

Screening Exercises

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Exercises

Which of the following is the measure of how often the test or method give false positive results

A *.sensitivity*

B *.specificity*

A very specific test :

A .has very few false positive results

B .has very few false negative results

Sensitivity is a measure of how often a test results in a false negative result. True or false

A .true

B .false

Which test rarely misses the presence of a pathogen ?

A .a very specific test

B .a very sensitive test

Below are some hypothetical results from women who had a mammogram.

	breast cancer	no breast cancer	total
pos mammogram	70	180	250
neg mammogram	30	720	750
total	100	900	1000

5- What is the sensitivity of the mammogram?

- a) 30%
- b) 50%
- c) 60%
- d) 70%
- e) 80%

Below are some hypothetical results from women who had a mammogram.

	breast cancer	no breast cancer	total
pos mammogram	70	180	250
neg mammogram	30	720	750
total	100	900	1000

6- What is the specificity of the mammogram?

- a) 20%
- b) 30%
- c) 70%
- d) 80%
- e) 90%

Below are some hypothetical results from women who had a mammogram.

	breast cancer	no breast cancer	total
pos mammogram	70	180	250
neg mammogram	30	720	750
total	100	900	1000

Calculate the positive predictive value?

Below are some hypothetical results from women who had a mammogram.

	breast cancer	no breast cancer	total
pos mammogram	70	180	250
neg mammogram	30	720	750
total	100	900	1000

Calculate the negative predictive value?

Below are some hypothetical results from women who had a mammogram.

	breast cancer	no breast cancer	total
pos mammogram	70	180	250
neg mammogram	30	720	750
total	100	900	1000

Calculate the prevalence of breast cancer?

A psychiatrist devised a short screening test for depression. An independent blind comparison was made with a gold standard for diagnosis of depression among 200 psychiatric outpatients. Among the 50 outpatients found to be depressed according to the gold standard, 35 patients were positive for the test. Among 150 patients found not to be depressed according to the gold standard, 30 patients were found to be positive for the test.

The positive predictive value of the screening test was:

- a) 35.2%
- b) 53.8%
- c) 67.6%
- d) 71.3%
- e) 82.9%

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The negative predictive value was:

- a) 33.5%
- b) 66.3%
- c) 88.9%
- d) 75.4%
- e) 44.7%

Assignment

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Calculate:

- 1- Sensitivity**
- 2- Specificity**
- 3- Prevalence**

The End



Thank You

