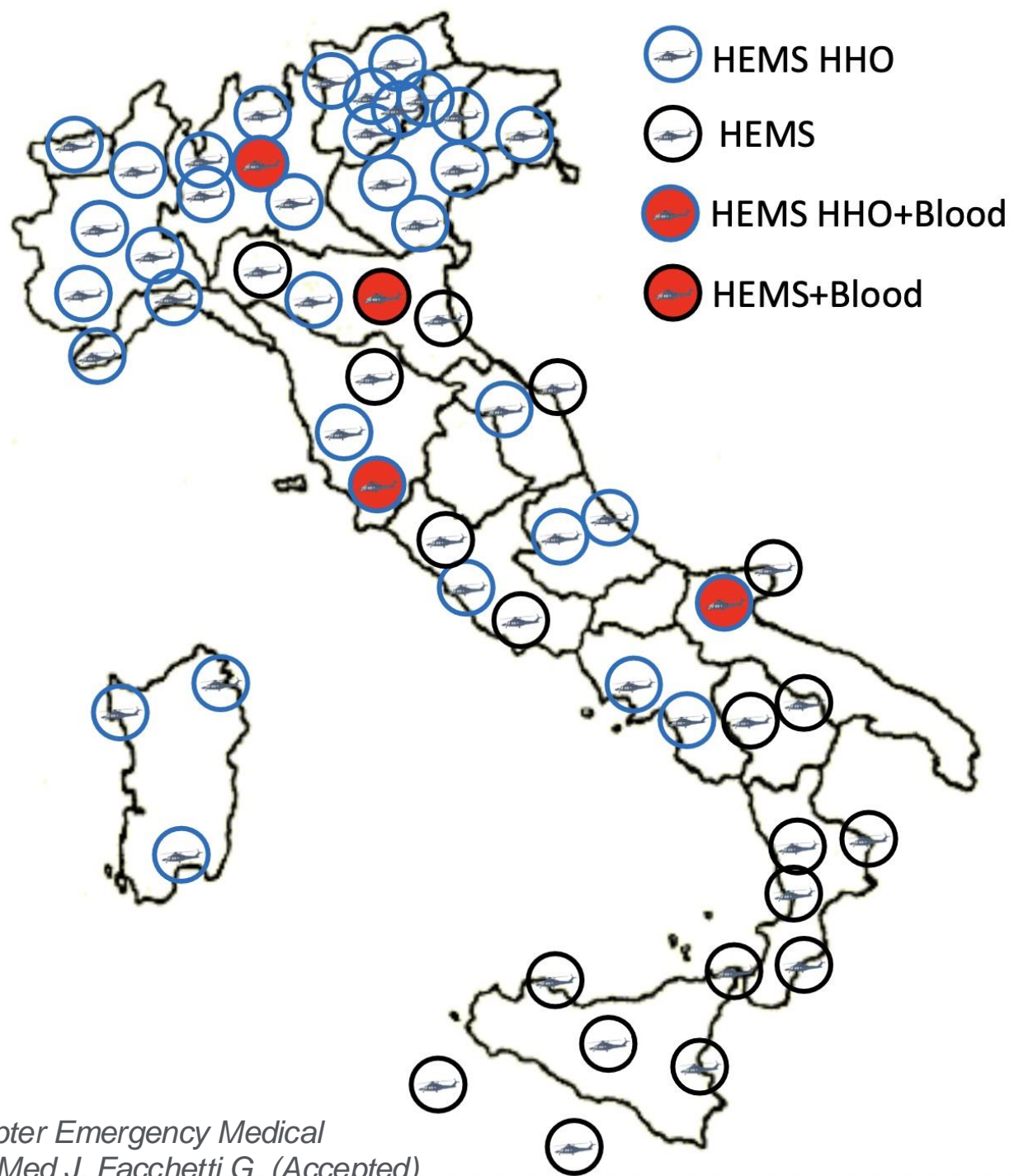


Pre-hospital blood transfusion – an ESA survey of European practice



2020





2022

Pre-hospital blood transfusion in Helicopter Emergency Medical Services (HEMS): an Italian survey. Air Med J, Facchetti G. (Accepted)



Papa Giovanni XXIII
Bergamo



Blood Bank



HEMS





0 Rh-



0 Rh-



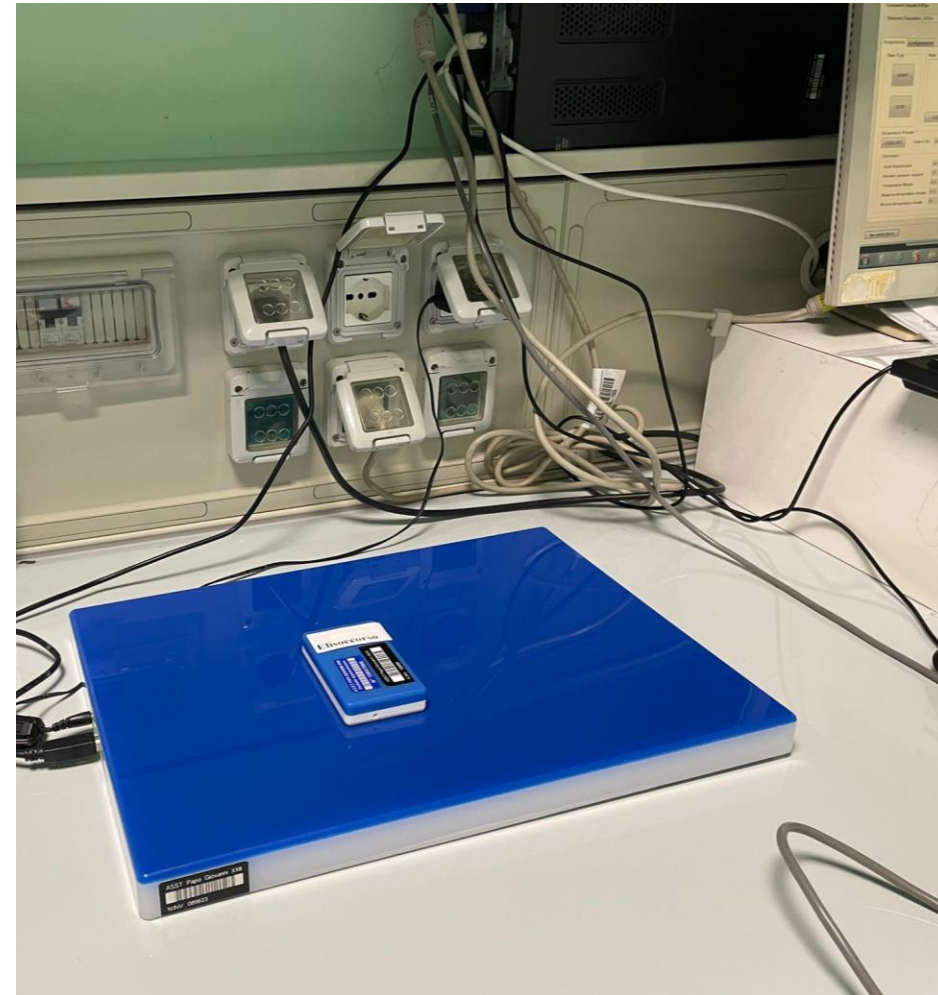
AB Rh+



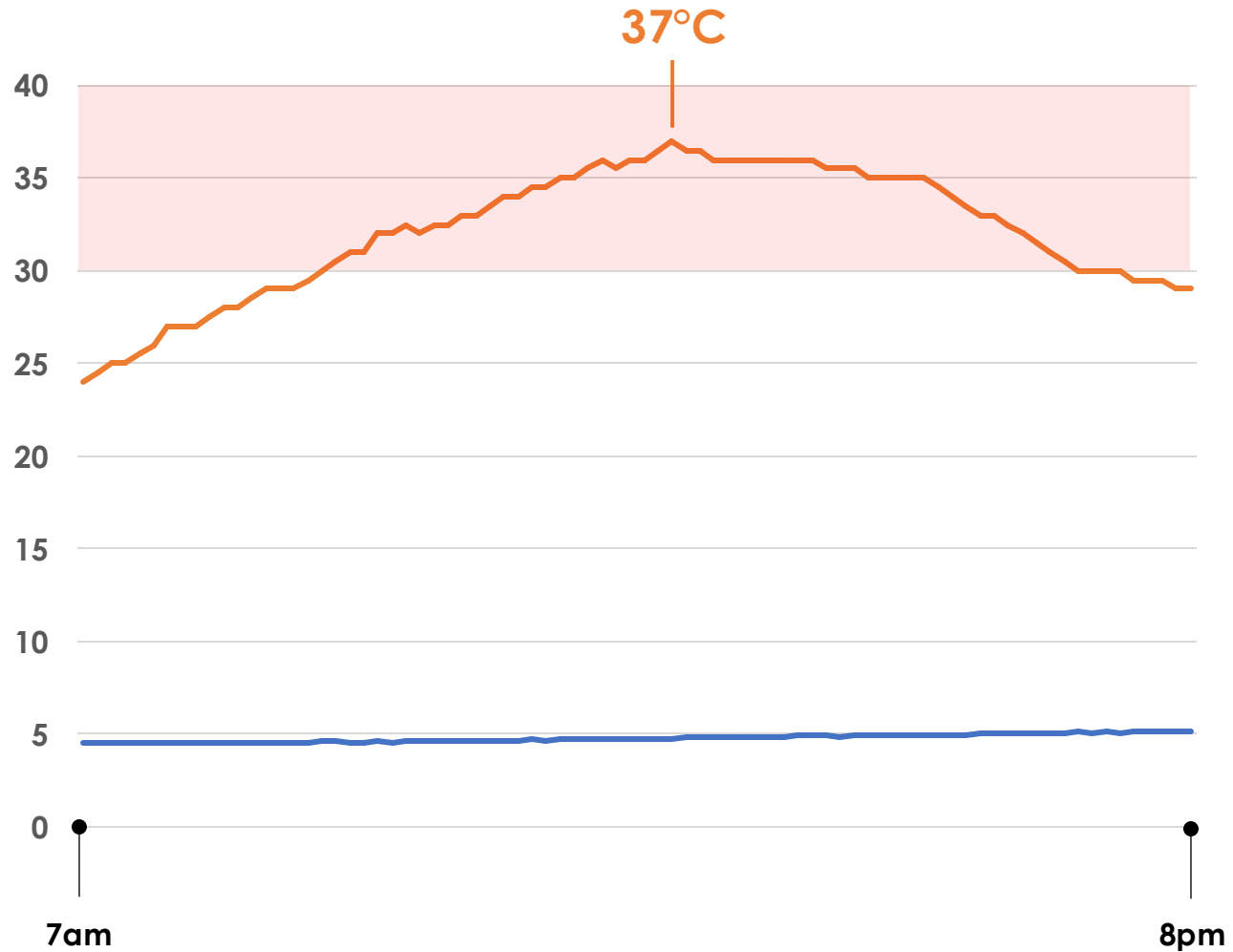
AB Rh+



Monitoring and traceability



Bergamo, 23rd August 2023










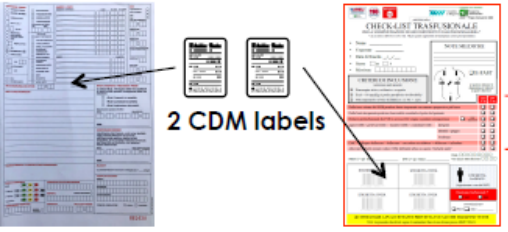
Fluid warmer

(Weight: 760 gr)



Thanks to Laura Bresciani, CEO at IMD generators srl

Standard Operative Procedure

1	<p>From GHB pocket take:</p> <p>Plastic envelope</p> <p>Content: 1 bracelet, 1 tube, 1 check-list</p> 
2	 <p>Identification bracelet to patient's wrist</p>
3	<p>Pre-transfusion sampling*</p> <p>time, date, sign</p> <p><i>*Can be omitted in hostile circumstances</i></p> 
4	<p>Open GHB</p> <p>this defines GHB as "used" → SIMT at the end of ongoing rescue operation</p>
↓ Check	<p>Integrity</p> <p>PRBC: HEMOCONTROL</p>  
	<p>Identity Type</p> <p>Expiry date</p>  <p>Match data with Emonet form</p>
5	 <p>Set line and warmer</p> <p>See quick reference on the back</p>
6	 <p>2 CDM labels</p> <p>DOC & NURSE</p> <p>tick, date, sign</p>

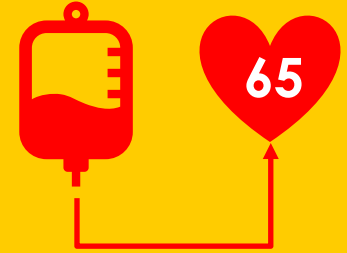
TEAM LEADER declares CODE RED if:

- Suspected Active Bleeding
- SBP < 90 mmHg (or undetectable peripheral pulse)
- Shock Index > 1 (or HR > 120 bpm)

- Traumatic Cardiac Arrest
(loss of vital signs must be witnessed)

4/11/2020 – 31/12/2024

89 PRBC
 81 Plasma



PRBC 342,3
 Plasma 311,5




TRAUMA (62)


Non trauma (3)

Penetrating (7, 11%)

Blunt (55, 89%)



Stabbing (3)




Gunshot (4)

Other (12)




Falls (6)




Work-related accidents (6)


Road Traffic Injuries (43)




Car/lorry drivers (18)




Bikers (17)



Cyclists (2)



Pedestrians (4)

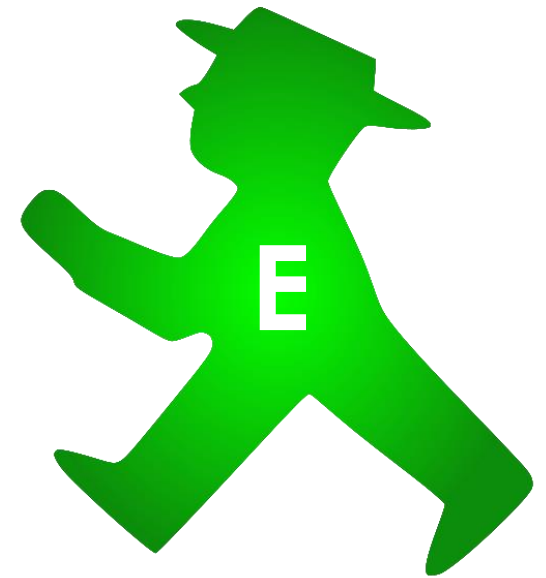
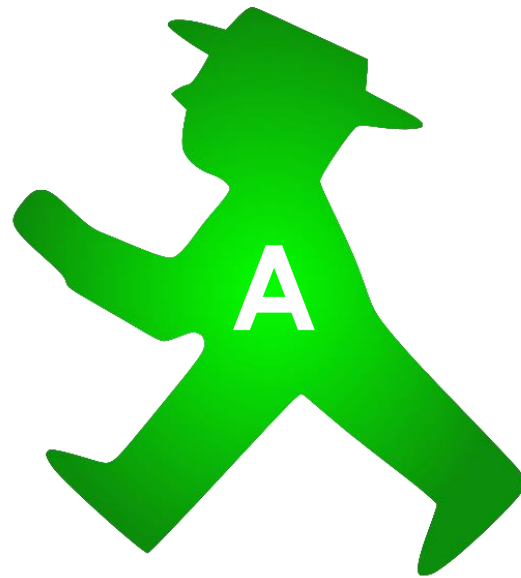


Tractor (2)



Prehospital blood transfusion is safe

Number of adverse reactions: 0 (zero)





Helicopter Hoist Operations





Thank you!

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