

# Highlow study.

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Recruiting
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON23452

### Source

NTR

### Health condition

To evaluate the efficacy and safety of intermediate dose LMWH versus fixed low dose LMWH in pregnant women with a history of previous deep venous thrombosis or pulmonary embolism.

## Sponsors and support

**Primary sponsor:** Academic Medical Center

**Source(s) of monetary or material Support:** GlaxoSmithKline, NWO, Academic Medical Center

## Intervention

## Outcome measures

### Primary outcome

1. Symptomatic DVT during pregnancy and 6 weeks postpartum;
2. Symptomatic PE during pregnancy and 6 weeks postpartum.

### Secondary outcome

1. Symptomatic DVT during pregnancy until 3 months postpartum;

2. Symptomatic PE during pregnancy until 3 months postpartum.

## Study description

### Background summary

This is a randomized-controlled open-label trial comparing two different doses of LMWH in pregnant patients with a history of previous VTE. Both doses are recommended doses in the ACCP guidelines.

Patients enter the study as soon as a home test confirms pregnancy. LMWH will be administered until 6 weeks postpartum. Follow-up will continue until 3 months postpartum.

Patients will be recruited by their treating physician, either an obstetrician or internist.

### Study objective

Intermediate weight-adjusted dose LMWH for VTE prophylaxis in pregnant women with a previous history of VTE is more efficacious than fixed low dose LMWH without increasing bleeding risk.

### Study design

1. Inclusion (visit);
2. 2 weeks after treatment (visit);
3. 20 weeks after treatment (phone or visit);
4. 30 weeks after treatment (phone or visit);
5. 1 week after delivery (phone or visit);
6. 6 weeks after delivery (phone);
7. 3 months after delivery (phone).

### Intervention

Intermediate dose LMWH. Two different doses will be tested. LMWH will be administered until 6 weeks postpartum.

Low doses: Nadroparin (Fraxiparine): 2850 IE 1dd1 s.c.; dalteparin (Fragmin): 5000 IU 1dd1 s.c.; tinzaparin (Innohep): 4500 IU 1dd1 s.c.; enoxaparin (Clexane): 40 mg 1dd1 s.c.

Intermediate doses: weight adjusted according to dosing scheme in protocol.

## Contacts

### Public

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### Scientific

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## Eligibility criteria

### Inclusion criteria

1. Age > 18 years;
2. Pregnancy confirmed by urinary pregnancy test;
3. Gestational age < 14 weeks since first day of last menstrual period;
4. Previous objectively confirmed VTE, either unprovoked, in the presence of use of oral contraceptives or estrogen/progestagen use, or related to pregnancy or the postpartum period, or minor risk factors (e.g. long distance travel, minor trauma).

### Exclusion criteria

1. Previous VTE related to a major provoking risk factor (e.g. surgery, major trauma or plaster cast immobilisation in the 3 months prior to VTE) as the sole risk factor;
2. Indication for treatment with therapeutic dose anticoagulant therapy (e.g. treatment of acute VTE; permanent use of therapeutic anticoagulants outside of pregnancy);
3. Inability to provide informed consent;
4. Type 1 allergy to LMWH preparations;
5. Confirmed heparin-induced thrombocytopenia;
6. Renal insufficiency (creatinine clearance < 30ml/min);
7. Previous inclusion in the Highlow study (for another pregnancy).

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active

### Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	15-03-2013
Enrollment:	1000
Type:	Anticipated

## Ethics review

Positive opinion	
Date:	12-03-2013

Application type:

First submission

## Study registrations

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

ID: 55412

Bron: ToetsingOnline

Titel:

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

No registrations found.

### In other registers

Register	ID
NTR-new	NL3731
NTR-old	NTR3894
CCMO	NL40326.018.12
ISRCTN	ISRCTN wordt niet meer aangevraagd.
OMON	NL-OMON55412

## Study results

### Summary results

N/A