

**Supplementary Table 1S.** TBS clinical and biochemical correlates in whole study population

	Correlation coefficient	p value
Age	-0.192	<b>0.003</b>
Menopausal status	-0.236*	<b>&lt;0.001*</b>
Menopause onset age	0.047	0.502
T2DM	-0.117*	0.068*
BMI	-0.245	<b>&lt;0.001</b>
Waist circumference	-0.333	<b>&lt;0.001</b>
Metabolic syndrome	-0.122*	0.067*
Metabolic syndrome components	-0.197*	<b>0.003*</b>
Total cholesterol	0.028	0.674
LDL	-0.007	0.923
HDL	0.160	<b>0.017</b>
Triglycerides	-0.147	<b>0.026</b>
FBG	-0.111	0.094
HbA1c	-0.191	<b>0.005</b>
FBI	-0.179	<b>0.048</b>
HOMA-IR	-0.192	<b>0.034</b>
ALP	-0.128	0.146
AST	-0.097	0.166
ALT	-0.127	0.069
GGT	-0.167	<b>0.025</b>
Calcium	0.093	0.283
Phosphate	0.165	0.059
Vitamin D	0.191	<b>0.007</b>
Vitamin D supplementation (yes/no)	0.031*	0.657*
PTH	-0.139	<b>0.050</b>
TSH	-0.153	0.078
Physical activity	0.105	0.331

Pearson's coefficient calculated; the asterisk (\*) indicates that Spearman coefficient was applied, as appropriate. Significant p values are reported in bold.

T2DM: Type 2 Diabetes Mellitus; BMI: Body Mass Index; FBG: Fasting Blood Glucose; HbA1c: Glycosylated Hemoglobin; FBI: Fasting Blood Insulin; HOMA-IR: Homeostatic Model Assessment for Insulin Resistance; HDL: High-Density Lipoprotein; LDL: Low-Density Lipoprotein; AST: Aspartate Aminotransferase; ALT: alanine aminotransferase; GGT: Gamma-Glutamyl Transferase; TSH: Thyroid Stimulating Hormone; PTH: Parathyroid Hormone.

STROBE Statement—Checklist of items that should be included in reports of *case-control studies*

	Item No	Recommendation	Page No.
Title and abstract	1	(a) Indicate the study’s design with a commonly used term in the title or the abstract	1
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	1
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	1-2
Objectives	3	State specific objectives, including any prespecified hypotheses	2
Study design	4	Present key elements of study design early in the paper	1, 8
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	8
Participants	6	(a) Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls	8
		(b) For matched studies, give matching criteria and the number of controls per case	-
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	8
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	8, 9
Bias	9	Describe any efforts to address potential sources of bias	8
Study size	10	Explain how the study size was arrived at	9
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	9
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	9
		(b) Describe any methods used to examine subgroups and interactions	9
		(c) Explain how missing data were addressed	9
		(d) If applicable, explain how matching of cases and controls was addressed	-
		(e) Describe any sensitivity analyses	9
<b>Results</b>			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	8
		(b) Give reasons for non-participation at each stage	N/A
		(c) Consider use of a flow diagram	N/A
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	8
		(b) Indicate number of participants with missing data for each variable of interest	8
Outcome data	15*	Report numbers in each exposure category, or summary measures of exposure	3

Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	3-6
		(b) Report category boundaries when continuous variables were categorized	4
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	6
<b>Discussion</b>			
Key results	18	Summarise key results with reference to study objectives	6
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	7, 9
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	7
Generalisability	21	Discuss the generalisability (external validity) of the study results	7, 9
<b>Other information</b>			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	10

\*Give information separately for cases and controls.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at <http://www.strobe-statement.org>.