

**Supplementary Table I.** Demographic and clinical features of the patients involved in the study

| Sample code | Sex | Age | Endo +/- | Mayo Score | Montreal Score | Hist+/- | GEBOES Grading | GEBOES Score | Treatment    | Disease duration (years) |
|-------------|-----|-----|----------|------------|----------------|---------|----------------|--------------|--------------|--------------------------|
| UC_001_End+ | F   | 32  | +        | 2          | E2             | +       | 5              | 5.3          | anti-TNF     | 7                        |
| UC_003_End+ | M   | 42  | +        | 1          | E3             | +       | 1              | 1.2          | 5-ASA        | 9                        |
| UC_004_End+ | M   | 32  | +        | 2          | E2             | +       | 5              | 5.2          | AZA          | 4                        |
| UC_005_End+ | M   | 56  | +        | 3          | E3             | +       | 5              | 2.3          | No treatment | 0                        |
| UC_006_End+ | M   | 48  | +        | 2          | E2             | +       | 4              | 4.3          | 5-ASA        | 1                        |
| UC_007_End+ | M   | 22  | +        | 2          | E2             | +       | 3              | 3.1          | AZA          | 2                        |
| UC_010_End+ | F   | 29  | +        | 1          | E2             | +       | 5              | 5.1          | 5-ASA        | 2                        |
| UC_011_End+ | M   | 66  | +        | 2          | E2             | +       | 5              | 5.4          | 5-ASA        | 6                        |
| UC_012_End+ | M   | 51  | +        | 2          | E3             | +       | 3              | 3.2          | 5-ASA        | 2                        |
| UC_013_End+ | F   | 60  | +        | 2          | E2             | +       | 3              | 3.3          | 5-ASA        | 5                        |
| UC_014_End+ | M   | 67  | +        | 2          | E2             | +       | 5              | 5.3          | No treatment | 0                        |
| UC_015_End+ | M   | 38  | +        | 3          | E1             | +       | 5              | 5.3          | No treatment | 0                        |
| UC_016_End+ | M   | 34  | +        | 3          | E3             | +       | 5              | 5.3          | anti-TNF     | 1                        |
| UC_017_End+ | M   | 60  | +        | 2          | E2             | +       | 5              | 5.1          | 5-ASA        | 10                       |
| UC_018_End+ | M   | 49  | +        | 2          | E2             | +       | 5              | 5.3          | No treatment | 0                        |
| UC_019_End+ | M   | 29  | +        | 2          | E3             | +       | 3              | 3.2          | 5-ASA        | 2                        |
| UC_020_End+ | F   | 50  | +        | 1          | E2             | +       | 5              | 5.1          | 5-ASA        | 5                        |
| UC_021_End+ | M   | 50  | +        | 1          | E1             | +       | 5              | 5.3          | 5-ASA        | 2                        |
| UC_022_End+ | M   | 41  | +        | 2          | E2             | +       | 2              | 2.1          | No treatment | 1                        |
| UC_023_End+ | M   | 64  | +        | 2          | E2             | +       | 3              | 3.1          | 5-ASA        | 4                        |
| UC_025_End+ | M   | 32  | +        | 2          | E3             | +       | 3              | 3.0          | AZA          | 3                        |
| UC_027_End+ | M   | 42  | +        | 2          | E3             | +       | 3              | 3.0          | 5-ASA        | 2                        |
| UC_028_End+ | M   | 31  | +        | 3          | E3             | +       | 3              | 3.1          | AZA          | 2                        |
| UC_029_End+ | F   | 30  | +        | 2          | E3             | +       | 3              | 3.0          | AZA          | 1                        |
| UC_030_End+ | M   | 55  | +        | 2          | E3             | +       | 4              | 4.0          | No treatment | 0                        |

| Sample code  | Sex | Age | Endo +/- | Mayo Score | Montreal Score | Hist+/- | GEBOES Grading | GEBOES Score | Treatment | Disease duration (years) |
|--------------|-----|-----|----------|------------|----------------|---------|----------------|--------------|-----------|--------------------------|
| UC_001_End-a | F   | 33  | -        | 0          | E2             | -       | 0              | 0.2          | anti-TNF  | 8                        |
| UC_002_End-b | M   | 38  | -        | 0          | E2             | -       | 0              | 0.1          | 5-ASA     | 12                       |
| UC_002_End-  | M   | 39  | -        | 0          | E2             | -       | 0              | 0.1          | 5-ASA     | 13                       |
| UC_003_End-  | M   | 42  | -        | 0          | E3             | -       | 0              | 0.2          | 5-ASA     | 9                        |
| UC_004_End-  | M   | 33  | -        | 0          | E2             | -       | 0              | 0.2          | AZA       | 5                        |
| UC_006_End-  | M   | 49  | -        | 0          | E2             | -       | 0              | 0.3          | 5-ASA     | 2                        |
| UC_008_End-  | M   | 67  | -        | 0          | E2             | -       | 0              | 0.0          | AZA       | 11                       |
| UC_009_End-  | M   | 38  | -        | 0          | E1             | -       | 0              | 0.2          | 5-ASA     | 4                        |
| UC_011_End-  | M   | 67  | -        | 0          | E2             | -       | 0              | 0.3          | 5-ASA     | 2                        |
| UC_017_End-  | M   | 61  | -        | 0          | E2             | -       | 0              | 0.1          | 5-ASA     | 11                       |
| UC_020_End-  | F   | 51  | -        | 0          | E2             | -       | 0              | 0.2          | 5-ASA     | 6                        |
| UC_022_End-  | M   | 41  | -        | 0          | E2             | -       | 0              | 0.3          | 5-ASA     | 1                        |
| UC_026_End-  | F   | 25  | -        | 0          | E3             | -       | 0              | 0.3          | AZA       | 1                        |
| UC_010_End-  | F   | 29  | -        | 0          | E2             | +       | 3              | 3.2          | 5-ASA     | 2                        |
| UC_012_End-  | M   | 51  | -        | 0          | E3             | +       | 2              | 2.1          | 5-ASA     | 2                        |
| UC_019_End-  | M   | 29  | -        | 0          | E3             | +       | 2              | 2.1          | 5-ASA     | 2                        |
| UC_023_End-  | M   | 64  | -        | 0          | E2             | +       | 2              | 2.2          | 5-ASA     | 4                        |
| UC_024_End-  | M   | 40  | -        | 0          | E2             | +       | 2              | 2.0          | 5-ASA     | 1                        |

**Supplementary Table II. RT<sup>2</sup> Profiler PCR Array (96-well plates):** from the position 1 to 84 are reported the transcripts analyzed; from 85 to 89 the housekeeping genes included in the array, and from 90 to 96 the quality control assays.

|    | Symbol   | Description   |
|----|----------|---|
| 1  | ABCB1    | ATP-binding cassette, sub-family B (MDR/TAP), member 1                            |
| 2  | ALDOB    | Aldolase B, fructose-bisphosphate   |
| 3  | ATG16L1  | ATG16 autophagy related 16-like 1 ( <i>S. cerevisiae</i> )                        |
| 4  | C3       | Complement component 3  |
| 5  | C4BPB    | Complement component 4 binding protein, beta                                      |
| 6  | CASP1    | Caspase 1, apoptosis-related cysteine peptidase (interleukin 1, beta, convertase) |
| 7  | CCL11    | Chemokine (C-C motif) ligand 11   |
| 8  | CCL2     | Chemokine (C-C motif) ligand 2  |
| 9  | CCL20    | Chemokine (C-C motif) ligand 20   |
| 10 | CCL25    | Chemokine (C-C motif) ligand 25   |
| 11 | CCL5     | Chemokine (C-C motif) ligand 5  |
| 12 | CCR1     | Chemokine (C-C motif) receptor 1  |
| 13 | CCR2     | Chemokine (C-C motif) receptor 2  |
| 14 | CCR5     | Chemokine (C-C motif) receptor 5  |
| 15 | CCR9     | Chemokine (C-C motif) receptor 9  |
| 16 | CD55     | CD55 molecule, decay accelerating factor for complement (Cromer blood group)      |
| 17 | CHI3L1   | Chitinase 3-like 1 (cartilage glycoprotein-39)                                    |
| 18 | CR2      | Complement component (3d/Epstein Barr virus) receptor 2                           |
| 19 | CSTA     | Cystatin A (stefin A)   |
| 20 | CX3CL1   | Chemokine (C-X3-C motif) ligand 1   |
| 21 | CX3CR1   | Chemokine (C-X3-C motif) receptor 1   |
| 22 | CXCL1    | Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)    |
| 23 | CXCL10   | Chemokine (C-X-C motif) ligand 10   |
| 24 | CXCL11   | Chemokine (C-X-C motif) ligand 11   |
| 25 | CXCL12   | Chemokine (C-X-C motif) ligand 12   |
| 26 | CXCL2    | Chemokine (C-X-C motif) ligand 2  |
| 27 | CXCL3    | Chemokine (C-X-C motif) ligand 3  |
| 28 | CXCL9    | Chemokine (C-X-C motif) ligand 9  |
| 29 | CXCR1    | Chemokine (C-X-C motif) receptor 1  |
| 30 | CXCR3    | Chemokine (C-X-C motif) receptor 3  |
| 31 | DEFA5    | Defensin, alpha 5, Paneth cell-specific   |
| 32 | DEFA6    | Defensin, alpha 6, Paneth cell-specific   |
| 33 | EDN3     | Endothelin 3  |
| 34 | EGR3     | Early growth response 3   |
| 35 | FPR1     | Formyl peptide receptor 1   |
| 36 | GCG      | Glucagon  |
| 37 | HLA-QA1  | Major histocompatibility complex, class II, DQ alpha 1                            |
| 38 | HLA-DRA  | Major histocompatibility complex, class II, DR alpha                              |
| 39 | HLA-DRB1 | Major histocompatibility complex, class II, DR beta 1                             |
| 40 | HSP90B1  | Heat shock protein 90kDa beta (Grp94), member 1                                   |

|    |        |  |
|----|--------|--|
| 41 | HSPA5  | Heat shock 70kDa protein 5 (glucose-regulated protein, 78kDa)                    |
| 42 | IFNG   | Interferon, gamma  |
| 43 | IL13   | Interleukin 13   |
| 44 | IL17A  | Interleukin 17A  |
| 45 | IL1B   | Interleukin 1, beta  |
| 46 | IL1RN  | Interleukin 1 receptor antagonist  |
| 47 | IL23A  | Interleukin 23, alpha subunit p19  |
| 48 | IL2RA  | Interleukin 2 receptor, alpha  |
| 49 | IL5    | Interleukin 5 (colony-stimulating factor, eosinophil)                            |
| 50 | IL6    | Interleukin 6 (interferon, beta 2)   |
| 51 | IL8    | Interleukin 8  |
| 52 | IRF5   | Interferon regulatory factor 5   |
| 53 | ISG15  | ISG15 ubiquitin-like modifier  |
| 54 | ITGB2  | Integrin, beta 2 (complement component 3 receptor 3 and 4 subunit)               |
| 55 | LCN2   | Lipocalin 2  |
| 56 | LTB    | Lymphotoxin beta (TNF superfamily, member 3)                                     |
| 57 | LYZ    | Lysozyme   |
| 58 | MMP1   | Matrix metallopeptidase 1 (interstitial collagenase)                             |
| 59 | MMP10  | Matrix metallopeptidase 10 (stromelysin 2)                                       |
| 60 | MMP3   | Matrix metallopeptidase 3 (stromelysin 1, progelatinase)                         |
| 61 | MMP7   | Matrix metallopeptidase 7 (matrilysin, uterine)                                  |
| 62 | MUC1   | Mucin 1, cell surface associated   |
| 63 | NOD2   | Nucleotide-binding oligomerization domain containing 2                           |
| 64 | NOS2   | Nitric oxide synthase 2, inducible   |
| 65 | NR3C2  | Nuclear receptor subfamily 3, group C, member 2                                  |
| 66 | PCK1   | Phosphoenolpyruvate carboxykinase 1 (soluble)                                    |
| 67 | PECAM1 | Platelet/endothelial cell adhesion molecule                                      |
| 68 | REG1A  | Regenerating islet-derived 1 alpha   |
| 69 | REG1B  | Regenerating islet-derived 1 beta  |
| 70 | S100A8 | S100 calcium binding protein A8  |
| 71 | S100A9 | S100 calcium binding protein A9  |
| 72 | SAA1   | Serum amyloid A1   |
| 73 | SELE   | Selectin E   |
| 74 | SELL   | Selectin L   |
| 75 | SOD2   | Superoxide dismutase 2, mitochondrial  |
| 76 | STAT1  | Signal transducer and activator of transcription 1, 91kDa                        |
| 77 | STAT3  | Signal transducer and activator of transcription 3 (acute-phase response factor) |
| 78 | TDO2   | Tryptophan 2,3-dioxygenase   |
| 79 | TFF1   | Trefoil factor 1   |
| 80 | TIMP1  | TIMP metallopeptidase inhibitor 1  |
| 81 | TNF    | Tumor necrosis factor  |
| 82 | TYK2   | Tyrosine kinase 2  |
| 83 | UBD    | Ubiquitin D  |
| 84 | VWF    | Von Willebrand factor  |
| 85 | ACTB   | Actin, beta  |

|           |       |   |
|-----------|-------|---|
| <b>86</b> | B2M   | <b>Beta-2-microglobulin</b>                     |
| <b>87</b> | GAPDH | <b>Glyceraldehyde-3-phosphate dehydrogenase</b> |
| <b>88</b> | HPRT1 | <b>Hypoxanthine phosphoribosyltransferase 1</b> |
| <b>89</b> | RPLP0 | <b>Ribosomal protein, large, P0</b>             |
| <b>90</b> | HGDC  | <b>Human Genomic DNA Contamination</b>          |
| <b>91</b> | RTC   | <b>Reverse Transcription Control</b>            |
| <b>92</b> | RTC   | <b>Reverse Transcription Control</b>            |
| <b>93</b> | RTC   | <b>Reverse Transcription Control</b>            |
| <b>94</b> | PPC   | <b>Positive PCR Control</b>                     |
| <b>95</b> | PPC   | <b>Positive PCR Control</b>                     |
| <b>96</b> | PPC   | <b>Positive PCR Control</b>                     |