

Table S1. Breast milk cytokine levels and oxidative status at 7 and 28 days of lactation from women with neonates without adverse outcomes separated by neonatal sex.

| Cytokines and Oxidative status | Day 7 | | | Day 28 | | |
|--------------------------------|----------------------|----------------------|----------|----------------------|----------------------|----------|
| | Male (n =15) | Female (n =24) | <i>p</i> | Male (n =14) | Female (n =18) | <i>p</i> |
| IL-10 Ln(pg/mL) | -0.20 [-0.22; -0.13] | -0.18 [-0.20; -0.07] | 0.39 | -0.17 [-0.22; -0.13] | -0.17 [-0.21; -0.07] | 0.76 |
| IL-13 Ln(pg/mL) | -0.51 [-0.55; -0.40] | -0.50 [-0.53; -0.42] | 0.79 | 0.76 [0.13; 1.00] | 0.59 [-0.13; 0.82] | 0.49 |
| IL-8 Ln(pg/mL) | -0.22 [-0.49; 1.74] | -0.22 [-0.37; 0.69] | 0.97 | -0.41 [-0.50; -0.22] | -0.58 [-0.63; -0.24] | 0.40 |
| MCP-1 Ln(pg/mL) | 0.27 [-0.41; 1.04] | 0.95 [0.07; 1.32] | 0.11 | -0.79 [-0.93; -0.17] | -0.93 [-0.97; -0.55] | 0.17 |
| TNF α Ln(pg/mL) | -0.17 [-0.38; 0.10] | -0.20 [-0.30; 0.12] | 0.51 | -0.27 [-0.34; -0.08] | -0.32 [-0.40; -0.26] | 0.27 |
| Inflammatory index | 0.01 [-0.25; 0.47] | -0.12 [-0.39; 0.73] | 0.76 | -0.27 [-0.34; -0.08] | -0.13 [-0.40; 0.21] | 0.91 |
| ABTS Ln(mg TE/mL) | 1.02 [0.62; 1.39] | 0.40 [-0.01; 0.90] | 0.004 | -0.72 [-1.14; -0.44] | -1.04 [-1.24; -0.55] | 0.44 |
| MDA+HNE Ln(μ M) | -0.09 [-0.32; 0.53] | 0.17 [-0.19; 0.59] | 0.50 | -0.56 [-0.94; -0.06] | -0.45 [-0.96; -0.03] | 0.91 |

Data show median and interquartile range [Q1; Q3] of cytokines after logarithm (Ln) transformation and typification. The *p*-Value (P) was extracted from independent Wilcoxon test. ABTS: 2,20-azino-bis-3-ethylbenzothiazoline-6-sulfonic acid; TE: Trolox equivalent; MDA: malondialdehyde; HNE: 4-Hydroxy-Trans-2-Nonenal.

Table S2. Breast milk cytokine levels and oxidative status at 7 and 28 days of lactation from women with and without C-section.

| Cytokine and Oxidative status | Day 7 | | | Day 28 | | |
|-------------------------------|----------------------|----------------------|----------|----------------------|----------------------|----------|
| | Vaginal (n =30) | C-section (n =14) | <i>p</i> | Vaginal (n =24) | C-section (n =12) | <i>p</i> |
| IL-10 Ln(pg/mL) | -0.19 [-0.21; -0.13] | -0.17 [-0.20; -0.02] | 0.20 | -0.16 [-0.21; -0.06] | -0.19 [-0.22; -0.16] | 0.26 |
| IL-13 Ln(pg/mL) | -0.50 [-0.53; -0.42] | -0.52 [-0.55; -0.42] | 0.47 | 0.66 [0.10; 0.99] | 0.61 [-0.02; 0.78] | 0.66 |
| IL-8 Ln(pg/mL) | -0.22 [-0.48; 0.73] | 0.09 [-0.35; 1.37] | 0.44 | -0.42 [-0.62; -0.20] | -0.49 [-0.61; -0.32] | 0.68 |
| MCP-1 Ln(pg/mL) | 0.28 [-0.25; 1.16] | 1.18 [0.71; 1.63] | 0.018 | -0.92 [-0.97; -0.60] | -0.48 [-0.92; -0.23] | 0.17 |
| TNF α Ln(pg/mL) | -0.19 [-0.37; 0.03] | -0.19 [-0.26; 0.24] | 0.29 | -0.28 [-0.38; -0.08] | -0.32 [-0.40; -0.27] | 0.37 |
| Inflammatory index | -0.11 [-0.28; 0.62] | -0.08 [-0.38; 0.42] | 0.99 | -0.13 [-0.44; 0.24] | -0.30 [-0.38; 0.26] | 0.83 |
| ABTS Ln(mg TE/mL) | 0.69 [0.01; 1.12] | 0.87 [0.51; 1.10] | 0.29 | -0.92 [-1.24; -0.53] | -0.79 [-1.15; -0.36] | 0.50 |
| MDA+HNE Ln(μ M) | 0.05 [-0.23; 1.03] | 0.00 [-0.63; 0.24] | 0.26 | -0.41 [-1.00; -0.13] | -0.60 [-0.92; 0.06] | 0.76 |

Data show median and interquartile range [Q1; Q3] of cytokines after logarithm (Ln) transformation and typification. Women c-section, cesarean section. The *p*-Value (*P*) was extracted from independent Wilcoxon test. ABTS: 2,20-azino-bis-3-ethylbenzothiazoline-6-sulfonic acid; TE: Trolox equivalent; MDA: malondialdehyde; HNE: 4-Hydroxy-Trans-2-Nonenal.

Table S3. Breast milk cytokine levels and oxidative status at 7 and 28 days of lactation comparing women with and without obstetric complications.

| Cytokine and Oxidative status | Day 7 | | | Day 28 | | |
|-------------------------------|----------------------|----------------------|----------|----------------------|----------------------|----------|
| | No (<i>n</i> = 27) | Yes (<i>n</i> = 12) | <i>p</i> | No (<i>n</i> = 25) | Yes (<i>n</i> =11) | <i>p</i> |
| IL-10 Ln(pg/mL) | -0.20 [-0.21; -0.09] | -0.15 [-0.20; -0.07] | 0.15 | -0.18 [-0.22; -0.07] | -0.16 [-0.18; -0.10] | 0.31 |
| IL-13 Ln(pg/mL) | -0.52 [-0.54; -0.48] | -0.46 [-0.51; -0.29] | 0.10 | 0.60 [-0.23; 0.84] | 0.61 [0.41; 1.01] | 0.43 |
| IL-8 Ln(pg/mL) | -0.22 [-0.40; 0.66] | 0.24 [-0.37; 2.77] | 0.25 | -0.48 [-0.63; -0.27] | -0.42 [-0.55; -0.21] | 0.54 |
| MCP-1 Ln(pg/mL) | 0.46 [-0.12; 1.26] | 0.95 [0.19; 1.21] | 0.59 | -0.86 [-0.96; -0.54] | -0.63 [-0.94; -0.28] | 0.60 |
| TNF α Ln(pg/mL) | -0.25 [-0.35; 0.00] | -0.04 [-0.19; 0.38] | 0.05 | -0.33 [-0.40; -0.19] | -0.27 [-0.33; -0.26] | 0.71 |
| Inflammatory index | -0.08 [-0.38; 0.99] | -0.18 [-0.67; 0.04] | 0.33 | 0.07 [-0.38; 0.35] | -0.39 [-0.77; -0.11] | 0.021 |
| ABTS Ln(mg TE/mL) | 0.87 [0.16; 1.09] | 0.69 [0.18; 1.05] | 0.81 | -0.91 [-1.36; -0.49] | -0.98 [-1.14; -0.49] | 0.73 |
| MDA+HNE Ln(μ M) | 0.04 [-0.35; 0.56] | 0.13 [-0.07; 0.75] | 0.56 | -0.50 [-1.06; 0.06] | -0.36 [-0.73; -0.17] | 0.43 |

Data show median and interquartile range [Q1; Q3] of cytokines after logarithm (Ln) transformation and typification. Women diagnosed with an obstetric complication were categorized as "yes", otherwise they were categorized as "no". The *p*-Value (P) was extracted from independent Wilcoxon test. ABTS: 2,20-azino-bis-3-ethylbenzothiazoline-6-sulfonic acid; TE: Trolox equivalent; MDA: malondialdehyde; HNE: 4-Hydroxy-Trans-2-Nonenal.