

SUPPLEMENTARY DATA

**Supplementary Table 1.** Model building on GMS sample: time horizon for mortality risk prediction of 2 years.

Step	Model	cNRI (95%CI)	cNRI p-value <sup>o</sup>	Survival C-statistic (95%CI)
1	Age	0.86 (0.51, 1.17)	<.0001	0.80 (0.73 - 0.87)
2	Age, Antihyp	0.71 (0.49, 0.89)	<.0001	0.84 (0.78 - 0.90)
3	Age, Antihyp, DBP	0.38 (0.02, 0.77)	0.021	0.85 (0.79 - 0.91)
4	Age, Antihyp, DBP, Insulin	0.35 (0.00, 0.70)	0.026	0.85 (0.79 - 0.91)
5	Age, Antihyp, DBP, Insulin, HDL	0.34 (-0.06, 0.73)	0.047	0.86 (0.80 - 0.92)
6	Age, Antihyp, DBP, Insulin, HDL, ACR	0.38 (0.00, 0.78)	0.026	0.87 (0.80 - 0.93)
7	Age, Antihyp, DBP, Insulin, HDL, ACR, LDL	0.34 (-0.03, 0.71)	0.037	0.87 (0.80 - 0.93)
8	Age, Antihyp, DBP, Insulin, HDL, ACR, LDL, BMI	0.43 (0.05, 0.75)	0.011	0.88 (0.82 - 0.94)
9*	Age, Antihyp, DBP, Insulin, HDL, ACR, LDL, BMI, TGL	0.35 (0.01, 0.71)	0.022	0.88 (0.82 - 0.94)
10	Age, Antihyp, DBP, Insulin, HDL, ACR, LDL, BMI, TGL, Sex	0.22 (-0.14, 0.59)	0.105	0.88 (0.82 - 0.93)
11	Age, Antihyp, DBP, Insulin, HDL, ACR, LDL, BMI, TGL, Sex, Smoking	0.33 (-0.01, 0.69)	0.029	0.88 (0.83 - 0.93)
12	Age, Antihyp, DBP, Insulin, HDL, ACR, LDL, BMI, TGL, Sex, Smoking, Diabetes duration	0.20 (-0.17, 0.56)	0.160	0.88 (0.83 - 0.93)
13	Age, Antihyp, DBP, Insulin, HDL, ACR, LDL, BMI, TGL, Sex, Smoking, Diabetes duration, Antidyslip	0.17 (-0.19, 0.59)	0.183	0.88 (0.83 - 0.93)
14	Age, Antihyp, DBP, Insulin, HDL, ACR, LDL, BMI, TGL, Sex, Smoking, Diabetes duration, Antidyslip, SBP	0.06 (-0.29, 0.44)	0.399	0.88 (0.83 - 0.93)
15	Age, Antihyp, DBP, Insulin, HDL, ACR, LDL, BMI, TGL, Sex, Smoking, Diabetes duration, Antidyslip, SBP, HbA1c	-0.14 (-0.50, 0.25)	0.774	0.88 (0.83 - 0.93)
16	Age, Antihyp, DBP, Insulin, HDL, ACR, LDL, BMI, TGL, Sex, Smoking, Diabetes duration, Antidyslip, SBP, HbA1c, e-GFR	-0.28 (-0.66, 0.13)	0.909	0.88 (0.83 - 0.94)

GMS= Gargano Mortality Study

Antihyp=Use of antihypertensive therapy, DBP=Diastolic Blood Pressure, Insulin=Use of insulin therapy, HDL= High-Density Lipoprotein cholesterol, ACR= Urinary Albumin-Creatinine Ratio, LDL=Low-Density Lipoprotein, BMI=Body Mass Index, TGL=Triglycerides, Antidyslip =Use of lipid-lowering therapy, SBP=systolic blood pressure, HbA1c=Glycated hemoglobin, eGFR=estimated Glomerular Filtration Rate.

\* Model building stopped at this step: no statistically significant cNRI was further observed after this step.

<sup>o</sup> P-values (from one side bootstrap test) refer to differences between actual and immediately previous cNRI value .

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**Supplementary Table 2.** Multivariate hazard ratios for 2-year mortality on pooled GMS and FMS samples.

Variable	Ev/tot*	HR**	95% CI	p-value
Age	88/1615	3.04	2.28 - 4.07	<0.001
BMI		0.78	0.62 - 0.98	0.037
DBP		0.76	0.62 - 0.94	0.010
LDL		1.09	0.88 - 1.35	0.456
TGL		0.83	0.63 - 1.10	0.195
HDL		0.76	0.59 - 0.98	0.034
ACR		1.41	1.15 - 1.73	0.001
Antihypertensive therapy		2.35	1.23 - 4.50	0.010
Insulin therapy		1.27	0.83 - 1.95	0.279

\* Ev/tot: number of observed events on total sample.

\*\*HR: Hazard ratios. They were express for one SD increment of transformed variables

Multivariate Cox proportional hazards regression model was estimated with robust standard errors, accounting for clustering due to study effect.

GMS=Gargano Mortality Study, FMS=Foggia Mortality Study

BMI=Body Mass Index, DBP=Diastolic Blood Pressure, LDL=Low-Density Lipoprotein, TGL=Triglycerides, HDL= High-Density Lipoprotein cholesterol, ACR= Urinary Albumin-Creatinine Ratio.

SUPPLEMENTARY DATA

**Supplementary Figure 1.** Empirical distribution of overall mortality risk score in the pooled sample

