

A statistical method that explicitly includes a prior probability distribution based on a subjective opinion or objective evidence, such as the results of previous research.

**Note:** Bayesian analysis uses Bayes' theorem to update the prior probability distribution in light of the results of a study, in order to produce a posterior distribution. It can be used in a single study or in a meta-analysis. Statistical inference ([point estimates](#), [confidence intervals](#), etc.) is based on the posterior distribution. The posterior distribution can also be used as the prior distribution for the next study. This approach is controversial when it depends on opinions, which may vary. However, its use has become commonplace in [economic evaluation](#), as it allows the creation of complex models with different evidence sources and the determination of uncertainty.