

4 **Name of Journal:** *World Journal of Critical Care Medicine*

Manuscript NO: 56750

Manuscript Type: ORIGINAL ARTICLE

Case Control Study

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

Adriana Teixeira Rodrigues, Julia Teixeira Rodrigues, Carolina Teixeira Rodrigues, Caroline Maria de Oliveira Volpe, Fabiana Rocha-Silva, Jose Augusto Nogueira-Machado, Luiz Ronaldo Alberti

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

1	Crossref 31 words Igor Tona Peres, Silvio Hamacher, Fernando Luiz Cyrino Oliveira, Antônio Márcio Tavares Thomé, Fernando Augusto	1%
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May 28, 2019 · The first clinical indication that recombinant thrombomodulin might be a valuable adjunctive therapy for patients with sepsis came from a phase 3 trial conducted in Japan of 227 patients with **DIC secondary to hematologic malignancy or infection**. 9 In this study, the effects of recombinant thrombomodulin were compared with heparin using resolution of DIC as a ...

Cited by: 6

Author: Tom van der Poll

Publish Year: 2019

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

https://www.researchgate.net/publication/235002970_Role_of_serum_high_mobility_group...

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 ...

<https://jamanetwork.com/journals/jama/fullarticle/2733995> ▾

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 ...

<https://www.eurekaselect.com/172735/article> ▾

High mobility group box-1 (HMGB1) mainly belongs to the non-histone DNA-binding protein. It has been studied as a nuclear protein that is present in eukary...



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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)

<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)

<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 ...](https://www.researchgate.net/publication/235002970...)

<https://www.researchgate.net/publication/235002970...>

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)

<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

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

<https://www.researchgate.net/publication/235002970...>

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.

[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 ...](#)