We're testing a new headache medication to see if it's more effective than the current treatment that's known to relieve pain within 15 minutes for 60% of headache suffers. We give the new medication to a bunch of volunteers and see what fraction of them report relief.

START	If the new med actually is 90% effective we'll almost surely notice. If it's only 65% effective we may miss that.

Translation: the greater the effect size, the higher the power.	If we're willing to accept less evidence, we're more likely to notice any effect.

Translation: The higher the alpha level, the greater the power.	If we're easier to convince, we are more likely to mistakenly think the new medication works when it really doesn't.

Translation: The higher the alpha level, the greater the risk of Type I error.	If we're easy to convince, we are less likely to miss an effective medication.

Translation: The higher the alpha level, the lower the risk of Type II error.	If we demand stronger evidence, we are more likely to overlook the fact that the medication is more effective.

Translation: The lower the alpha level, the greater the risk of Type II error.	If we require a higher standard of proof, we are less likely to be fooled into thinking an ineffective medication works.

Translation: The lower the alpha level, the lower the risk of Type I error.	If we're tougher to convince, the less likely we are to notice that the med really is effective.

Translation: The lower the alpha level, the less power we have.	If we increase the number of subjects in our experiment, we are more likely to discover an effective medication.

Translation: Increasing your sample size increases your power.	FINISH