

# A dosing study to optimise vitamin D levels prior to oesophagectomy

<b>Submission date</b> 19/08/2011	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 26/09/2011	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 29/01/2018	<b>Condition category</b> Cancer	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Oesophagectomy is the surgical removal of the oesophagus (food pipe), for example to remove oesophageal cancer. Sometimes following oesophagectomy the lungs become inflamed - a condition that is called acute lung injury. This happens about 28% of the time following oesophagectomy and the causes for it are poorly understood. The condition can range in severity from causing mild breathlessness to more severe breathlessness that can require assistance from a ventilator (breathing machine) to help with breathing in intensive care. We believe that people who are severely vitamin D deficient may be more at risk of acute lung injury following the operation than those who are not. We have previously done research which suggests that people who need an oesophagectomy are usually vitamin D deficient with about half being very deficient. We have evidence from our previous studies that those with the lowest levels of vitamin D may be at increased risk of inflammation and acute lung injury. The aim of this study is to determine whether we can restore vitamin D levels rapidly in the week or so prior to surgery using a single dose of liquid vitamin D taken by mouth.

### Who can participate?

Patients aged over 16 undergoing oesophagectomy for oesophageal cancer.

### What does the study involve?

Participants are given one of three doses of liquid vitamin D about 7 days before their oesophagectomy. We then measure their blood vitamin D levels after 7, 10 and 14 days.

### What are the possible benefits and risks of participating?

Not provided at time of registration.

### Where is the study run from?

University of Birmingham (UK).

### When is the study starting and how long is it expected to run for?

November 2011 to June 2012.

Who is funding the study?  
Medical Research Council (UK).

Who is the main contact?  
Dr David Thickett  
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## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr David Thickett

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## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

**Secondary identifying numbers**  
Version 1.0 19-08-2011

## Study information

**Scientific Title**  
A phase II open label dosing study to optimise vitamin D levels prior to oesophagectomy

**Acronym**  
VINDALOO

**Study objectives**  
Developing vitamin D therapy to prevent acute respiratory distress syndrome following oesophagectomy. To study the optimal dose of vitamin D to be give preoperatively in patients undergoing oesophagectomy.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approval pending as of 22/08/2011

**Study design**

Open-labelled sequential dose-escalation study

**Primary study design**

Interventional

**Secondary study design**

Non randomised study

**Study setting(s)**

Hospital

**Study type(s)**

Treatment

**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**

Oesophageal cancer/acute lung injury/oesophagectomy

**Interventions**

Patients will be given a single dose of oral Vigantol® liquid approximately 7 days preoperatively.

Doses will be 100,000 units, 200,000 units or 300,000 units of vitamin D.

**Intervention Type**

Supplement

**Phase**

Phase II

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

Vitamin D (Vigantol®)

**Primary outcome measure**

The dose of Vigantol® that successfully increases serum vitamin D levels above 75 nmol/l in all cases

**Secondary outcome measures**

1. Safety and tolerability data - blood biochemistry, medication related side effects
2. Plasma 25D3 levels at 7, 10 and 14 days post dose
3. Plasma LL-37 (a downstream vitamin D target) at baseline and on the day of operation

4. Change in Plasma 1, 25 D3 (the biologically active hormone) from baseline on the day of operation

**Overall study start date**

01/11/2011

**Completion date**

01/06/2012

## **Eligibility**

**Key inclusion criteria**

1. Planned transthoracic oesophagectomy for oesophageal carcinoma at a participating centre
2. Aged over 16 years on day of first dose of Investigational Medicinal Product (IMP)
3. Ability to give written informed consent to participate in the study

**Participant type(s)**

Patient

**Age group**

Adult

**Sex**

Both

**Target number of participants**

18

**Key exclusion criteria**

1. Known intolerance of vitamin D
2. Known sarcoidosis, hyperparathyroidism, or nephrolithiasis
3. Taking more than 1000iu/day vitamin D supplementation in the month preceding enrolment
4. Baseline serum corrected calcium > 2.65 mmol/L
5. Undergoing haemodialysis
6. Pregnant or breastfeeding
7. Taking cardiac glycoside, carbamazepine, phenobarbital, phenytoin, primidone or long-term immunosuppressant therapy
8. Taking oral preparation containing > 10 micrograms vitamin D/day up to 2 months before first dose of IMP
9. Diagnosis of chronic obstructive pulmonary disease (COPD) with an forced expiratory volume in one second (FEV1) less than 50% predicted or resting oxygen saturations of less 92%

**Date of first enrolment**

01/11/2011

**Date of final enrolment**

01/06/2012

## **Locations**

**Countries of recruitment**

England

United Kingdom

**Study participating centre**

**University of Birmingham**

Birmingham

United Kingdom

B15 2TT

## **Sponsor information**

**Organisation**

University of Birmingham (UK)

**Sponsor details**

Edgbaston

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resgoviras@lists.bham.ac.uk

**Sponsor type**

University/education

**Website**

<http://www.birmingham.ac.uk>

**ROR**

<https://ror.org/03angcq70>

## **Funder(s)**

**Funder type**

Research council

**Funder Name**

Medical Research Council (MRC) (UK) (ref: G1100196)

**Alternative Name(s)**

Medical Research Council (United Kingdom), UK Medical Research Council, MRC

**Funding Body Type**

Government organisation

**Funding Body Subtype**

National government

**Location**

United Kingdom

## **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