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The KyberSept trial

Submission date	Recruitment status	[_] Prospectively registered
05/06/2002	No longer recruiting	[_] Protocol
Registration date	**Overall study status**	[_] Statistical analysis plan
05/06/2002	Completed	[X] Results
Last Edited	**Condition category**	[_] Individual participant data
15/11/2013	Infections and Infestations	

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Study information

Scientific Title

Study objectives
To determine if high-dose antithrombin III (administered within 6 hours of onset) would provide a survival advantage in patients with severe sepsis and septic shock.

Ethics approval required

Old ethics approval format

Ethics approval(s)
Not provided at time of registration

Primary study design
Interventional

Study design
Randomised controlled trial

Study type(s)
Treatment

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

Interventions
Patients were randomly assigned to receive 30 000 IU antithrombin III (Aventis Behring, Marburg, Germany) with a loading dose of 6000 IU (given over 30 minutes), followed by a continuous IV infusion of 6000 IU per day for 4 days, or an equivalent volume of placebo solution (1% of human albumin).

Intervention Type
Drug

Phase
Not Specified

Drug/device/biological/vaccine name(s)
Antithrombin III

Primary outcome(s)
28-day all-cause mortality in the primary efficacy population.

Key secondary outcome(s)
1. Survival time within 7 days
2. Length of intensive care unit stay within 7 days
3. Occurrence of new organ dysfunction (according to Logistic Organ Dysfunction score) within 7 days
4. Severity of sepsis was assessed via the Simplified Acute Physiology Score version II(SAPS II)
5. Surgical interventions and bleeding events, recorded for 28 days
6. Other serious adverse events, recorded for 14 days
7. Antithrombin III plasma concentrations (functional) at baseline and after 24 hours
8. Activated partial thromboplastin time and prothrombin time values, assessed at baseline and 3 times daily for days 1 through 5 and on day 7

Completion date
01/01/2000

Eligibility

Key inclusion criteria
1. Adult hospitalised men and women (greater than or equal to 18 years)
2. Gave informed consent
3. Met the following criteria within a 6-hour period:
3.1. Clinical evidence of sepsis with a suspected source of infection
3.2. Body temperature (rectal or core) higher than 38.5°C or lower than 35.5°C
3.3. Leukocyte count higher than 10 x 10^3/µL or lower than 3.5 x 10^3/µL
4. Three of the following 6 signs had to be met within the same 6-hour period:
4.1. Tachycardia (heart rate greater than 100/min)
4.2. Tachypnoea (greater than 24/min) or mechanical ventilation because of septic indication
4.3. Hypotension with systolic blood pressure lower than 90 mm Hg despite sufficient fluid replacement or the need of vasoactive agents to maintain systolic blood pressure of 90 mm Hg or greater
4.4. Thrombocytopenia with platelet counts of less than 100 x 103/µL
4.5. Elevated lactate levels (above upper limit of normal range) or metabolic acidosis (pH less than 7.3 or base excess -10 mmol/L) not secondary to respiratory alkalosis
4.6. Oliguria with urine output of less than 20 mL per hour despite sufficient fluid replacement

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Sex
All

Key exclusion criteria
1. Advanced directive to withhold life-sustaining treatment (except cardiopulmonary resuscitation)
2. Condition other than sepsis anticipated to be fatal within 28 days
3. Pregnancy or breastfeeding
4. History of hypersensitivity to study medication
5. Treatment with other investigational drugs within the last 30 days
6. Treatment with an antithrombin III concentrate within the last 48 hours
7. Treatment with heparin (except subcutaneous low dose or intravenous [IV] line flushing) or coumarin derivatives
8. Non-steroidal anti-inflammatory drug treatment within previous 2 days
9. Known bleeding disorder or ongoing massive surgical bleeding
10. Platelet count of less than 30 x 10^3/µL
11. Immunocompromised status
12. Acute myocardial infarction (within previous 7 days)

13. Third-degree burns (20% of total body area)
14. Incurable malignancy with documented metastases and life-expectancy of less than 3 months
15. Haematologic neoplasia during cytostatic treatment
16. Bone marrow aplasia
17. Preexisting dialysis-dependent renal failure
18. End-stage liver disease
19. Transplantation (postoperative state)
20. History of stroke within the last year
21. Severe cranial or spinal trauma within the last year
22. Planned cranial or spinal surgery (except nontraumatic lumbar puncture) within the next 48 hours

Date of first enrolment
01/03/1997

Date of final enrolment
01/01/2000

Locations

Countries of recruitment
United Kingdom

Czech Republic

Denmark

Germany

South Africa

United States of America

Study participating centre
Aventis Behring LLC
King of Prussia
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Sponsor information

Organisation
Aventis Behring LLC (USA)

ROR
https://ror.org/04nvba109

Funder(s)

Funder type
Industry

Funder Name
Aventis Behring LLC (USA)

Results and Publications

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?
Results article	Results	17/10/2001		Yes	No
Results article	Results	01/08/2006		Yes	No
Other publications	Quality of life evaluation:	01/08/2002		Yes	No