

SUPPLEMENTARY DATA

Proteinuria is definitely associated with mortality. There remains a residual concern that people with marked uACR positivity may still have disproportionately contributed to the mortality outcome, even if small in number, and even if the association between Fructosamine and proteinuria is statistically very weak (representing of < 1% of the variance of Fructosamine). Excluding those with proteinuria could skew the mortality outcome. Never the less, further survival analysis was done including the following factors: age, gender, ethnicity, smoking status, type of diabetes, duration of diabetes, HbA_{1c}, G-gap and various degrees uACR (log transformed). In the complete data set, including all patients with proteinuria (including those with uACR >200), uACR is significantly associated with mortality, but the G-gap mortality association remains significant independent of that. Sequential steps were then taken removing subjects with a uACR >200, >100, >30, >10 and then finally excluding patients with any level of uACR (>3.5) which is down to the normal or non-microalbuminuric level. In each step G-gap retains its significant association with mortality but not uACR (see supplementary table). Thus the G-gap effect is significant throughout completely independent of any level of proteinuria, and continues to be significant even when all proteinuria patients are excluded.

Supplementary Table 1. Association of overall model, G-gap and uACR with mortality, in the cohort categorised by the uACR level

Cohort	All	uACR<200	uACR<100	uACR<30	uACR<10	uACR<3.5
Alive/Dead	2791/391	2646/341	2603/331	2458/307	2214/263	1873/204
(Total)	(3182)	(2987)	(2934)	(2765)	(2477)	(2077)
Overall model	$\chi^2=305.2$	$\chi^2=292.9$	$\chi^2=286.2$	$\chi^2=258.8$	$\chi^2=237.5$	$\chi^2=179.0$
	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001
G-gap OR(95% CI)	1.06(1.03-1.09)	1.06(1.03-1.09)	1.06(1.03-1.09)	1.06(1.03-1.09)	1.06(1.03-1.1)	1.05(1.02-1.09)
	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.01
uACR OR(95% CI)	1.26(1.09-1.44)	-	-	-	-	-
	p<0.001	p=0.15, ns	p=0.18, ns	p=0.17, ns	p=0.17, ns	p= 0.55, ns

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Supplementary Figure 1. The simple bivariate relationship between Fructosamine and the coincidental uACR (log transformed) ($p>0.4$)

