# Evaluation of an algorithm for intensive subcutaneous insulin therapy in emergency room patients with hyperglycaemia

Submission date	Recruitment status	[X] Prospectively registered
17/07/2006	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
17/08/2006	Completed	[X] Results
Last Edited	Condition category	[] Individual participant data
16/04/2019	Nutritional, Metabolic, Endocrine	

#### Plain English summary of protocol

Not provided at time of registration

#### Contact information

#### Type(s)

Scientific

#### Contact name

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#### Contact details

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#### Additional identifiers

ClinicalTrials.gov (NCT) NCT00353431

Protocol serial number

EKBB13/06

## Study information

#### Scientific Title

Evaluation of an algorithm for intensive subcutaneous insulin therapy in emergency room patients with hyperglycaemia

#### Acronym

Euglycemia

#### **Study objectives**

Time in the glycaemic target range (5.5 to 7.0 mmol/l) during the period of observation of 48 hours expected to be longer in the intensive insulin group.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Local Ethics Committee of Basel, Switzerland (EKBB) approval, 20/03/2006, ref: 13/06

#### Study design

Interventional randomised open-label active-controlled trial

#### Primary study design

Interventional

#### Study type(s)

Treatment

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

All medical patients with a plasma glucose concentration more than 8 mmol/l

#### **Interventions**

Comparison of a normal sliding scale with subcutaneous (s.c.) insulin injections versuss the new algorithm with s.c. insulin injections (in both groups NovoRapid ®)

#### Intervention Type

Drug

#### Phase

Not Applicable

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

Subcutaneous insulin

#### Primary outcome(s)

Time in the glycaemic target range (5.5 to 7.0 mmol/l) during the period of observation of 48 hours (expected to be longer in the intensive insulin group).

### Key secondary outcome(s))

- 1. Time to reach the target range (expected to be shorter in the intensive insulin group)
- 2. Frequency of hypoglycaemia (plasma glucose less than 3.8 mmol/l) (safety endpoint, expected

to be similar in the two groups)

- 3. Frequency of severe hypoglycaemia (plasma glucose less than 2.5 mmol/l) (safety endpoint, expected to be similar in the two groups)
- 4. Frequency of hypokalaemia (safety endpoint, expected to be similar in the two groups)

#### Completion date

30/04/2008

## Eligibility

#### Key inclusion criteria

- 1. All patients with hyperglycaemia (more than 8.0 mmol/l) admitted to the medical emergency room
- 2. Patients with presumed hospitalisation in the Emergency Room (ER) or medical ward of more than 48 hours duration

#### Participant type(s)

Patient

#### Healthy volunteers allowed

No

#### Age group

**Not Specified** 

#### Sex

All

#### Total final enrolment

130

#### Key exclusion criteria

- 1. Patients in shock (defined as hypotension or shock index more than one with oliguria, changed mental status and metabolic acidosis)
- 2. Patients with a terminal illness on palliative care
- 3. Patients with type one diabetes
- 4. Patients with insulin pump therapy
- 5. Patients with need for hospitalisation in the intensive or coronary care unit
- 6. Patients with presumed hospitalisation shorter than 48 hours
- 7. Known pregnancy (in women of birthbearing age pregnancy test for exclusion mandatory)
- 8. No informed consent

#### Date of first enrolment

31/08/2006

#### Date of final enrolment

30/04/2008

### Locations

#### Countries of recruitment

Switzerland

## Study participating centre Petersgraben 4

Basel Switzerland 4031

## Sponsor information

#### Organisation

University Hospital of Basel (Switzerland)

#### **ROR**

https://ror.org/04k51q396

## Funder(s)

#### Funder type

Industry

#### **Funder Name**

Novo Nordisk (Switzerland)

#### Alternative Name(s)

Novo Nordisk Global

#### **Funding Body Type**

Private sector organisation

#### **Funding Body Subtype**

For-profit companies (industry)

#### Location

Denmark

## **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	14/06/2013	16/04/2019	Yes	No
Basic results				No	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes