Studies should aim to have the smallest number of endpoints feasible. **Multiple endpoints** (more than one) can be used; however, all endpoints should be specified at the outset. Studies should be adequately powered for the specified endpoints and results for all endpoints should be reported.

Endpoints with more than one component are **composite endpoints**. Using these increases event rates, thus reducing the number of subjects required for studies to be adequately powered. The separate components should not be reported as discrete endpoints.

For example, a composite cardiovascular endpoint could be defined as myocardial infarction, or stroke, or death occurring in a subject.

The validity of a composite endpoint is dependent on the components being similar in the way they are affected by a treatment, the frequency with which they occur, and their importance to patients.

Consider the composite endpoint of hospitalisation or death from pneumonia. Do both components warrant equal weighting?

**A surrogate endpoint** is an outcome, which is relatively easy to measure (such as a biological marker, laboratory finding, or physical sign) that is often used when observing important clinical events is expected to be impractical or expensive - frequently involving too long a follow-up.

For example, bone mineral density for vertebral fracture, endoscopy findings for gastrointestinal bleeding, and cholesterol concentrations for myocardial infarction.

The validity of a surrogate endpoint depends on the extent to which it correlates with, or is indicative or predictive of, the relevant clinical outcome.