

## Supplementary Table 1- Search strategy:

| Search Strategy |                                                                                                                   |
|-----------------|-------------------------------------------------------------------------------------------------------------------|
| 1               | Exp inflammatory bowel diseases/                                                                                  |
| 2               | inflammatory bowel disease*.ti,ab,kw.                                                                             |
| 3               | inflammatory bowel disorder*.ti,ab,kw.                                                                            |
| 4               | ibd.ti,ab,kw.                                                                                                     |
| 5               | crohn*.ti,ab,kw.                                                                                                  |
| 6               | ulcerative colitis*.ti,ab,kw.                                                                                     |
| 7               | inflam* colitis*.ti,ab,kw.                                                                                        |
| 8               | colitis*.ti,ab,kw.                                                                                                |
| 9               | colitis/                                                                                                          |
| 10              | 1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9                                                                         |
| 11              | diagnos* adj3 delay*.ti,ab,kw.                                                                                    |
| 12              | diagnos* adj3 lag*.ti,ab,kw.                                                                                      |
| 13              | diagnos* adj3 interval*.ti,ab,kw.                                                                                 |
| 14              | ((late* or earl*) adj3 diagnos*).ti,ab,kw.                                                                        |
| 15              | ((late* or earl*) adj3 treat*).ti,ab,kw.                                                                          |
| 16              | ((late* or earl*) adj3 consult*).ti,ab,kw.                                                                        |
| 17              | ((late* or earl*) adj3 refer*).ti,ab,kw.                                                                          |
| 18              | ((late* or earl*) adj3 detect*).ti,ab,kw.                                                                         |
| 19              | (health* adj3 seek*).ti,ab,kw.                                                                                    |
| 20              | (case* adj3 seek*).ti,ab,kw.                                                                                      |
| 21              | (case* adj3 find*).ti,ab,kw.                                                                                      |
| 22              | (delay* adj3 consult*).ti,ab,kw.                                                                                  |
| 23              | (delay* adj3 detect*).ti,ab,kw.                                                                                   |
| 24              | (delay* adj3 interval*).ti,ab,kw.                                                                                 |
| 25              | (delay* adj3 refer*).ti,ab,kw.                                                                                    |
| 26              | (delay* adj3 treat*).ti,ab,kw.                                                                                    |
| 27              | (delay* adj3 seek*).ti,ab,kw.                                                                                     |
| 28              | Delayed diagnosis/                                                                                                |
| 29              | Early diagnosis/                                                                                                  |
| 30              | 11 OR 12 OR 13 OR 14 OR 15 OR 16 OR 17 OR 18 OR 19 OR 20<br>OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27 OR 28 OR 29 |
| 31              | 10 AND 30                                                                                                         |

**Supplementary Table 2: Quality appraisal of included articles**

| Author and Publication Year | Study design                       | Selection                                    |                           | Outcome               |
|-----------------------------|------------------------------------|----------------------------------------------|---------------------------|-----------------------|
|                             |                                    | Representativeness of the cohort             | Ascertainment of Exposure | Assessment of Outcome |
| Kyle, 1971                  | Cross-sectional                    | Somewhat representative                      | Secure records            | No description        |
| Lind, 1985                  | Prospective cohort                 | Somewhat representative                      | Secure records            | Record linkage        |
| Foxworthy, 1985             | Prospective cohort                 | Selected group of users (elderly population) | Secure records            | Self-report           |
| Harper, 1985                | Cross-sectional                    | Selected group of users (elderly population) | Secure records            | Self-report           |
| Langholz, 1991              | Prospective cohort                 | Somewhat representative                      | Secure records            | Record linkage        |
| Munkholm, 1992              | Prospective cohort                 | Somewhat representative                      | Secure records            | Record linkage        |
| Timmer, 1999                | Prospective cohort                 | Truly representative                         | Secure records            | Record linkage        |
| Yang, 2000                  | Retrospective & prospective cohort | Truly representative                         | Secure records            | Self-report           |
| Burgmann, 2006              | Cross-sectional                    | Truly representative                         | Secure records            | Self-report           |
| Albert, 2008                | Cross-sectional                    | Somewhat representative                      | Secure records            | No description        |
| Romberg-Camps, 2009         | Prospective cohort                 | Somewhat representative                      | Secure records            | Record linkage        |
| Guariso, 2010               | Retrospective & prospective cohort | Somewhat representative                      | Secure records            | Record linkage        |
| Vavricka, 2012              | Retrospective cohort               | Truly representative                         | Secure records            | Self-report           |
| Burisch, 2014               | Prospective cohort                 | Truly representative                         | Secure records            | Self-report           |
| Pellino, 2015               | Cross-sectional                    | Somewhat representative                      | Secure records            | Record linkage        |
| Li, 2015                    | Retrospective cohort               | Somewhat representative                      | Secure records            | Record linkage        |
| Manconi, 2015               | Retrospective cohort               | Somewhat representative                      | Secure records            | Self-report           |
| Basaranoglu, 2015           | Retrospective cohort               | Somewhat representative                      | Secure records            | Record linkage        |
| Lin, 2016                   | Retrospective cohort               | Truly representative                         | Secure records            | Record linkage        |
| Lee, 2017                   | Retrospective cohort               | Somewhat representative                      | Secure records            | Record linkage        |
| Cantoro, 2017               | Retrospective cohort               | Truly representative                         | Secure records            | Record linkage        |
| Nguyen, 2017                | Retrospective cohort               | Somewhat representative                      | Secure records            | Record linkage        |
| Nahon, 2018                 | Retrospective &                    | Truly representative                         | Secure records            | Record linkage        |

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|----------------|----------------------|-------------------------|----------------|----------------|
|                | prospective cohort   |                         |                |                |
| Irving, 2018   | Cross-sectional      | Truly representative    | Secure records | Self-report    |
| Szanto, 2018   | Retrospective cohort | Truly representative    | Secure records | Record linkage |
| Banerjee, 2018 | Retrospective cohort | Somewhat representative | Secure records | Record linkage |
| Kang, 2019     | Retrospective cohort | Truly representative    | Secure records | Record linkage |
| Novacek, 2019  | Cross-sectional      | Truly representative    | Secure records | Self-report    |
| Walker, 2020   | Retrospective cohort | Truly representative    | Secure records | Record linkage |
| Gomes, 2021    | Cross-sectional      | Truly representative    | Secure records | Record linkage |
| Chaparro, 2021 | Prospective cohort   | Truly representative    | Secure records | Self-report    |

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