Meta-analysis is a statistical procedure that integrates the results of at least two independent studies. The biggest threats to meta-analysis are publication bias due to missing studies with negative results and low-quality evidence due to methodological limitations imposed by included studies. Tools to improve the quality of meta-analysis have been developed by the Cochrane Collaboration and by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA).

Meta-analyses of trials have demonstrated that pain responses in patients with chronic pain, following treatment, are not normally distributed but have a bimodal distribution with the majority of patients having either very little or very good pain relief. The benefit can be detected within 2-4 weeks following drug administration. Further, the efficacy of drug and physical treatments is hampered by high placebo response rates, with modest average benefits with active treatments over placebo in both parallel and crossover design trials.