Summary of Functions

Single-Parameter Models

`binomial.beta.mix` – computes the parameters and mixing probabilities for a binomial sampling problem where the prior is a discrete mixture of beta densities

Usage: `binomial.beta.mix(probs,betapar,data)`

Arguments: `probs`, vector of probabilities of the beta components of the prior; `betapar`, matrix where each row contains the shape parameters for a beta component of the prior; `data`, vector of number of successes and number of failures

Value: `probs,` vector of probabilities of the beta components of the posterior; `betapar,` matrix where each row contains the shape parameters for a beta component of the posterior

Single-Parameter Models

pbetat – Bayesian test that a proportion is equal to a specified prior using a beta prior

Usage: `pbetat(p0,prob,ab,data)`

Arguments: `p0`, the value of the proportion to be tested; `prob`, the prior probability of the hypothesis; `ab`, the vector of parameter values of the beta prior under the alternative hypothesis; `data`, vector containing the number of successes and number of failures

Value: `bf`, the Bayes factor in support of the null hypothesis; `post`, the posterior probability of the null hypothesis

Single-Parameter Models

`normal.select` – finds the mean and standard deviation of a normal density that matches knowledge of two quantiles of the distribution

Usage: `normal.select(quantile1,quantile2)`

Arguments: `quantile1`, list with components `p`, the value of the first probability, and `x`, the value of the first quantile; `quantile2`, list with components `p`, the value of the second probability, and `x`, the value of the second quantile

Value: `mean`, mean of the matching normal distribution; `sigma`, standard deviation of the matching normal distribution