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*Case Control Study*

**Association between thrombomodulin and high mobility group box 1 in sepsis patients**

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## Abstract

### BACKGROUND

High mobility group box 1 (HMGB1) has been studied as a molecule associated with severe outcomes in sepsis and thrombomodulin (TM) seems to decrease HMGB1

## Match Overview

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**High mobility group box-1** (HMGB-1), a typical damage-associated molecular pattern protein released from various cells, was first identified in 1973. It is usually stored in the nuclei of cells.

## Effect of Thrombomodulin on Mortality in Patients With ...

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May 28, 2019 · Findings In this randomized clinical trial that included **800** patients with sepsis-associated coagulopathy, treatment with thrombomodulin, compared with placebo, did not significantly reduce 28-day all-cause mortality (26.8% in the thrombomodulin group vs 29.4% in the placebo group).

**Cited by:** 58

**Author:** Jean Louis Vincent, Bruno François, Igo...

**Publish Year:** 2019

## High Mobility Group Box-1 (HMGB1): A Potential Target in ...

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May 28, 2019 · **Sepsis** is a heterogeneous syndrome caused by an unbalanced host response to an infection resulting in organ dysfunction. 1 **Sepsis** is associated with activation of the coagulation system, and 30% to 60% of **patients** have disseminated intravascular coagulation (DIC). 2 Fulminant DIC is characterized by activation of the coagulation system combined with an impaired function of ...

Cited by: 7

Author: Tom van der Poll

Publish Year: 2019

## Recombinant human soluble thrombomodulin in sepsis-induced ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3607733>

Jan 30, 2013 · Nagato M, Okamoto K, Abe Y, Higure A, Yamaguchi K. Recombinant human soluble **thrombomodulin** decreases the plasma **high-mobility group box-1** protein levels, whereas improving the acute liver injury and survival rates in experimental endotoxemia. Crit Care Med. 2009; 37:2181–2186. doi: 10.1097/CCM.0b013e3181a55184.

Cited by: 111

Author: Kazuma Yamakawa, Kazuma Yamakawa, H...

Publish Year: 2013

## Proteolytic Cleavage of High Mobility Group Box 1 Protein ...

<https://www.ahajournals.org/doi/10.1161/ATVBAHA.107.150631>

Thrombomodulin (TM), an **endothelial thrombin-binding protein**, can bind and sequester high mobility group box 1 (HMGB1). In the present study, we examined the end results of this binding, and found that thrombin-TM complexes degrade HMGB1 to a less proinflammatory form.

Cited by: 222

Author: Takashi Ito, Ko-ichi Kawahara, Kohji Okamo...

Publish Year: 2008

## (PDF) Role of serum high mobility group box 1 in ...

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**High mobility group box-1** (HMGB-1), a typical damage-associated molecular pattern protein released from various cells, was first identified in 1973. It is usually stored in the nuclei of cells.

## High mobility group box-1 protein in patients with ...

<https://ccforum.biomedcentral.com/articles/10.1186/cc5715> ▾

Mar 08, 2007 · **Sepsis** is a serious condition with a significant morbidity and mortality. New insight into the immunopathogenesis of **sepsis** could promote the development of new strategies for diagnosis and therapy. **High mobility group box-1** protein (HMGB1) has been known for many years as a nuclear chromosomal protein. Its role as a pro-inflammatory cytokine in **sepsis** and rheumatoid arthritis has ...





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<https://thrombosisjournal.biomedcentral.com/articles/10.1186/s12959-020-0216-6> ▾

Feb 07, 2020 · In the pathogenesis of DIC with **sepsis**, inflammation and coagulation have been closely linked to damage-associated molecular patterns (e.g. **high mobility group box 1**, histone), pathogen-associated molecular patterns (e.g. lipopolysaccharide), which facilitate secretion of neutrophil extracellular traps from activated neutrophils, and other ...

**Cited by:** 3      **Author:** Noriaki Kawano, Hideo Wada, Toshimasa...

**Publish Year:** 2020

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### [Associations between Single Nucleotide Polymorphisms of ...](#)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4696941>

Jan 01, 2016 · Purpose. **High mobility group box 1** (HMGB1) plays a central role in the pathogenesis of **sepsis** and multiple organ dysfunction syndromes. We investigated the **associations** of a single nucleotide polymorphism (SNP; rs1045411) in HMGB1 with various clinical parameters, severity, and prognosis in **patients** with **sepsis**, severe **sepsis**, or septic shock.

**Cited by:** 8      **Author:** Kwangha Lee, Youjin Chang, Kyuyoung ...

**Publish Year:** 2016

### [Thrombomodulin in disseminated intravascular coagulation ...](#)

<https://ccforum.biomedcentral.com/articles/10.1186/s13054-019-2552-0> ▾

Aug 15, 2019 · The **lectin-like** domain of TM binds high mobility group box 1 (HMGB1) and inhibits its signaling via the receptor for advanced glycation end product (RAGE). The activation of RAGE by HMGB1 initiates the nuclear translocation of nuclear factor kappa B ...

**Cited by:** 10      **Author:** Takashi Ito, Jecko Thachil, Hidesaku Asa...

**Publish Year:** 2019

### [Association of high mobility group box-1 protein levels ...](#)