



Equipe Mobile Chirurgicale de Stabilisation du Traumatisé Sévère

MC Michael CARDINALE

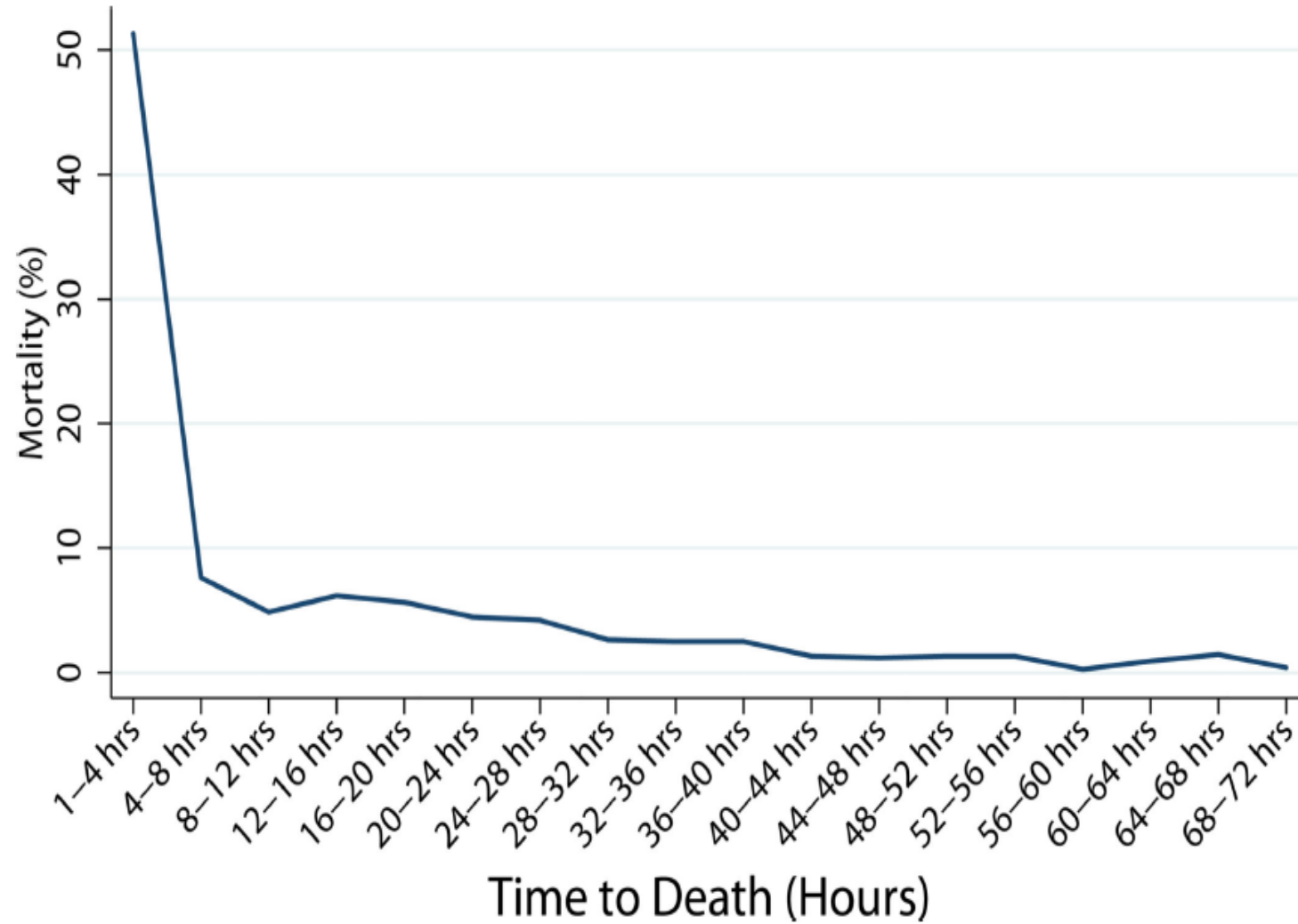
Fédération Anesthésie-Réanimation-Brulés
HIA Sainte Anne Toulon

Absence de conflit d'intérêt

PLAN

- Pourquoi
- Comment
- Perspectives

Mortalité



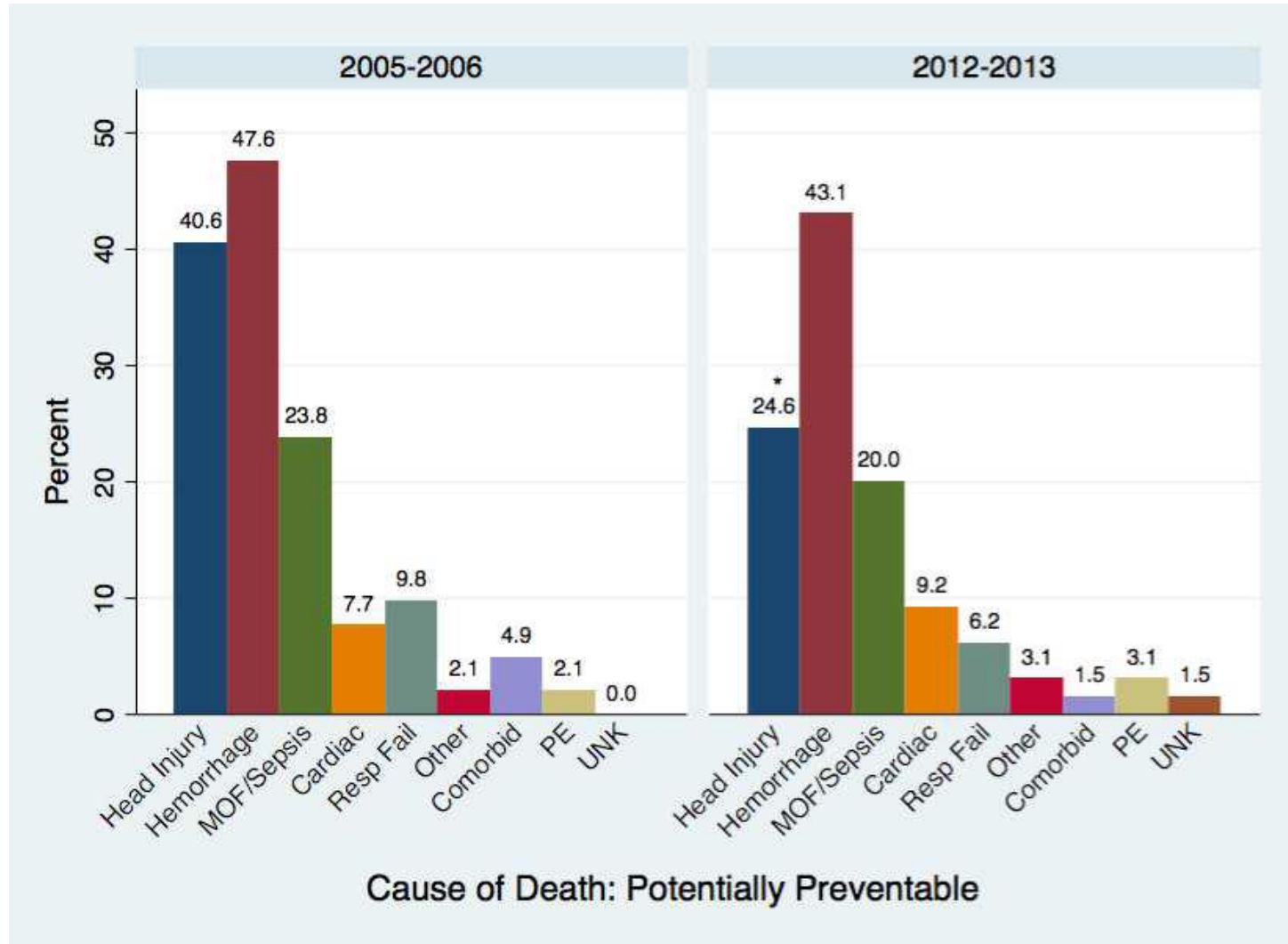
*Trends in 1029 Trauma Deaths at a Level 1 Trauma Center
Injury 2017*

Mortalité

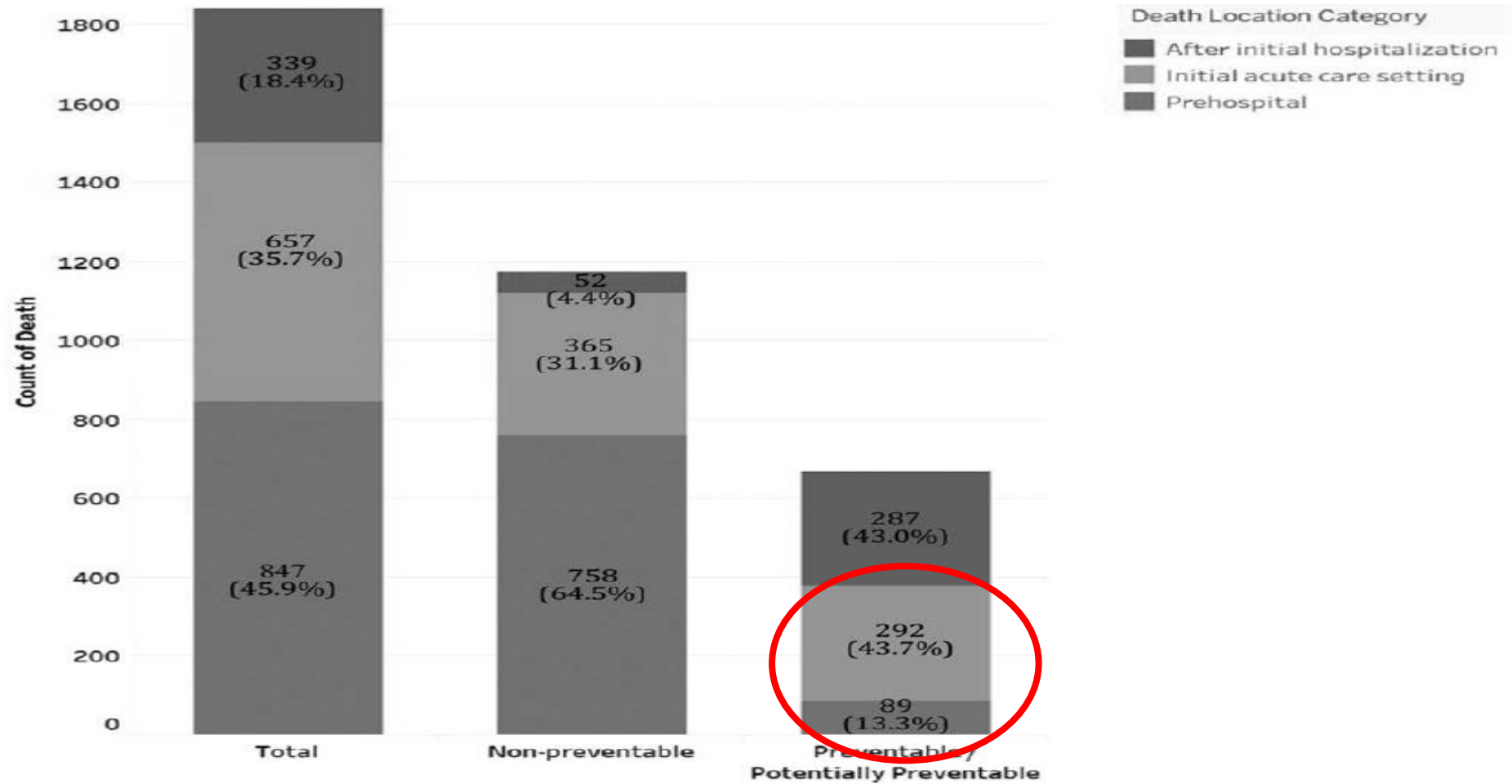
Time to Trauma Deaths Based on Cause of Death

	Total (N=1029)	2005–2006 (N=498)	2012–2013 (N=531)	p
Overall, med (IQR)	14.6 (0.87, 78.5)	13.0 (0.52, 80.3)	16.2 (1.10, 77.9)	0.95
Head Injury, med (IQR)	19.6 (2.75–78.3)	22.6 (3.95–91.5)	17.4 (2.08–54.3)	0.02
Hemorrhage, med (IQR)	1.65 (0.22–12.4)	1.52 (0.20–11.6)	1.78 (0.24–15.2)	0.61
MOF + Sepsis, med (IQR)	256 (122–456)	287 (147–690)	215 (101–406)	0.09
Respiratory Failure, med (IQR)	170 (66–263)	250 (184–621)	109 (24–193)	0.01
Cardiac, med (IQR)	35.9 (4.5–134)	27.5 (2.1–172)	35.9 (6.9–134)	0.55
Comorbid, med (IQR)	124 (53–185)	142 (66–255)	102 (43–168)	0.46
Other, med (IQR)	90.2 (19–199)	75 (3.5–118)	180 (34–199)	0.35
Unknown, med (IQR)	0.08 (0.1–0.2)	0.1 (0.1–0.3)	0.04 (0.03–0.1)	0.11
PE, med (IQR)	68 (13–313)	313 (13–412)	40 (12–68)	0.25

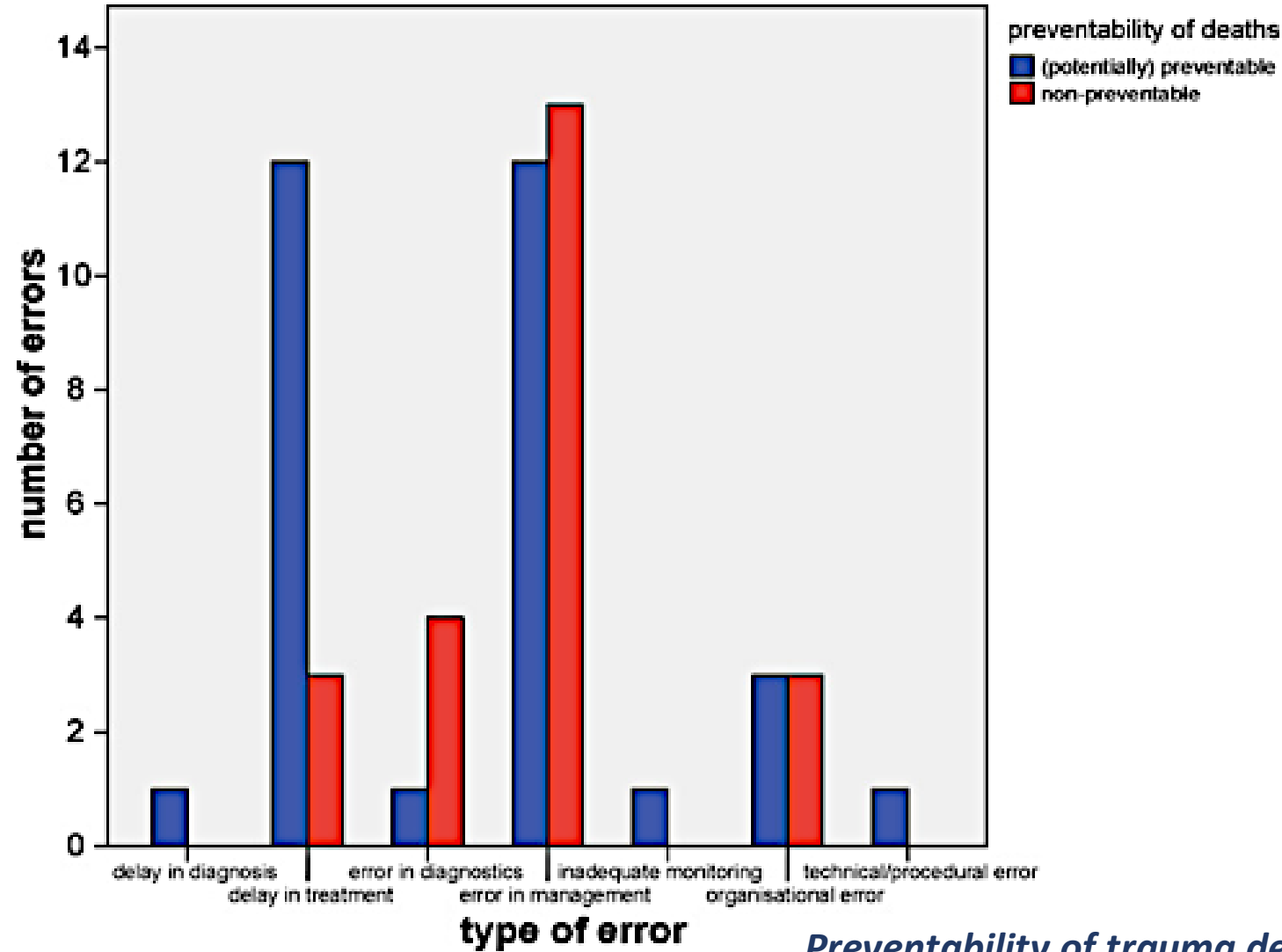
Mortalité évitable



mortalité évitable



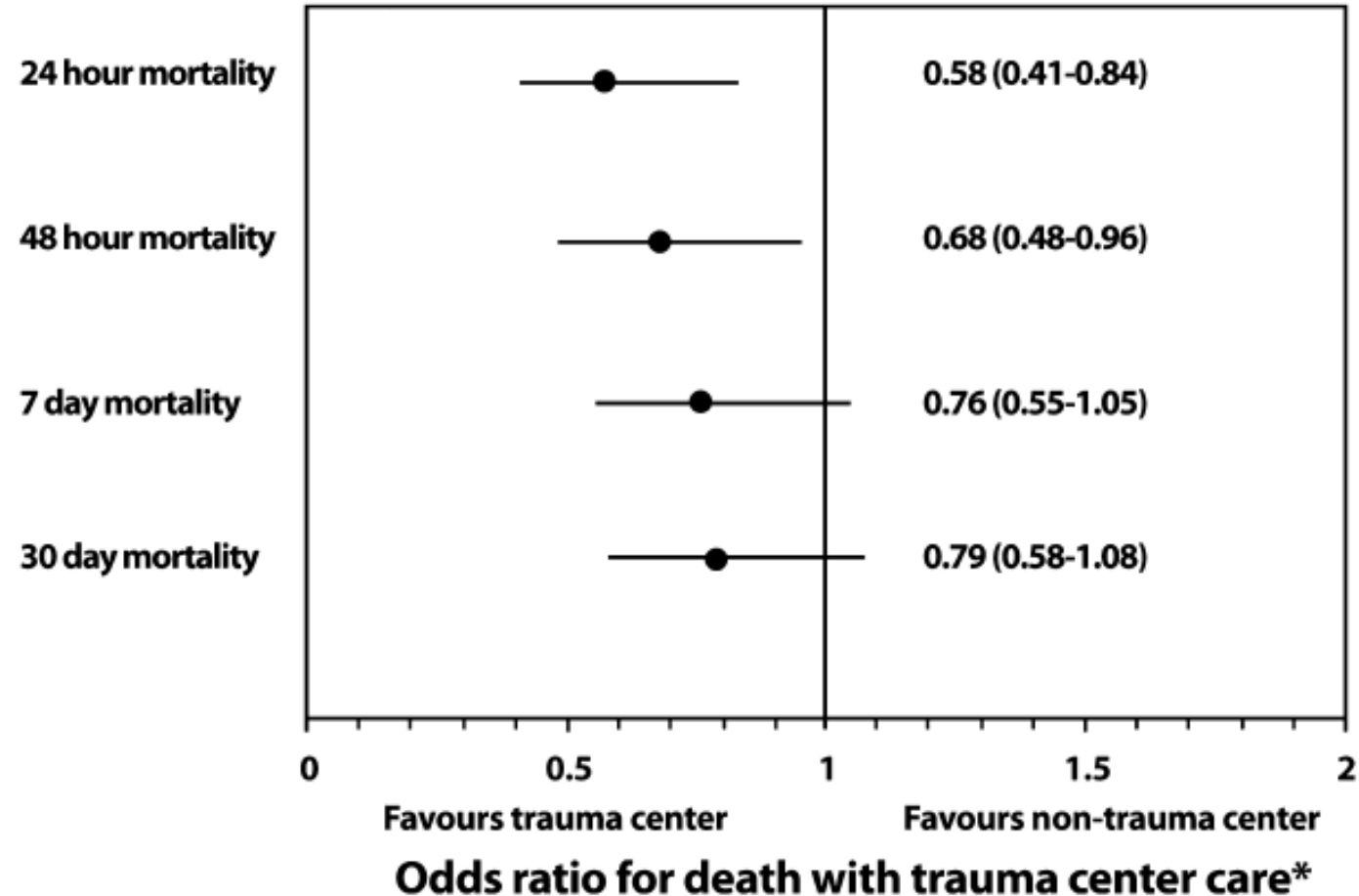
mortalité évitable



Preventability of trauma deaths in a Dutch Level-1 trauma centre.

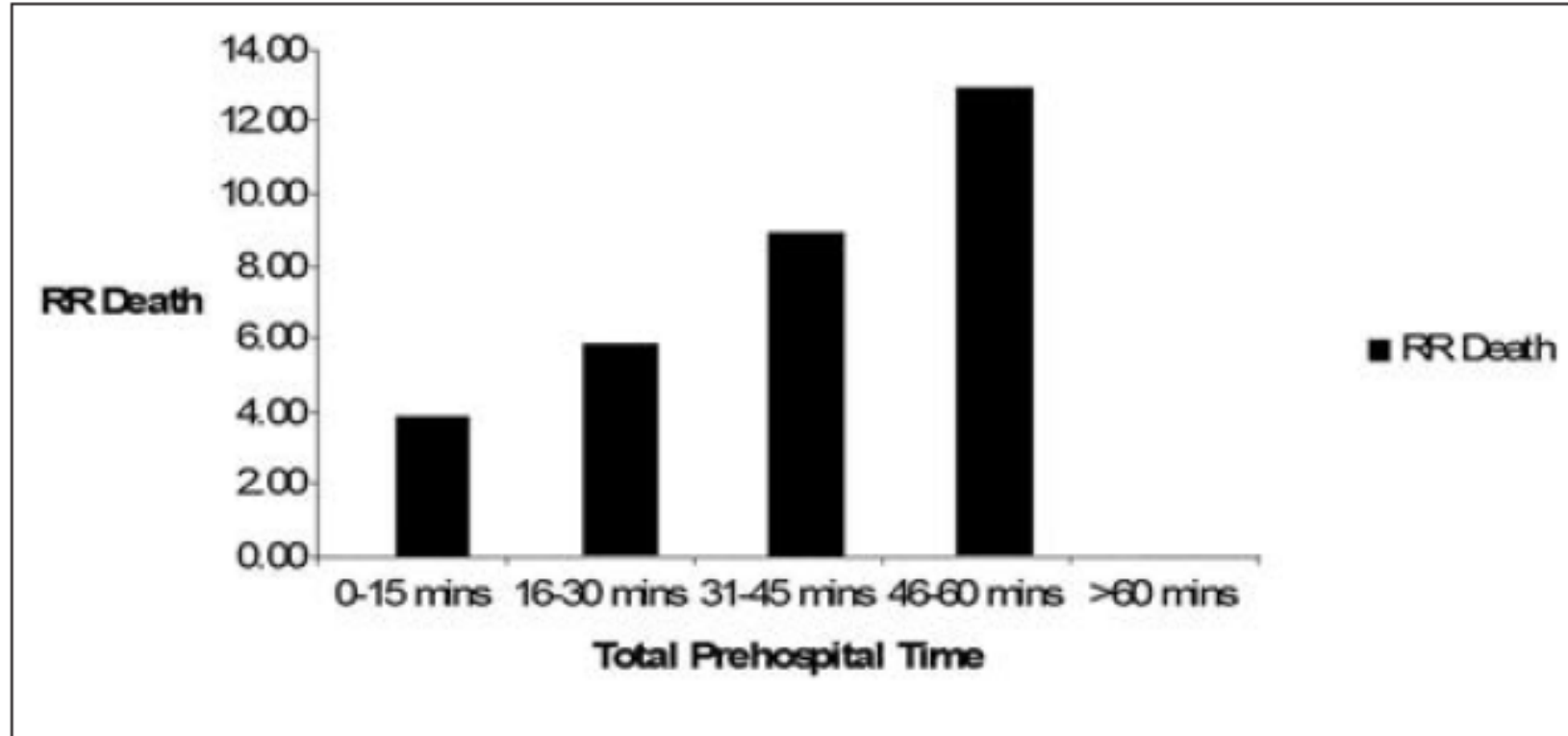
Injury 2011

impact du Trauma System



The mortality benefit of direct trauma center transport in a regional trauma system: A population-based analysis *J Trauma* 2012

Impact du temps préhospitalier



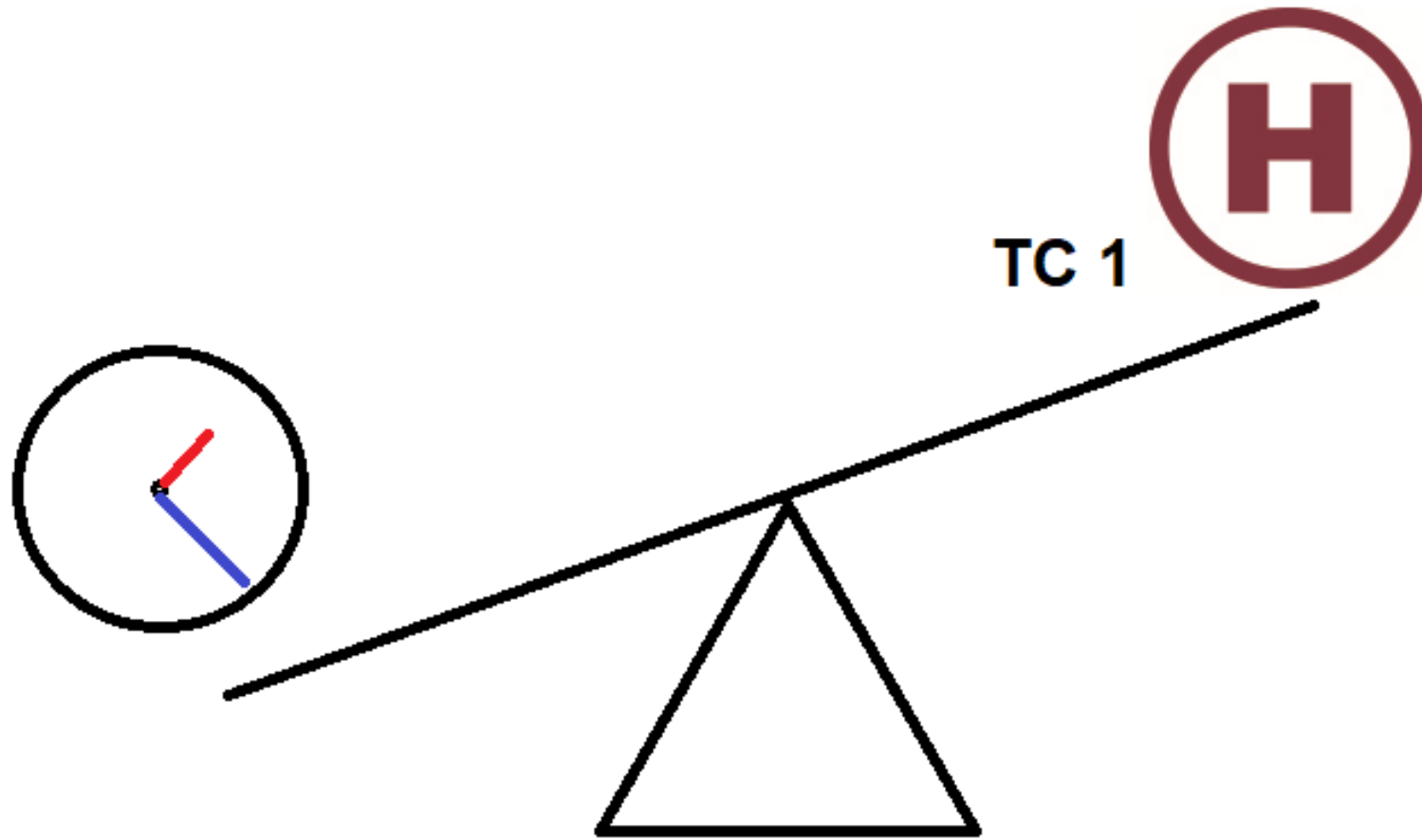
Pre-hospital transport times and survival for Hypotensive patients with penetrating thoracic Trauma
J Emerg Traum Shock 2013

Pourquoi

Comment

Perspectives

Impact trauma system



Pourquoi

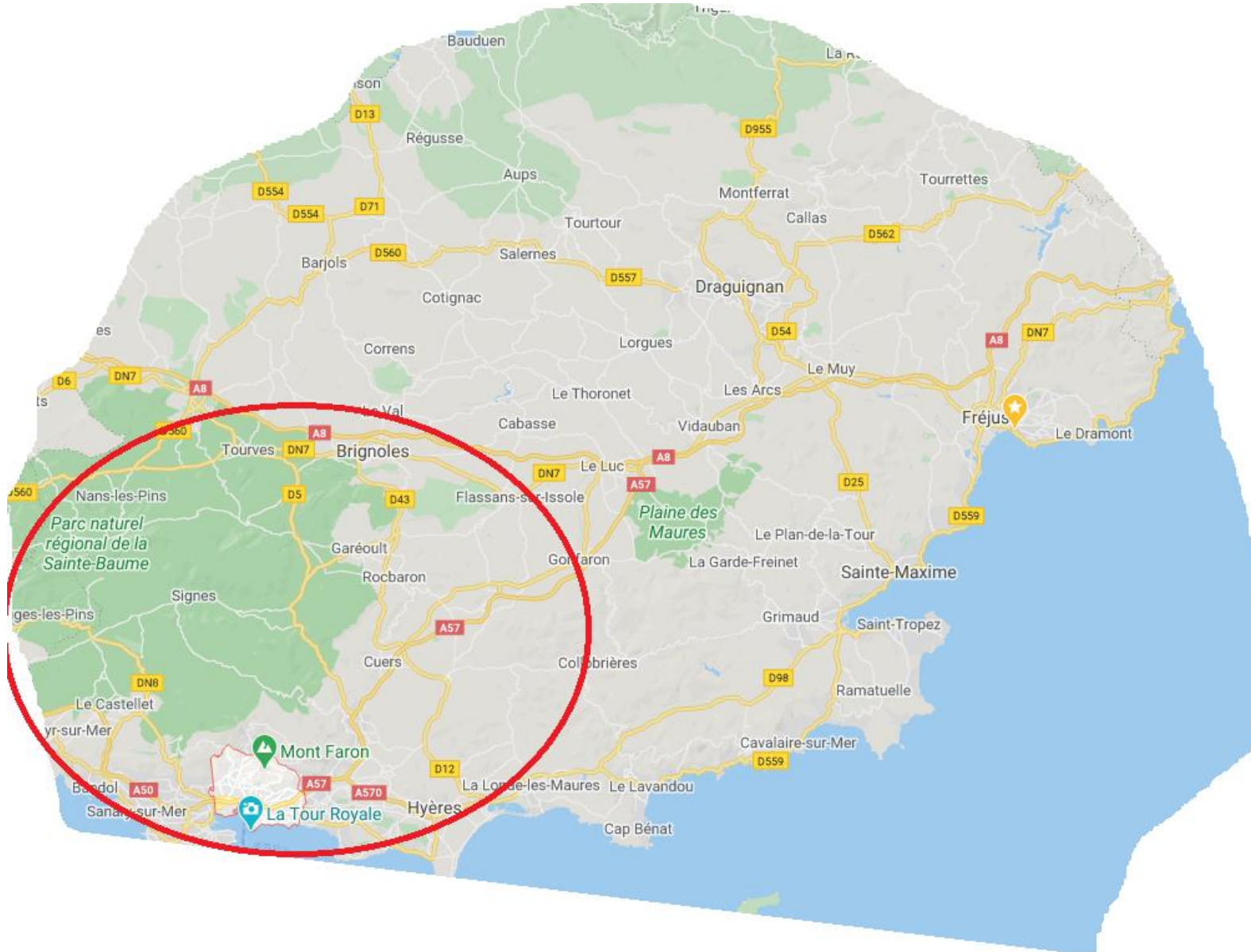
Comment

Perspectives

impact du Trauma System



< 60'



impact du Trauma System



J 365
≈H12



62 %



J 90
H24

le concept

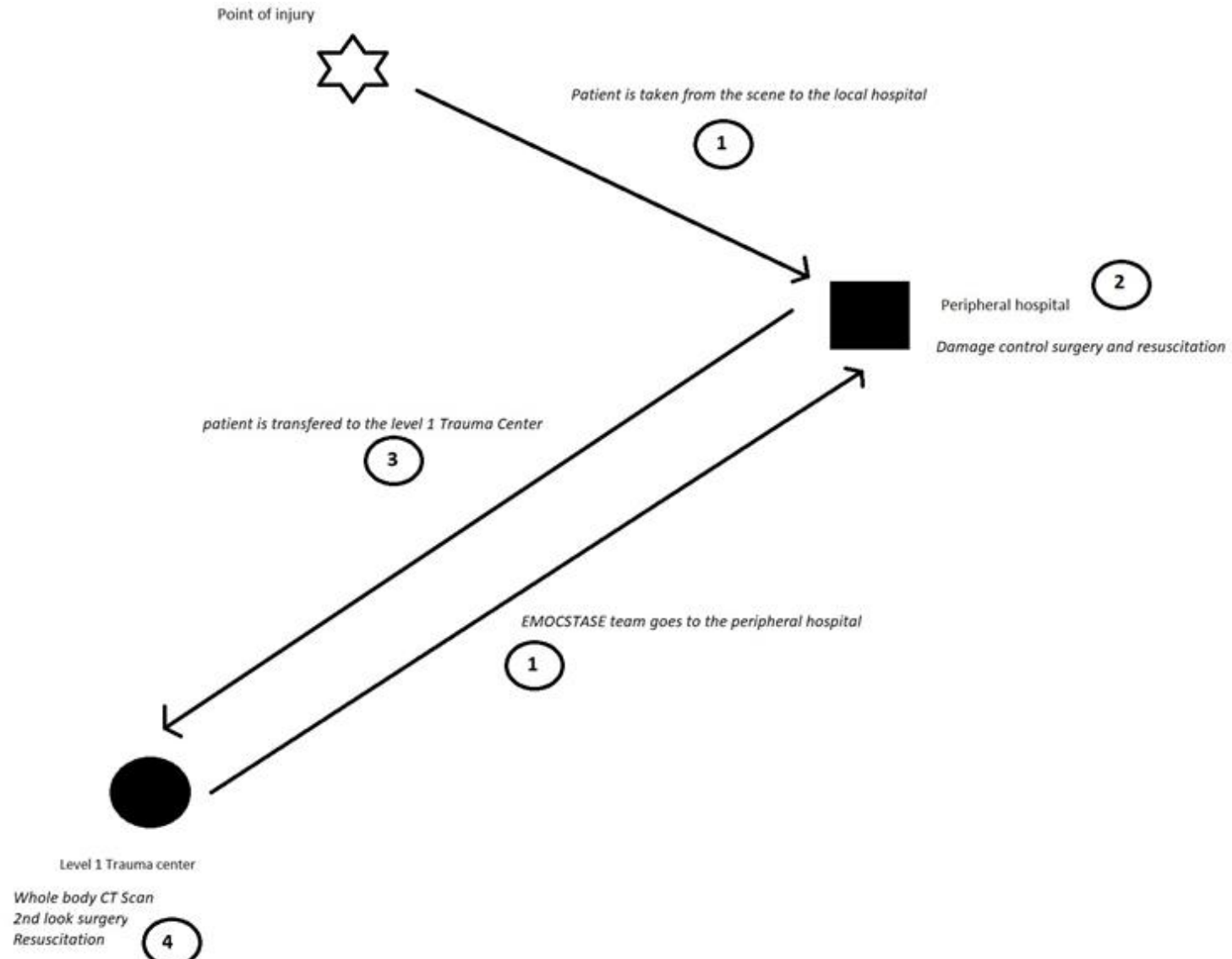
- Equipe experte projetable
 - Chir + MAR +/- IADE +/- IBODE
- Mentoring équipe locale
- Moyens validés
 - Chirurgie écourtée
 - Réanimation hémostatique

Pour quels patients

Indication		contraindication
medical criteria	logistical criteria	
at least one	mandatory	
haemorrhagic shock (SBP <100 mmHg AFTER >1 PRBC OR > 1000 mL cristalloids OR vasopressors)	Transport time to Level 1 trauma center \geq 90 min	age < 18
recovered cardiac arrest		ongoing cardiac arrest
penetrating heart wound (penetrating trauma AND pericardial effusion)		bilateral mydriasis, persistent after osmotherapy

Table 1. Eligibility criteria and contra-indications to Mobile Trauma Team deployment

le plan



les résultats

- 3 déclenchements en 2 ans
 - 2 Procédures complètes
- Survie: 100%

	patient 1	patient 2
accident	20:00	12:25
EMS on scene	20:10	13:00
EMOCSTASE decision	20:22	14:00
EMOCSTASE team leaving	20:27	14:15
Patient at the peripheral hospital	20:27	14:30
EMOCSTASE team at the peripheral hospital	21:15	15:00
beginning of surgery	21:25	15:10
end of surgery	21:57	16:00
patient at Level 1 trauma center	23:15	17:20

continuum civilo-militaire



Effect of special operational forces surgical resuscitation teams on combat casualty survival: A narrative review

Transfusion 2022

chirurgicalisation *en route*



Conclusion:

- Rapprocher la chirurgie et la Réanimation du traumatisé sévère
- Expertise militaire
- Etendre la période survivable avant admission en TC1
- Challenge indications

Merci de votre attention!



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