The original submission by Kim et al. presents genotype data from 16 SNPs in 661 case infants and a Danish case control cohort of 723 cases. They also sequenced the oxytocin receptor in 1225 cases and 449 controls from the USA, Argentina, and Finland. Their aim was to identify genetic variations in the oxytocin pathway (oxytocin, oxytocin receptor, and leucyl/cystinyl aminopeptidase) that may contribute to preterm birth.

The authors should be commended on the innovation of the research question, the study design and execution, and selection of appropriate statistical analyses.

Major Compulsory Revisions
1. Formatting the paper in a standardized fashion: Abstract, Background, Methods, Results, Discussion and Conclusion to optimize readability.
2. Portions of the last paragraph of the Background section contain information that are better suited for the methods section (study details and statistical analyses).
3. The last paragraph of page 14 also contains information that is best suited in the Background section to give the reader sufficient information regarding the defining characteristics and rationale for inclusion of LNPEP as a gene candidate.
4. Clearly describing the phases of the study and the patient population (and demographics) in both the Methods and Results sections. For example defining the phases of the study (phase 1-discovery; phase 2-replication) and the sample sizes, demographics, and exclusion and inclusion criteria for each. In fact, some of this information may be best accomplished with a figure/table.
5. Stating clear inclusion and exclusion criteria for the U.S. subjects.

Minor Essential Revisions
1. The last paragraph on page 12 is better suited in the Background and/or Discussion as appropriate.
2. Adding a statement in the Abstract and Results regarding the potential contribution that these variants may effect on the incidence of preterm birth (i.e. how much of the variance in preterm birth is explained by the identified sequence variations).
3. In the conclusion, consideration should be given towards placing a statement regarding:

a. The potential for future study of these genetic variations in women who deliver at term (when the oxytocin pathway is more likely to have a causative effect).

b. The observed effect being primarily within the maternal unit.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.