**Supplementary Figures**

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**Figure S1**. Flowchart of inclusion of study participants.

**\***1945 of them participating with a short self-administered questionnaire only rather than a personal interview with blood sampling; 464 not genotyped yet.

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**Figure S2**. Genetic risk equivalent for comparisons between pack-years of smoking in the whole population and different subgroups

\*Interactions were tested by additionally including a cross-product term of stratification factors (sex, age, history of colonoscopy, or FH) and pack-years of active smoking in the model 2 but with polygenic risk score included as percentiles (per 10 percentiles, continuous factor).

**Note:** Never smokers were used as reference in each subgroup.

**Abbreviations:** FH, family history of colorectal cancer in a first-degree relative