Table S1. Univariate analysis of clinical and laboratory variables associated with gallstone disease and cholecystectomy in men.

Variables	Gallstone Disease		Cholecystectomy	
	OR (95% CI)	*p*	OR (95% CI)	*p*
Age above median	2.219 (1.209-4.072)	0.019	2.652 (1.057-6.659)	**0.038**
Obesity (BMI≥30kg/m²)	1.832 (1.017-3.300)	0.044	2.168 (0.915-5.135)	0.079
Central Obesity (High waist circumference) *	1.310 (0.727-2.361)	0.368	1.424 (0.613-3.310)	0.411
Impaired Fasting Glucose *	2.437 (1.327-4.475)	0.004	4.282 (1.577-11.776)	0.005
Low HDL *	1.302 (0.716-2.367)	0.386	2.579 (1.100-6.047)	0.029
High triglycerides *	1.072 (0.596-1.930)	0.817	0.707 (0.292-1.708)	0.441
Total Cholesterol (mg/dl)	0.994 (0.987-1.002)	0.163	0.993 (0.983-1.004)	0.193
LDL Cholesterol (mg/dl)	0.994 (0.986-1.005)	0.871	0.997 (0.985-1.009)	0.615
High Blood Pressure *	2.204 (0.952-4.300)	0.067	2.652 (0.772-9.109)	0.121
Metabolic Syndrome	2.248 (1.187-4.260)	0.013	5.743 (1.671-19.740)	0.006
Metabolic Syndrome Score	1.402 (1.110-1.772)	0.014	1.592 (1.117-2.269)	**0.010**
High HOMA IR	1.167 (0.632-2.154)	0.662	1.857 (0.761-4.531)	0.174
High ALT **	0.644 (0.344-1.204)	0.168	1.011 (0.427-2.398)	0.979
High AST **	0.831 (0.356-1.941)	0.669	1.173 (0.385-3.577)	0.122
High GGT **	1.090 (0.592-2.009)	0.728	1.716 (0.736-4.001)	0.211

* = defined according to ref. [26]; ** = values above median; CI = confidence interval; OR= odds ratio

Table S2. Univariate analysis of clinical and laboratory variables associated with gallstone disease and cholecystectomy in women.

Variables	Gallstone Disease		Cholecystectomy	
	OR (95% CI)	*p*	OR (95% CI)	*p*
Age above median	2.330 (1.144-4.349)	0.010	3.096 (1.344-7.131)	**0.008**
Obesity (BMI≥30kg/m²)	1.304 (0.702-2.419)	0.401	1.386 (0.680-2.823)	0.369
Central Obesity (High waist circumference) *	1.595 (0.522-4.873)	0.413	1.728 (0.915-3.264)	0.092
Impaired Fasting Glucose*	0.887 (0.474-1.659)	0.707	0.825 (0.402-1.696)	0.602
Low HDL*	0.818 (0.419-1.596)	0.556	0.951 (0.446-2.030)	0.898
High triglycerides *	0.992 (0.514-1.931)	0.992	1.004 (0.470-2.144)	0.992
Total Cholesterol (mg/dl)	1.006 (0.998-1.014)	0.120	1.002 (0.993-1.011)	0.719
LDL Cholesterol (mg/dl)	1.005 (0.997-1.014)	0.229	1.001 (0.991-1.011)	0.868
High Blood Pressure *	1.942 (0.933-4.041)	0.076	1.697 (0.732-3.933)	0.218
Metabolic Syndrome	1.265 (0.677-2.366)	0.461	1.519 (0.728-3.169)	0.265
Metabolic Syndrome Score	1.061 (0.836-1.346)	0.627	1.060 (0.806-1.394)	**0.678**
High HOMA IR	0.804 (0.406-1.592)	0.532	0.878 (0.406-1.898)	0.741
High ALT **	1.479 (0.755-2.897)	0.254	1.671 (0.789-3.541)	0.671
High AST **	1.401 (0.604-3.251)	0.423	2.348 (0.985-5.594)	0.054
High GGT **	1.763 (0.889-3.496)	0.104	2.323 (1.091-4.946)	0.029