

Bayes-Update: Von Prior zu Posterior

Prior: $P(\text{krank}) = 1\%$

1%

Likelihood: $P(+|\text{krank}) = 99\%$

$\frac{\text{Prior} \times \text{Likelihood}}{P(+)}$

Posterior: $P(\text{krank}|+) \approx 17\%$

17%

0.0

0.2

0.4

0.6

0.8

1.0

Wahrscheinlichkeit

$$P(+) = P(+|K) \cdot P(K) + P(+|G) \cdot P(G) = 0.99 \times 0.01 + 0.05 \times 0.99 = 0.0594$$