

# The effects of Immunoglobulin M (IgM) enriched immunoglobulin preparations in patients with severe sepsis

**Submission date**  
29/04/2002

**Recruitment status**  
No longer recruiting

☐ Prospectively registered

☐ Protocol

**Registration date**  
29/04/2002

**Overall study status**  
Completed

☐ Statistical analysis plan

☒ Results

**Last Edited**  
07/03/2008

**Condition category**  
Infections and Infestations

☐ Individual participant data

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

Dr Simru Tugrul

### Contact details

IU Istanbul Tıp Fakültesi Anesteziyoloji AD

Cerrahi Monoblok

Çapa

Istanbul

Türkiye

34390 Fatih

+90 (9)212 6318767

mtugrul@isbank.net.tr

## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

## Study information

### Scientific Title

### Study objectives

To evaluate the effect of IgM-enriched immunoglobulin treatment on progression of organ failure and septic shock in patients with severe sepsis.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Not provided at time of registration

### Study design

Randomised controlled trial

### Primary study design

Interventional

### Secondary study design

Randomised controlled trial

### Study setting(s)

Not specified

### Study type(s)

Treatment

### Participant information sheet

### Health condition(s) or problem(s) studied

Severe sepsis

### Interventions

Patients in the study group (n = 21) received intravenous immunoglobulin preparation (Pentaglobin®) in addition to standard therapy. Pentaglobin® was started on the day of diagnosis of severe sepsis. 5 mL/kg/day Pentaglobin® (38 g/L IgG, 6 g/L IgM and 6 g/L IgA) was infused over 6 hours and repeated for three consecutive days.

Patients in the control group (n = 18) received standard sepsis therapy, but no immunoglobulin administration. Blood samples for procalcitonin measurements were taken daily for eight days. Severity of critical illness and development of organ failures were assessed by obtaining daily Acute Physiological and Chronic Health Evaluation II and Sequential Organ Failure Assessment scores.

### Intervention Type

Drug

**Phase**

Not Specified

**Drug/device/biological/vaccine name(s)**

Pentaglobin®

**Primary outcome measure**

Procalcitonin (PCT) measurements; blood samples were taken daily for eight days following study admission.

**Secondary outcome measures**

1. Severity of critical illness, assessed by obtaining daily acute physiological and chronic health evaluation score (APACHE II)
2. Sequential organ failure assessment (SOFA) score used to assess the development of organ failure
3. Duration of mechanical ventilation
4. Length of stay in the intensive care unit
5. Septic shock incidence
6. 28-day mortality rate

**Overall study start date**

01/01/2000

**Completion date**

01/01/2001

## **Eligibility**

**Key inclusion criteria**

Thirty-nine patients with severe sepsis, defined as:

1. Temperature of greater than 38°C or less than 36°C
2. Heart rate of greater than 90 beats/min
3. Respiratory rate greater than 20/min or arterial carbon dioxide pressure (PaCO<sub>2</sub>) less than 32 mmHg
4. White blood cell count greater than 12000/mm<sup>3</sup> or less than 4000/mm<sup>3</sup>
5. Documented infection and dysfunction of an organ or hypotension

**Participant type(s)**

Patient

**Age group**

Not Specified

**Sex**

Not Specified

**Target number of participants**

39

**Key exclusion criteria**

Does not comply with above inclusion criteria

**Date of first enrolment**

01/01/2000

**Date of final enrolment**

01/01/2001

**Locations****Countries of recruitment**

Türkiye

**Study participating centre**

IU Istanbul Tıp Fakültesi Anesteziyoloji AD

Istanbul

Türkiye

34390 Fatih

**Sponsor information****Organisation**

Istanbul University (Turkey)

**Sponsor details**

Anesthesiology Department

Istanbul Medical Faculty

Istanbul

Türkiye

-

**Sponsor type**

Hospital/treatment centre

**Website**

<http://www.istanbul.edu.tr/english/>

**ROR**

<https://ror.org/03a5qrr21>

**Funder(s)**

**Funder type**

Not defined

**Funder Name**

Not provided at time of registration

## Results and Publications

**Publication and dissemination plan**

Not provided at time of registration

**Intention to publish date****Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	Results	01/08/2002		Yes	No