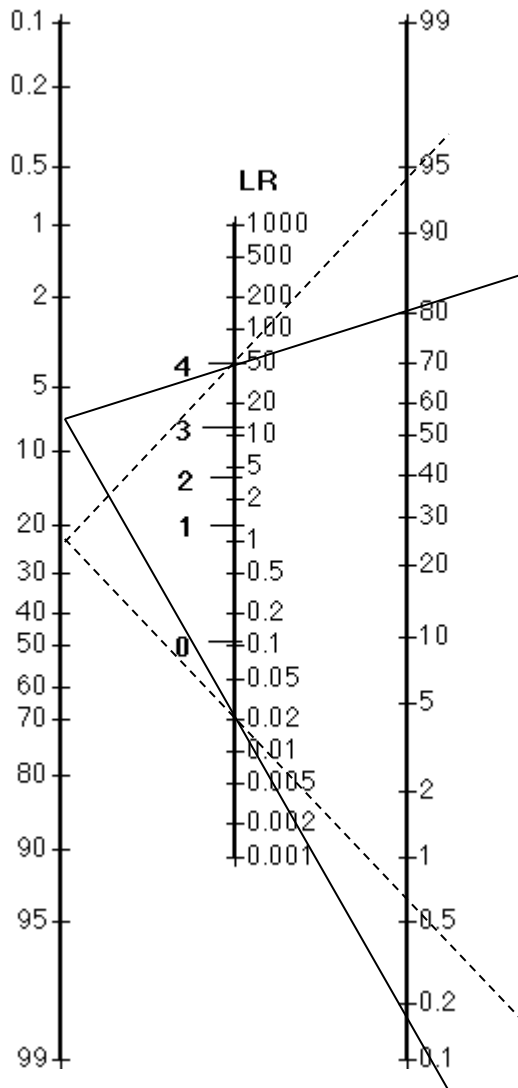


Using the Likelihood ratio monogram to determine the post-test probability of CD

Pre-test probability Post-test probability



- **CASE A (Continuous line):**
Patient with osteoporosis and irritable bowel syndrome. The pretest probability is around 7%.
 - If tTG is negative, CD is ruled out (post test probability is below 0.2%).
 - If tTG is positive, the posttest probability is 80% and biopsy will be required for diagnosis confirmation.
- **CASE B (Dashed line):**
Patient with osteoporosis and persistent vitamin D deficiency despite appropriate supplementation and positive family history for CD. In this case the pretest probability of CD is around 20%.
 - If tTG is negative, CD can be ruled out (the posttest probability is <1%).
 - If tTG is positive, the posttest probability is 95% and biopsy will be required for diagnosis confirmation.

Figure shows 2 cases that exemplify how TTG is the appropriate first test to rule out CD when pretest probability is below 25% (See box). According to Rostom A (30), in adults the pooled sensitivity and specificity for human recombinant tTG were both 98%. From these data we calculated the tTG hr LR+ is 49 and LR- is 0.02.

LR+ = sensitivity/100- specificity; LR- = 100-sensitivity/ specificity. The LR (positive or negative) indicates how much more likely or less likely is a particular diagnosis if the test is positive or negative. A LR of 1 indicates that the test result makes the diagnosis neither more nor less likely