

# Do vitamins for homocyst(e)ine slow progression of diabetic nephropathy?

<b>Submission date</b> 01/09/2005	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 01/09/2005	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
<b>Last Edited</b> 29/04/2010	<b>Condition category</b> Urological and Genital Diseases	<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**  
MCT-41551

# Study information

## Scientific Title

Lowering total homocysteine using vitamins to slow the progression of diabetic nephropathy: a randomised controlled trial

## Acronym

DIVINE

## Study objectives

To test whether lowering total homocysteine with vitamins slows progression of diabetic nephropathy.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

University of Western Ontario, Office of Research Ethics approved on the 31st May 2005

## Study design

Randomised controlled trial

## Primary study design

Interventional

## Secondary study design

Randomised controlled trial

## Study setting(s)

Hospital

## Study type(s)

Treatment

## Participant information sheet

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

Diabetic nephropathy

## Interventions

Placebo versus active vitamin combination tablet once daily.

## Intervention Type

Supplement

## Phase

Not Applicable

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

## Vitamins

### Primary outcome measure

The change in glomerular filtration rate (GFR)

### Secondary outcome measures

1. Renal outcomes (change from baseline in urea, creatinine, urinary albumin excretion, creatinine clearance, and progression to dialysis or transplantation)
2. Vascular events (stroke, death, myocardial infarction, revascularisation)
3. Cognitive decline
4. Progression of carotid intima-media thickness and plaque volume (London study centre only)

### Overall study start date

01/10/2000

### Completion date

30/09/2005

## Eligibility

### Key inclusion criteria

1. Type I or type II diabetes mellitus
2. Clinical or histological diagnosis of diabetic nephropathy
3. Urinary albumin excretion level of at least 300 mg/day or urinary protein level of at least 500 mg/day (based upon a 24 hour urine collection) within the past 24 months
4. Patient is able and willing to give informed consent
5. Over the age of 18 years old, either sex
6. Individual patient co-operation is obtained for regular follow-up until completion of the trial

### Participant type(s)

Patient

### Age group

Adult

### Lower age limit

18 Years

### Sex

Both

### Target number of participants

300

### Key exclusion criteria

1. Patient starting on an angiotensin-converting enzyme (ACE) inhibitor or angiotensin receptor blocker who has been taking the drug for less than three months. (After a three-month time period the patient may then be considered eligible for the trial).
2. Patient not expected to survive three years because of intercurrent cancer or other severe illness

3. Patient expected to be non-compliant; who will not adhere to the study visit protocol, who will not take the study vitamins or who will not discontinue previous multivitamin or B-complex vitamin use
4. Patient on dialysis or imminently expected to require dialysis
5. Other known renal disease that may impact on progression rate (i.e. renal artery stenosis or glomerular renal disease such as membranous nephropathy)
6. Women of childbearing potential who are unwilling to practice a form of birth control for the duration on the trial deemed appropriate by the Investigator
7. Patient with a creatinine clearance of less than 30 ml/min based on the Cockcroft-Gault method or less than 25 ml/min if the patient is currently on an ACE inhibitor or angiotensin receptor blocker (within 30 days prior to randomization if less than 35 ml/min or within 6 months if greater than or equal to 35 ml/min)

**Date of first enrolment**

01/10/2000

**Date of final enrolment**

30/09/2005

## Locations

**Countries of recruitment**

Canada

**Study participating centre**

**Stroke Prev. & Ath. Research Centre**

London, Ontario

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## Sponsor information

**Organisation**

John P. Robarts Research Institute (Canada)

**Sponsor details**

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**Sponsor type**

Not defined

**ROR**

<https://ror.org/02grkyz14>

## Funder(s)

**Funder type**

Research organisation

**Funder Name**

Canadian Institutes of Health Research (CIHR) (Canada) - <http://www.cihr-irsc.gc.ca> (ref: MCT-41551)

## 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	28/04/2010		Yes	No