CURRICULUM VITAE

NAME: KATHRYN (KATE) K. STEVENS



Personal Details

Name Kathryn (Kate) K. Stevens

Sex Female

Date of

10/04/1980 birth

Age 34 years Nationality British

E-mail Kate.Stevens@Glasgow.ac.uk

GMC Number

6076491 (full registration with a licence to practise)

National

Training WOS/AG/010/C

Number

Education and Qualifications

University of Glasgow 1997-2003 and 2009-2013

BSc (Med. With 1st Class Honours in Clinical Cardiovascular Studies.

2001 Sci.)

MB.Ch.B

With Commendation & Distinction in Final Examination, 2003 (Comm)

MRCP (UK) November 2006

July 2014 Ph.D.

MRCP

March 2015 (Neph)

1st line management qualification Chartered Management Institute July

2011

Grants and Prizes

Young Investigator's Award ERA-EDTA - winner 2015

Young Investigator Award Academy of Medical Sciences – runner up 2015

Young Investigator's Award ERA-EDTA - shortlisted 2014

One of thirty best abstracts by young presenters ERA-EDTA 2014

Best Abstract (awarded jointly) Scottish Renal Association 2013

Darlinda's charity for renal research award (£8500) 2014

ICAMS small grant award (£6000) 2013

NHS Endowment award (£11900) 2013

One of eight best abstracts by young presenters ERA-EDTA 2013

ERA-EDTA Travel Grant for abstract at European Renal Association 2013

Poster of Distinction at The Renal Association 2013

Travel Grant to attend course entitled 'Autoimmunity and Alloimmunity' at the American Society of Nephrology Meeting, 2012

Graham Wilson Travelling Scholarship (£1000) 2013

BHF Junior Clinical Fellowship (£107 000) 2012

Poster of Distinction at American Transplant Congress 2012

ERA-EDTA Travel Grant for abstract at European Renal Association 2012

John Robertson Bequest award (£1390.40) 2012

ERA-EDTA Travel Grant for abstract at World Congress of Nephrology 2009 **Amgen Bursary** for abstract at British Renal Association 2008

Cross Trust Bursary for senior elective, 2002

Association of Physicians' Prize for intercalated research project 2001.

Employment

Career Summary

I am currently employed as a Clinical Lecturer at The University of Glasgow where I am building upon the skills acquired and research undertaken as part of my Ph.D. From August 2009 until August 2013, I was employed as a Clinical Research Fellow at the Institute of Cardiovascular and Medical Sciences, University of Glasgow where I undertook a Ph.D. involving both clinical and laboratory based studies into the mechanism of action of phosphate as a cardiovascular risk factor. During this time, I undertook full on-call duties on the renal rota and attended a weekly outpatient clinic. I also spent time working in Prof Frans Claas' laboratory in Leiden, Holland in early 2013. I was awarded a travelling scholarship to help to fund this work.

Prior to this, following my junior house officer job as an anaesthetic rotator in The Western Infirmary/Gartnavel General Hospitals, I undertook a critical care rotation at The Royal Alexandra Hospital with experience in both Accident and Emergency and Intensive Care Medicine. I continued in basic medical training at The Western Infirmary, Gartnavel General, the Beatson Oncology Centre and the Vale of Leven Hospitals and then continued in higher training in Renal and General Internal Medicine.

Research Experience

My Ph.D. looking at the effects of phosphate on vascular and endothelial function with a view to better understanding its mechanism of action as a cardiovascular risk factor was supervised by Professor Alan Jardine and Dr Christian Delles. There were 3 components; cellular studies, vessel studies and a clinical study. During my time as a clinical research fellow, I acquired a number of skills and have had the opportunity to gain expertise in a number of scientific techniques.

Cell culture

• I have experience working with both primary and non primary cell lines including smooth muscle cells, endothelial cells and cardiac myocytes.

Biochemical methods

- Detection and measurement of protein Western blot and ELISA.I can perform cell based and standard ELISA as well as Western blotting. I have taught other Ph.D. students Western blotting.
- Detection, isolation and quantification of RNA/DNA. I have experience performing these techniques in cell lines including human lymphocytes and from tissue samples.
- Extraction of human lymphocytes from whole blood samples.
- Proliferation assay using MTT.
- FAC scanning.
- Fix, stain and photograph cells.
- Measurement of calcium by epifluorescence.
- Gene Expression. I can perform both quantitative (SYBR-green and Taqman) and qualitative PCR. I am able to design and optimise

primers. I have experience in microarray studies, and am able to perform and independently analyse the results obtained with this technique.

Measurement of vascular function in vitro and in vivo

- Flow mediated dilatation (brachial artery ultrasound), pulse wave analysis and assessment of pulse wave velocity (SphygmoCor system).
 I can perform these techniques reliably and with good repeatability and have supervised and taught a BSc. Student this technique.
- Wire Myography. I have been trained in wire myography including dissection, mounting of vessels, carrying out the experiment using the myograph and analysing the results and can perform this independently in both animal and human vessels from patients with and without chronic kidney disease. I can also perform organ bath experiments and am experienced in the use of the large vessel myograph. I have helped to supervise a BSc. Student undertaking an organ bath project.

H&I experience

- I have recently been spending time in our local tissue typing laboratory where I have been trained in laboratory techniques for the measurement of antibodies using luminex and one lambda and gen probe. Additionally, I am gaining experience in antibody analysis. I am using these techniques to measure for the presence of donor specific antibodies in our local post transplant cohort (we do not currently do this routinely) and correlate this with biopsy data, tacrolimus variability data and outcome data.
- I have spent time working in Prof Frans Claas' laboratory in Leiden, Holland. Here I was trained to perform and analyse FACS including flow cross match and I cultured endothelial progenitor cells from peripheral blood. We plan to continue this collaboration and apply for funding to allow us to build a panel of endothelial cells which can be closely phenotyped. This will provide more information about the polymorphic nature of endothelial cell antigens and ultimately may allow us to perform an endothelial cell cross match prior to transplantation. I also had the opportunity in Leiden to shadow the renal clinicians and to visit Eurotransplant (Leiden is the Eurotransplant reference laboratory).

Ongoing projects

- Prospective collection and analysis for the presence of de novo donor specific antibodies in the renal transplant population
- Culture and phenotyping of endothelial cells from the healthy and transplant population and cross matching of endothelial cells using patient sera. This work includes identification of endothelial cell antibodies and characterization of the activity of atypical chemokine receptors.
- · Endothelial function following phosphate loading in patients with CKD
- Audit of the transplant assessment process in The West of Scotland first audit step completed, changes being implemented and loop will be completed within the next 12 months.
- Collaboration with Prof Rhian Touyz group exploring the relationship of phosphate and endothelial function and vascular calcification further.

Teaching Experience

Advanced Life Support

I have been an advanced life support instructor since 2008 and teach biannually on courses within the Glasgow area. I re-certified as an instructor in November 2012. I also teach basic and intermediate life support.

Undergraduate

- Case based learning and OSCEs with medical students
- Question writing for the 3rd year undergraduate examination
- · Marking for the 3rd and 4th year final examinations
- · Bedside clinical teaching.
- More recently I have taught and co-supervised 4 undergraduate intercalated BSc. students (organ bath and flow mediated dilatation and antibody measurement)

Postgraduate

- · Nurses undertaking the nurse practitioner course
- · Central venous cannulation on a local 'Lines Course'
- PACES teaching for the MRCP examination
- Delivering lecture 'Medical Emergencies in Renal Replacement Therapy Patients' as part of the organized West of Scotland CMT teaching programme
- I regularly present at local unit meetings and at conferences.
- I organised a series of filmed question and answer sessions at The European Society of Organ Transplantation conference (Glasgow 2011) with trainees asking questions of major players in the field of transplantation. The series entitled 'An audience with...' is available on The University of Glasgow website, the ESOT website and iTunesU – via the University of Glasgow

Recent courses attended

Renal biopsy course Glasgow, 2014

BSHI higher training course Manchester, November 2014

Clinical Trials in Nephrology Royal Society of Medicine June 14

ESOT and AST - Personalised Transplantation meeting, Madrid, October 2014

ERA-EDTA Epidemiology course Glasgow, November 2013
Advanced Nephrology Course 2008 and 2012
Autoimmunity and Alloimmunity The American Society of Nephrology, San Diego,
November 2012.

Glasgow University's research and training programme including:

- Good Clinical Practice for Clinical Research, Nov 2009 and online update June 2011
- · Postgraduate leadership programme
- · Presentation Skills
- Using word to write the thesis
- Reference Manager
- Advanced Powerpoint
- · Going further with Excel
- · Poster design
- · Successful writing
- · Advanced statistics
- · An introduction to SPSS
- Supervisor's course

NHS management courses - LaMP

Membership of Learned Societies

- European Renal Association (including the Young Nephrologists Platform)
- Scottish Renal Association
- The Renal Association
- British Transplant Society
- · International Society of Nephrology
- American Society of Nephrology
- European Society of Organ Transplantation
- · British Society for Histocompatibility and Immunogenetics

Publications

Full publications

- P.W. Macfarlane, J. Kelly, R. Colaco, **K. Stevens** and P. Reay. **Electrocardiography in Women: Selected Aspects.** C.A.Pastore (ed) Electrocardiology 2001. Atheneu, Sao Paulo, 2002, pp563-8
- P.W. Macfarlane, R. Colaco, K. Stevens, P. Reay, C. Beckett and T. Aitchison. **Precordial Electrode Placement in Women.** The Netherlands Heart Journal 2003, vol. 11, pp118-22
- K.K. Stevens, Y.M. Woo, R.S.C. Rodger and C.C. Geddes. Discharging patients from the renal clinic to primary care will they get appropriate monitoring of renal function? The Quarterly Journal of Medicine 2009 Jun; 102(6):425-8.
- K.K. Stevens, R.K. Patel, M.J. Clancy and A.G. Jardine. Angiotensin converting enzyme inhibitors and angiotensin II receptor blockers are associated with slow graft function following live donor renal transplantation. Transplantation. 2010 Mar 27;89(6):707-9.
- R.K. Patel, A.M.G. Jardine, P.B. Mark, A.F. Cunningham, T. Steedman, E.P. McQuarrie, J.R. Powell, **K.K. Stevens**, H.J. Dargie, and A.G. Jardine. **Association of left atrial volume with mortality among end stage renal disease patients with left ventricular hypertrophy referred for renal transplantation.** Am J Kidney Dis. 2010 Jun; 55(6): 1088-96.
- P.B. Mark, K.K. Stevens, A.G. Jardine. Electrolytes: Acid-base.
- The Encyclopaedia of Human Nutrition (3rd Edition). Oxford: Elsevier, (in press)
- **K.K. Stevens,** I.R. Morgan, R.K.Patel, P.B. Mark, C.C. Geddes, A.G.Jardine, C.Delles.
- Serum Phosphate and outcome at one year post deceased donor renal transplantation. Clin Transplant. 2011 Feb 9. doi: 10.1111/j.1399-0012.2011.01400.x. (Epub)
- **K.K.Stevens**, Y.M. Woo, J.D.McClure, J.G.Fox, C.C. Geddes. **Deceased donor transplantation in the elderly are we creating false hope?** Nephrol Dial Transplant. 2011 Jul; 26(7):2382-6.
- K.K. Stevens and A.G. Jardine SHARP: a stab in the right direction in chronic kidney disease Lancet. 2011 Jun 25;377(9784):2153-4
- **K.K. Stevens**, E.P McQuarrie, W. Sands, D.Z Hillyard, R.K.Patel, P.B. Mark and A.G. Jardine. **Fibroblast growth factor 23 predicts left ventricular mass and induces cell adhesion molecule formation.** Int J Nephrol. 2011;2011:297070. Epub 2011 Aug
- **K.K.Stevens**, R.K.Patel and A.G.Jardine. **How to identify and manage diabetes mellitus after renal transplantation**. <u>Journal of Renal Care</u> 2012 Feb; 38 Suppl 1:125-137
- R.K.Patel, E.P.McQuarrie, P.B. Mark. K.K. Stevens and A.G.Jardine
- Altered relative concentrations of high energy phosphates in uremic cardiomyopathy measured by magnetic resonance spectroscopy.
- Nephrol Dial Transplant; 2012 Jan 11. Epub ahead of print. PMID: 22241795 **K.Stevens**, M. Clancy and C. Geddes
- Deceased donor transplantation in the elderly.
- Nephrol. Dial. Transplant. (2012) Epub ahead of print. DOI: 10.1093/ndt/gfr800
- R.K. Patel, K.K.Stevens and A.G.Jardine
- Sleep apnoea and the potential benefits of a good night's sleep in patients receiving maintenance dialysis. Nephrol. Dial. Transplant. 2013 Apr; 28(4):777-8.
- **K.K.Stevens,** R.K. Patel, S. Methven, M.J. Clancy, J.G. Fox, A.G.Jardine and C.C.Geddes
- **Proteinuria and Outcome After Renal Transplantation: Ratios or Fractions?** Transplantation. 2013 July 15;96(1):65-9. DOI: 10.1097/TP.0b013e318295852c
- Sokratis Stoumpos, **Kathryn K Stevens**, Emma Aitken, David B Kingsmore, Marc J Clancy, Jonathan G Fox, Colin C Geddes
- Predictors of sustained arteriovenous access use for haemodialysis.
- Am J Nephrol. 2014 May 39(6):491-8. doi: 10.1159/000362744. Epub
- R.K. Patel, C. Pennington, K.K. Stevens, A. Taylor, K. Gillis, E. Rutherford,

N. Johnston, A.G. Jardine and P.B. Mark

Effect of left atrial and ventricular abnormalities on renal transplant recipients outcome; a single centre experience.

Transplantation Research 2014, 3:20 in press

H. Whalen, K. K. Stevens, J.A. Glen, A.G.Jardine, C.C. Geddes, M.J. Clancy

High Intra-Patient Tacrolimus Variability is associated with Worse Outcomes in Renal Transplantation utilizing a low dose Tacrolimus, ("Symphony") immunosuppressive regime.

Under revision for Transplantation, 2014

R. K. Patel, P. Jeemon, **K.K. Stevens**, L. McCallum, C.E. Hastie, A. Schneider, A.G. Jardine, P.B. Mark and S. Padmanabhan

Association between serum phosphate and calcium, long term blood pressure and mortality in treated hypertensive adults: A longitudinal study with 40 years of follow-up

In press Journal of Hypertension, 2015

K.K.Stevens, R.K.Patel, P.B.Mark, L.Denby, G.L.Smith, E.C.Beattie, C.Delles, A.G.Jardine

Effects of long term exposure to phosphate on endothelial function: a translational approach to explain increased cardiovascular risk.

Submitted to JASN 2015.

M.D.Findlay, P.C. Thomson, R. Fulton, M.Dahl-Solbu, R.K.Patel, **K.K.Stevens**, C.C. Geddes, J. Dawson and P.B. Mark

Risk factors for ischemic stroke and subsequent outcome in haemodialysis patients

Under revision for Stroke, 2015

M. Dahl-Solbu, P.C.Thomson, S. Macpherson, S. Padmanabhan, M. D.Findlay,

K.K. Stevens, R.K. Patel, A.G. Jardine and P.B.Mark

Phosphate, social deprivation and mortality

Submitted to Nephrol. Dial. Transplant. 2015

Published Abstracts

K.Stevens, S.K. McManus, P.B. Mark, J.G. Fox and C. Stirling

Age is the strongest predictor of patient outcome in pauci-immune renal vasculitis.

The Scottish Medical Journal 2008 53(4):47-57

K.Stevens, S McManus P.B. Mark J.G. Fox and C. Stirling

ANCA status and prognosis in renal vasculitis

Renal association website 2008 (http://www.renalarchive.org/search.aspx)

K. Stevens, Y.M. Woo, R.S.C Rodger and C.C. Geddes

Discharging patients from the renal clinic to primary care – will they get appropriate monitoring of renal function?

Renal association website 2008 (http://www.renalarchive.org/search.aspx)

K.K.Stevens, R.K.Patel, M.J.Clancy and A.G.Jardine.

Angiotensin Converting enzyme inhibitors and angiotensin II receptor blockers are associated with slow graft function following live donor renal transplantation

NDT Plus (2009)2 (suppl. 2): ii2185

K.K.Stevens, S.K. McManus, P.B. Mark, J.G. Fox and C. Stirling

Azathioprine maintenance therapy in pauci-immune renal vasculitis.

The Scottish Medical Journal 2010 55(2): 45-53

KK Stevens, RK Patel, CC Geddes, AG Jardine, C Delles

Phosphate Level, Graft Failure and Mortality in Renal Transplant Recipients.

The Scottish Medical Journal 2010 55(2): 45-53

K.K. Stevens, R.K.Patel, C.C.Geddes, A.G.Jardine and C.Delles

Serum phosphate and outcome at one year post deceased donor renal transplant

NDT Plus (2010) 3(suppl.3): iii541

K.K.Stevens, M.Clancy, J.McClure, J.G.Fox and C.C. Geddes

Older dialysis patients are unlikely to receive a deceased donor transplant, even if listed for transplantation

J. Am. Soc. Nephrol 21: 2010 F-PO2013

K.K.Stevens, E.C. Beattie, W.Sands, C.Delles and A.G. Jardine

Hyperphosphatemia impairs function of resistance vessels

NDT Plus (2011) 4(suppl 2): 4.s2.3 doi:10.1093/ndtplus/4.s2.3

K.K. Stevens, E.C. Beattie, W. Sands, C. Delles and A.G. Jardine

Hyperphosphataemia Impairs Relaxation in Resistance Vessels; an Effect Which Is Partially Reversed in the Presence of a Phosphodiesterase Inhibitor

J. Am. Soc. Nephrol 22: 2011

K.K. Stevens, W. Sands, D.Z. Hillyard, R.K. Patel, P.B. Mark and A.G. Jardine

Hyperphosphataemia Increases Endothelial Cell Size, Granularity and Rate of Proliferation

J. Am. Soc. Nephrol 22: 2011

K.K. Stevens, R.K. Patel, P.B. Mark, C.C. Geddes, M.J. Clancy, A.G. Jardine Fractional Excretion of Protein May Have Superior Predictive Value over Traditional Proteinuria Measures in Renal Transplant Recipients J. Am. Soc. Nephrol 22: 2011

K.K. Stevens, E.P. McQuarrie, W. Sands, D.Z. Hillyard, R.K. Patel, P.B. Mark and A.G. Jardine

Fibroblast Growth Factor 23 Predicts Left Ventricular Mass and Induces Cell Adhesion Molecule Formation

J. Am. Soc. Nephrol 22: 2011

K.K. Stevens, E.C. Beattie, W. Sands, C. Delles and A.G. Jardine

Zaprinast can correct phosphate induced impaired relaxation in rat resistance vessels.

NDT (2012) 27(suppl 2): ii36-ii37 doi:10.1093/ndt/gfs193

K.K. Stevens, R.K. Patel, P.B. Mark, C.C. Geddes, M.J. Clancy, A.G. Jardine Fractional Excretion of Protein is a Sensitive and Specific Test to Predict Risk of Renal Transplant Failure and Death

American Journal of Transplantation vol 3, (suppl 3) 2012 pp247. (Poster prize)

K.K. Stevens, R.K. Patel, S. Kettlewell, M.J. Clancy, C. Delles G.L.Smith and A.G. Jardine

Phosphate has deleterious effects on vascular function

J. Am. Soc Nephrol. 23: 2012

K.K.Stevens, R.K. Patel, S. Kettlewell, C.Delles, G.L. Smith and A.G. Jardine

Toxic effect of phosphate on the vasculature can be reversed

J. Am. Soc Nephrol. 23: 2012

K.K. Stevens, E.C. Beattie, C. Delles and A.G. Jardine

Phosphate impairs endothelial function – a mechanism for increased cardiovascular risk? NDT (2013) 28(suppl 1): i3-i4 doi:10.1093/ndt/gft134 K.K. Stevens, R.K. Patel, G.L.Smith, M.J. Clancy, C. Delles and A.G. Jardine

Deleterious effects of phosphate on vascular function.

NDT (2013) 28(suppl 1): i66 doi:10.1093/ndt/gft177

K.K. Stevens, R.K. Patel, P.B.Mark, C.Delles and A.G. Jardine

Sustained phosphate loading impairs endothelial function: a single blind cross over trial. NDT (2013) 28(suppl 1): i331-i351 doi:10.1093/ndt/gft129

K.K. Stevens, R.K. Patel, P.B.Mark, C.Delles and A.G. Jardine

Urinary Phosphate and Serum FGF-23 Predict Endothelial Function: A Single Blind Cross-Over Trial J. Am Soc. Nephrol 24: 2013

K.K. Stevens, R.K. Patel, P.B.Mark, C.Delles and A.G. Jardine

Hyperphosphataemia increases endothelail cell size, granularity and rate of proliferation

NDT (2014) 29(suppl 3): iii330 doi:10.1093/ndt/qfu161

K.K. Stevens, R.K. Patel, P.B.Mark, C.Delles and A.G. Jardine

Phosphate as a cardiovascular risk factor; effects on vascular and endothelial function

A collection of abstracts, published by The Lancet, The Academy of Medical Sciences Spring Meeting for Clinical Scientists in Training, February 2015, p10

Presentations at conferences

K.K. Stevens, E.P.McQuarrie, R.K. Patel, P.B.Mark and A.G. Jardine

FGF-23 is an independent predictor of LVH, measured with cardiac MRI, in patients with CKD

Oral presentation at The Scottish Renal Association, Inverness March 2011

K.K.Stevens, E.C. Beattie, W.Sands, C.Delles and A.G. Jardine

Hyperphosphatemia impairs relaxation in resistance vessels

Poster presentation at The World Congress of Nephrology, Vancouver April 2011

K.K.Stevens, E.C. Beattie, W.Sands, C.Delles and A.G. Jardine

Hyperphosphatemia alters both endothelial dependent and independent relaxation in resistance vessels

Poster presentation at The Renal Association meeting, Birmingham June, 2011

K.K.Stevens, R.K.Patel, P.B. Mark, C.C. Geddes, M.J.Clancy and A.G.Jardine Fractional excretion of protein may have superior predictive value of traditional measures of proteinuria in determining those at higher risk of transplant failure.

Mini-oral presentation at The European Society of Organ Transplantation, Glasgow September, 2011

K.K. Stevens, R.K. Patel, S. Methven, C.C. Geddes, M.J. Clancy, A.G. Jardine

Fractional Excretion of Protein is a Sensitive and Specific Test to Predict Risk of Renal Transplant Failure.

Poster presentation at The British Transplant Society, Glasgow Feb, 2012

K.K. Stevens, E.C. Beattie, W. Sands, C. Delles and A.G. Jardine

Hyperphosphatemia impairs endothelial function in cells and in resistance vessels – a mechanism for increased cardiovascular risk?

Oral presentation at Scottish Renal Association, Dumfries, March, 2012

K.K. Stevens, E.C. Beattie, W. Sands, C. Delles and A.G. Jardine

Hyperphosphatemia impairs relaxation in resistance vessels – a mechanism for increased cardiovascular risk?

Poster Presentation at the Royal Medical and Chirugical Society, Glasgow March 2012

K.K. Stevens, E.C. Beattie, R.K.Patel, C. Delles and A.G. Jardine

Phosphodiesterase 5 inhibitor can correct phosphate induced impaired relaxation in rat resistance vessels.

Poster presentation at the Renal Association, Newcastle, June, 2012

K.K. Stevens, E.C. Beattie, S. Kettlewell, D.Hillyard, W. Sands, C. Delles, G. Smith and A.G. Jardine

Deleterious effects of hyperphosphatemia in vitro – a novel mechanism for increased cardiovascular risk?

Oral presentation at The Physiological Society, Edinburgh, July 2012

K.K. Stevens, R.K. Patel, P.B. Mark, C. Delles and A.G.Jardine

Oral Phosphate Loading and Endothelial Function: a Single Blind, Cross Over Trial

Poster presentation at the Royal Medical and Chirugical Society, Glasgow March 2013

K.K. Stevens, R.K. Patel, P.B. Mark, C. Delles and A.G.Jardine

Long term phosphate loading and endothelial function: a single blind cross over trial.

Poster presentation at the Renal Association, Bournemouth, March, 2013. (Poster prize)

K.K.Stevens, R.K.Patel, P.B.Mark, C.Delles and A.G.Jardine

Sustained phosphate loading impairs endothelial function: a single blind cross over trial. Oral presentation at the Scottish Renal Association, Glasgow November 2013

K.K.Stevens, R.K.Patel, L. Denby, G.L. Smith, M. Clancy, C.Delles and A.G.Jardine

Phosphate has deleterious effects on vascular function. Oral presentation at the Scottish Renal Association, Glasgow November 2013 (Abstract prize)

K.K. Stevens, R.K. Patel, Patrick B. Mark, C. Delles and A.G.Jardine

Phosphate as a cardiovascular risk factor: effects on vascular and endothelial function. Oral presentation at The Academy of Medical Sciences spring meeting, February 2015

K.K. Stevens, R.K. Patel, Patrick B. Mark, C. Delles and A.G.Jardine

Phosphate has deleterious effects on vascular and endothelial function – a mechanism for increased cardiovascular risk? Oral presentation at The ERA-EDTA meeting, London, May 2015