The random allocation of subjects of a clinical trial to the intervention and control groups using mechanisms such as a random number table or a computer-generated random number list.

Note: This type of allocation reduces potential bias in subject assignment because it tends to neutralise known and unknown prognostic factors by spreading them evenly between the intervention and control groups. Randomisation is a basic condition to the validity of many statistical tests. Non-random systematic allocation, or quasi randomisation, which allocates the subjects on the basis of elements such as day of the week, name, date of birth, etc., is not equivalent to randomisation and can lead to serious biases.

(Related concept: blinding)

Alternate spelling: randomisation.