Ten women (10.4%) had elevated depressive symptoms (defined as MADRS-S score ≥ 13). This group had significantly lower allopregnanolone levels (39.0 ± 17.9 nmol/l) than women with depression scores in the normal range (54.6 ± 18.7 nmol/l), p = 0.014, Mann-Whitney U-test. The corresponding negative linear association (Figure 1) remained significant after adjusting for serum progesterone and number of days until delivery. Neither trait- nor state anxiety scores were associated with allopregnanolone levels.

**Conclusion**
A low level of endogenous serum allopregnanolone seems to be a risk factor for having depressive symptoms during late pregnancy. We speculate that the increase in allopregnanolone during pregnancy has a mood-balancing function during a time of vast neuroendocrine alterations.

**Results**
Ten women (10.4%) had elevated depressive symptoms (defined as MADRS-S score ≥ 13). This group had significantly lower allopregnanolone levels (39.0 ± 17.9 nmol/l) than women with depression scores in the normal range (54.6 ± 18.7 nmol/l), p = 0.014, Mann-Whitney U-test. The corresponding negative linear association (Figure 1) remained significant after adjusting for serum progesterone and number of days until delivery. Neither trait- nor state anxiety scores were associated with allopregnanolone levels.

**Background**
Allopregnanolone (3α-hydroxy-5α-pregnan-20-one) is a neurosteroid which allosterically enhances GABAergic signalling at GABAA receptors. Previous studies have reported lower allopregnanolone levels in depressed non-pregnant populations. During pregnancy the maternal serum concentration of allopregnanolone rises continuously, and eventually reaches more than ten times the maximum menstrual cycle levels.

**Methods**
**Subjects:** Ninety-six women in pregnancy weeks 37–40.
**Self-rating of depression and anxiety:** Montgomery-Åsberg Depression Rating Scale (MADRS-S), Spielberger State-Trait Anxiety Inventory (STAI-S and STAI-T).
**Allopregnanolone serum concentration:** High-performance liquid chromatography (HPLC) and radioimmunoassay (RIA).

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**Disclosure**
This study was supported by research grants from the Swedish Research Council, the Council for Working Life and Social Research, and the Marianne and Marcus Wallenberg Foundation. None of the funding sources have influenced the study, or the poster submission. I. Sundström-Poromaa occasionally serves on advisory boards or acts as invited speaker at scientific meetings for MSD, Bayer Health Care, and Lundbeck A/S. The other authors declare that they have no potential conflicts of interest.