Observed Rate of Down Syndrome in Twin Pregnancies

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1. What proportion of pregnancies at your institution are twin pregnancies? Outline the current counseling including the risk of Down syndrome provided to patients with or without twin pregnancies.

2. Describe the current practice at your institution or center regarding the methods of prenatal genetic screening available to patients with twins and higher-order pregnancies.

3. Identify the primary objective of the study. Is this objective relevant to your own clinical practice? Why or why not? If not, how would you modify the objective to be more relevant to your own practice?

4. Why did the authors use zygosity and not chorionicity to quantify the risks of Down syndrome? Discuss whether or not you agree with their approach.

5. The authors wrote, “a one-sided test based on the cumulative Poisson distribution compared the observed number of Down syndrome cases to those expected.” Discuss the appropriateness of a one-sided test and the use of Poisson distributions for the analyses.

6. Summarize the main findings of the study in your own words. How do the data presented in Table 1 influence your interpretation of the main study findings? Discuss any differences between your interpretation of the main findings and the conclusions of the authors.

7. The authors identify a number of study limitations. Discuss why you agree or disagree with proposed study limitations and identify any additional study limitations not discussed by the authors.

8. Will the study findings influence how you counsel women with twin pregnancy? Discuss how your counseling will change or why the findings will not influence your counseling.