**S4 Table. Complete case analysis of maternal and perinatal outcomes following successful VBAC and in-labor non-elective repeat cesarean section compared to ERCS**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Successful VBAC vs. ERCS** |  | **In-labor non-elective repeat cesarean section vs. ERCS** |
|  | **Base model1  relative risk (95% CI)** | **Model A2 relative risk (95% CI)** | **Model B3 relative risk (95% CI)** | **Model C4 relative risk (95% CI)** |  | **Base model1  relative risk (95% CI)** | **Model A2 relative risk (95% CI)** | **Model B3 relative risk (95% CI)** | **Model C4 relative risk (95% CI)** |
| ***Maternal outcomes*** |  |  |  |  |  |  |  |  |  |
| Uterine rupture | 1.14 (0.51-2.56)P=0.744 | 1.16 (0.51-2.60)P=0.727 | NC | - |  | **19.28** **(11.09-33.53)****P<0.001** | **19.28** **(10.97-33.88)****P<0.001** | NC | - |
| Peripartum hysterectomy | 0.33 (0.10-1.10)P=0.071 | NC | NC | - |  | 0.82 (0.24-2.76)P=0.752 | NC | NC | - |
| Blood transfusion† | **1.95** **(1.61-2.36)****P<0.001** | **1.93** **(1.59-2.34)****P<0.001** | **2.37** **(1.74-3.22)****P<0.001** | - |  | **2.54** **(2.02-3.21**)**P<0.001** | **2.51** **(1.99-3.17**)**P<0.001** | **3.60****(2.56-5.07**)**P<0.001** | - |
| Puerperal sepsis‡¥ | 1.17 (0.79-1.73)P=0.430 | 1.15 (0.78-1.70)P=0.489 | 0.99 (0.55-1.78)P=0.968 | - |  | **3.14** **(2.12-4.66)****P<0.001** | **3.08** **(2.08-4.57)****P<0.001** | 1.84 (0.95-3.57)P=0.071 | - |
| Other puerperal infection‡¥ | **0.66** **(0.58-0.75**)**P<0.001** | **0.65** **(0.57-0.74**)**P<0.001** | **0.63** **(0.51-0.77**)**P<0.001** | - |  | **1.88** **(1.65-2.13**)**P<0.001** | **1.87** **(1.65-2.13**)**P<0.001** | **1.99** **(1.64-2.41**)**P<0.001** | - |
| Surgical injury | **0.11** **(0.03-0.47**)**P=0.003** | **0.12** **(0.03-0.48**)**P=0.003** | NC | - |  | **6.67** **(4.37-10.18)****P<0.001** | **6.92** **(4.56-10.49)****P<0.001** | NC | - |
| Length of postnatal hospital stay >5 days†‡¥ | **0.60** **(0.53-0.67**)**P<0.001** | **0.60** **(0.53-0.67**)**P<0.001** | **0.64** **(0.54-0.76**)**P<0.001** | - |  | **1.63** **(1.46-1.82**)**P<0.001** | **1.67** **(1.50-1.87**)**P<0.001** | **1.73** **(1.44-2.08**) **P<0.001** | - |
| Readmission to hospital within 42 days of birth†‡¥ | **0.82** **(0.74-0.92**)**P<0.001** | **0.82** **(0.73-0.91**) **P<0.001** | 0.95 (0.81-1.11)P=0.495 | - |  | 1.02 (0.88-1.17)P=0.835 | 1.01 (0.88-1.16)P=0.899 | 1.20 (0.98-1.48)P=0.078 | - |
| Any breastfeeding at birth or hospital discharge | **1.17** **(1.15-1.19**)**P<0.001** | **1.19** **(1.17-1.21**)**P<0.001** | **1.19** **(1.17-1.21**)**P<0.001** | **1.16** **(1.14-1.19**)**P<0.001** |  | **1.21** **(1.19-1.24**)**P<0.001** | **1.20** **(1.18-1.22**)**P<0.001** | **1.15** **(1.12-1.18**)**P<0.001** | **1.12****(1.09-1.15**)**P<0.001** |
| Exclusive breastfeeding at 6-8 week review | **1.34** **(1.30-1.38**) **P<0.001** | **1.40** **(1.36-1.44**) **P<0.001** | **1.40** **(1.35-1.45**) **P<0.001** | **1.33****(1.28-1.38**) **P<0.001** |  | **1.34** **(1.29-1.39**) **P<0.001** | **1.32** **(1.27-1.37**) **P<0.001** | **1.31** **(1.25-1.38**) **P<0.001** | **1.25****(1.18-1.31**) **P<0.001** |
| Any breastfeeding at 6-8 week review | **1.25** **(1.22-1.28**) **P<0.001** | **1.29** **(1.26-1.32**) **P<0.001** | **1.31** **(1.27-1.35**) **P<0.001** | **1.26** **(1.22-1.30**) **P<0.001** |  | **1.31** **(1.27-1.35**) **P<0.001** | **1.27** **(1.24-1.31**) **P<0.001** | **1.24** **(1.19-1.30**) **P<0.001** | **1.19** **(1.15-1.24**) **P<0.001** |

**S4 Table continued**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Successful VBAC vs. ERCS** |  | **In-labor non-elective repeat cesarean section vs. ERCS** |
|  | **Base model1 relative risk (95% CI)** | **Model A2 relative risk (95% CI)** | **Model B3 relative risk (95% CI)** | **Model C4 relative risk (95% CI)** |  | **Base model1 relative risk (95% CI)** | **Model A2 relative risk (95% CI)** | **Model B3 relative risk (95% CI)** | **Model C4 relative risk (95% CI)** |
| ***Perinatal outcomes*** |  |  |  |  |  |  |  |  |  |
| Adverse perinatal outcomea†‡¥ | 1.07 (1.00-1.15)P=0.065 | 1.06 (0.99-1.14)P=0.085 | **1.23** **(1.11-1.36**)**P<0.001** | **1.45** **(1.30-1.61**)**P<0.001** |  | **1.61** **(1.48-1.76**)**P<0.001** | **1.65** **(1.51-1.80**)**P<0.001** | **1.76** **(1.54-2.02**)**P<0.001** | **1.98** **(1.73-2.26**)**P<0.001** |
| Intrapartum stillbirth or neonatal death | **4.60** **(1.55-13.64**)**P=0.006** | NC | NC | NC |  | **11.63** **(3.89-34.75**)**P<0.001** | NC | NC | NC |
| Admitted to a neonatal unit†‡¥ | **0.85** **(0.79-0.92)****P<0.001** | **0.85** **(0.78-0.92) P<0.001** | 1.01 (0.90-1.13)P=0.926 | **1.19** **(1.06-1.34**)**P=0.003** |  | **1.38** **(1.26-1.52**)**P<0.001** | **1.42** **(1.29-1.56**) **P<0.001** | **1.49** **(1.29-1.73**) **P<0.001** | **1.68** **(1.45-1.94**) **P<0.001** |
| Resuscitation requiring drugs and/or intubation†‡¥ | **4.62** **(3.76-5.68) P<0.001** | **4.61** **(3.74-5.67) P<0.001** | **4.37****(3.13-6.10) P<0.001** | **4.32** **(3.11-6.00**) **P<0.001** |  | **5.58** **(4.39-7.09) P<0.001** | **5.70** **(4.48-7.26) P<0.001** | **5.76** **(3.95-8.40) P<0.001** | **5.72** **(3.94-8.29) P<0.001** |
| Apgar score <7 at 5 minutes†‡¥ | **2.76** **(2.28-3.33**) **P<0.001** | **2.74** **(2.26-3.32**) **P<0.001** | **2.55** **(1.94-3.35**) **P<0.001** | **2.83** **(2.14-3.73**) **P<0.001** |  | **5.22** **(4.24-6.42**) **P<0.001** | **5.36** **(4.35-6.60**) **P<0.001** | **5.41****(4.05-7.23**) **P<0.001** | **5.80****(4.33-7.77**) **P<0.001** |

1 Base model adjusted for year of delivery.

2 Model A adjusted for year of delivery and socio-demographic factors (maternal age, mother’s country of birth, marital status/registration type and socio-economic status).

3 Model B adjusted for variables in Model A and additionally adjusted for maternal medical and pregnancy-related factors (number of previous cesarean sections, any prior vaginal delivery, inter-pregnancy interval, maternal smoking status at booking, maternal BMI at booking, hypertensive disorder where † is shown, diabetes where ‡ is shown and pre-labor rupture of membranes where ¥ is shown).

4 Model C adjusted for variables in Model B and additionally adjusted for infant-related factors (sex of infant, gestational age at delivery and birth weight centile).

a Includes intrapartum stillbirth or neonatal death, admission to a neonatal unit, resuscitation requiring drugs and/or intubation or an Apgar score <7 at 5 minutes.

NC – not calculated because of low number of events.

Bold text indicates statistically significant findings at the 5% level.