

**Supplementary Table 1.** Prospective studies of circulating fetuin-A levels in relation to incident type 2 diabetes.

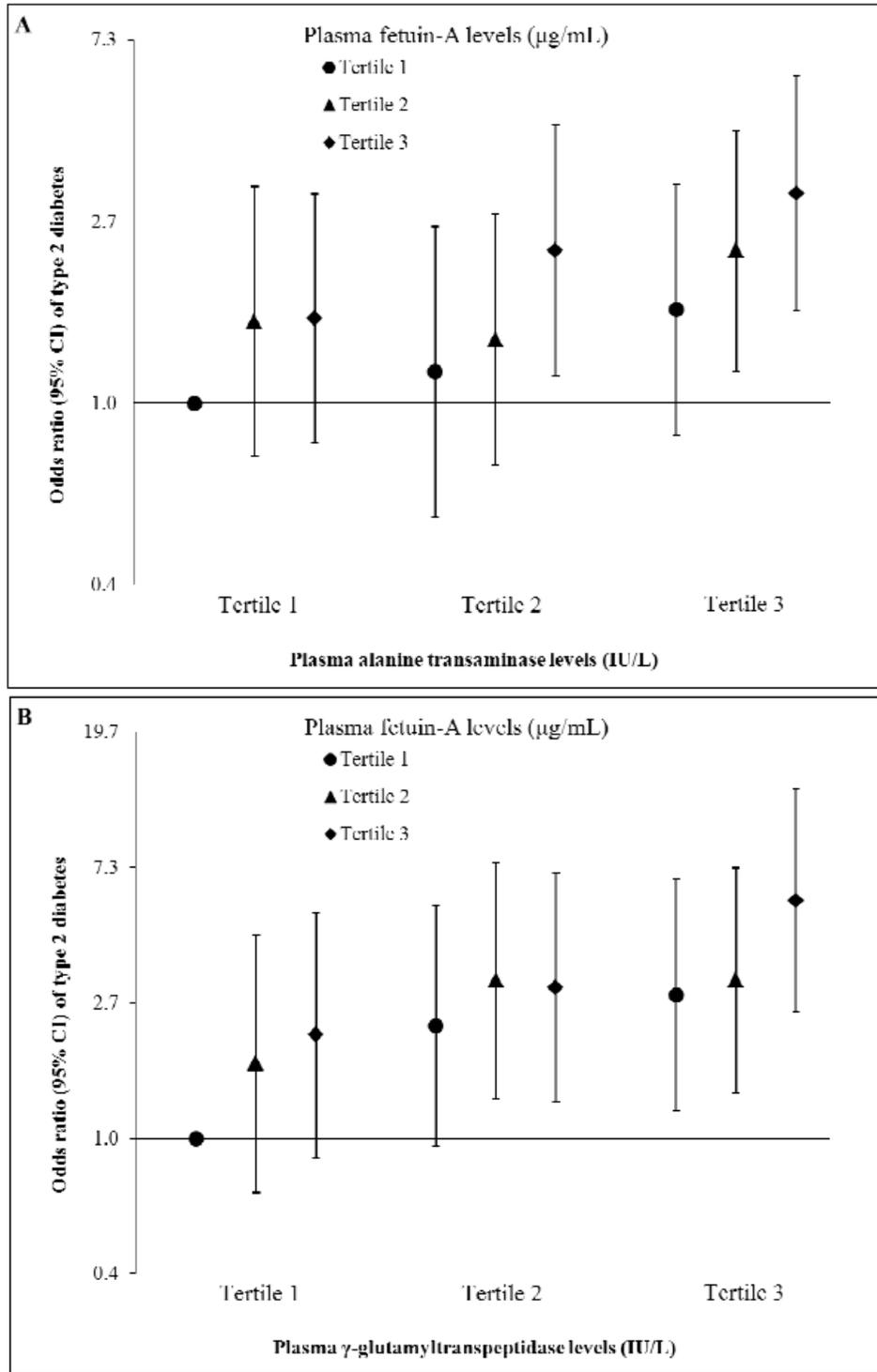
Author	Study participants	Study design	Fetuin-A assay method	Study outcome and ascertainment
Ix et al. 2008	Health, Aging, and Body Composition Study; Total: n=518; Male: 49.4%; Location: U.S.; Age: 70-79 yr	Prospective case-cohort study	Serum fetuin-A levels measured using a human fetuin-A enzyme linked immunosorbent assay kit (Epitope Diagnostics, San Diego, California).	Type 2 diabetes identified through self-report, new use of diabetes medications, or a fasting glucose level $\geq$ 126 mg/dL; n=135.
Stefan et al. 2008	European Prospective Investigation into Cancer and Nutrition (EPIC)-Potsdam Study; Total: n=2,803; Male: 39.6%; Location: Germany; Age: 35-65 yr	Prospective case-cohort study	Plasma fetuin-A levels measured by an immunoturbidimetric method used with specific polyclonal goat anti-human fetuin-A antibodies to human fetuin-A (BioVendor Laboratory Medicine, Modreci, Czech Republic).	Type 2 diabetes identified through self-report; n=703.
Ix et al. 2012	Cardiovascular Health Study; Total: n=3,710; Male: 60.4%; Location: U.S.; Age: $\geq$ 65 yr	Prospective cohort study	Serum fetuin-A levels measured using a human fetuin-A enzyme linked immunosorbent assay kit (Epitope Diagnostics, San Diego, California).	Type 2 diabetes identified during annual clinical examination and diagnosed if fasting glucose was $\geq$ 126 mg/dL, casual glucose was $\geq$ 200 mg/dL, or use of insulin or oral hypoglycemic agents, n=305.

**Supplementary Table 1.** Prospective studies of circulating fetuin-A levels in relation to incident type 2 diabetes (cont).

Author	Comparison categories and corresponding relative risk (95% CI)	Covariates in the fully-adjusted model
Ix et al. 2008	Tertile 3 vs. tertile 1: 2.41 (1.28, 4.53).	Age, sex, race, physical activity score, body weight, waist circumference, systolic blood pressure, diastolic blood pressure, fasting glucose level, high-density lipoprotein cholesterol concentration, triglyceride concentration, and C-reactive protein level.
Stefan et al. 2008	Quintile 5 vs. quintile 1: 1.75 (1.32, 2.31).	Age.
Ix et al. 2012	Quartile 4 vs. quartile 1: 1.37 (1.10, 2.21).	Age, sex, race, field center site, physical activity, smoking, alcohol use, estimated glomerular filtration rate, and prevalent cardiovascular disease, body mass index, waist circumference, hypertension, triglycerides, high-density lipoprotein, serum albumin, and C-reactive protein.

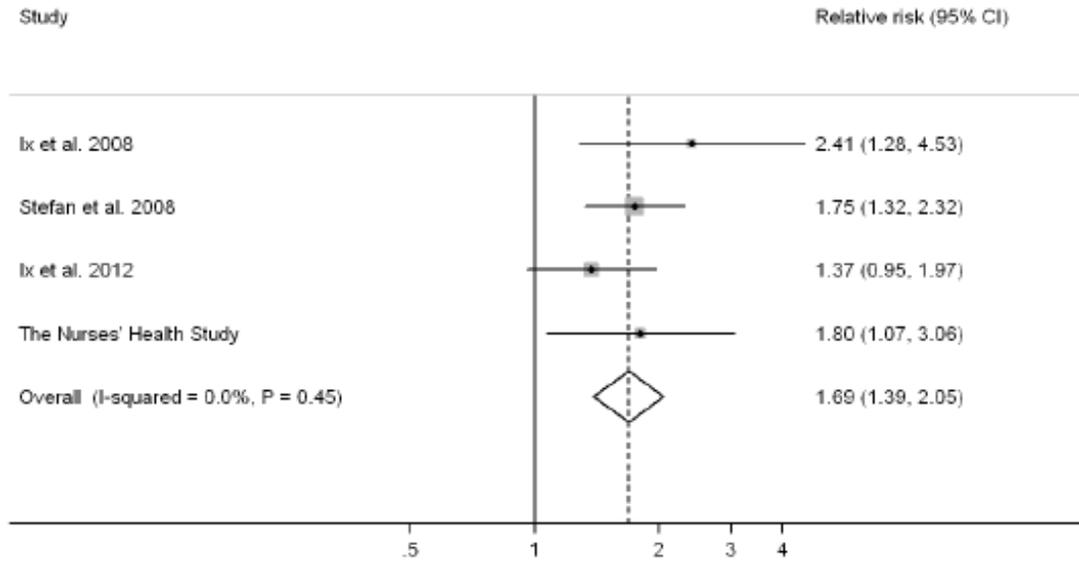
SUPPLEMENTARY DATA

**Supplementary Figure 1.** Joint association of fetuin-A with alanine transaminase and  $\gamma$ -glutamyltranspeptidase levels on risk of type 2 diabetes. The associations were adjusted for the same set of covariates as that in model 2, Table 3. In addition, ALT and GGT were mutually adjusted for in this analysis. Y axis was on a natural logarithm scale. A, fetuin-A and alanine transaminase; B, fetuin-A and  $\gamma$ -glutamyltranspeptidase. **Error!**



SUPPLEMENTARY DATA

**Supplementary Figure 2.** Pooled random-effects relative risk (95% CI) of type 2 diabetes comparing high with low fetuin-A levels. *P* values are *P* for heterogeneity.



**Supplementary Figure 3.** Scatterplot of plasma fetuin-A levels repeatedly measured in blood samples collected 1-2 years apart.

