

MYCIN Certainty Factor Combination Rules

$$CF(rule) = \frac{CF \text{ of IF statement} * CF \text{ of conclusion}}{100}$$

If CF(previous) and CF(rule) are both positive or zero,

$$CF = CF(previous) + \frac{CF(rule) * (100 - CF(previous))}{100}$$

If CF(previous) and CF(rule) are both negative;

$$CF = CF(previous) + \frac{CF(rule) * (100 + CF(previous))}{100}$$

If CF(previous) * CF(rule) is negative and
CF(previous) + CF(rule) is positive,

$$CF = \frac{[(CF(previous) + CF(rule)) * 100] + \frac{100-MIN}{2}}{100 - MIN}$$

where *MIN* is the lesser of the absolute values of CF(previous) and CF(rule)

If CF(previous) * CF(rule) is negative and
CF(previous) + CF(rule) is negative,

$$CF = \frac{[(CF(previous) + CF(rule)) * 100] - \frac{(100-MIN)}{2}}{100 - MIN}$$

where MIN is the lesser of the absolute values of CF(previous) and CF(rule)