

	Data Assumptions	Parametric tests	Permutation tests on original data	Permutation tests on rarefied data
strong assumptions	Parametric assumptions (e.g. negative binomial) are approximately correct.	Valid inference with highest power	Valid inference	Valid inference with reduced power
	Parametric assumptions might not hold, but it is reasonable to assume that the group an observation belong to <u>does not</u> affect the associated library size.	Possibly invalid inference	Valid inference	Valid inference with reduced power
weak assumptions	Parametric assumption might not hold, and the group an observation belong to might affect the associated library size.	Possibly invalid inference	Possibly invalid inference	Valid inference