



COLOURS OF SEPSIS  
FESTIVAL INTENZIVNÍ MEDICÍNY

# Co je METABOLICKÁ RESUSCITACE

**MUDr. JAN VARADY**  
**KARIM FNO**  
**28.1.2020**

# Sapphire

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**08:30 - 10:10** METABOLICKÁ RESUSCITACE

*Předsedající: MUDr. K. Galková, Ph.D., (Nitra), MUDr. J. Chvojka, Ph.D., (Plzeň)*



**Co je metabolická resuscitace** MUDr. J. Varady  
(Ostrava)

**Role pro vitamíny** MUDr. M. Frelich, Ph.D., (Ostrava)

**Role pro stopové prvky** Doc. MUDr. J. Firment, Ph.D.,  
(Košice)

**Další metabolické resuscitátory** MUDr. J. Köppl  
(Bratislava)



# Co je „metabolická resuscitace“ ?

- ▶ Sepsis is life-threatening organ dysfunction caused by a **dysregulated** host response to infection

## The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3)

Mervyn Singer, MD, FRCP; Clifford S. Deutschman, MD, MS; Christopher Warren Seymour, MD, MSc; Manu Shankar-Hari, MSc, MD, FFICM; Djillali Annane, MD, PhD; Michael Bauer, MD; Rinaldo Bellomo, MD; Gordon R. Bernard, MD; Jean-Daniel Chiche, MD, PhD; Craig M. Coopersmith, MD; Richard S. Hotchkiss, MD; Mitchell M. Levy, MD; John C. Marshall, MD; Greg S. Martin, MD, MSc; Steven M. Opal, MD; Gordon D. Rubenfeld, MD, MS; Tom van der Poll, MD, PhD; Jean-Louis Vincent, MD, PhD; Derek C. Angus, MD, MPH

# Sepse a Septický šok

- ▶ Urgent recognition

**Sepsis-3** SIRS x SOFA

- ▶ Broad-spectrum ATB

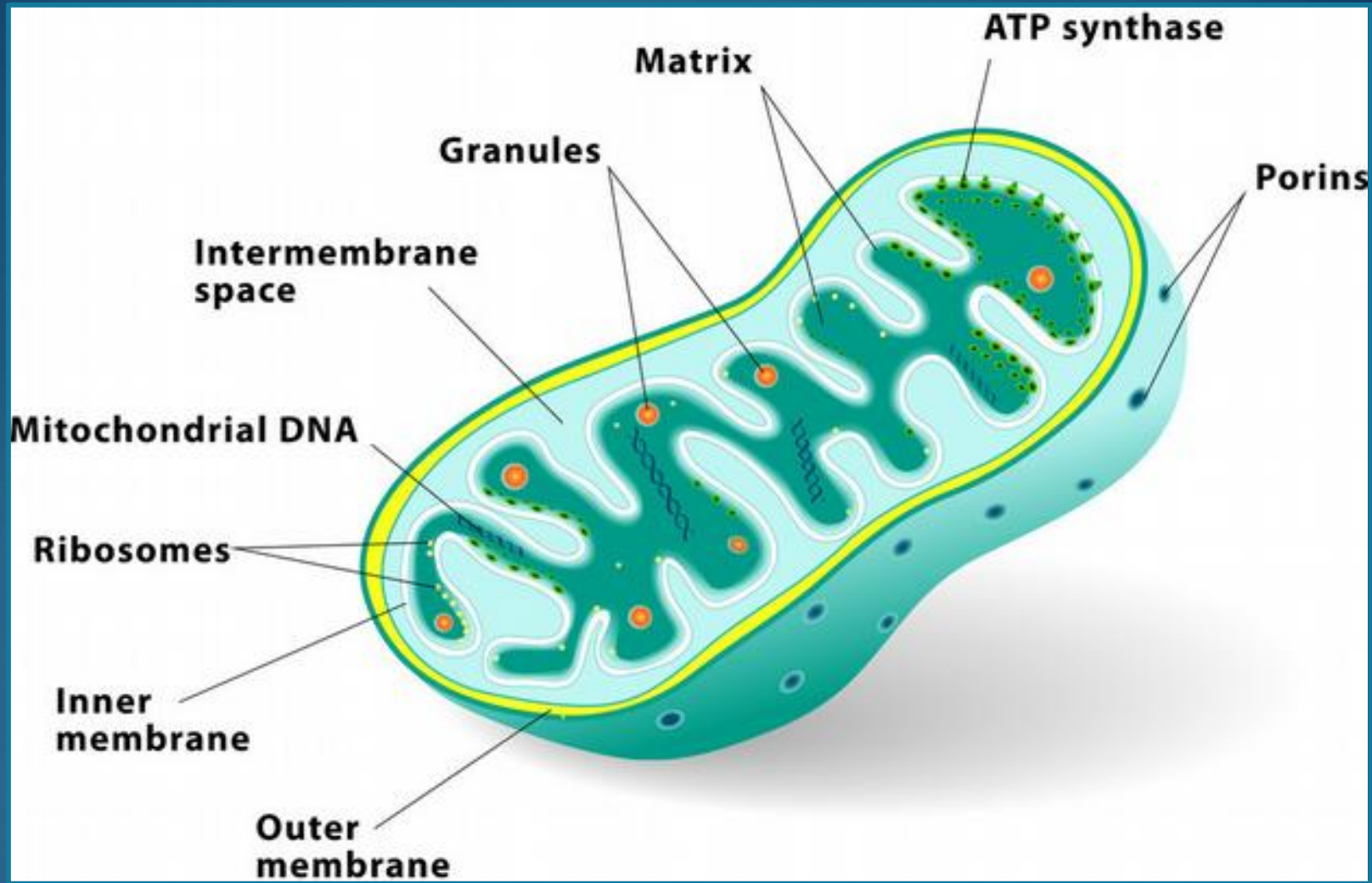
- ▶ Fluid therapy

- ▶ Vasopressors

- ▶ Source control

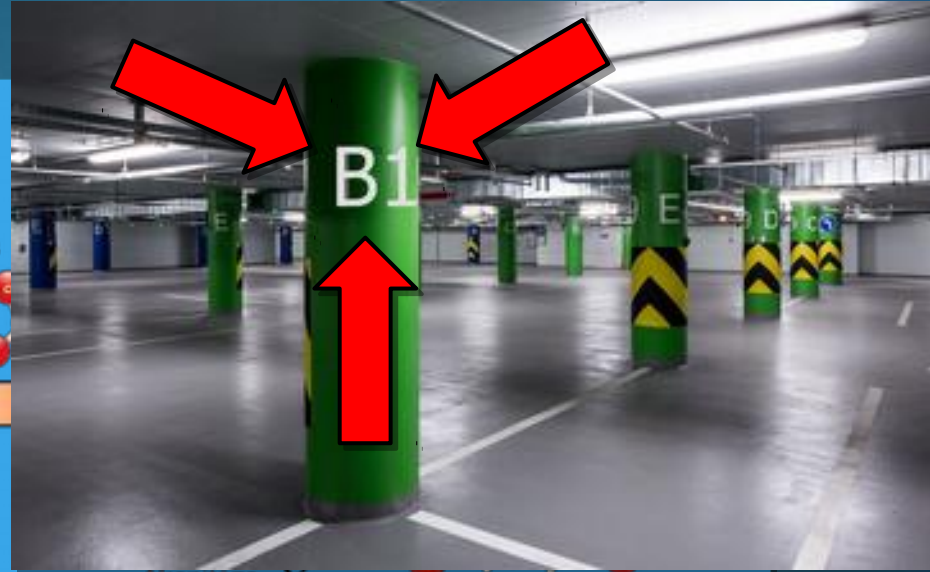
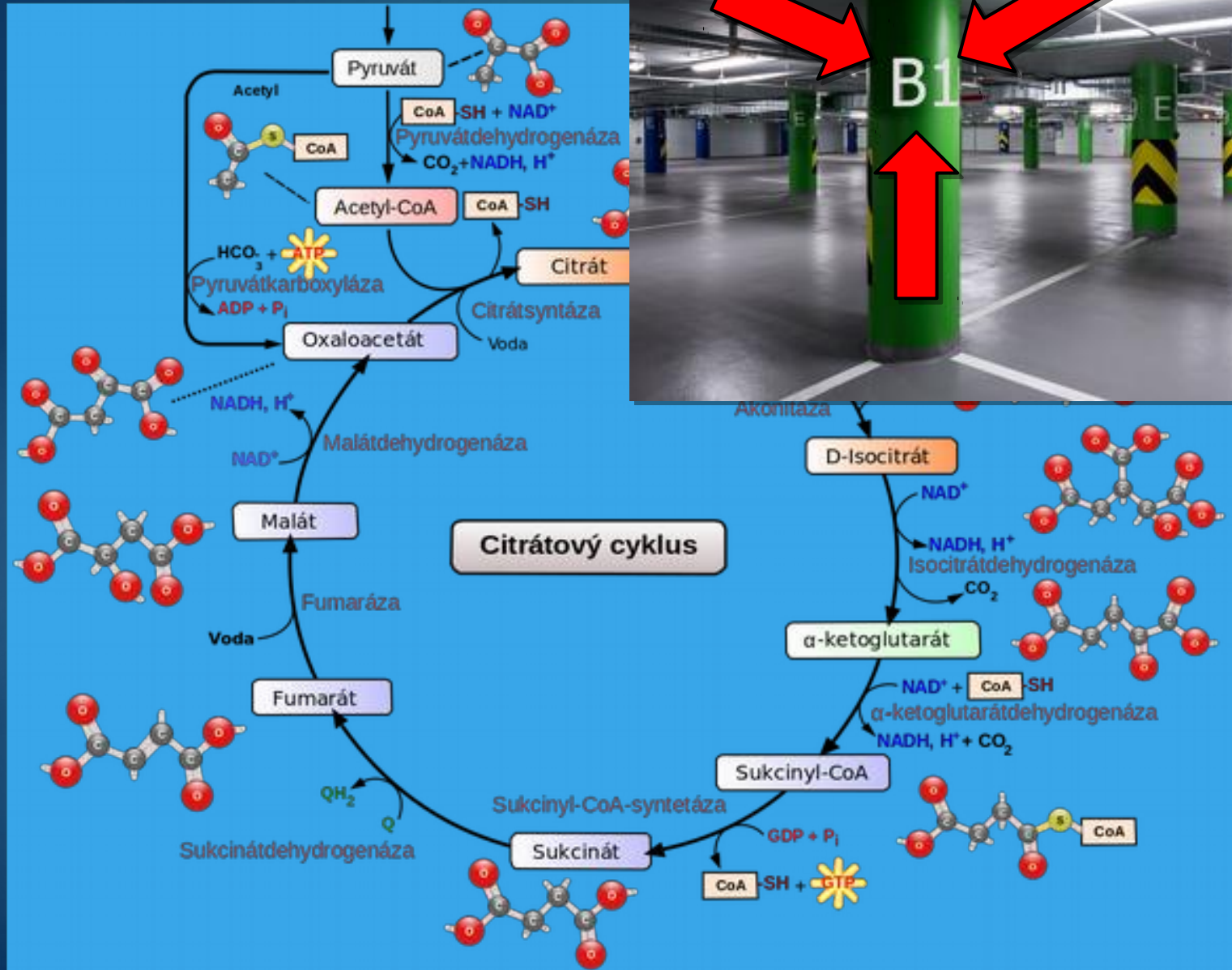
▶ **8 % STEMI**





# Mitochondria targeted therapy

# Mitochondrie



**NADH+H<sup>+</sup>**  
**FADH<sub>2</sub>**

**O<sub>2</sub>**

**ATP**

**β-oxidace**

**Laktát**



ROS

ROS

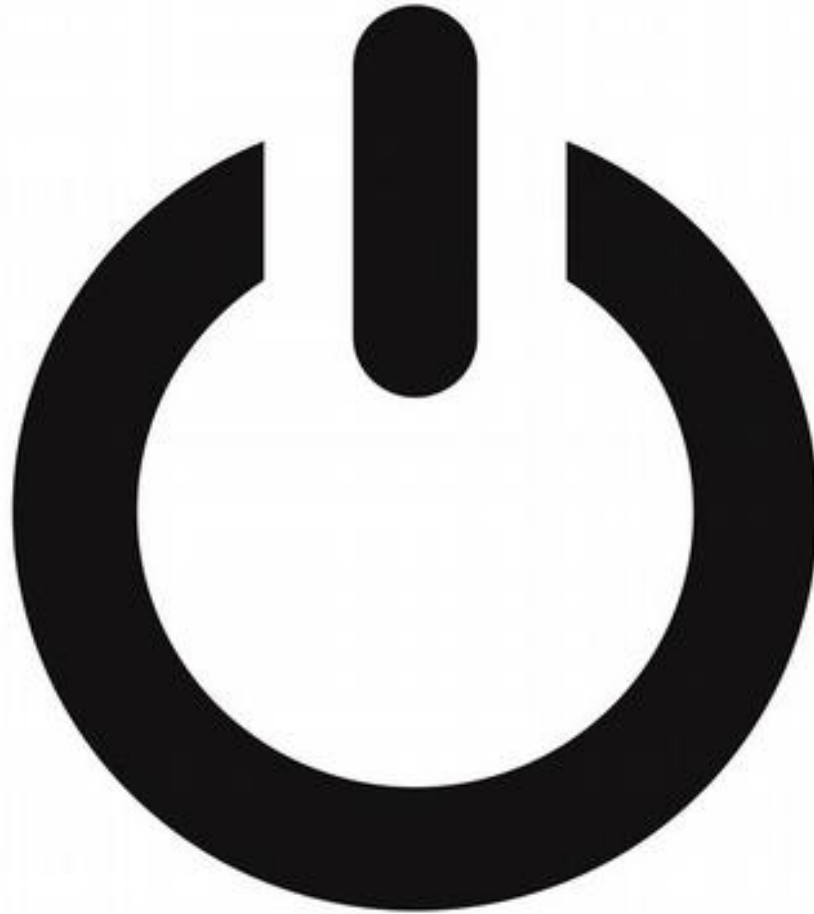
ROS

- NOX
- eNOS
- iNOS
- XantinOxidase
- Lipoxygenase
- Cyclooxygenase

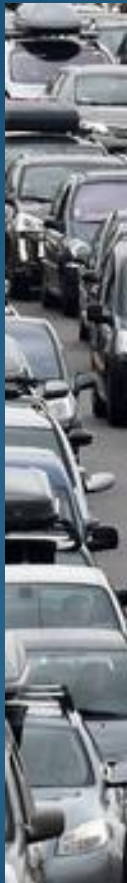
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RNS

RNS



# Metabolická resuscitace





# Paul Marik

007 Marik COCKTAIL:  
VITAMIN C 1,5g a 6 h  
Hydrokortison 50mg a 6 h  
Thiamin 200mg a 12 h

SHAKEN,  
NOT STIRRED !!!





**Děkuji za pozornost**