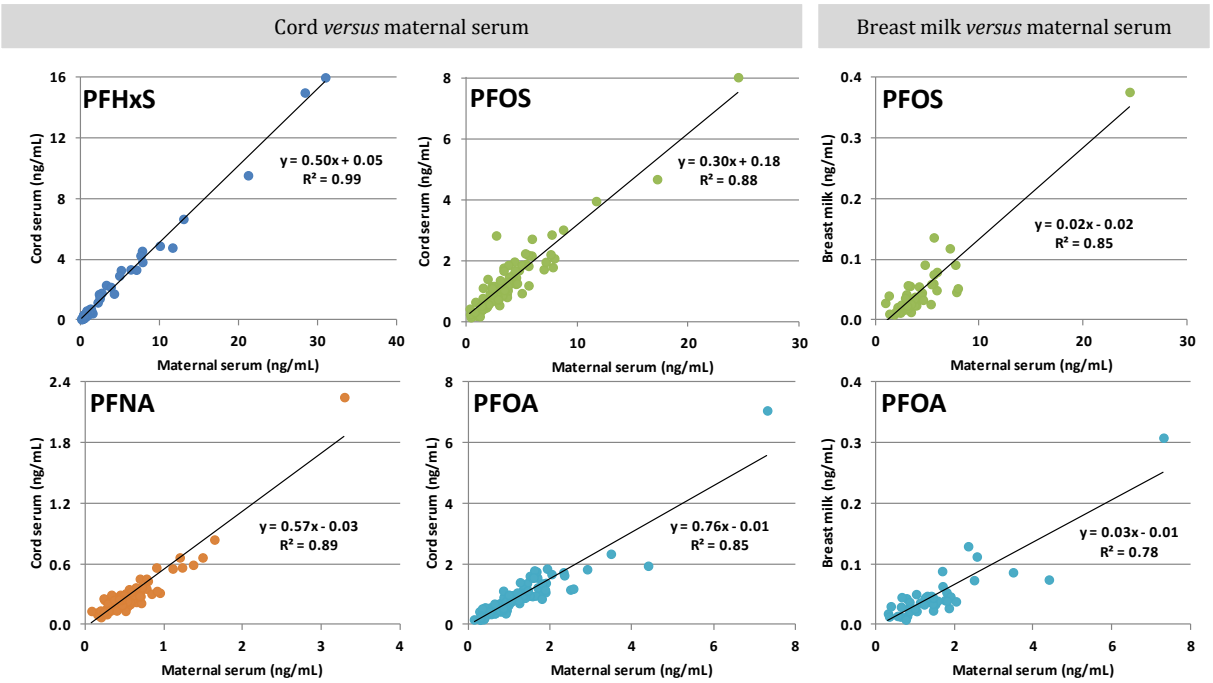

Figure 3: Concentration levels (ng/mL) determined in cord *versus* maternal serum for PFHxS (n=93), PFOS (n=99), PFOA (n=100) and PFNA (n=91), and in breast milk *versus* maternal serum levels for PFOS (n=45) and PFOA (n=48).

The relative contribution of PFOS/PFOA was found to be significantly lower in breast milk than in maternal serum, so that PFOA exceeds PFOS in breast milk. Distribution frequencies observed for these 2 compounds were classically found to be Log-normals (Figure 2). Similarly to what had been observed in serum, PFAS contamination patterns in breast milk displayed significant inter-individual variability. PFOS and PFOA were usually the main contributors (Figure 1). However, PFHxS was also a significant, if not major, contributor in certain serum profiles (Figure 2). As expected, no correlation was found between the main detected compounds.
Correlations for PFOS and PFOA between breast milk and maternal serum are showed in Figure 3. Concentration ratios were 0.011 (PFOS, n=48), 0.012 (PFHxS, n=11) and 0.033 (PFOA, n=45). Again, PFOA appeared more likely to cross the placental barrier and was also more extensively excreted in breast milk than PFOS. Compared to the literature overview from 25 breast milk sample sets from various regions[6], median values observed for PFOS, PFOA and PFHxS in the present study stand among the lowest ones. This could confirm a global decreasing exposure to the targeted substances. The tendency is corroborated with significant decreases observed for PFOS and PFOA when compared with 29 breast milk samples previously obtained from the same sampling protocol, for women recruited in 2005-06, with medium bound mean folds at 0.49 ($p=2.10^{-6}$, non parametric Mann-Whitney test) and at 0.61 ($p=3.10^{-3}$), respectively.

Acknowledgements
This work is funded by the French National Agency of Research (ANR), CONTREPERF 2010-CESA-008-03.

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