

Additional file 3

Quality assessment form adapted from the Ottawa-Newcastle scale (NOS) for assessing non-randomised studies

		Yes/No/Unclear														
Selection of participants	<p>[1] Was the inclusion/exclusion clearly described? (for example, age, diagnosis status, IGT)</p> <p>[2] Was inclusion/exclusion assessed using valid and reliable measures? (for example, if there are important inclusion/exclusion criteria that are not directly related to exposure and outcome and for which the accuracy of measurement may need scrutiny, e.g age)</p> <p>[3] Was recruitment strategy clearly described?</p> <p>[4] Did the investigators ensure that the exposed/unexposed group were comparable (for example, did they use stratification, matching or propensity Score)</p>															
Adequate description of study population	<p>[1] Was study population well characterised?</p> <ul style="list-style-type: none"> • Age • Sex • Ethnicity • Suitable definition of IGT 															
Validated method for ascertaining exposure	<p>[1] Was the method used to ascertain exposure clearly defined?</p> <p>[2] Was a valid and reliable measure used to ascertain exposure? (For example what diagnostic test was used to confirm IGT)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 60%;">Fasting Plasma Glucose</td> <td style="width: 40%;">6.1 – 6.9 mmol/L</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td>Oral Glucose Tolerance Test (2h value)</td> <td>7.8 – 11.0 mmol/L</td> </tr> <tr> <td>HbA1c</td> <td>42 – 47 mmol/mol</td> </tr> </tbody> </table>	Fasting Plasma Glucose	6.1 – 6.9 mmol/L			Oral Glucose Tolerance Test (2h value)	7.8 – 11.0 mmol/L	HbA1c	42 – 47 mmol/mol							
Fasting Plasma Glucose	6.1 – 6.9 mmol/L															
Oral Glucose Tolerance Test (2h value)	7.8 – 11.0 mmol/L															
HbA1c	42 – 47 mmol/mol															
Validated method to confirm outcome	<p>[1] Was valid and reliable measures used to ascertain outcome? For example</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Stage</th> <th style="width: 80%;">eGFR (ml/min/1.73m²)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>≥90</td> </tr> <tr> <td>2</td> <td>60-89</td> </tr> <tr> <td>3A</td> <td>45-59</td> </tr> <tr> <td>3B</td> <td>30-44</td> </tr> <tr> <td>4</td> <td>15-29</td> </tr> <tr> <td>5</td> <td><15</td> </tr> </tbody> </table> <p>ACR - >30mg/mmol PCR - >45mg/mmol SCr measures CrCl measures</p>	Stage	eGFR (ml/min/1.73m ²)	1	≥90	2	60-89	3A	45-59	3B	30-44	4	15-29	5	<15	
Stage	eGFR (ml/min/1.73m ²)															
1	≥90															
2	60-89															
3A	45-59															
3B	30-44															
4	15-29															
5	<15															
Adequate follow up period	<p>[1] Was follow up long enough for the outcome to occur?</p> <p>[2] Was the follow up period the same across all groups?</p> <p>[3] Were differences in follow-up adjusted for using statistical techniques, e.g., survival analysis?</p>															
Completeness of follow-up (Attrition)	<p>[1] Were drop-out rates and reasons for drop-out similar across exposed and unexposed?</p> <p>[2] Were numbers of dropouts/withdrawals documented at</p>															

		Yes/No/Unclear
	each time point?	
Analysis controls for confounding	[1] Does the study identify and control for important confounding variables and effect modifiers?	
Sample size calculated	<p>[1] Is the sample size adequate?</p> <p>[2] Did the study describe how the sample size was calculated?</p> <ul style="list-style-type: none"> • Did the investigators conduct a power analysis to determine the adequacy of study group sizes for the outcome of interest? • Was the sample size large enough to detect differences in event or a significant OR/RR between groups? <p>(For example, OR/RR increases of ≥ 1.5 or decrease of ≥ 0.67 between groups).</p>	
Analytical appropriate methods	<p>[1] Was the kind of analysis done appropriate for the kind of outcome data? For example,</p> <ul style="list-style-type: none"> • Dichotomous – logistic regression, survival • Categorical – mixed model for categorical outcomes • Continuous – Mixed model, ANCOVA <p>[2] Was loss to follow up accounted for in the analysis (For example, through sensitivity analysis)</p>	