**S2 Table. Risk-adapted starting age of prostate cancer screening for different benchmark starting ages of screening by number of affected relatives and youngest age at diagnosis of first-degree relatives using 15-year cumulative risk**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Family history** | **Age at diagnosis of youngest relative, y** | **Cancer patients (N)** |  | **Risk-adapted starting age of screening, y** **(95% CI)** |
| **Population [benchmark age]** | **-** | 88,999 |  | **[40]** | **[45]** | **[50]** | **[55]** |
| **1 First-degree relative** | **All ages** | 3,576 |  | 36 (36-37) | 41 (40-41) | 46 (46-46) | 51 (50-51) |
|  **<60** | 449 |  | 34 (32-36) | 39 (36-40) | 43 (41-45) | 48 (47-50) |
|  **60-69** | 1,117 |  | 36 (35-37) | 40 (39-41) |  45\*(44-46) | 49 (49-50) |
|  **≥70** | 2,010 |  | 37 (36-38) | 42 (41-42) | 47 (46-47) | 52 (51-52) |
| **≥2 First-degree relatives**  | **All ages** | 311 |  | 34 (33-37) | 36 (34-40) | 40 (37-43) | 44 (42-46) |
|  **<60** | 120 |  | 34 (33-37) | 36 (34-39) | 39 (36-42) | 44 (40-46) |
|  **≥60** | 191 |  | 36 (35-40) | 38 (36-42) | 41 (38-44) | 44 (41-47) |
| **15-year cumulative risk in the general population**  |  | **0.1%** | **0.2%** | **0.7%** | **1.4%** |

Bold ages 40, 45, 50, and 55 indicate benchmark starting ages of prostate cancer screening in the general population.

\*Example: When recommended benchmark starting age of prostate cancer screening in the general population was 50 years, men who had a history of prostate cancer diagnosed between age 60 and 69 only in one first-degree relative attained the same risk level of 50-year-old men in the general population at age 45 and thus they could start screening five years earlier.