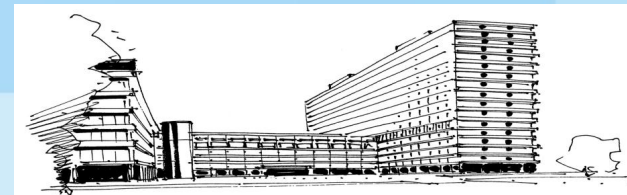


Copenhagen University Hospital - Rigshospitalet

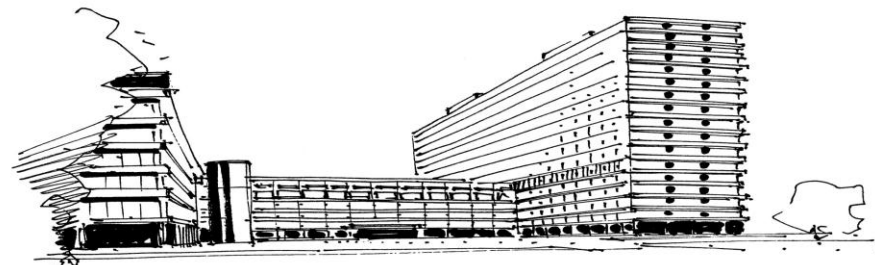
Success Factors for Nordic Clinical Trials

Nicolai Haase, MD, ph.d.-student, 6S-trial coordinator



Trials in Intensive Care – why?

- Very expensive treatment
- Many common treatments are untested
- Weakest patients



Fluid

The 6S-trial

- Investigator-initiated Scandinavian Multicenter Trial
- Comparison of fluids with/without the additive 'hydroxyethyl starch'
- 800 patients from 26 hospitals



Challenge #1: Investigator's time is precious

DENMARK:

2 consultants (part-time)

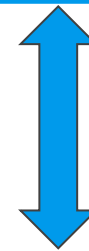
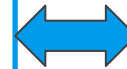
1 trial coordinator (full-time)

1-2 research nurses (full-time)

Other Nordic Countries:

1 national investigator

(spare-time)



Local investigators (spare-time)



Challenge #2: Funding

- Low budget trial: € 900,000
- Competition is hard
- Grant from the Strategic Research Council, Denmark



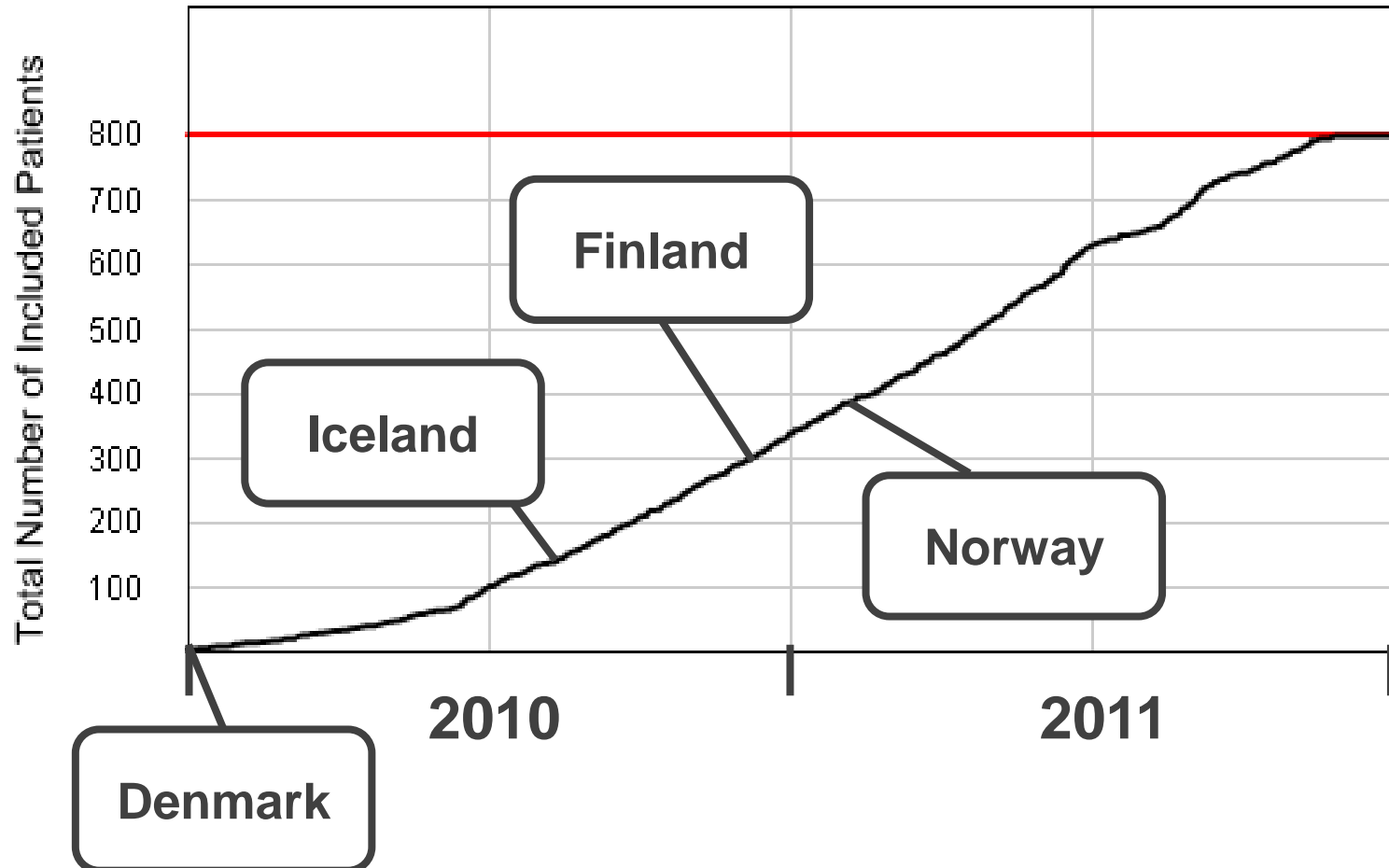
Challenge #3: Approvals

- Medicines Agencies
 - Separate application in each country
- Ethics Committees:
 - Separate application in each country (per region in Sweden)
- Data Protection Agency
 - Separate application in each country



Paper work done in investigator's spare time!!

Delayed trial initiation in other countries



710 of 800 patients were Danish

Challenge #4: Informed consent

- One EU-directive → varying procedures in Scandinavian countries
- Fast procedure needed to resemble clinical practice
- Severely sick patients cannot consent!
- Legal substitutes:
 - **Sweden: Legal substitutes not allowed in drug trials!!!**
 - Finland & Iceland: Relatives must sign first (slow)
 - Denmark & Norway: Independent doctors (fast)



Some additional burdens

- GCP-monitoring
 - 'New' demand to ensure quality
 - Same requirements as those for industry
 - Increases costs (> € 200,000 = 20-25% of total)
- Local administrative burdens
- During trial conduct
 - Eg. adding a new treatment or protocol amendment to medicine
 - Fee: € 100,000
 - Wait 6 weeks for approval

No longer needed

Our key to success

- Important clinical question
- Motivated investigators
- **We took work load off local investigators**
- Luck



Does it matter?

- Patients treated with **hydroxyethyl starch** had
 - Increased mortality
 - Kidney failure
 - Spontaneous bleedings



Does it matter?


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Health Society & Culture Environment Technology Agriculture & Fisheries Natural Sciences Blogs
RESEARCH & STUDY

Treatment for blood poisoning can be fatal

July 5, 2012 - 05:00

A widespread treatment of severe blood poisoning can provoke life-threatening kidney failure and haemorrhages. The researchers behind a new study recommend that this treatment should be stopped.

Keywords: Diseases, Medicine, The Body [Send](#) [PDF](#) [Print](#)

By: [Sybille Hildebrandt](#)

Patients suffering from severe blood poisoning (sepsis) are usually treated with a drug called hydroxyethyl starch (HES).

A new study now shows that there is a significant risk associated with the drug. It can induce kidney failure and haemorrhages, which in the worst case can kill the patient.

The findings have been published in *The New England Journal of Medicine*.



In 2007, the Danish government introduced a

Most read articles

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Jobs

- PhD Research Fellow in Marie Curie Initial Training Network NanoS3**
University of Oslo
- 2 Professorships**
Greenland Institute of Natural Resources
- Managing Director**

Does it matter?

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Hydroxyethyl Starch 130/0.42 versus Ringer's Acetate in Severe Sepsis

N Engl J Med 2012;367:124-34.
DOI: 10.1056/NEJMoal204242

Does it matter?

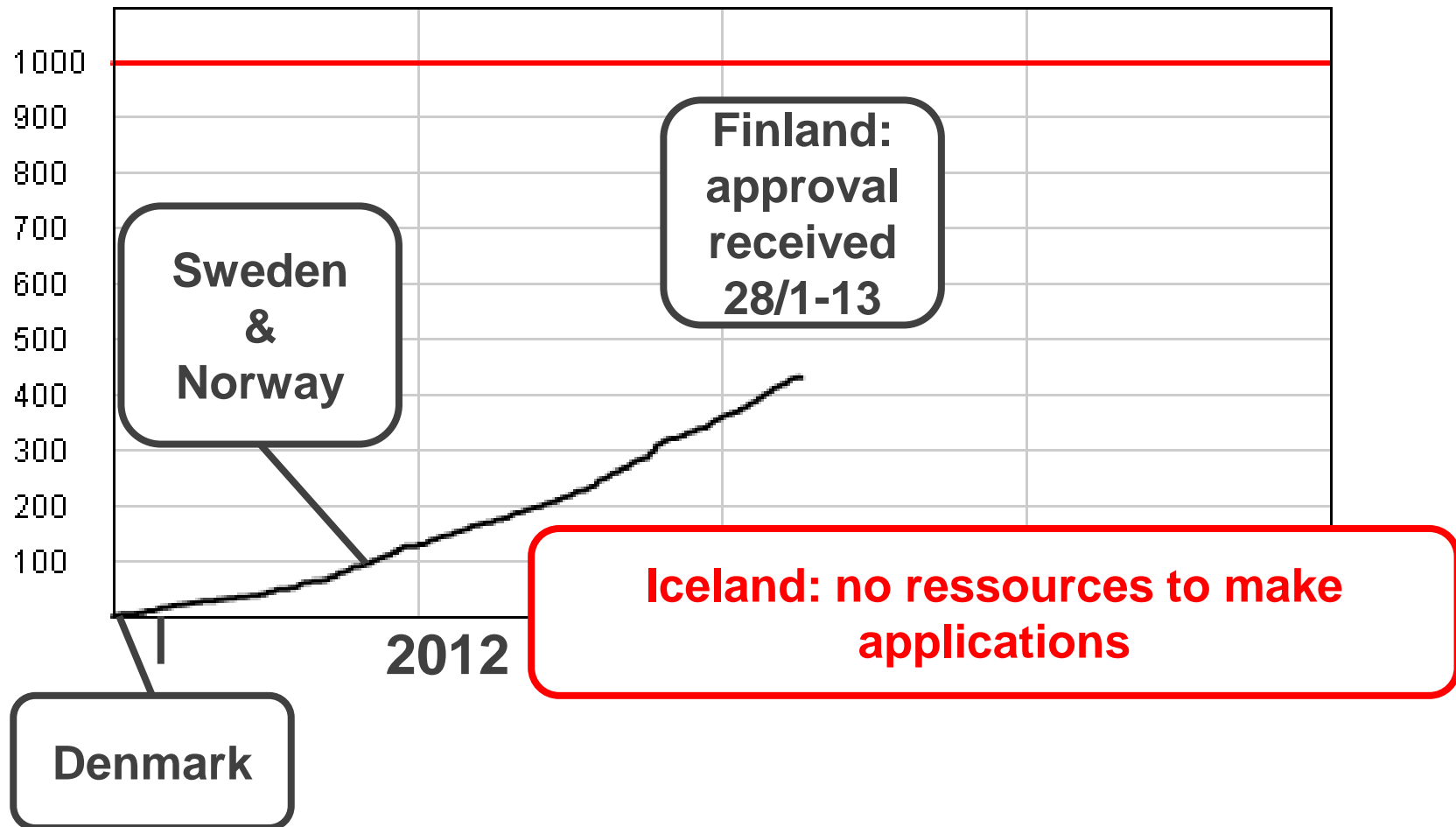
- January 2013: International guidelines changed:
'Hydroxyethyl starch should not be used'
- EMEA and FDA are now reassessing the benefit-risk balance of hydroxyethyl starch

The TRISS Trial

Blood Transfusion



TRISS trial



Final Remarks

Barriers and burdens



Delays

Increased costs

Investigators will lose motivation



Risk of trial failure

Fewer trials



Final Remarks

- Trials are life-saving and reduce the burden and cost of disease
- All burdens must actively be minimised for investigator-initiated trials