Multimedia Appendix 1. Characteristics of participants with inflammatory bowel disease (IBD) and those of participants in other IBD cohorts

| Characteristic | Present study | Bhandari[88] | Ediger[89] | De Groof[90] |
|---|---|---|---|---|
| Data collection years | 2014-2016 | 2009-2010 | 2003-2004 | 2004-2012 |
| Study name | - | NHANES[c] | Manitoba IBD Cohort | - |
| Region | Manitoba, Canada | United States | Manitoba, Canada | Netherlands |
| N | 247 | 2325226[d] | 304 | 1461 |
| **Age, yr** mean (SD) | 47.4 (14.8) | | 41 (14.06) | |
| **Age, yr,** n (%) | | | | |
| 20-50 | 122 (49.4) | 50% | e | |
| >50 | 118 (47.8) | 50% | 78 (25.6) | |
| **Sex**, n (%) | | | | |
| Male | 92 (37.2) | 42% | 121 (39.8) | 595 (40.7) |
| Female | 155 (62.7) | 58% | 183 (60.2) | 866 (59.3) |
| **Ethnicity**, n (%) | | | | |
| Caucasian | 210 (85.4) | 81% | 289 (95.1) | |
| Other | 36 (14.6) | 19% | 15 (4.9) | |
| Missing | 1 | 0 | 0 | |
| **Education**, n (%) | | | | |
| <High school | 8 (3.2) | 21% | | |
| High School/ GED | 68 (27.5) | 7% | | |
| Some College | 78 (31.6) | 40% | | |
| ≥College/university | 93 (37.6) | 32% | 76 (25.0) | |
| **Marital Status**, n (%) | | | | |
| Single/never married | 56 (22.7) | 19% | - | |

| | | | | |
|---|---|---|---|---|
| Married/common law | 160 (64.8) | 56% | 201 (66.1) | |
| Divorced/separated/widowed | 31 (12.5) | 25% | - | |
| **Ever smoked** | 138 (55.9) | 51% | | |
| **Current smoker** | 186 (19.3) | - | | |
| **Overweight/obese** | 151 (61.1) | 57% | | |
| **Number of comorbid conditions**[a] | | | | |
| 0 | 138 (55.9) | 29% | | |
| 1 | 73 (29.5) | 44% | | |
| 2 | 26 (10.5) | 21% | | |
| ≥3 | 10 (4.0) | 6% | | |
| Age at IBD onset, yrs mean (SD) | 26.6 (13.2)[b] | | | - |
| Age at IBD diagnosis, yrs mean (SD) | 30.4 (13.4)[b] | | | 35.0 (25-48) |
| **Type of IBD** | | | | |
| Crohn's disease | 153 (61.9) | | 165 (54.2) | 761 (52.1) |
| Ulcerative colitis | 94 (38.1) | | 143 (47.0) | 579 (39.5) |
| Unspecified | 0 (0) | | 0 (0) | 121 (8.3) |
| **Montreal classification UC** | | | | |
| Extent[c] | | | | |
| E1 | 14 (14.9) | | | 178/749 (23.8) |
| E2 | 37 (39.4) | | | 345/749 (46.1) |
| E3 | 39 (41.5) | | | 226/749 (30.2) |
| **Montreal classification CD** | | | | |
| Age at diagnosis[d] | | | | |
| A1 | 20 (13.2) | | | 35/571 (6.1) |
| A2 | 101 (66.9) | | | 370/571 (64.8) |
| A3 | 30 (19.9) | | | 166/571 (29.1) |
| Localization | | | | |
| L1 | 65 (42.5) | | | 172/565 (30.4) |
| L2 | 21 (13.7) | | | 182/565 (32.2) |

| | | |
|---|---|---|
| L3 | 67 (43.8) | 205/565 (36.3) |
| L4 | 5 (3.3) | 6/565 (1.1) |
| Behaviour | | |
| B1 | 63 (41.2) | 299/555 (53.9) |
| B2 | 57 (37.2) | 119/555 (21.4) |
| B3 | 40 (26.1) | 137/555 (24.7) |

a- Self-reported comorbidities in present study: hypertension, diabetes, heart disease (including coronary artery disease, congestive heart failure), liver disease, kidney disease, cancer (breast, lung, colon, skin), chronic lung disease (including asthma, chronic obstructive pulmonary disease). Self-reported comorbidities in NHANES study: hypertension, diabetes, CAD, stroke, CHF, liver disease, kidney disease, asthma, cancer. b- 2 missing age at onset and 3 missing age at diagnosis. c- NHANES = National Health and Nutrition Examination Survey; sample characteristics reported only as percentages. d-NHANES using a multistage, probability sampling design to derive estimates; e-study included individuals under age 20 years, so comparable information not reported