a. What is PAMAM?

- PAMAM stands for Power Analysis for Multi-ancestry Admixture Mapping. It is an online tool for power and sample size analysis for studies with samples from two-way and three-way admixed populations using admixture mapping approaches.

b. How does PAMAM calculate power and sample size?

-The analytical approaches behind the PAMAM algorithm for two-way admixture mapping are provided somewhere else. Please check the reference Gautam et al. (2017). For three way admixture analyses, the details are provided in the draft.

c. I have samples from Latinos. Which admixture level should I choose?

- Latinos are three-way admixed populations of three ancestries - Native American, European, and African. It is appropriate to use 'Three-way' admixture level for Latinos.

d. Which risk factor should I consider for power/sample size calculation for discrete phenotype?

- Genotype risk ratio (GRR), Parental Risk Ratio (PRR), and Ancestral Odds Ratio (AOR) are three different risk factors for discrete (dichotomous) phenotype. Any of the risk ratio can be used with the right combination of the input parameters.

e. How do I interpret the calculated sample size for a case-control study design?

- PAMAM output of sample size for a case-control design is the total of the cases and control assuming # of cases = # of control. Accordingly, the cases and controls size can be computed as # case = sample size/2 = # control.

f. Does the assumption of # cases = # of control for a case-control study design apply for power calculation?

- No, the equal cases and controls doesn't apply for power calculation. Number of cases and # of controls are required to provide independently to compute the power under case-control study design.

g. Can I download the associated table created for the graph?

- Yes, the data table associated to any output graph can be downloaded by clicking on the link 'Click here to view table' appear below the graph.

h. Where should I contact if I have any other question?

- Please contact Dr. Tesfaye Mersha at Tesfaye.Mersha@cchmc.org.