

Chapter 14 Study Questions

1. In words, what do you mean when you say that stress testing has a sensitivity of 67%?
2. In words, what do you mean when you say that stress testing has a specificity of 77%?
3. How can you increase sensitivity?
4. How can you increase specificity?
5. What do we mean by the predictive value of a test? What influences predictive value?
6. What do we mean by a positive stress test?
7. How do you verify that someone has CAD?
9. What is a false positive, true positive, false negative, and false positive result?
10. 100 IBM executives undergo a stress test to screen for cardiovascular disease. From the stress test results, 50 have a positive result. Those 50 then undergo angiography. 25 show evidence of occluded arteries). Of the 50 with a negative test result, 5 years later 5 of them experience angina and are found to have CAD and must have had it for some time.
 - a. how many true positive results
 - b. how many false positive results
 - c. how many true negative results
 - d. how many false negative results
 - e. what is the test sensitivity
 - f. what is the test specificity
 - g. what is the predictive value of a positive result
 - h. what is the predictive value of a negative result

Assume that all the false negatives were discovered.

11. A patient performs a stress test and is told that he has a risk ratio of 2. What does this mean?

For # 10, see if you get sensitivity of 83%, specificity of 64%, PV+ of 50% and PV- of 90%.