



Sir William Osler (1849-1919)

The Osler Institute

*Excellence in Continuing Medical
Education*

Surgical Critical Care

Disc 1

Disc 2

Disc 3



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Surgical Critical Care Disc 1

Surviving Sepsis Campaign

Richard Treat

Oxygen Transport

Richard Treat

Neurological Critical Care

Richard Treat

Acute Renal Failure

Richard Treat

Homodynamic Assessment

Ahmed Mahmoud

Metabolism and Nutrition

Ahmed Mahmoud

Acid Base and Blood Gases

Ahmed Mahmoud

Thoracic Trauma

Gregory York

Abdominal Trauma I

Gregory York

SURVIVING SEPSIS

CAMPAIGN



Primary Sponsors:

Society of Critical Care Medicine

European Society of Intensive Care Medicine

International Sepsis Forum



SURVIVING SEPSIS CAMPAIGN

Additional supporting organizations

American Association of Critical Care Nurses

American College of Chest Physicians

American College of Emergency Physicians

American Thoracic Society

Australian and New Zealand Intensive Care Society

European Society of Clinical Microbiology and Infect. Dis.

European Respiratory Society

Surgical Infection Society



SURVIVING SEPSIS CAMPAIGN

Consensus process (with development of)



SURVIVING SEPSIS CAMPAIGN

Consensus process (with development of)

Evidence based conclusions



SURVIVING SEPSIS CAMPAIGN

Consensus process (with development of)

Evidence based conclusions

- A = > one large RCT → clear results, low error risk
- B = one large RCT → clear results, low error risk
- C = small RCT(s) → vague results, moderate error risk
- D = nonrandomized study, contemporaneous controls
- E = nonrandomized, noncontrolled or historical control studies, case studies, expert opinion



SURVIVING SEPSIS CAMPAIGN

Why ???



SURVIVING SEPSIS CAMPAIGN

Why ???

Magnitude of the problem



SURVIVING SEPSIS CAMPAIGN

- **Leading cause of death in critically ill patients**
- **Responsible for 10 % of all deaths**
- **750,000 cases per year**
- **215,000 deaths (equal to MI deaths)**
- **Medical care costs - \$ 16.7 billion**



SURVIVING SEPSIS CAMPAIGN

- **Management evaluation indicated:**
 - Inconsistent care
 - Incomplete care
 - Delays in care
- **Concept of need for rapid organized care approach as developed for trauma, MI and stroke**



SURVIVING SEPSIS CAMPAIGN

In response to the realization of this problem
critical care leaders developed the

SURVIVING SEPSIS CAMPAIGN

Crit Care Med 2004; 32:858



SURVIVING SEPSIS CAMPAIGN

- **Nineteen therapy processes**
- **Integral to sepsis management**
- **Emphasis on :**
 - **Comprehensive approach to management**
 - **Rapid initiation of therapy processes**



SURVIVING SEPSIS CAMPAIGN

Sepsis

Pathophysiology

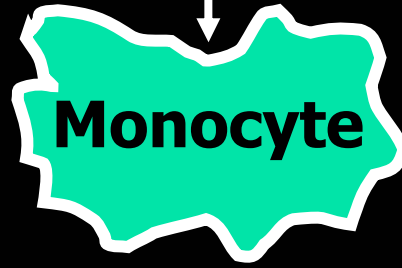
Event

Event → **1° mediator**

Event



1° mediator

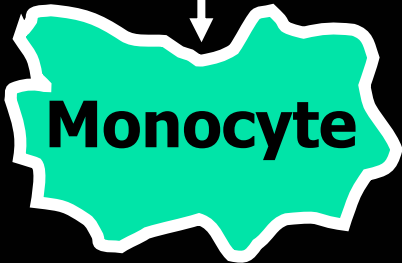


Monocyte

Event



1° mediator



Monocyte



**Pro-inflammatory
mediators**

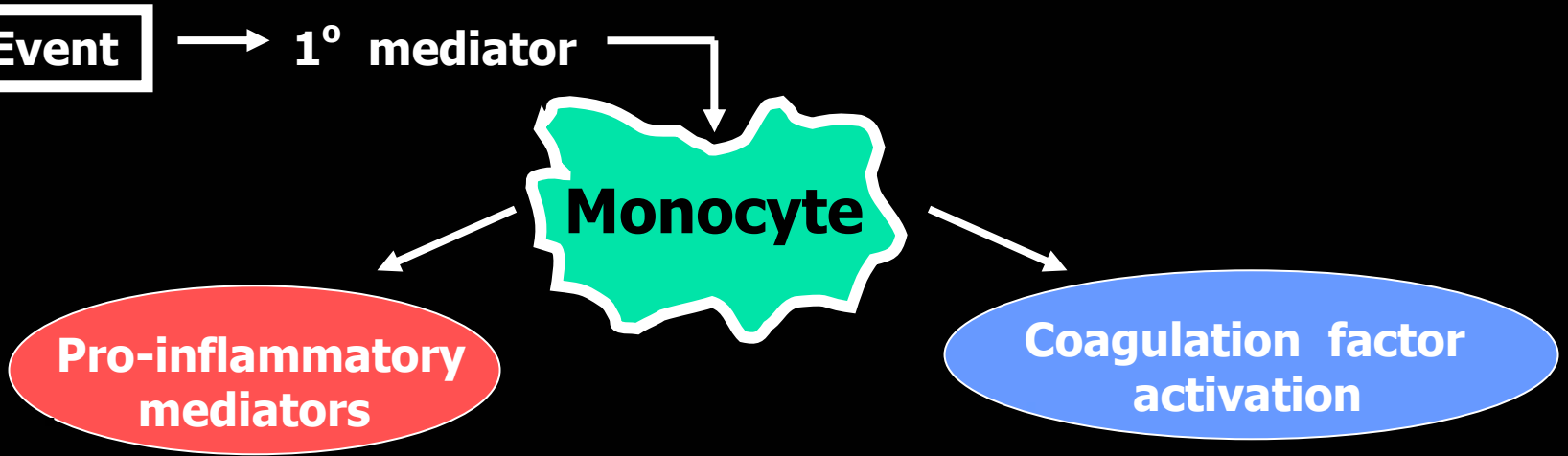
Event

→ **1° mediator**

Monocyte

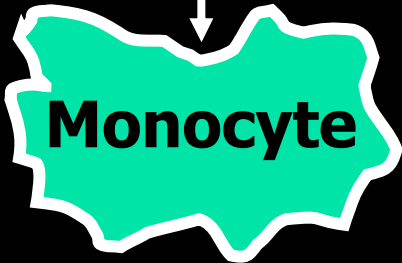
**Pro-inflammatory
mediators**

**Coagulation factor
activation**



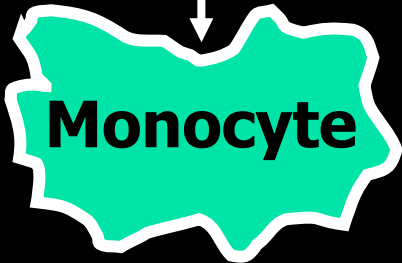
Event

→ **1° mediator**



Event

→ **1° mediator**



Monocyte



WBC { recruitment
adhesion
activation

Microvascular endothelium effects
- procoagulation
- proadhesion
- vasoconstriction
- capillary leak

Event

→ 1° mediator

Monocyte

Pro-inflammatory mediators

Coagulation factor activation

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Impaired
fibrinolysis

Event

→ 1° mediator

Monocyte

Pro-inflammatory mediators

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Impaired fibrinolysis

INFLAMMATION

