

„Do not take this patient to the ICU – EGDT kills him“

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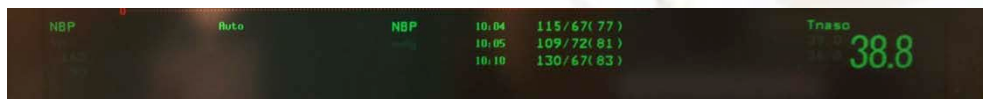
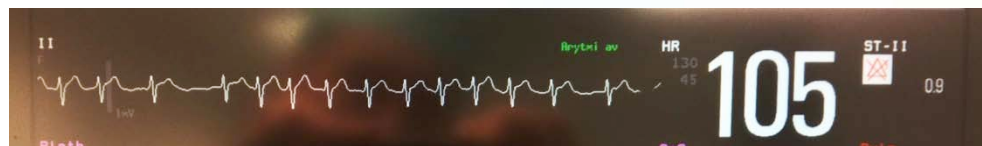


“Čím rychleji,
tím lépe”



Kolik jste viděli podobných případů?

82 let, uroinfekt, (DM, EF LK 35%)



Bolus tekutin 30 ml/kg



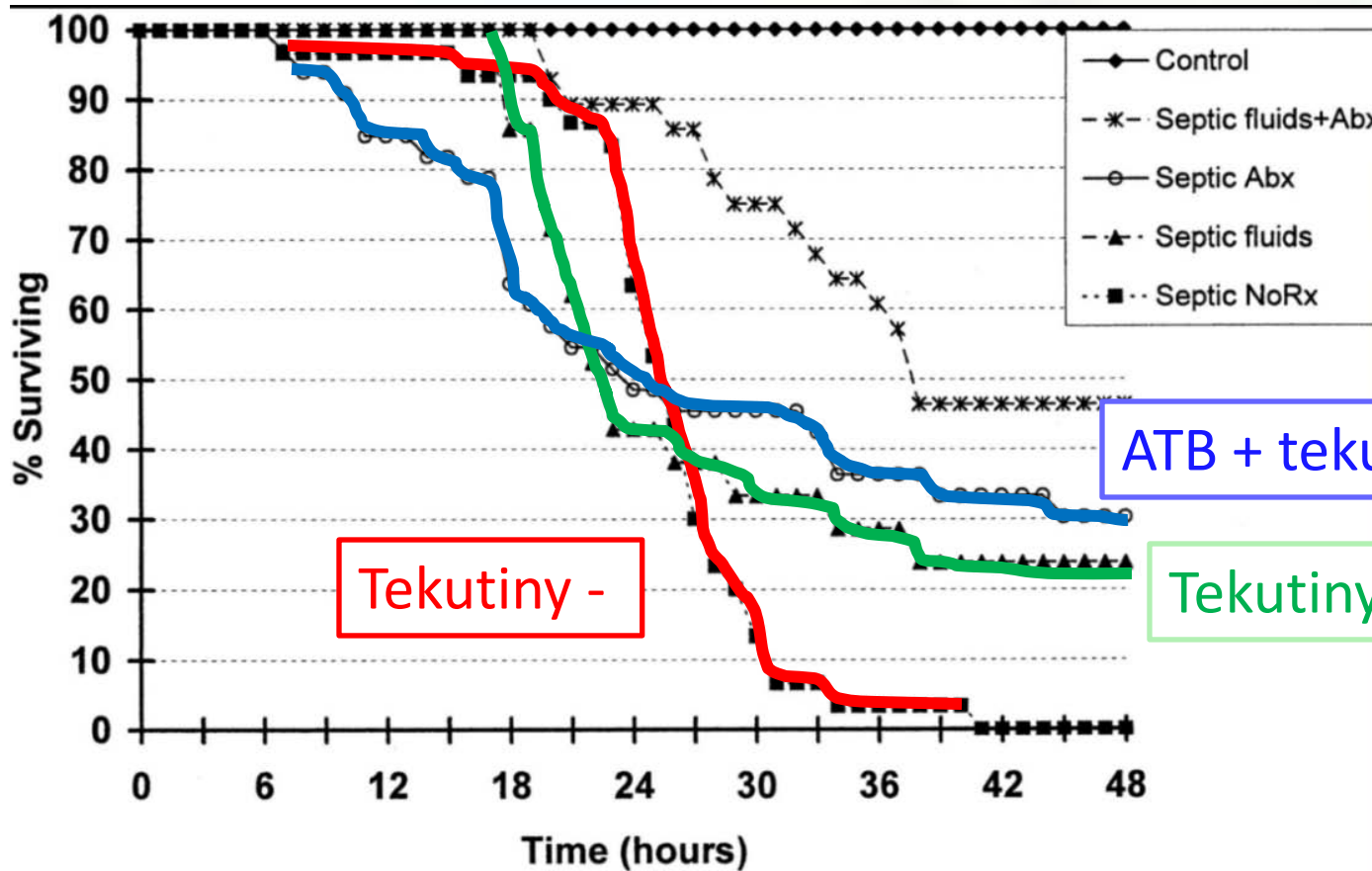
ScvO2 64%



Bolus tekutin

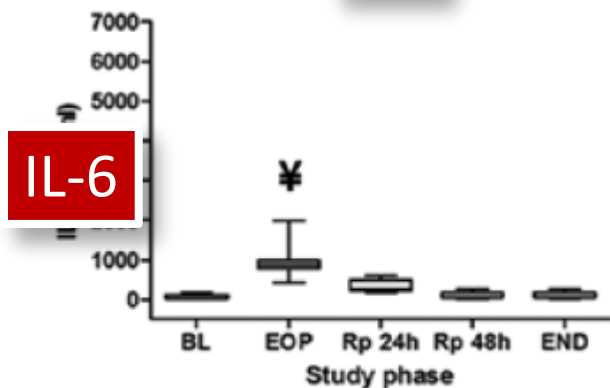


Does EGDT kill? No so fast...

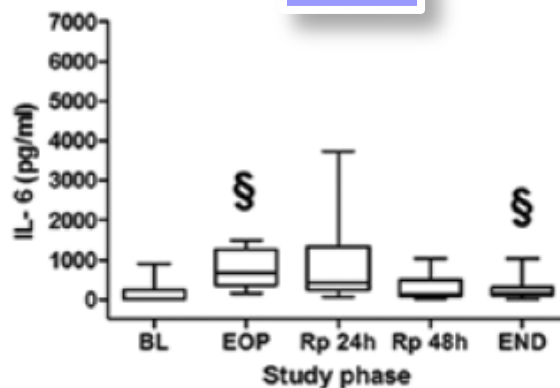


Dos EGDT kill? No so fast...

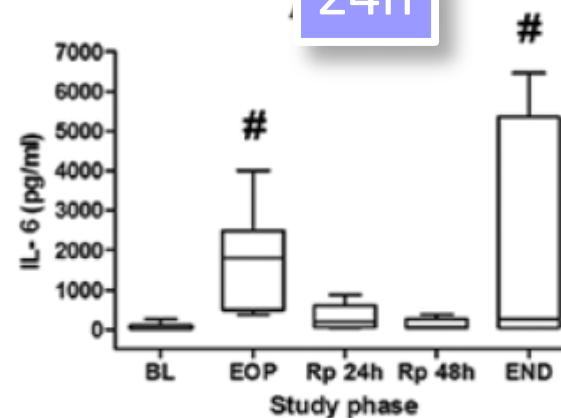
6h



12h



24h



Tkáňová perfúze



systemová inflamace

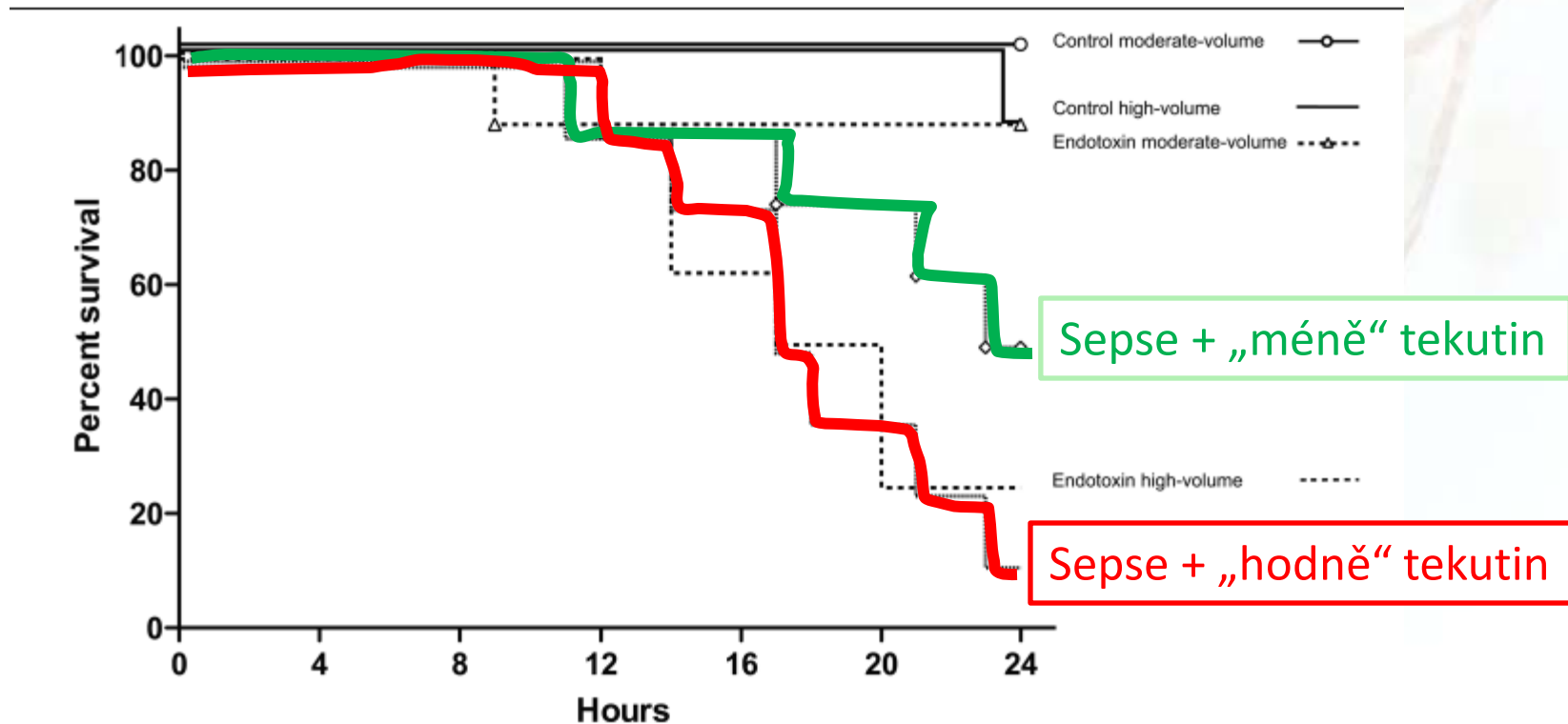


**Není pochyb o významu
tekutinové resuscitace jako o
základním pilíři v léčbě většiny
kriticky nemocných**



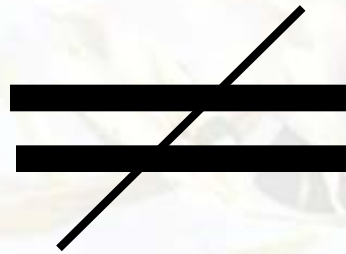
Zakotvené paradigma: bolus(y) tekutin

Does EGDT kill? Not so fast, **BUT...**



Agresivní tekutinová resuscitace zvyšuje časnou mortalitu v preklinickém modelu

Well, just pre-clinical data....



**Male vs Female
White vs Black
Young vs Old
Co-morbidities**

Courtesy Prof. Bruce Molitoris

FEAST study

3000 afrických dětí bez komorbidit,
bez maskujících technologií– UPV, vasopresory, CRRT, ECMO....



The NEW ENGLAND
JOURNAL of MEDICINE

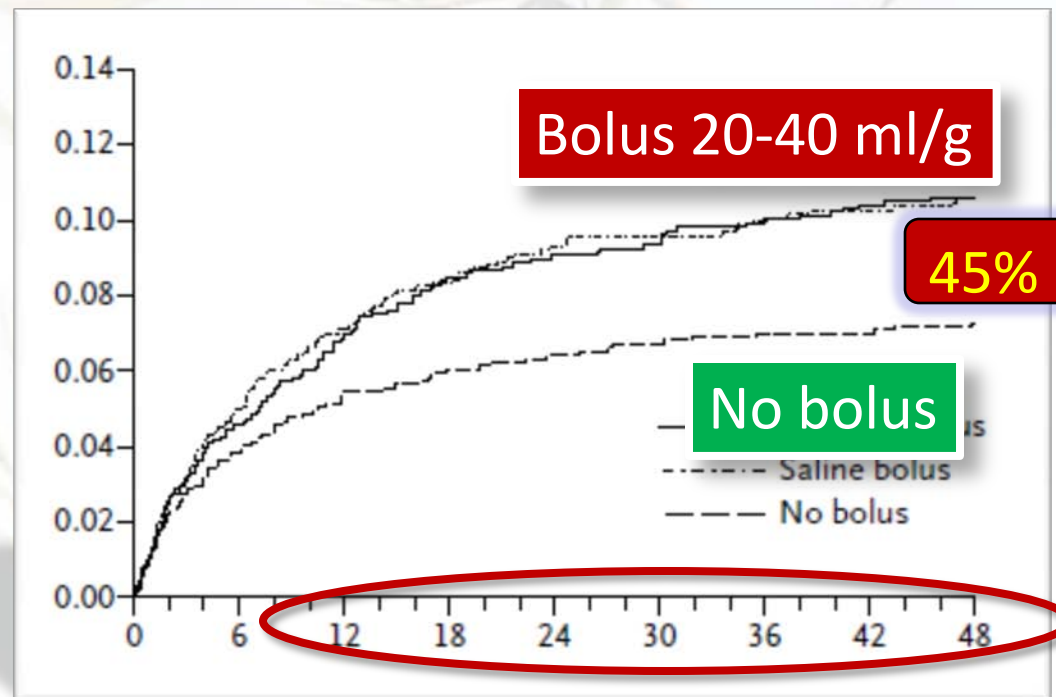
ESTABLISHED IN 1812

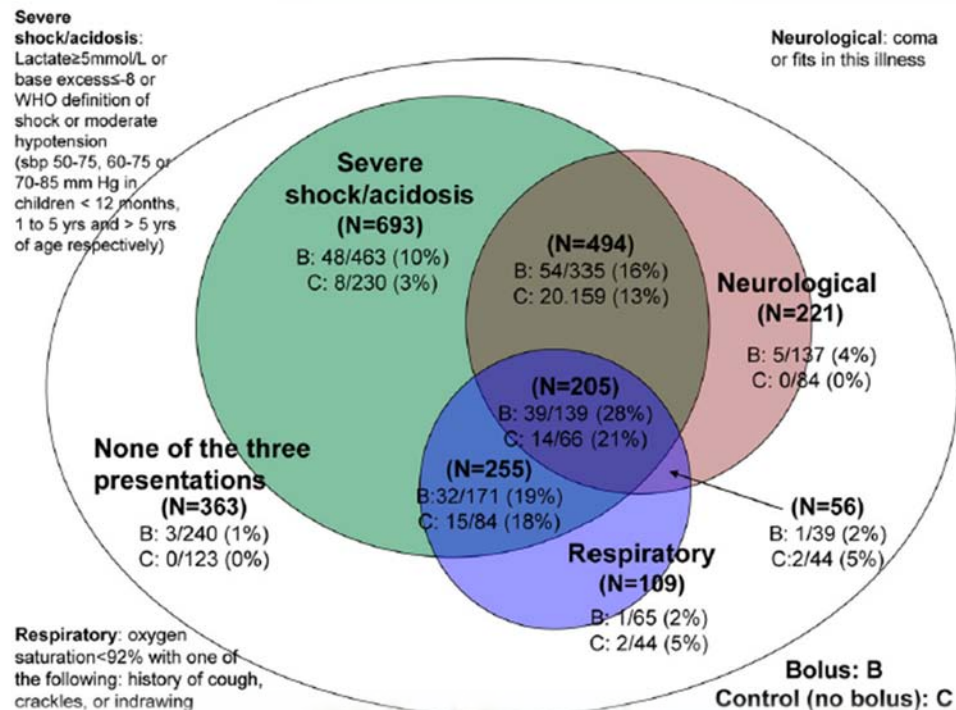
JUNE 30, 2011

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Mortality after Fluid Bolus in African Children with Severe Infection

Kathryn Maitland, M.B., B.S., Ph.D., Sarah Kiguli, M.B., Ch.B., M.Med., Robert O. Opoka, M.B., Ch.B., M.Med.,



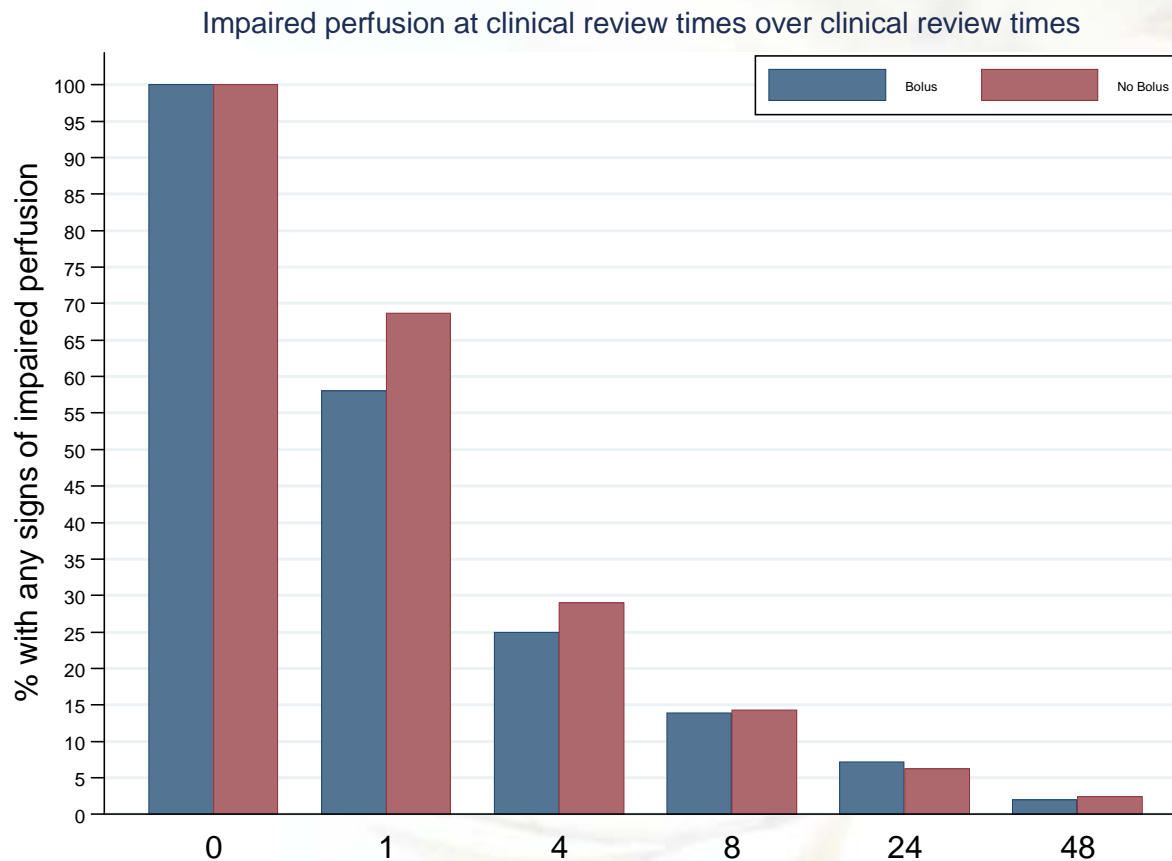


- Vyšší 48h mortalita bolusu ve všech podskupinách
- Vyšší 48h mortalita bolusu bez ohledu na vstupní Hb
- Nejhorší výsledky tam, kde těžká acidóza

**Mechanismus vysoké úmrtnosti ve skupině
“bolus”?**

Kardiovaskulární kolaps

...navzdory lepší rezoluci známek tkáňové hypoperfúze v průběhu prvních 60 minut!



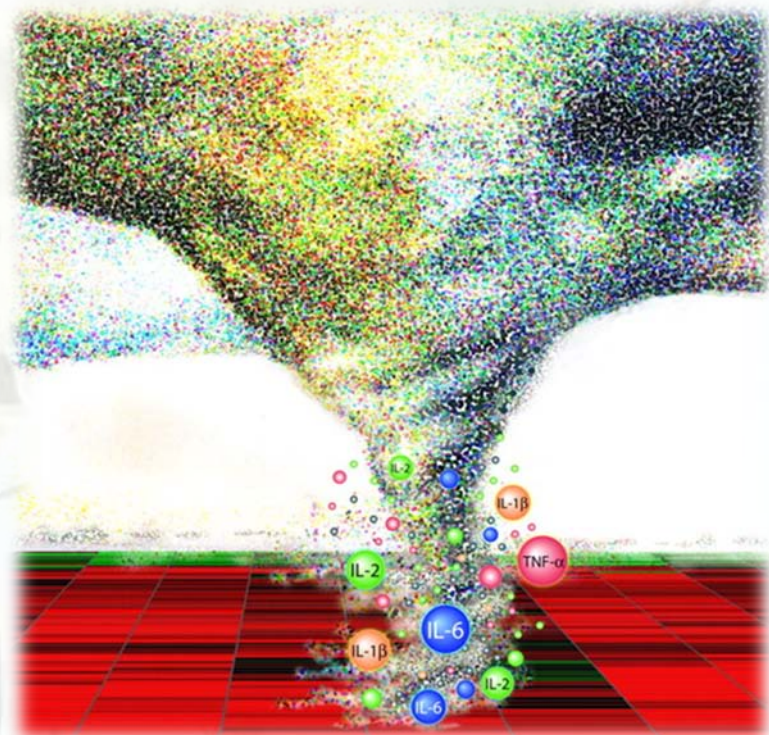
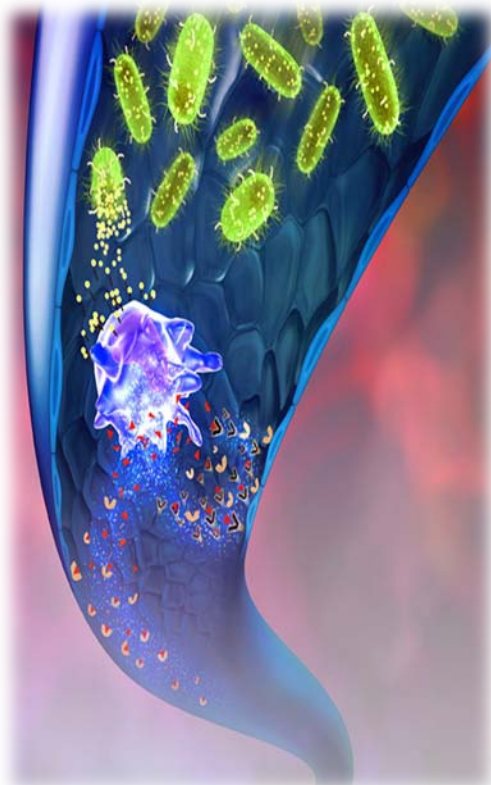
	Bolus	No Bolus	Bolus	No Bolus	Bolus	No Bolus	Bolus	No Bolus	Bolus	No Bolus	Bolus	No Bolus
No. at risk.	2097	1044	2070	1030	2011	1011	1972	996	1899	975	1876	968
No. of measurements	2097	1044	2041	1017	1987	997	1946	984	1877	958	1823	945

Rychlejší resoluce tkáňové hypoperfúze
versus
Kardiovaskulární selhání jako příčina smrti



Proč je cena za rychlejší obnovu tkáňové hypoperfúze tak vysoká?

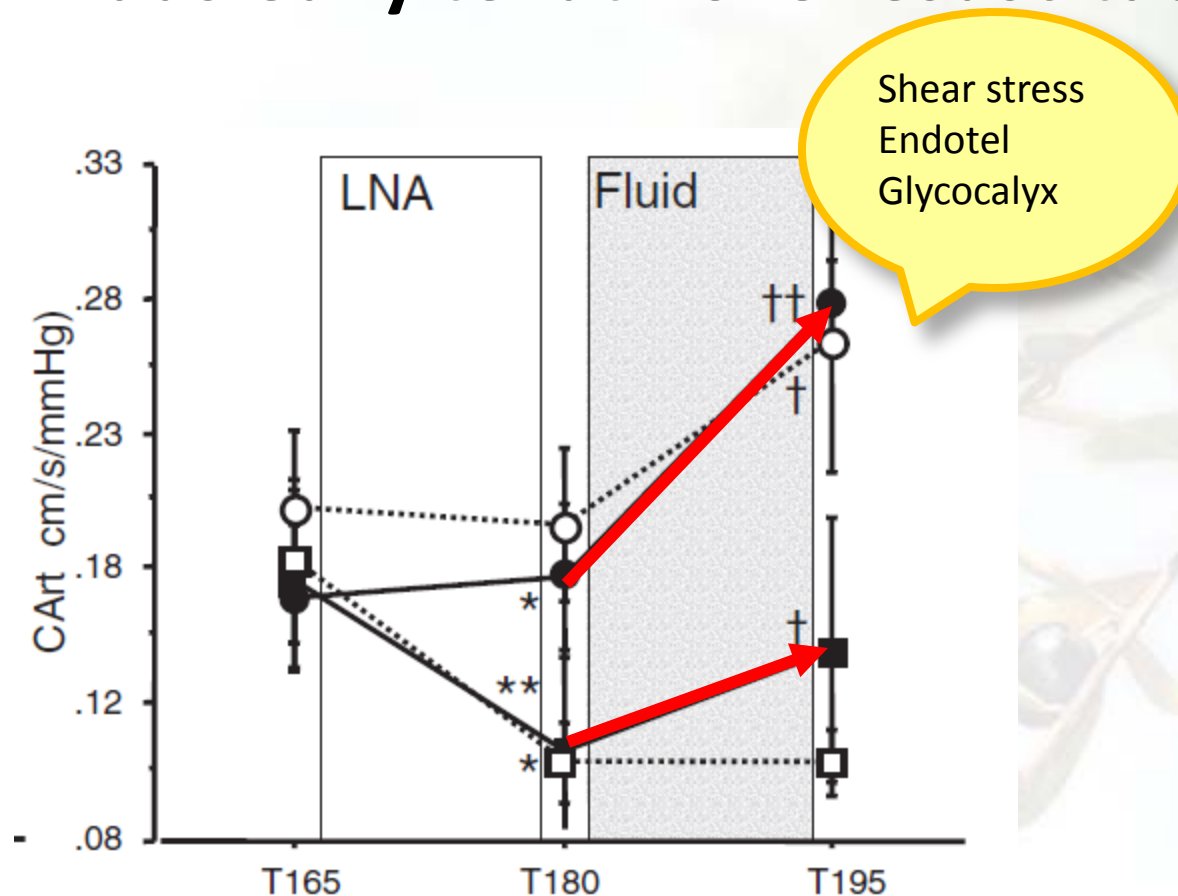
„a perfect danger signal storm“ ?



Reperfúze, surge of cytokines
Potřeba vazopresorů, UPV.....

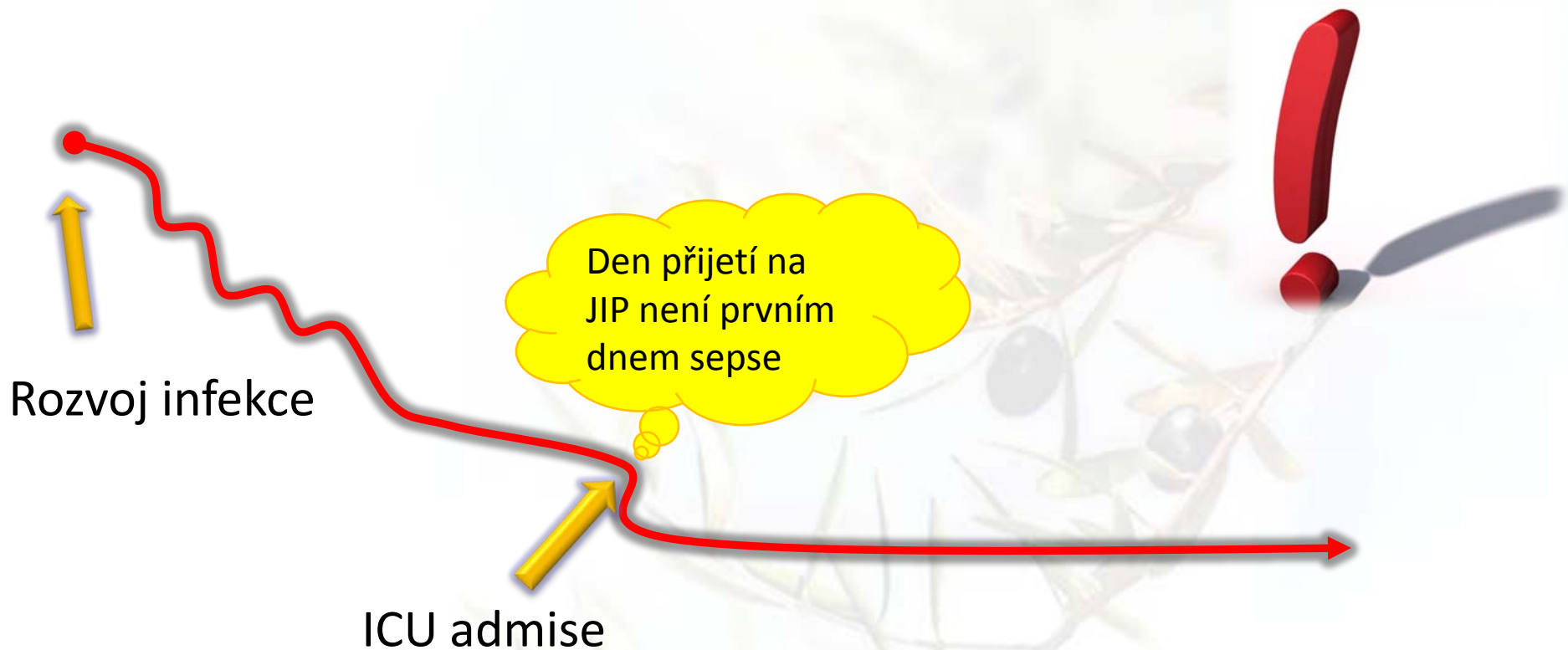


Vaskulární důsledky tekutinové resuscitace

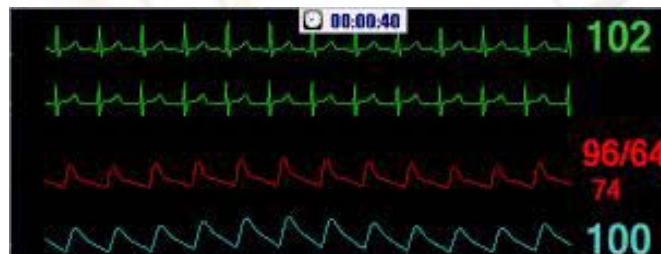
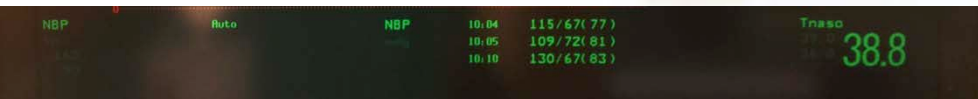
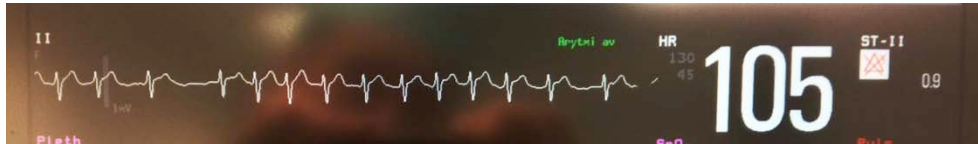


Co nastane u pacienta s limitovanou kardiální rezervou při vazodilataci potencované tekutinami v sepsi?

Normalizační heuristika, aneb more aggressive care \neq better care ?



„ Frail patient “



No bolus, 2-4 ml/kg/h
ATB ASAP!

O2
Korekce teploty
(paracetamol)





Forgotten were the elementary rules of logic, that extraordinary claims require extraordinary evidence and that what can be asserted without evidence can also be dismissed without evidence.

(Christopher Hitchens)

CAUTION

**EGDT
HAS NO BRAIN
USE YOUR OWN**

It's
COOL
To Be
SMART!



Dekuji 😊



Don't forget – ATB is key

Studies of Severe Sepsis Bundles (what changes?): Hours to Antibiotics

Author/Yr

Rivers '01

Trzeciak '06

Kortgen '06

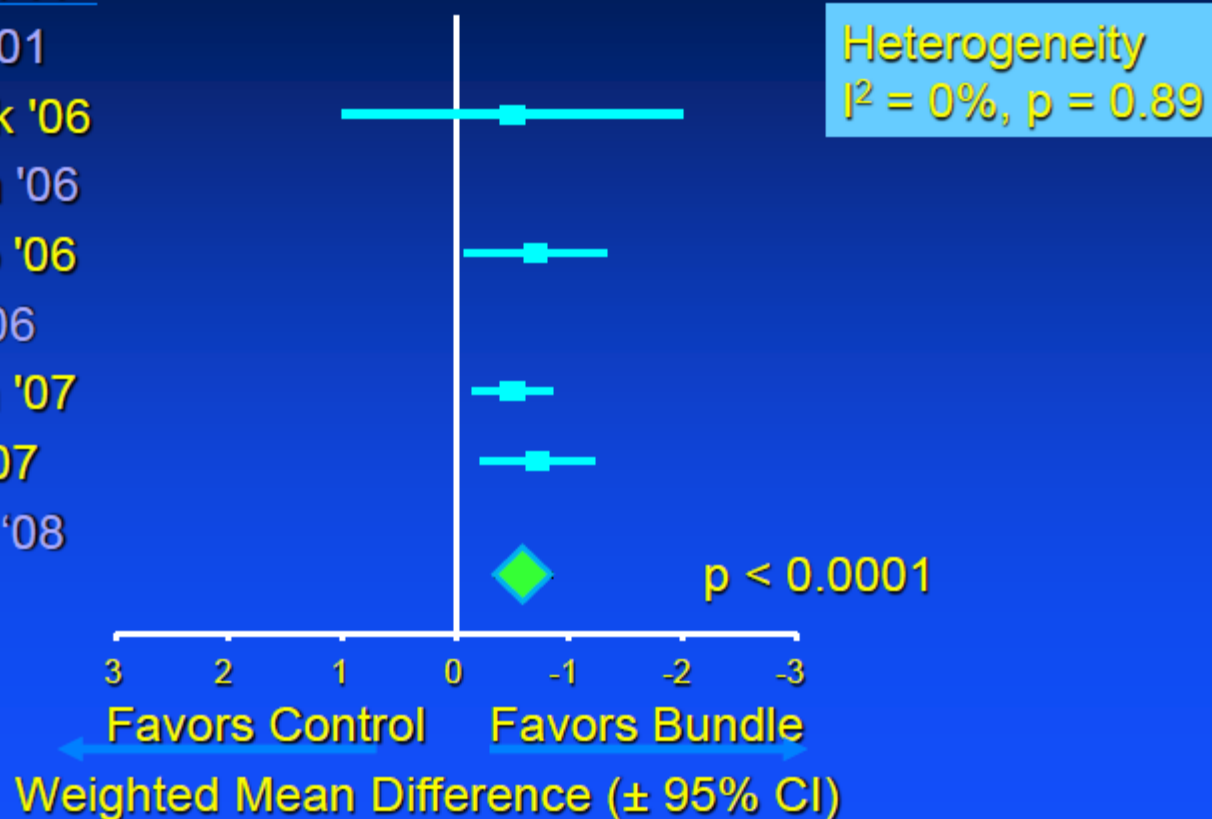
Shapiro '06

Micek '06

Nguyen '07

Jones '07

El Solh '08

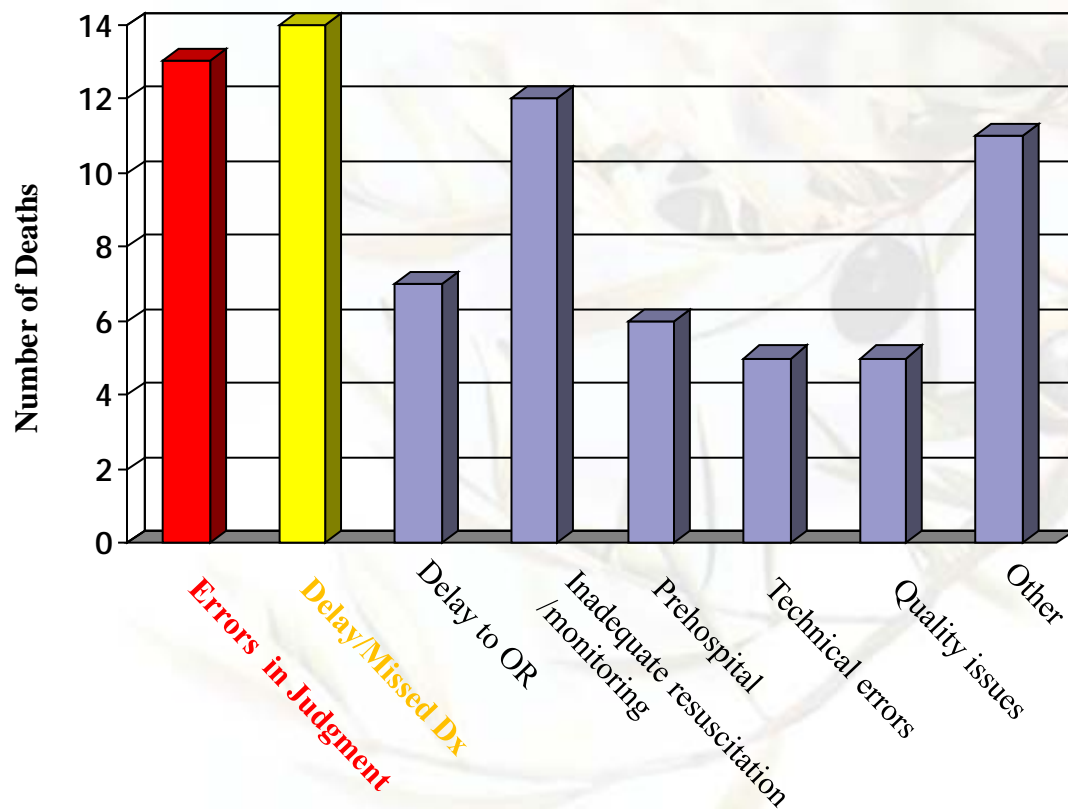




Preventable Deaths 1991-2004

Causes of Preventable Deaths

n = 73 / 2,216 (3.3%)





**the
ProCESS
Trial**