Single-Case Study

A single-case study refers to a research design that analyzes only one subject or specimen—often a cadaver, patient, or image set—to draw preliminary conclusions or illustrate a concept.

🔍 Key Characteristics: Sample size = 1 Only one example is used for observation and analysis.

Purpose: Typically used to describe:

Rare findings

New imaging techniques

Unique anatomical variants

Proof-of-concept ideas

Structure: Often descriptive, including images, narrative explanation, and discussion of significance.

⚠ Major Limitations: No generalizability Findings cannot be extrapolated to a broader population.

No statistical validity It lacks power, reproducibility, and control, making it weak evidence.

High bias risk Vulnerable to selection bias and observer bias; authors may overinterpret results.