**Supplement**

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| Supplemental Material 1. Example of comorbidity score calculation for a hypothetical study participant | | | | | |
| Comorbidity | Status2 | All-cause death1 | | | |
| Beta coefficient  in cox model3 | Beta coefficient for age  in cox model4 | Score  per comorbidity5 | Comorbidity score6 |
| Hypertension | Yes | 0.16327 | 0.08662 | 1.884899561 | 5.805125837 |
| Diabetes | Yes | 0.53988 | 0.08662 | 6.232740707 |
| Hyperlipidemia | No | -0.11259 | 0.08662 | 0 |
| Stroke | No | 0.41652 | 0.08662 | 0 |
| …7 | No | … | 0.08662 | 0 |
| Duodenal ulcer | Yes | -0.20031 | 0.08662 | -2.312514431 |
| Cancer | No | 0.81174 | 0.08662 | 0 |

1 Cause of death identified by ICD-10 codes A00-Z99

2 Comorbidity status. Yes indicates the hypothetical study participant is afflicted with the corresponding comorbidity.

3 Beta coefficient determined from model 3A for the corresponding comorbidity

4 Beta coefficient determined from model 3A for age

5 Beta coefficient determined from model 3A for the corresponding comorbidity divided by that for age. Set to 0 if the hypothetical study participant is not afflicted with the corresponding comorbidity

6 The sum of all scores per comorbidity

7 For this example, it was assumed the hypothetical study participant was not afflicted by any other comorbidity