

# The effect of treating patients with anaemia in diabetic nephropathy to different target haemoglobin levels with epoetin beta

<b>Submission date</b> 17/10/2006	<b>Recruitment status</b> Stopped	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 04/12/2006	<b>Overall study status</b> Stopped	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 09/02/2009	<b>Condition category</b> Haematological Disorders	<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

## 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

### Protocol serial number

ESA-2

## Study information

### Scientific Title

**Study objectives**

That treating patients with anaemia in diabetic nephropathy to a higher haemoglobin target range decreases rate of decline of renal function, requirement for dialysis, doubling of creatinine and death.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Not provided at time of registration

**Study design**

Randomised controlled open trial

**Primary study design**

Interventional

**Study type(s)**

Treatment

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

Anaemia in diabetic nephropathy

**Interventions**

All patients should be iron replete (i.e. ferritin 0.1 or Tsats 0.2%) before randomisation. Participants will be given intravenous (IV) iron to replete iron stores if required before randomisation.

Participants will be randomised to two target ranges of haemoglobin on a 1:1 basis. Target ranges:

1. Hb 10.5 - 12 g/dl
2. Hb 12.1 - 13.5 g/dl

Participants will be treated with Epoetin Beta subcutaneously, if required, to maintain their haemoglobin within the target group. This will be a starting dose of 50 units/kg/week given once a week. Dose will be titrated on a monthly basis to start with, and then modified according to response (total dose 720 units/kg/week). Participants will be treated for three years.

**Intervention Type**

Drug

**Phase**

Not Applicable

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

Epoetin beta

**Primary outcome(s)**

1. Rate of decline of renal function as determined by estimated glomerular filtration rate (GFR)
2. Composite end-point of:

- 2.1. Doubling of creatinine
- 2.2. Reaching end-stage renal failure
- 2.3. Death

**Key secondary outcome(s)**

1. Change in left ventricular hypertrophy as measured on echocardiogram
2. Change in intimal and medial wall thickness as determined by intimal thickness and flow dependant vasodilation as determined by ultrasound
3. Change in functional quality of life scores
4. Change in markers of endothelial dysfunction
5. Change of markers of tubular damage in the urine

**Completion date**

30/11/2009

**Reason abandoned (if study stopped)**

Objectives no longer viable

## Eligibility

**Key inclusion criteria**

1. Male and female patients with diabetic nephropathy and chronic kidney disease III and IV
2. Age more than 18 years and less than 80 years
3. Haemoglobin less than 11.5 g/dl

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Upper age limit**

80 years

**Sex**

All

**Key exclusion criteria**

1. Current treatment with an erythropoiesis-stimulating agent (ESA)
2. Uncontrolled hypertension
3. Congestive cardiac failure
4. History of seizures
5. History of thrombotic episodes
6. Pregnancy

7. Lactation
8. Presence of systemic disease, infection or inflammatory conditions
9. Hepatic insufficiency
10. Active hepatitis
11. Uncontrolled hypothyroidism
12. Chronic alcoholism
13. Known hypersensitivity to the active substance in the cartridge or benzoic acid
14. Known sensitivity to epoetin beta

**Date of first enrolment**

01/12/2006

**Date of final enrolment**

30/11/2009

## Locations

**Countries of recruitment**

United Kingdom

England

**Study participating centre**

Department of Kidney and Transplant Medicine

London

United Kingdom

E1 1BB

## Sponsor information

**Organisation**

Barts and the London NHS Trust (UK)

**ROR**

<https://ror.org/00b31g692>

## Funder(s)

**Funder type**

Industry

**Funder Name**

Roche Pharmaceuticals (UK) - salary of research doctor through the hospital Research and Development Department (ref: ML20597)

## **Results and Publications**

**Individual participant data (IPD) sharing plan**

**IPD sharing plan summary**

Not provided at time of registration