Webtable 1: Tests for proportional hazards assumption concerning cardiovascular mortality.

|  | $\rho$ | $\chi^{2}$ | p |
| :---: | :---: | :---: | :---: |
| Bmi | -0.06766 | 0.966 | 0.32571 |
| Bmi' | 0.06094 | 0.722 | 0.39555 |
| Mdrd | -0.06348 | 0.786 | 0.37526 |
| Mdrd' | 0.08038 | 0.910 | 0.34018 |
| Proteinuria | -0.00912 | 0.016 | 0.89815 |
| Age | 0.10213 | 1.870 | 0.17178 |
| Sex $=$ Women | 0.02901 | 0.155 | 0.69380 |
| HdL | -0.08174 | 1.428 | 0.23203 |
| LDL | -0.02643 | 0.237 | 0.62607 |
| Triglycerides | -0.13002 | 2.560 | 0.10935 |
| Uric acid | -0.00139 | 0.000 | 0.98314 |
| Smoke $=$ exsmoke | -0.01739 | 0.051 | 0.82086 |
| Smoke $=$ smoker | -0.16445 | 4.952 | 0.02609 |
| Blood glucose | 0.02490 | 0.213 | 0.64419 |
| Antihypertensives | -0.10098 | 2.140 | 0.14317 |
| Sport | -0.07831 | 0.931 | 0.33450 |
| Alcohol | -0.01255 | 0.003 | 0.86140 |
| Map | 0.02877 | 0.225 | 0.63510 |
| BMI * MDRD | 0.06299 | 0.777 | 0.37799 |
| Bmi' * MDRD | -0.05880 | 0.632 | 0.42668 |
| Bmi $*$ MDRD ${ }^{\text {c }}$ | -0.07852 | 0.872 | 0.35036 |
| Bmi'* MDRD' | 0.08009 | 0.816 | 0.36647 |
| Global |  | 2.815 | 0.13789 |

Webfigure 1: Scaled Schoenfeld residuals for the factor smoke concerning cardiovascular mortality.


Under the proportional hazards assumption, the residuals are constant over time. For the factor smoke, residuals are decreasing. Therefore a time dependent term was used for the factor smoke in the final model.

Webtable 2: Effect contrasts for cardiovascular death (alternative model 1)

|  |  |  | $95 \%$ CI |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| CKD | Weight contrast | HR | Lower | Upper | p |
| Absent | underweight vs. normal | 0.29 | 0.06 | 1.47 | 0.14 |
|  | overweight vs. normal | 1.27 | 1.04 | 1.57 | 0.02 |
|  | obese vs. normal | 1.58 | 0.83 | 2.99 | 0.16 |
| Mild | underweight vs. normal | 1.05 | 0.43 | 2.58 | 0.91 |
|  | overweight vs. normal | 0.98 | 0.84 | 1.14 | 0.78 |
|  | obese vs. normal | 0.95 | 0.60 | 1.50 | 0.81 |
|  | underweight vs. normal | 0.53 | 0.05 | 6.02 | 0.61 |
|  | overweight vs. normal | 0.61 | 0.45 | 0.83 | 0.00 |
|  | obese vs. normal | 0.17 | 0.07 | 0.42 | 0.00 |

To validate the model of the main text (table 3a) we fitted three additional models: In alternative model 1, variables were included as confounders in a multivariable Cox model if the change in the Chi-Square statistics of the BMI*GFR interaction term exceeded $10 \%$. Contrasts were calculated identically to Table 3a of the main paper. Wald test for the effect size of the $B M I^{*} G F R$ interaction term: $P=0.0001$.

Webtable 3: Effect contrasts for cardiovascular death (alternative model 2)

|  |  |  | $95 \%$ CI |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| CKD | Weight contrast | HR | Lower | Upper | p |
| Absent | underweight vs. normal | 0.74 | 0.16 | 3.37 | 0.69 |
|  | overweight vs. normal | 1.30 | 1.05 | 1.60 | 0.01 |
|  | obese vs. normal | 2.11 | 1.08 | 4.14 | 0.03 |
| Mild | underweight vs. normal | 1.36 | 0.60 | 3.09 | 0.46 |
|  | overweight vs. normal | 1.07 | 0.95 | 1.21 | 0.28 |
|  | obese vs. normal | 1.34 | 0.91 | 1.96 | 0.14 |
|  | underweight vs. normal | 0.76 | 0.08 | 7.78 | 0.82 |
|  | overweight vs. normal | 0.71 | 0.52 | 0.97 | 0.03 |
|  | obese vs. normal | 0.31 | 0.13 | 0.77 | 0.01 |

[^0]Webtable 4: Effect contrasts for cardiovascular death (alternative model 3)

|  |  |  | $95 \%$ CI |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| CKD | Weight contrast | HR | Lower | Upper | p |
| Absent | underweight vs. normal | 0.39 | 0.08 | 1.81 | 0.23 |
|  | overweight vs. normal | 1.43 | 1.17 | 1.75 | 0.00 |
|  | obese vs. normal | 2.44 | 1.30 | 4.58 | 0.01 |
| Mild | underweight vs. normal | 0.85 | 0.36 | 2.02 | 0.72 |
|  | overweight vs. normal | 1.02 | 0.91 | 1.15 | 0.76 |
|  | obese vs. normal | 1.02 | 0.71 | 1.46 | 0.92 |
|  | underweight vs. normal | 0.37 | 0.03 | 3.87 | 0.40 |
|  | overweight vs. normal | 0.59 | 0.44 | 0.79 | 0.00 |
|  | obese vs. normal | 0.14 | 0.06 | 0.31 | 0.00 |

For alternative model 3 a propensity score was created by logistic regression of cardiovascular death on all potential confounders. Alternative model 3 uses this propensity score as time dependent covariable in a Cox regression model. Contrasts were calculated identically to Table 3 a of the main paper. Wald test for the effect size of the $\mathrm{BMI}^{*} \mathrm{GFR}$ interaction term: $\mathrm{P}=0.0001$.

Webtable 5: Effect contrasts for cancer death (alternative model 1)

|  |  |  | $95 \%$ CI |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| CkD | Weight contrast | HR | Lower | Upper | p |
| Absent | underweight vs. normal | 1.35 | 0.55 | 3.31 | 0.52 |
|  | overweight vs. normal | 1.07 | 0.90 | 1.26 | 0.45 |
| Mild | obese vs. normal | 1.33 | 0.76 | 2.31 | 0.32 |
|  | underweight vs. normal | 1.05 | 0.46 | 2.40 | 0.91 |
|  | overweight vs. normal | 1.03 | 0.89 | 1.18 | 0.72 |
|  | obese vs. normal | 1.10 | 0.69 | 1.74 | 0.69 |
| Moderate | underweight vs. normal | 1.02 | 0.11 | 9.09 | 0.99 |
|  | overweight vs. normal | 0.81 | 0.56 | 1.17 | 0.26 |
|  | obese vs. normal | 0.51 | 0.16 | 1.69 | 0.27 |

[^1]Webtable 6: Effect contrasts for cancer death (alternative model 2)

|  |  |  | $95 \%$ CI |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| CkD | Weight contrast | HR | Lower | Upper | p |
| Absent | underweight vs. normal | 1.56 | 0.61 | 3.96 | 0.35 |
|  | overweight vs. normal | 1.06 | 0.89 | 1.26 | 0.49 |
|  | obese vs. normal | 1.36 | 0.76 | 2.43 | 0.30 |
| Mild | underweight vs. normal | 1.40 | 0.61 | 3.22 | 0.43 |
|  | overweight vs. normal | 1.07 | 0.94 | 1.23 | 0.31 |
|  | obese vs. normal | 1.37 | 0.86 | 2.18 | 0.18 |
|  | underweight vs. normal | 1.57 | 0.16 | 15.49 | 0.70 |
|  | overweight vs. normal | 0.94 | 0.63 | 1.40 | 0.75 |
|  | obese vs. normal | 0.91 | 0.23 | 3.60 | 0.89 |

To validate the model of the main text (table 3a) we fitted three additional models: For alternative model 2 a propensity score was created by logistic regression of cardiovascular death on all potential confounders. Alternative model 2 uses this propensity score in a Cox regression model stratified by quintiles of the propensity score. Contrasts were calculated identically to Table 3a of the main paper. Wald test for the effect size of the $\mathrm{BMI}^{*}$ GFR interaction term: $\mathrm{P}=0.2609$.

Webtable 7: Effect contrasts for cancer death (alternative model 3)

|  |  |  | $95 \%$ CI |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| CkD | Weight contrast | HR | Lower | Upper | p |
| Absent | underweight vs. normal | 1.35 | 0.56 | 3.26 | 0.50 |
|  | overweight vs. normal | 1.01 | 0.86 | 1.19 | 0.89 |
|  | obese vs. normal | 1.12 | 0.65 | 1.93 | 0.68 |
| Mild | underweight vs. normal | 1.03 | 0.46 | 2.29 | 0.95 |
|  | overweight vs. normal | 1.00 | 0.88 | 1.14 | 0.98 |
|  | obese vs. normal | 1.01 | 0.67 | 1.53 | 0.95 |
|  | underweight vs. normal | 0.97 | 0.11 | 8.65 | 0.98 |
|  | overweight vs. normal | 0.82 | 0.57 | 1.16 | 0.26 |
|  | obese vs. normal | 0.52 | 0.17 | 1.60 | 0.25 |

Effect contrasts for cancer death (alternative model 3) Legend: To validate the model of the main text (table 3a) we fitted three additional models: For alternative model 2 a propensity score was created by logistic regression of cardiovascular death on all potential confounders. Alternative model 3 uses this propensity score as time dependent covariable in a Cox regression model. Contrasts were calculated identically to Table 3a of the main paper. Wald test for the effect size of the BMI*GFR interaction term: $\mathrm{P}=0.0829$.


[^0]:    To validate the model of the main text (table 3a) we fitted three additional models: For alternative model 2 a propensity score was created by logistic regression of cardiovascular death on all potential confounders. Alternative model 2 uses this propensity score in a Cox regression model stratified by quintiles of the propensity score. Contrasts were calculated identically to Table 3a of the main paper. Wald test for the effect size of the BMI*GFR interaction term: $\mathrm{P}=0.0070$.

[^1]:    To validate the model of the main text (table 3a) we fitted three additional models: In alternative model 1 , variables were included as confounders in a multivariable Cox model if the change in the Chi-Square statistics of the BMI*GFR interaction term exceeded 10the main paper. Wald test for the effect size of the BMI*GFR interaction term: $\mathrm{P}=0.0808$.

