

# Human Protein Turnover Project

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Recruiting
<b>Health condition type</b>	-
<b>Study type</b>	Observational non invasive

## Summary

### ID

NL-OMON23584

### Source

NTR

### Brief title

HuPTuP

### Health condition

Protein synthesis in muscle tissue has been well studied in different conditions. Protein turnover in other organs however, has not yet been investigated using contemporary research methods. The goal of this study is to determine fractional protein synthesis rates in different organ tissues during surgery. Furthermore, protein synthesis rates in several tumors will be measured.

## Sponsors and support

**Primary sponsor:** Atrium MC Heerlen

**Source(s) of monetary or material Support:** Government funding

## Intervention

## Outcome measures

### Primary outcome

Fractional synthetic rate (FSR) and enrichment (MPE) in vastus lateralis and organ tissue.

### Secondary outcome

Fractional synthetic rate (FSR) and enrichment (MPE) in tumor tissue, compared to organ tissue.

## Study description

### Background summary

-

### Study objective

1. Organ-specific protein synthesis rates will be higher than muscle protein synthesis rates.
2. Tumor-specific protein synthesis rates will be higher than organ-specific protein synthesis rates.

### Study design

Several Blood draws before and during surgery. Tissue sample during surgery at the moment tissue is removed.

### Intervention

none

## Contacts

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### Scientific

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# Eligibility criteria

## Inclusion criteria

- Age 18 to 85 years
- Compos mentis
- Surgical intervention for oesophagus carcinoma, colon carcinoma, aortic valve insufficiency, lung carcinoma, renal cell carcinoma, epilepsy, hip fracture or osteo-arthritis of the knee
- Written informed consent

## Exclusion criteria

- Co-morbidities and neuromuscular disorders of the lower limbs severely interacting with mobility with limited or no opportunity for improvement (e.g. cerebral palsy);
- Peripheral arterial disease Fontaine III or IV;
- Chronic obstructive pulmonary disease (COPD) GOLD III or IV;
- Use of systemic steroids in the past four weeks, other than indicated for the specific type of surgery;
- Use anti-inflammatory biologicals (e.g. TNF-alfa blockers) in the past four weeks;
- Phenylketonuria (PKU);
- Surgical intervention in the past four weeks;
- Insulin dependent diabetes mellitus;
- Total parenteral nutrition at day of surgery;
- Pregnancy;
- Neoadjuvant chemo- or radiotherapy in the past four weeks;
- Organ-specific exclusion criteria (see below).

Organ specific exclusion criteria:

Heart:

- Medical history of ischemic heart disease
- Heart failure

Kidney:

- Diabetes Mellitus
- GFR < 20 ml/min/1.73 m<sup>2</sup>

Bone:

- Life expectancy <6 months
- Time to surgery >48 hours

Knee:

- Use of injected corticosteroids in the replaced knee the past 3 months
- Use of bisphosphonates in the past 3 months

- Rheumatoid arthritis or other inflammatory joint diseases
- Knee surgery within the last 3 months
- Osteoarthritis of the knee secondary to septic arthritis, osteonecrosis, fracture, OD and tumor
- Collagen disorders, e.g. Marfan and Ehler-Danlos

## Study design

### Design

Study type:	Observational non invasive
Intervention model:	Parallel
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

### Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	04-05-2015
Enrollment:	35
Type:	Anticipated

### IPD sharing statement

**Plan to share IPD:** Undecided

## Ethics review

Positive opinion	
Date:	23-04-2015
Application type:	First submission

## Study registrations

## Followed up by the following (possibly more current) registration

ID: 47497

Bron: ToetsingOnline

Titel:

## Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register	ID
NTR-new	NL4876
NTR-old	NTR5147
CCMO	NL51743.096.14
OMON	NL-OMON47497

## Study results