

Proposal for Welsh Diabetic Kidney Disease Cohort



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Introduction

- Diabetic kidney disease (DKD) is identified as one of the most serious challenges facing the NHS in Wales and the UK, and it is a common and feared complication of Diabetes Mellitus.
- DKD carries increased risk of all-cause and cardiovascular mortality such that overall life expectancy is worse than that of people diagnosed with common cancers including lung, breast and prostate.
- DKD is also the commonest cause of kidney failure in the UK, and the cost to patients and to healthcare providers of DKD is staggering.

Aims and objectives

- To set up a new cohort of patients with Diabetic Kidney Disease in Wales for biomarker discovery and validation.
- To explore how best to further optimise procedures and recruitment by gaining a better understanding of how initial processes are working and to ascertain the experiences and thought processes of patients, clinicians, and researchers with respect to study participation and consent to kidney biopsy.

Inclusion Criteria

- Aged over 18 years
- Diabetes Mellitus (Type 1 or Type 2)
- Chronic Kidney Disease category G1-G4 and A1-A3 (A2 or A3 for G1 and G2)
- Kidney biopsy indicated on clinical grounds or consents to kidney biopsy for research purposes
- Anatomically normal native kidneys on ultrasound

Exclusion Criteria

- Life expectancy below 12 months
- Acute Kidney Injury in the past 3 months
- Contraindication to kidney biopsy
- (Specifically: known bleeding diathesis, prescribed anticoagulant, prescribed antiplatelet therapy and unable to stop for 1 week)
- Renal transplant recipient

Methods

- 100 patients with DKD will be recruited from secondary care diabetes and nephrology services to establish an initial cohort.
- Patients will undergo detailed clinical evaluation alone (n=80) or with kidney biopsy (n=20) with selection of study arm by patient choice.
- Interviews will be conducted with 40 cohort participants (20 kidney biopsy and 20 non-biopsy) at cohort entry and at follow up visit (when kidney biopsy and other results are fed back) with an emphasis on recruitment and consent to kidney biopsy.

