

## Supplementary file 1

| <b>Table S1.</b> Relative risk of outcomes in patients with Ulcerative colitis based on patients' age at diagnosis (early- and elderly-onset) adjusted by disease duration and gender. |                                |         |                           |         |                           |         |
|--|--------------------------------|---------|---------------------------|---------|---------------------------|---------|
| Variable<br>(Referent group)   | Proctitis                      |         | Left-sided Colitis        |         | Pancolitis                |         |
|  | Relative Risk<br>(95% CI)      | P-Value | Relative Risk<br>(95% CI) | P-Value | Relative Risk<br>(95% CI) | P-Value |
| Age at diagnosis (early-onset)   | 1.4 (0.8, 2.3)                 | 0.685   | 1.7 (1.3, 2.3)            | <0.001* | 0.6 (0.4, 0.8)            | <0.001* |
| Years of disease duration  | 0.9 (0.9, 1.01)                | 0.254   | 0.9 (0.9, 0.9)            | <0.001* | 0.9 (0.9, 0.9)            | <0.001* |
| Gender (Female)  | 1.3 (0.8, 2.1)                 | 0.267   | 0.9 (0.7, 1.3)            | 0.749   | 1.2 (0.9, 1.5)            | 0.142   |
| Variable<br>(Referent group)   | Prednisolone                   |         | Immunomodulator           |         | Anti-TNF                  |         |
|  | Relative Risk<br>(95% CI)      | P-Value | Relative Risk<br>(95% CI) | P-Value | Relative Risk<br>(95% CI) | P-Value |
| Age at diagnosis (early-onset)   | 0.5 (0.3, 0.7)                 | 0.001*  | 0.5 (0.4, 0.7)            | <0.001* | 0.5 (0.3, 0.7)            | <0.001* |
| Years of disease duration  | 1.0 (0.9,1.0)                  | 0.462   | 0.9 (0.9, 1.1)            | 0.937   | 1.0 (0.9, 1.0)            | 0.162   |
| Gender (Female)  | 0.8 (0.6, 1.2)                 | 0.457   | 0.9 (0.7,1.1)             | 0.502   | 0.9 (0.7, 1.1)            | 0.502   |
| Variable<br>(Referent group)   | Extraintestinal Manifestations |         | Aggressive Phenotype      |         |                           |         |
|  | Relative Risk<br>(95% CI)      | P-Value | Relative Risk<br>(95% CI) | P-Value |                           |         |
| Age at diagnosis (early-onset)   | 0.5 (0.4, 0.6)                 | <0.001* | 0.7 (0.6, 0.9)            | 0.005*  |                           |         |
| Years of disease duration  | 1.01 (1.01, 1.02)              | <0.001* | 0.9 (0.9, 1.0)            | 0.141   |                           |         |
| Gender (Female)  | 0.97 (0.97, 0.97)              | <0.001* | 1.1 (0.9, 1.1)            | 0.341   |                           |         |

5-ASA; 5-Aminosalicyclic Acid; Anti-TNF; Anti-Tumor necrosis factor

| <b>Table S2.</b> Relative risk of outcomes in patients with Crohn's disease based on patients' age at diagnosis (early- and elderly-onset) adjusted by disease duration and gender. |                           |                 |                           |                 |                                |                 |                           |                 |
|---|---------------------------|-----------------|---------------------------|-----------------|--------------------------------|-----------------|---------------------------|-----------------|
| Variable<br>(Referent group)  | Ileal                     |                 | Colonic                   |                 | Ileocolonic                    |                 | IBD-related Surgery       |                 |
|   | Relative Risk<br>(95% CI) | <i>P</i> -Value | Relative Risk<br>(95% CI) | <i>P</i> -Value | Relative Risk<br>(95% CI)      | <i>P</i> -Value | Relative Risk<br>(95% CI) | <i>P</i> -Value |
| Age at diagnosis (early-onset)  | 1.9 (1.2, 3.3)            | 0.009*          | 1.7 (0.8, 3.7)            | 0.190           | 0.4 (0.2, 0.9)                 | 0.018*          | 0.4 (0.3, 0.8)            | 0.003*          |
| Years of disease duration   | 0.9 (0.9, 1.0)            | 0.419           | 0.9 (0.9, 1.0)            | 0.301           | 0.9 (0.9, 1.0)                 | 0.126           | 1.03 (1.03, 1.03)         | <0.001*         |
| Gender (Female)   | 1.1 (0.6, 1.8)            | 0.749           | 0.7 (0.3, 1.4)            | 0.318           | 1.2 (0.7, 1.8)                 | 0.530           | 0.7 (0.7, 0.7)            | <0.001*         |
| Variable<br>(Referent group)  | Fistulizing               |                 | Strictureing              |                 | Extraintestinal Manifestations |                 | Aggressive phenotype      |                 |
|   | Relative Risk<br>(95% CI) | <i>P</i> -Value | Relative Risk (95% CI)    | <i>P</i> -Value | Relative Risk (95% CI)         | <i>P</i> -Value | Relative Risk (95% CI)    | <i>P</i> -Value |
| Age at diagnosis (early-onset)  | 1.4 (0.9, 2.1)            | 0.168           | 0.2 (0.1, 0.8)            | 0.018*          | 2.0 (1.4, 2.5)                 | <0.001*         | 0.8 (0.6, 1.01)           | 0.069           |
| Years of disease duration   | 0.9 (0.9, 0.9)            | <0.020*         | 1.0 (0.9, 1.0)            | 0.550           | 1.01 (1.01, 1.01)              | <0.001*         | 1.0 (0.9, 1.0)            | 0.509           |
| Gender (Female)   | 0.9 (0.6, 1.5)            | 0.881           | 0.6 (0.3, 1.1)            | 0.064           | 1.03 (1.03, 1.03)              | <0.001*         | 1.1 (0.9, 1.3)            | 0.259           |
| Variable<br>(Referent group)  | 5-ASA                     |                 | Prednisolone              |                 | Immunomodulator                |                 | Anti-TNF                  |                 |
|   | Relative Risk<br>(95% CI) | <i>P</i> -Value | Relative Risk<br>(95% CI) | <i>P</i> -Value | Relative Risk<br>(95% CI)      | <i>P</i> -Value | Relative Risk<br>(95% CI) | <i>P</i> -Value |
| Age at diagnosis (early-onset)  | 0.7 (0.6, 0.9)            | <0.001*         | 0.2 (0.1, 0.7)            | 0.005*          | 0.5 (0.3, 0.7)                 | 0.001*          | 0.6 (0.4, 0.8)            | 0.005*          |
| Years of disease duration   | 1.003 (1.003, 1.003)      | <0.001*         | 1.01 (0.9, 1.03)          | 0.356           | 1.01 (1.0, 1.02)               | 0.043*          | 1.0 (0.9, 1.0)            | 0.267           |
| Gender (Female)   | 1.02 (1.02, 1.02)         | <0.001*         | 0.9 (0.5, 1.5)            | 0.706           | 1.2 (0.9, 1.5)                 | 0.118           | 1.1 (0.8, 1.4)            | 0.417           |

5-ASA, 5-Aminosalicylic Acid; Anti-TNF, Anti-Tumor necrosis factor