**Table 1. Characteristics of the 1,962 probands and 16,270 first-degree relatives.**

|  |  |
| --- | --- |
| Characteristic | N |
| Sex of proband |  |
| Male | 1,153 (59.1 %) |
| Female | 799 (40.9 %) |
| Age of onset, Median(IQR) | 61.7, 63 (55 - 70) |
| Less than 50 | 229 (11.7 %) |
| Over 50 | 1,723 (88.3 %) |
| Total number of FDRs | 16,270 |
| Parents | 3,904 |
| Siblings | 7,649 |
| Offsprings | 4,717 |
| FDRs with affected colorectal cancer | 216 |
| Parents | 77 |
| Siblings | 132 |
| Offsprings | 7 |

**Table 2. Estimates for probability of being affected in CRC and relative risks**

|  |  |  |  |
| --- | --- | --- | --- |
| Age | Sex | Pr(CRC) | RR |
| Under 50 | Female | 0.00040 | 1.00 |
| Male | 0.00055 | 1.40 |
| Over 50 | Female | 0.00309 | 7.80 |
| Male | 0.00410 | 10.36 |

**Table 3. Increased risk of colorectal cancer according to positive family history in first-degree relatives**

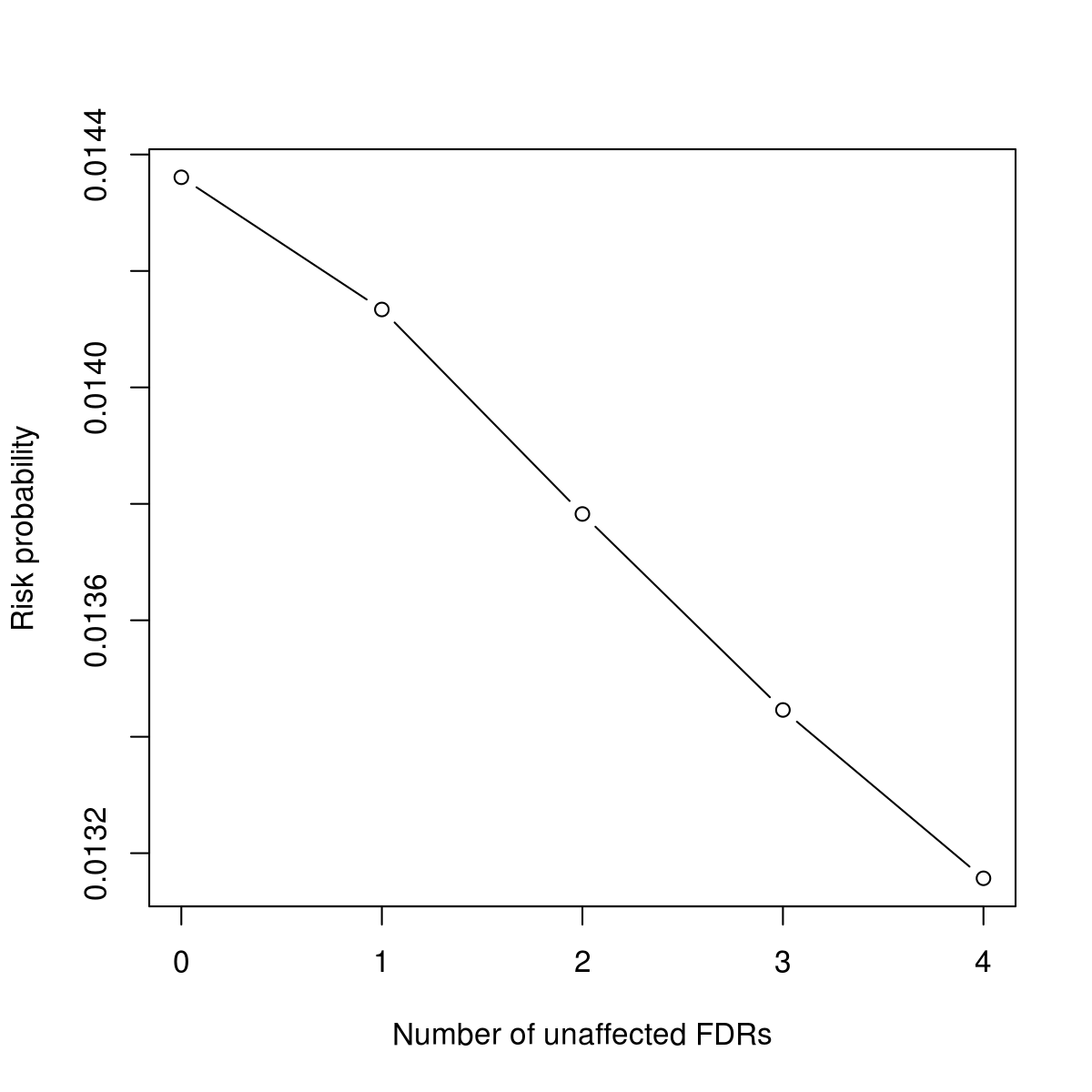
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Factor | Number  of subjects | Covariate adjusted Hazard ratio | 95% Confidence Interval | P-value | |
| Family history of CRC |  |  |  |  | |
| No | 1,766 | 1.00 (ref) | - |  | |
| Yes (≥ 1 affected FDR) | 186 | 1.1998 | [1.0306 , 1.3968] | 0.0188 | |
| No. of affected FDRs |  |  |  |  | |
| 0 (no FH) | 1,766 | 1.00 (ref) |  |  | |
| 1 affected FDR | 160 | 1.2540 | [1.0657 , 1.4756] | 0.0064 | |
| ≥ 2 affected FDR | 26 | 0.9479 | [0.9133 , 1.0948] | 0.7865 | |
| Proportion of affected FDRs | |  |  |  |
| [0 – 0.125) | 1,843 | 1.00 (ref) |  |  | |
| [0.125 – 0.3) | 100 | 1.5949 | [1.3031 , 1.9519] | 5.9310-6 | |
| [0.3 – 1] | 9 | 2.7498 | [1.4246 , 5.3078] | 2.7510-3 | |

**Figure 1. Probability of being affected to the CRC with the several number of affected FDRs**

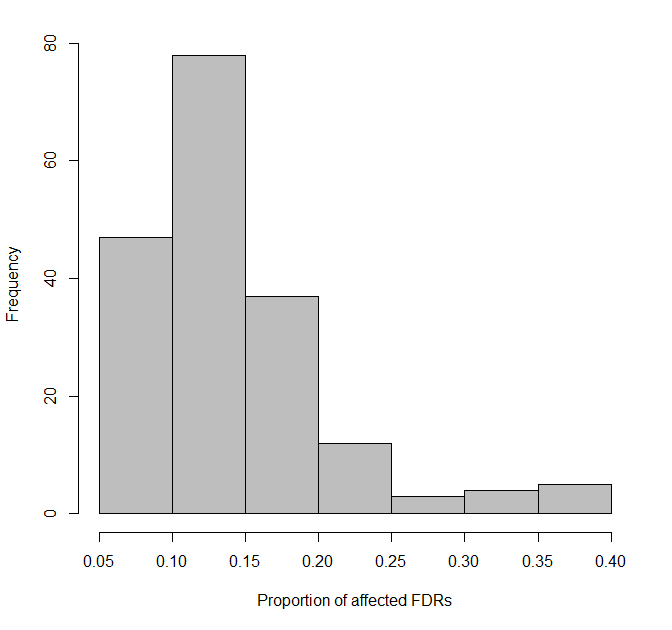
**A screenshot of a cell phone

Description automatically generated**

**Figure 2. Probability of being affected to the CRC with the different number of u affected FDRs.**

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**Figure 3. Histogram of proportion of affected FDRs excluding those with no family history.**

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**Figure 4. AIC of Cox proportional hazard model for different cutoff values.**

**A close up of a map

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