**Supplementary File 19. Participants’ characteristics for the training and validation cohorts.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Training cohort (n=60) |  | Validation cohort (n=124) |
|  | CRC | AA | NC |  | CRC | AA | NC |
| Number | 31 | 19 | 10 |  | 47 | 24 | 53 |
| Sex |  |  |  |  |  |  |  |
|  Male | 18 | 11 | 6 |  | 36 | 20 | 36 |
|  Female | 13 | 8 | 4 |  | 11 | 4 | 17 |
| Age |  |  |  |  |  |  |  |
|  >55 | 23 | 13 | 7 |  | 37 | 16 | 30 |
|  ≤55 | 8 | 6 | 3 |  | 10 | 8 | 23 |
| Stage |  |  |  |  |  |  |  |
|  I | 31 | - | - |  | 23 | - | - |
|  II-III | 0 | - | - |  | 24 | - | - |
| Tumor size |  |  |  |  |  |  |  |
|  ≥1cm | 25 | 10 | - |  | 31 | 14 | - |
|  <1cm | 6 | 9 | - |  | 16 | 10 | - |
| Location |  |  |  |  |  |  |  |
|  Right colon | 5 | 5 | - |  | 9 | 5 | - |
|  Left colon | 17 | 8 | - |  | 22 | 13 | - |
|  Rectum | 9 | 6 | - |  | 16 | 6 | - |
| Yamada\_subtype |  |  |  |  |  |  |
|  I | 8 | 7 | - |  | 10 | 7 | - |
|  II | 8 | 6 | - |  | 9 | 9 | - |
|  III/IV | 15 | 6 | - |  | 28 | 8 | - |