A measure of the strength of a diagnostic test to distinguish between persons who do or do not have a target condition.

Note 1: A positive likelihood ratio compares the probability of a positive test result in persons with the disease with the probability of a positive test result in persons without the disease. A negative likelihood ratio compares the probability of a negative test result in persons without the disease with the probability of a negative test result in persons with the disease.
Note 2: Positive likelihood ratios greater than 10 or negative likelihood ratios less than 0.1 are sometimes judged to provide convincing diagnostic evidence.
Note 3: A positive likelihood ratio is calculated as: sensitivity ÷ (1 minus specificity). A negative likelihood ratio is calculated as: (1 minus sensitivity) ÷ specificity.
Note 4: In statistics, an alternative meaning of the *likelihood ratio* exists. It is the ratio of the values of the likelihood function at two different parameter values or under two different data models. See also *likelihood ratio test*.