

Supplementary Table S3: Maternal and unit factors associated with MgSO<sub>4</sub> treatment after exclusion of unit policy variables

| Receiving MgSO <sub>4</sub>          | Women with severe preeclampsia*<br>(255/720) |      |      |             | Women without preeclampsia,<br>HELLP or eclampsia<br>(95/3,658) |     |      |             |
|--------------------------------------|--|------|------|-------------|---|-----|------|-------------|
|                                      | n/N  | %    | aOR  | 95% CI      | n/N   | %   | aOR  | 95% CI      |
| Maternal age                         |  |      |      |             |   |     |      |             |
| <25 years                            | 58/158                                       | 42.0 | 1.27 | [0.70;2.30] | 24/631  | 3.8 | 1.56 | [0.82;2.97] |
| 25-34 years                          | 131/364                                      | 36.0 | 0.88 | [0.55;1.39] | 47/2,044  | 2.3 | 0.82 | [0.48;1.41] |
| ≥35 years                            | 64/214                                       | 29.9 | Ref. |             | 24/972  | 2.5 | Ref. |             |
| Parity                               |  |      |      |             |   |     |      |             |
| Primiparous                          | 77/242                                       | 31.8 | 1.10 | [0.71;1.68] | 44/1,690  | 2.6 | 0.88 | [0.56;1.39] |
| Multiparous                          | 177/474                                      | 37.3 | Ref. |             | 50/1,944  | 2.6 | Ref. |             |
| Gestational age                      |  |      |      |             |   |     |      |             |
| 24+0-25+6 weeks                      | 18/48  | 37.5 | 1.73 | [0.79;3.80] | 18/453  | 4.0 | 1.75 | [0.89;3.43] |
| 26+0-28+6 weeks                      | 86/216                                       | 39.8 | 1.67 | [1.09;2.56] | 36/1,148  | 3.1 | 1.63 | [1.00;2.65] |
| 29+0-31+6 weeks                      | 151/456                                      | 33.1 | Ref. |             | 41/2,057  | 2.0 | Ref. |             |
| Diagnosis of IUGR                    |  |      |      |             |   |     |      |             |
| No                                   | 161/421                                      | 38.2 | Ref. |             | 79/3,173  | 2.5 | Ref. |             |
| Yes                                  | 92/296                                       | 31.1 | 0.64 | [0.42;0.98] | 14/466  | 3.0 | 1.11 | [0.55;2.21] |
| Sex of baby                          |  |      |      |             |   |     |      |             |
| Male                                 | 112/329                                      | 34.0 | 0.89 | [0.6;1.32]  | 54/2,006  | 2.7 | 0.99 | [0.64;1.55] |
| Female                               | 143/390                                      | 36.7 | Ref. |             | 41/1,652  | 2.5 | Ref. |             |
| Type of pregnancy                    |  |      |      |             |   |     |      |             |
| Singleton                            | 13/38  | 34.2 | 1.29 | [0.51;3.27] | 12/811  | 1.5 | 1.75 | [0.92;3.32] |
| Multiple                             | 242/682                                      | 35.5 | Ref. |             | 83/2,846  | 2.9 | Ref. |             |
| Pregnancy complications              |  |      |      |             |   |     |      |             |
| Eclampsia                            | 23/51  | 45.1 | 2.23 | [1.04;4.78] | --  | --  | --   | --          |
| HELLP                                | 72/198                                       | 36.4 | 0.59 | [0.36;0.95] | --  | --  | --   | --          |
| Antepartum hemorrhage                | 7/26   | 26.9 | 0.48 | [0.15;1.52] | 23/865  | 2.7 | 0.79 | [0.45;1.38] |
| Admission for preterm labor          | 4/35   | 11.4 | 0.20 | [0.05;0.77] | 51/1,974  | 2.6 | 0.87 | [0.53;1.44] |
| PPROM                                | 1/5  | --   | --   | --          | 29/1,283  | 2.3 | 0.69 | [0.41;1.16] |
| Infection as indication for delivery | 1/1  | 100  | --   | --          | 14/421  | 3.3 | 1.27 | [0.67;2.39] |
| In utero transfer                    | 95/295                                       | 38.2 | 1.42 | [0.90;2.24] | 34/1,242  | 2.7 | 0.94 | [0.57;1.54] |

\*Defined as a diagnosis of eclampsia or HELLP, regardless of mode of delivery, or a diagnosis of preeclampsia and a prelabor cesarean section before 32 weeks of gestation.

IUGR intrauterine growth restriction, HELLP Hemolysis, elevated liver enzymes, low platelet count, PPRM preterm prelabor rupture of membranes.