**Supplementary Material 1.** **Definition of colorectal cancer and cognitive disorders by ICD-10 diagnostic codes.**

|  |  |
| --- | --- |
| **ICD-10 codes** | **Diseases** |
| **Colorectal cancer** |
| C18 | Malignant neoplasm of colon |
|  C19 | Malignant neoplasm of rectosigmoid junction |
|  C20 | Malignant neoplasm of rectum |
| **Cognitive disorders** |  |
|  F00 | Dementia in Alzheimer disease |
|  F01 | Vascular dementia |
|  F02 | Dementia in other diseases classified elsewhere |
|  F03 | Unspecified dementia |
|  F06.7 | Mild cognitive impairment |
|  G30 | Alzheimer disease |
|  G31.00 | Behavioral variant frontotemporal dementia |
|  G31.82 | Dementia with Lewy bodies |