**Supplementary material**

**eTable 1. ICD codes used for Charlson comorbidity index score**

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| **Disease** | **ICD-8** | **ICD-10** |
| Myocardial infarction | 410 | I21, I22, I23 |
| Congestive heart failure | 427.09, 421.10, 427.11, 427.19, 428.99, 782.49 | I50, I11.0, I13.0, I13.2 |
| Peripheral vascular disease | 440, 441, 442, 443, 444, 445 | I70, I71, I72, I73, I74, I77 |
| Cerebrovascular disease | 430-438 | I60-I69, G45, G46 |
| Dementia | 290.09-290.19, 293.09 | F00-F03, F05.1, G30 |
| Chronic pulmonary disease | 490-493, 515-518 | J40-J47, J60-J67, J68.4, J70.1, J70.3, J84.1, J92.0, J96.1, J98.2, J98.3 |
| Connective tissue disease | 712, 716, 734, 446, 135.99 | M05, M06, M08, M09, M30, M31, M32, M33, M34, M35, M36, D86 |
| Ulcer disease | 530.91, 530.98, 531-534 | K22.1, K25-K28 |
| Mild liver disease | 571, 573.01, 573.04 | B18, K70.0-K70.3, K70.9, K71, K73, K74, K76.0 |
| Diabetes I and II | 249.00, 249.06, 249.07, 249.09, 250.00, 250.06, 250.07, 250.09 | E10.0, E10.1, E10.9, E11.0, E11.1, E11.9 |
| Hemiplegia | 344 | G81, G82 |
| Moderate to severe renal disease | 403, 404, 580-584, 590.09, 593.19, 753.10-753.19, 792  | I12, I13, N00-N05, N07, N11, N14, N17-N19, Q61 |
| Diabetes with end-organ damage | 249.01-249.05, 249.08, 250.01-250.05, 250.08 | E10.2-E10.8, E11.2-E11.8 |
| Any tumor | 140-194 | C00-C75 |
| Leukemia | 204-207 | C91-C95 |
| Lymphoma | 200-203, 275.59 | C81-C85, C88, C90, C96 |
| Moderate to severe liver disease | 070.00, 070.02, 070.04, 070.06, 070.08, 573.00, 456.00-456.09 | B15.0, B16.0, B16.2, B19.0, K70.4, K72, K76.6, I85 |
| Metastatic solid tumor | 195-198, 199 | C76-C80 |
| AIDS | 079.83 | B21-B24 |