

Specify settings for simulation of individuals in schemes A and B

Simulate many instances of the study

Carry out a test of H_0 for each study

Combine all decisions to approximate power

Give n and settings for simulation of vitamin D profiles under schemes A and B , exposures rate function $\lambda(t)$, p_0 , $g(x)$, hypotheses to test H_0, H_A and α .

Study 1

H_0 decision 1

Study 2

H_0 decision 2

⋮

⋮

Study N

H_0 decision N

Approximate the power via

$$\widehat{\text{Power}} = \frac{\# H_0 \text{ rejected}}{N}$$