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100 words

Randomised controlled trials

John Geddes

A randomised controlled trial (RCT) is an experiment in which the outcomes are compared between participants who have been allocated to comparator treatments or interventions unpredictably and randomly. Properly done, an RCT provides a fair test of treatments, avoiding bias due to treatment selection according to initial patient characteristics. Masking minimises biases due to clinical management or outcome assessment being influenced by the allocated treatment. Including all randomised patients in the analysis avoids bias due to differential drop-out. The trick for the trialist is to ensure that all this control does not make the results unusable in the real world.