

**Supplementary table 1: Risk of adverse pregnancy and birth outcome among women diagnosed with inflammatory bowel disease with steroids prescriptions during pregnancy compared to those not on steroids.**

| Variable                               | Pregnancies of women with IBD not prescribed steroids during pregnancy (n=1,698) |      | Pregnancies of women with IBD prescribed steroids during pregnancy (n=271) |      | OR (95% CI) (Adjusted <sup>1</sup> ) |
|--|--|------|--|------|--------------------------------------|
|  | No.  | %    | No.  | %    |                                      |
| <b>Pregnancy related complications</b> |  |      |  |      |                                      |
| Postpartum haemorrhage                 | 207  | 12.2 | 22   | 8.1  | 0.61 (0.39-0.96)                     |
| Antepartum haemorrhage                 | 88   | 5.2  | 16   | 5.9  | 1.08 (0.63-1.87)                     |
| Pre-eclampsia/eclampsia                | 30   | 1.8  | 11   | 4.1  | 2.33 (1.13-4.81)                     |
| Venous thromboembolism                 | -  | -    | -  | -    | -                                    |
| Gestational diabetes                   | 35   | 2.1  | 11   | 4.2  | 2.27 (1.34-4.51)                     |
|  |  |      |  |      |                                      |
| <b>Mode of delivery</b>                |  |      |  |      |                                      |
| Assisted <sup>2</sup>                  | 243  | 14.3 | 35   | 12.9 | 0.94 (0.62-1.46)                     |
| Elective caesarean <sup>2</sup>        | 256  | 15.1 | 44   | 16.2 | 1.13 (0.76-1.69)                     |
| Emergency caesarean <sup>2</sup>       | 255  | 15   | 43   | 15.9 | 1.12 (0.77-1.65)                     |
|  |  |      |  |      |                                      |
| <b>Birth outcome</b>                   |  |      |  |      |                                      |
| Adverse birth outcome <sup>3</sup>     | 177  | 10.4 | 45   | 16.6 | 1.60 (1.11-2.32)                     |
| Still birth                            | -  | -    | -  | -    | -                                    |
|  |  |      |  |      |                                      |
| <b>Length of gestation</b>             |  |      |  |      |                                      |
| Pre-term (<37 weeks) <sup>4</sup>      | 134  | 7.9  | 36   | 13.3 | 1.62 (1.07-2.44)                     |
| Prolonged (>41 weeks) <sup>4</sup>     | 132  | 7.8  | 16   | 5.9  | 0.78 (0.46-1.34)                     |
|  |  |      |  |      |                                      |
| <b>Birth weight</b>                    |  |      |  |      |                                      |
| >4500 grams <sup>5</sup>               | -  | -    | -  | -    | -                                    |
| <2500 grams <sup>5</sup>               | 85   | 5    | 22   | 8.1  | 1.82 (1.09-3.05)                     |
| Missing <sup>5</sup>                   | 276  | 16.3 | 67   | 24.7 | 1.73 (1.26-2.38)                     |

<sup>1</sup>Adjusted for smoking status, age, ethnicity, diabetes, calendar year and BMI

<sup>2</sup>Analysis based on normal vaginal delivery

<sup>3</sup>Includes pregnancies of women resulting in stillbirth, pre-term birth or infant born with low birth weight

<sup>4</sup>Analysis based on pregnancies with normal gestational length (37-41 weeks)

<sup>5</sup>Analysis based on pregnancies resulting in live births with baby's weight between 2500-4500 grams

- <3 cases omitted.

**Supplementary table 2: Risk of adverse pregnancy and birth outcome among women diagnosed with CD compared to those without IBD excluding perianal Crohn's disease.**

| Variable                               | Pregnancies of women without IBD (362,394) |      | Pregnancies of women without perianal Crohn's (n=878) |      | OR (95% CI) (Adjusted <sup>1</sup> ) |
|--|--|------|---|------|--------------------------------------|
|  | No.  | %    | No.   | %    |                                      |
| <b>Pregnancy related complications</b> |  |      |   |      |                                      |
| Postpartum haemorrhage                 | 35,197                                     | 9.7  | 105   | 12   | 1.25 (1.01-1.54)                     |
| Antepartum haemorrhage                 | 17,052                                     | 4.7  | 49  | 5.6  | 1.24 (0.93-1.65)                     |
| Pre-eclampsia/eclampsia                | 8,261                                      | 2.3  | 20  | 2.3  | 1.06 (0.64-1.76)                     |
| Gestational diabetes                   | 6,667                                      | 1.9  | 11  | 1.3  | 0.69 (0.35-1.38)                     |
| <b>Mode of delivery</b>                |  |      |   |      |                                      |
| Assisted <sup>2</sup>                  | 43,846                                     | 12.1 | 117   | 13.3 | 1.21 (0.99-1.49)                     |
| Elective caesarean <sup>2</sup>        | 35,301                                     | 9.7  | 128   | 14.6 | 1.61 (1.28-2.01)                     |
| Emergency caesarean <sup>2</sup>       | 50,025                                     | 13.8 | 135   | 15.4 | 1.25 (1.01-1.53)                     |
| <b>Birth outcome</b>                   |  |      |   |      |                                      |
| Adverse birth outcome <sup>3</sup>     | 31,296                                     | 8.6  | 107   | 12.2 | 1.48 (1.19-1.84)                     |
| <b>Length of gestation</b>             |  |      |   |      |                                      |
| Pre-term (<37 weeks) <sup>4</sup>      | 23,525                                     | 6.5  | 81  | 9.2  | 1.46 (1.14-1.88)                     |
| Prolonged (>41 weeks) <sup>4</sup>     | 33,999                                     | 9.4  | 74  | 8.4  | 0.92 (0.73-1.17)                     |
| <b>Birth weight</b>                    |  |      |   |      |                                      |
| <2500 grams <sup>5</sup>               | 16,406                                     | 4.5  | 56  | 6.4  | 1.48 (1.11-1.98)                     |
| Missing <sup>5</sup>                   | 68,083                                     | 18.8 | 182   | 20.7 | 1.19 (1.00-1.42)                     |

<sup>1</sup>Adjusted for smoking status, age, ethnicity, diabetes, calendar year and BMI

<sup>2</sup>Analysis based on pregnancies not resulting in normal vaginal delivery

<sup>3</sup>Includes pregnancies of women resulting in stillbirth, pre-term birth or infant born with low birth weight

<sup>4</sup>Analysis based on pregnancies with normal gestational length (37-41 weeks)

<sup>5</sup>Analysis based on pregnancies resulting in live births with baby's weight between 2500-4500 grams

Note: <3 cases omitted.

**Supplementary table 3: Risk of adverse pregnancy and birth outcome among women diagnosed with CD with surgery compared women without surgical intervention. The analysis is split by surgery type**

| Variables                          | Without surgery<br>(n=709) |      | Small/Large bowel surgery<br>(N=231) |      |  | Perianal surgery<br>(N=95) |      |  |
|------------------------------------|----------------------------|------|--------------------------------------|------|--|----------------------------|------|--|
|                                    | No.                        | %    | No.                                  | %    | OR (95%CI)<br>(Adjusted <sup>1</sup> ) | No.                        | %    | OR (95%CI)<br>(Adjusted <sup>1</sup> ) |
| <b>Postpartum haemorrhage</b>      | 84                         | 11.8 | 25                                   | 10.8 | 0.89 (0.52-1.50)                       | 16                         | 16.8 | 1.32 (0.69-2.52)                       |
| <b>Antepartum haemorrhage</b>      | 40                         | 5.6  | 12                                   | 5.2  | 1.04 (0.87-0.97)                       | *                          | *    | 0.38 (0.09-1.62)                       |
| <b>Mode of delivery</b>            |                            |      |                                      |      |  |                            |      |  |
| Assisted <sup>2</sup>              | 94                         | 13.3 | 33                                   | 14.3 | 1.26 (0.79-2.00)                       | 12                         | 12.6 | 1.63 (0.79-3.32)                       |
| Elective caesarean <sup>2</sup>    | 99                         | 14   | 50                                   | 21.6 | 1.66 (1.04-2.67)                       | 36                         | 37.9 | 4.27 (2.38-7.68)                       |
| Emergency caesarean <sup>2</sup>   | 108                        | 15.2 | 37                                   | 16.0 | 1.28 (0.80-2.05)                       | 16                         | 16.8 | 1.96 (0.99-3.89)                       |
| <b>Length of gestation</b>         |                            |      |                                      |      |  |                            |      |  |
| Pre-term (<37 weeks) <sup>3</sup>  | 65                         | 9.2  | 22                                   | 9.5  | 1.08 (0.64-1.82)                       | 7                          | 7.4  | 0.76 (0.33-1.70)                       |
| Prolonged (>41 weeks) <sup>3</sup> | 54                         | 7.6  | 20                                   | 8.7  | 1.27 (0.73-2.20)                       | 6                          | 6.3  | 1.27 (0.68-2.35)                       |
| <b>Birth weight</b>                |                            |      |                                      |      |  |                            |      |  |
| <2500 grams <sup>6</sup>           | 43                         | 6.1  | 16                                   | 6.9  | 1.15 (0.59-2.23)                       | *                          | *    | 0.56 (0.15-1.99)                       |

<sup>1</sup>Adjusted for smoking status, age, ethnicity, diabetes, calendar year and BMI

<sup>2</sup>Analysis based on normal vaginal delivery

<sup>3</sup>Analysis based on pregnancies with normal gestational length

<sup>4</sup>Analysis based on live birth with normal birth weight

- No cases.

\*Estimates based on less than 5 events

**Supplementary table 4: Risk of adverse pregnancy and birth outcome among women diagnosed with UC with surgery compared women without surgical intervention.**

| Variables                         | UC without surgery<br>(n=835) |      | UC with surgery<br>(n=49)              | US with surgery<br>(restricting to pouch<br>surgery)<br>(n=37) |
|-----------------------------------|-------------------------------|------|--|--|
|                                   | No.                           | %    | OR (95%CI)<br>(Adjusted <sup>1</sup> ) | OR (95%CI)<br>(Adjusted <sup>1</sup> )                         |
| <b>Postpartum haemorrhage</b>     | 94                            | 11.3 | 0.54 (0.16-1.82)                       | 0.93 (0.20-4.32)   |
| <b>Antepartum haemorrhage</b>     | 43                            | 5.1  | 1.61 (0.52-4.98)                       | 3.02 (0.92-1.03)   |
| <b>Mode of delivery</b>           |                               |      |  |  |
| Elective caesarean <sup>2</sup>   | 96                            | 11.5 | 13.01 (5.68-29.80)                     | 20.41 (5.78-71.99)   |
| Emergency caesarean <sup>2</sup>  | 122                           | 14.6 | 1.89 (0.55-6.52)                       | 4.68 (0.77-28.25)  |
| <b>Length of gestation</b>        |                               |      |  |  |
| Pre-term (<37 weeks) <sup>3</sup> | 68                            | 8.1  | 1.89 (0.77-4.63)                       | 3.00 (0.91-9.88)   |
| <b>Birth weight</b>               |                               |      |  |  |
| <2500 grams <sup>6</sup>          | 39                            | 4.7  | 1.38 (0.42-4.45)                       | 2.93 (0.55-15.6)   |

<sup>1</sup>Adjusted for smoking status, age, ethnicity, diabetes, calendar year and BMI

<sup>2</sup>Analysis based on normal vaginal delivery

<sup>3</sup>Analysis based on pregnancies with normal gestational length

<sup>4</sup>Analysis based on live birth with normal birth weight

- No cases.

