

# Lec:2

# Randomized

# Controlled

# Trials

## Epidemiology Lecture #2

**Author: Janet Forrester**

Professor @Tufts University School of Medicine

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## 4. Chapter: Lec:2 Randomized Controlled Trials

### 1. Lec:2 Randomized Controlled Trials Questions

#### 4.1.1. Randomized?-controlled trials are considered the most valid of the ...

Author: Janet Forrester

Randomized?-controlled trials are considered the most valid of the epidemiologic study designs because of what aspect of the design?

- Randomization

Check the answer of this question online at QuizOver.com:

Question: [Randomized -controlled trials are considered by Dr. Janet Forrester](#)

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#### 4.1.2. Why do investigators use a placebo in clinical trials?

Author: Janet Forrester

Why do investigators use a placebo in clinical trials?

- It allows the investigators to separate the effect of the medication or procedure tested from the placebo effect (an effect resulting from the power of suggestion). The use of a placebo also helps to blind the study, which prevents the investigator or volunteer from influencing the study results based on prior knowledge of the treatment allocation.

Check the answer of this question online at QuizOver.com:

Question: [Why do investigators use a placebo in clinical by Dr. Janet Forrester](#)

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#### 4.1.3. Which of the following descriptors apply to the design of this study?

Author: Janet Forrester

The following questions are based on what you have learned about cardiovascular disease in

Med Foundations I and the assigned article entitled, "A Randomized Trial of Low-Dose Aspirin in

the Primary Prevention of Cardiovascular Disease in Women" New England Journal of Medicine 2005; 352: 1293-1304

Which of the following descriptors apply to the design of this study?

Please choose only one answer:

- Observational & interventional
- Analytic & observational
- Observational & descriptive
- Descriptive & analytic
- Analytic & interventional

Check the answer of this question online at [QuizOver.com](http://www.quizover.com):

Question: [Which of the following descriptors apply questions are based on what](#)

Flashcards:

<http://www.quizover.com/flashcards/which-of-the-following-descriptors-apply-questions-are-based-on-what?pdf=1505>

Interactive Question:

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#### 4.1.4. Table 1 indicates that the prevalence of hypertension in the low?-d...

Author: Janet Forrester

The following questions are based on what you have learned about cardiovascular disease in

Med Foundations I and the assigned article entitled, "A Randomized Trial of Low-Dose Aspirin in

the Primary Prevention of Cardiovascular Disease in Women" New England Journal of Medicine 2005; 352: 1293-1304

Table 1 indicates that the prevalence of hypertension in the low?-dose aspirin group was 26% at the first study visit. How many women in the low?-dose aspirin group had hypertension at the first study visit?

Please choose only one answer:

- 5183
- 5185
- 10,368
- Cannot be calculated without knowing the number of new cases of hypertension over the ten years of follow?-up.
- Cannot be calculated without knowing the number of women who had hypertension before the first study visit.

Check the answer of this question online at QuizOver.com:

Question: [Table 1 indicates that the prevalence of following questions are](#)

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#### 4.1.5. From Table 2, the ten-year cumulative incidence of ischemic stroke ...

Author: Janet Forrester

The following questions are based on what you have learned about cardiovascular disease in

Med Foundations I and the assigned article entitled, "A Randomized Trial of Low-Dose Aspirin in

the Primary Prevention of Cardiovascular Disease in Women" New England Journal of Medicine 2005; 352: 1293-1304

From Table 2, the ten-year cumulative incidence of ischemic stroke (absolute risk) in the placebo group was:

Please choose only one answer:

- 221 per 19,942 person?-years
- 221 cases
- 1.1%
- 1.1% per 19,942 person?-years
- 221 cases per 19,9420 person-years

Check the answer of this question online at [QuizOver.com](http://www.quizover.com):

Question: [From Table 2 the ten-year cumulative incidence following questions](#)

Flashcards:

<http://www.quizover.com/flashcards/from-table-2-the-ten-year-cumulative-incidence-following-questions?pdf=1505>

Interactive Question:

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#### 4.1.6. From Table 2 the ten?-year cumulative incidence of either fatal or ...

Author: Janet Forrester

The following questions are based on what you have learned about cardiovascular disease in

Med Foundations I and the assigned article entitled, "A Randomized Trial of Low-Dose Aspirin in

the Primary Prevention of Cardiovascular Disease in Women" New England Journal of Medicine 2005; 352: 1293-1304

From Table 2 the ten?-year cumulative incidence of either fatal or non?-fatal stroke in the low?-dose aspirin group was:

Please choose only one answer:

- 1.1%
- 2.4%
- 221 cases over ten years
- 0.55%
- 477 cases per 19,934 person?-years

Check the answer of this question online at QuizOver.com:

Question: [From Table 2 the ten -year cumulative incidence following questions](#)

Flashcards:

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#### 4.1.7. The relative risk of ischemic stroke in the aspirin compared to the...

Author: Janet Forrester

The following questions are based on what you have learned about cardiovascular disease in

Med Foundations I and the assigned article entitled, "A Randomized Trial of Low-Dose Aspirin in

the Primary Prevention of Cardiovascular Disease in Women" New England Journal of Medicine 2005; 352: 1293-1304

The relative risk of ischemic stroke in the aspirin compared to the placebo group shown in Table 2 was calculated as:

Please choose only one answer:

- $170/19,934$  divided by  $221/19,942$
- $221/19,942$  divided by  $170/19,934$
- $170/19,942$  divided by  $221/19,934$
- $170/39,876$  divided by  $221/39,876$
- $(170+221)$  divided by  $(19,934+19,942)$

Check the answer of this question online at QuizOver.com:

Question: [The relative risk of ischemic stroke in following questions are based](#)

Flashcards:

<http://www.quizover.com/flashcards/the-relative-risk-of-ischemic-stroke-in-following-questions-are-based?pdf=1505>

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#### 4.1.8. How would you interpret the relative risk of ischemic stroke shown ...

Author: Janet Forrester

How would you interpret the relative risk of ischemic stroke shown in Table 2?

- In women, low dose aspirin reduces the ten?-year risk of ischemic stroke by 24%.

Check the answer of this question online at QuizOver.com:

Question: [How would you interpret the relative risk by Dr. Janet Forrester](#)

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<http://www.quizover.com/flashcards/how-would-you-interpret-the-relative-risk-by-dr-janet-forrester?pdf=1505>

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#### 4.1.9. From Table 2 the difference in cumulative incidence of ischemic str...

Author: Janet Forrester

From Table 2 the difference in cumulative incidence of ischemic stroke between the low-dose aspirin and placebo groups was:

Please choose only one answer:

- 51 cases
- 51 cases over ten years
- 0.26%
- 0.26% over ten years
- 51 per 39,876 person?-years

Check the answer of this question online at QuizOver.com:

Question: [From Table 2 the difference in cumulative by Dr. Janet Forrester](#)

Flashcards:

<http://www.quizover.com/flashcards/from-table-2-the-difference-in-cumulative-by-dr-janet-forrester?pdf=1505>

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#### 4.1.10. Using the data in Table 2, calculate the number needed to treat wit...

Author: Janet Forrester

Using the data in Table 2, calculate the number needed to treat with low?-dose aspirin to prevent 1 ischemic stroke.

- Step 1) Calculate the absolute risk reduction:  $221/19,942 - 170/19,934 = 0.0026$  or 2.6 fewer cases per 1000 women treated with low?-dose aspirin  
Step 2) Take the reciprocal of the absolute risk reduction:  $1/0.0026=392$ .  
Therefore, you would need to treat 392 women with low?-dose aspirin to prevent 1 ischemic stroke.

Check the answer of this question online at QuizOver.com:

Question: [Using the data in Table 2 calculate the by Dr. Janet Forrester @Tufts](#)

Flashcards:

<http://www.quizover.com/flashcards/using-the-data-in-table-2-calculate-the-by-dr-janet-forrester-tufts?pdf=1505>

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#### 4.1.11. What was the purpose of conducting subgroup analyses in this study?

Author: Janet Forrester

What was the purpose of conducting subgroup analyses in this study?

- To determine if the association between aspirin and cardiovascular disease as measured by the relative risk was the same across subgroups based on factors such as age, smoking status, body mass index etc.

Check the answer of this question online at QuizOver.com:

Question: [What was the purpose of conducting subgroup by Dr. Janet Forrester](#)

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#### 4.1.12. Subgroup analyses were conducted based on hypertension status. From...

Author: Janet Forrester

Subgroup analyses were conducted based on hypertension status. From the data in Table 3, what was the finding regarding the effect of low?-dose aspirin on major cardiovascular events in women with hypertension versus women without hypertension?

- Low dose aspirin was more effective at reducing the risk of major cardiovascular events in women with hypertension compared to women without hypertension.

Check the answer of this question online at QuizOver.com:

Question: [Subgroup analyses were conducted based on by Dr. Janet Forrester](#)

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#### 4.1.13. How would you interpret the relative risk of ?gAny gastrointestinal...

Author: Janet Forrester

How would you interpret the relative risk of ?gAny gastrointestinal bleeding?h in the low-dose aspirin versus placebo group shown in Table 4?

- In women, low?-dose aspirin increases the ten?-year risk of any gastro?-intestinal bleeding by 22%

Check the answer of this question online at QuizOver.com:

Question: [How would you interpret the relative risk by Dr. Janet Forrester](#)

Flashcards:

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