

# The role of ghrelin in acute versus prolonged critical illness

<b>Submission date</b> 20/11/2009	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 07/12/2009	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 07/05/2013	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
N/A

# Study information

## Scientific Title

The role of ghrelin in acute versus prolonged critical illness: A single centre, observational trial

## Study objectives

To investigate whether (impaired) endogenous ghrelin secretion plays a role in the impaired pulsatile GH secretion and action during prolonged critical illness.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Study protocol and consent forms were approved by the Institutional Review Board (IRB) of the Catholic University Leuven School of Medicine on the 10th of November 2006 (ref: ML2112).

## Study design

Single-centre observational study

## Primary study design

Observational

## Secondary study design

Randomised controlled trial

## Study setting(s)

Hospital

## Study type(s)

Other

## Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

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

Critical illness

## Interventions

The patients will be studied once on day 1-2 of ICU admission, and once on day 10-14 (if still in ICU). Blood sampling from patients and healthy volunteers will take place during the night from 21.00 h to 06.00 h every 20 minutes.

## Intervention Type

Other

## Phase

Not Applicable

**Primary outcome measure**

Concentrations of ghrelin and GH will be measured in each sample.

**Secondary outcome measures**

1. Information obtained from each patient at baseline

1.1. Demographic

1.2. Diagnostic

1.3. Therapeutic

1.4. Severity of illness (Acute Physiology and Chronic Health Evaluation [APACHE-II]) (Knaus W.A. et al. Critical Care Medicine, 1985, 13:818-829)

2. Evaluation of trends in organ dysfunction (Sepsis-related Organ Failure Assessment score [SOFA]) (Intensive Care Med. 1996;22:707-10)

3. At 06.00h, serum concentrations of the following will be measured:

3.1. Insulin-like growth factor I (IGF-I)

3.2. IGF-binding protein-1 (IGFBP-1)

3.3. IGFBP-3

3.4. The acid-labile subunit (ALS)

3.5. IGFBP-4

3.6. IGFBP-5

3.7. Insulin

3.8. Leptin

3.9. TSH

3.10. Cortisol

3.11. Adrenocorticotrophic Hormone (ACTH)

**Overall study start date**

01/02/2007

**Completion date**

31/10/2010

**Eligibility****Key inclusion criteria**

1. Patients admitted to any of the five intensive care units (ICUs)

2. Older than 18 years

3. Age, gender and BMI matched healthy subjects

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

8 patients and 8 healthy control subjects

**Key exclusion criteria**

1. Age less than 18 years
2. Pre-existing neurological, psychiatric, metabolic, or endocrine disease
3. Intracranial hypertension
4. Intracranial lesions which could influence the hypothalamus-pituitary axis function
5. Gastrectomy
6. Clinically significant liver failure (prothrombin time <30%)
7. Concomitant treatment with thyroid hormones high dose glucocorticoids (>90mg hydrocortisone/day or >18 mg methyl-prednisolone/day), somatostatin, clonidine, dopamine or dopamine antagonist.

**Date of first enrolment**

01/02/2007

**Date of final enrolment**

31/10/2010

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

Belgium

**Study participating centre**

Director of the Department of Intensive Care Medicine

Leuven

Belgium

3000

**Sponsor information****Organisation**

Catholic University Leuven (Katholieke Universiteit Leuven) (Belgium)

**Sponsor details**

Herestraat 49

Leuven

Belgium

3000

**Sponsor type**

University/education

ROR

<https://ror.org/05f950310>

## Funder(s)

### Funder type

University/education

### Funder Name

Catholic University Leuven (Katholieke Universiteit Leuven) (Belgium)

### Funder Name

Research Foundation, Flanders (Fond Wetenschappelijk Onderzoek Vlaanderen [FWO]) (Belgium)

### Funder Name

Supported by long term structural funding Methusalem - funding by the Flemish Government

## 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	18/04/2013		Yes	No