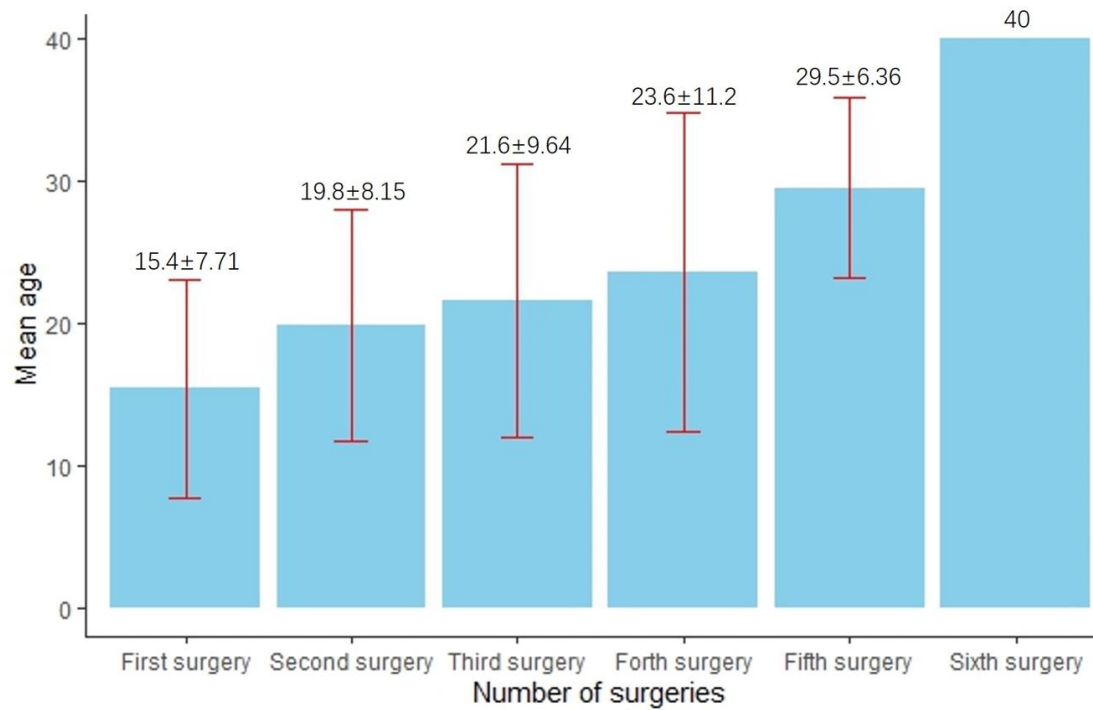
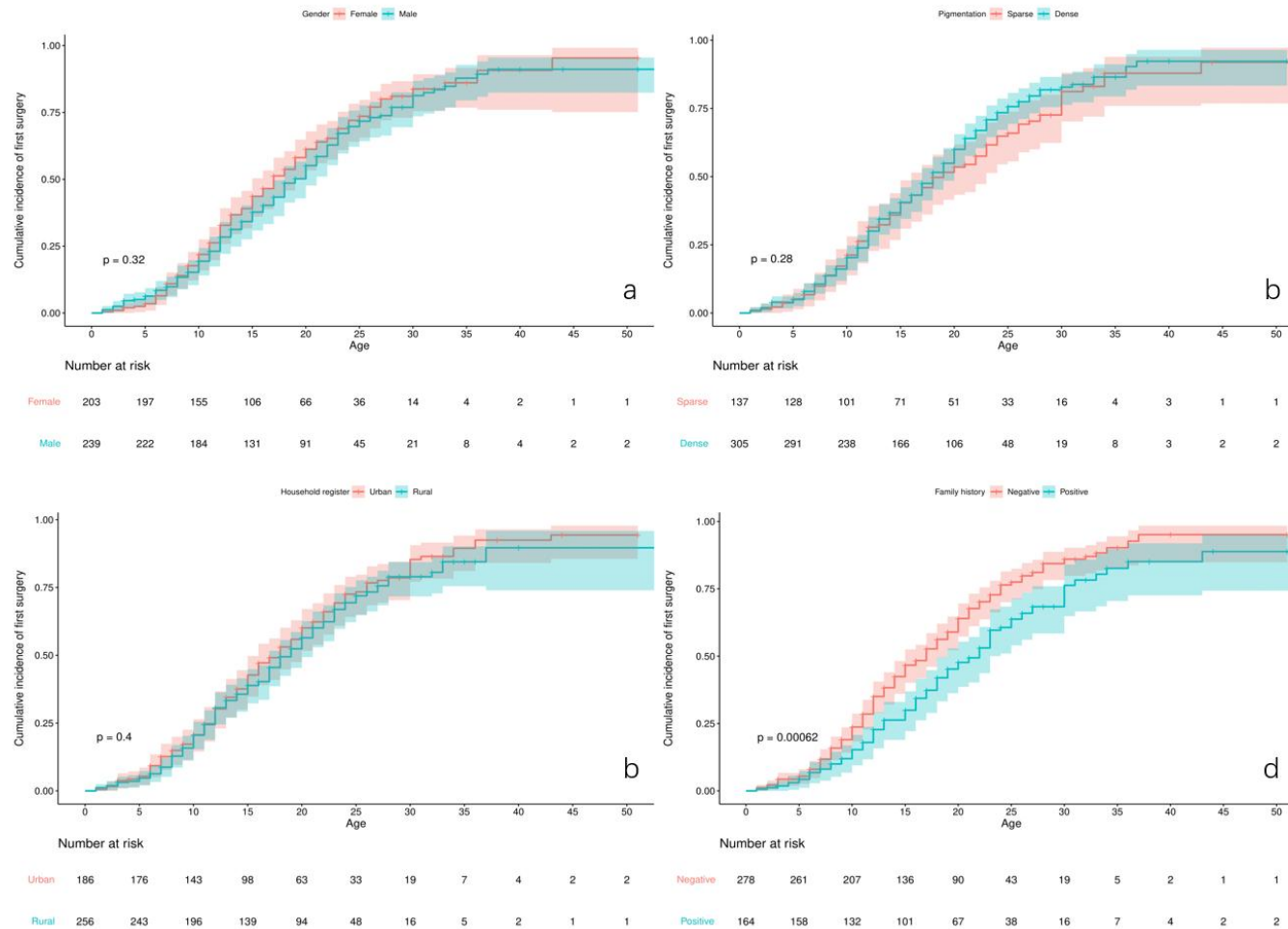


Supplementary Figure 1 Symptoms for the first clinical visit in patients with Peutz-Jeghers syndrome and their age distribution.

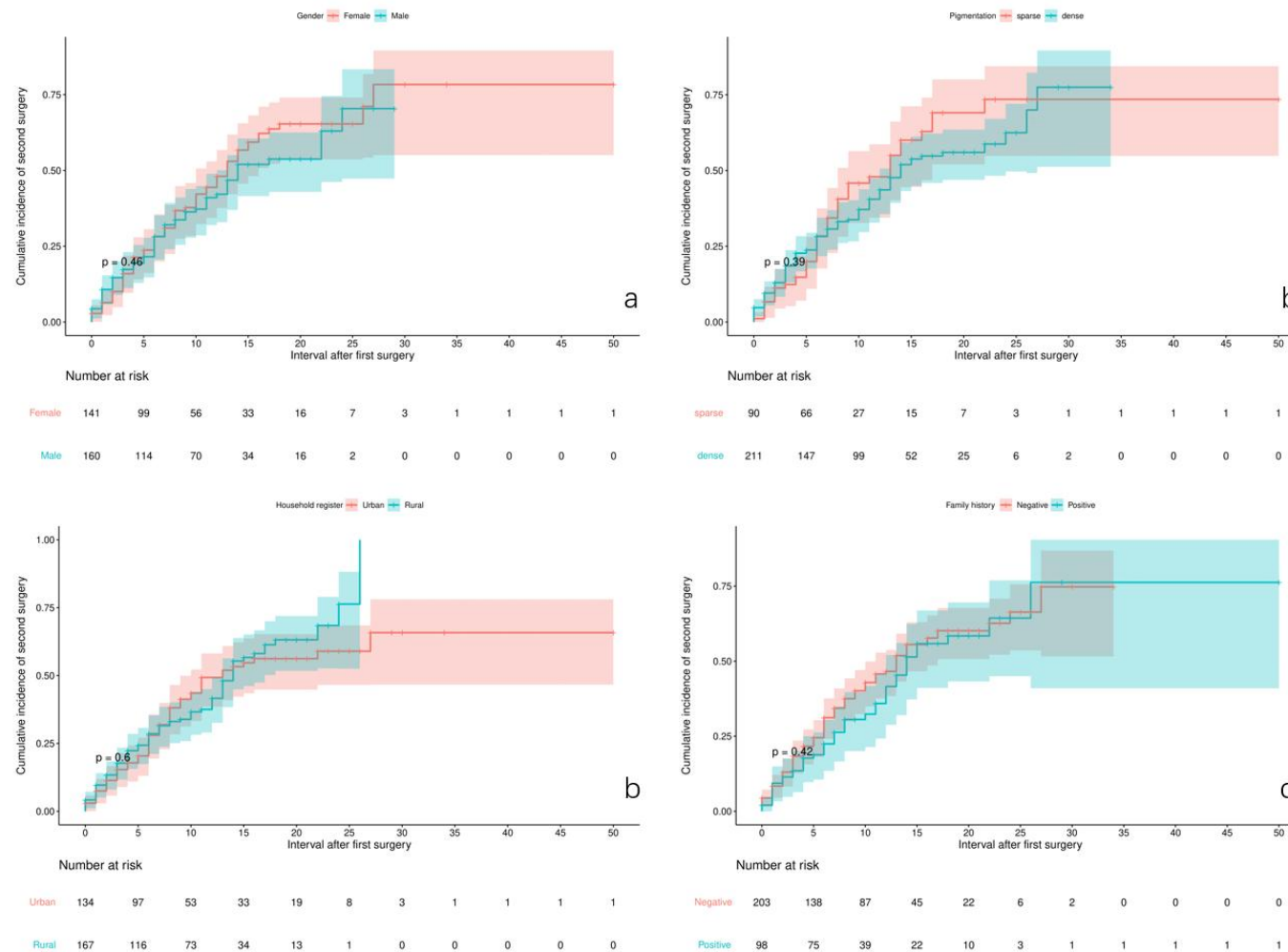
The symptoms for the first clinical visits in PJS include abdominal pain ($n = 177$, 40.05%), bloating and vomiting ($n = 76$, 17.19%), defecating polyps ($n = 41$, 9.28%), gastrointestinal bleeding ($n = 51$, 11.54%), and pigmentation ($n = 97$, 21.95%). The median ages at the first clinical visit corresponding to the different symptoms were 12 (8-20) years, 11 (8-18) years, 3 (2-9) years, 16 (11-20) years, and 12 (6-18) years, respectively.



Supplementary Figure 2 Mean age of per surgical procedures. The average age at each procedure was 15.4 ± 7.71 years for the first; 19.8 ± 8.15 years for the second; 21.6 ± 9.64 years for the third; 23.6 ± 11.2 years for the fourth; and 29.5 ± 6.36 years for the fifth and 40 years for the sixth.



Supplementary Figure 3 Stratified analysis of the risk factors for the first surgical procedure. A-D: A significant difference in the risk of first surgery was observed between cases with a positive family history of PJS and sporadic cases (d), whereas no significant differences in the risk of first surgery were observed between females and males (a), between patients with sparse and dense pigmentation (b), or between patients with urban and rural register (c).



Supplementary Figure 4 Stratified analysis of the risk factors for the second surgery. A-D: No significant differences were observed in the risk of a second surgical procedure between females and males (a), or between patients with sparse and dense pigmentation (b), or between patients with urban and rural register (c), or between patients with a positive family history of PJS and sporadic cases (d).