

VUmc_CAT_TSM_B15_2017-09-09_inzage

Wednesday, September 20, 2017 09:04

Block 1, 56 question(s), maximum score 73
CAT TSM 29-09-2017 INZAGE**1 of 56**Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

An investigator aims to increase the selectivity and pharmacokinetic properties of a new and promising compound. What is the name of this process during drug discovery and development?

- drug purification
- target selection
- lead optimization
- lead finding

IF choice c. is selected
Set score to 1

Correct.

2 of 56Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

What is an advantage of natural products compared to synthetic drugs?
Natural products, in general,

- are complex and more difficult to synthesize than synthetic drugs.
- show more side-effects compared to synthetic drugs.
- have a lifelong patent, whereas synthetic drugs have no lifelong patent.
- are less selective compared to synthetic drugs.

IF choice a. is selected
Set score to 1

Correct.

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LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

A medical ethical committee evaluates if the risk-benefit ratio of a clinical study is favorable. What expertise is required to perform the evaluation of the risk-benefit ratio of a clinical study?

- scientific
- ethical
- legal
- financial

IF choice a. is selected
Set score to 1

Correct.

4 of 56Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Based on what ethical principle the Medical Research Involving Human Subjects Act (WMO) forbids to perform receptor binding studies for a new anticancer drug in subjects younger than 18 years?

- integrity
- subsidiarity
- scientific validity
- proportionality

IF choice b. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

A research protocol can only be approved when it fulfills the criteria of the Medical Research Involving Human Subjects Act (WMO)? Which of the following criteria is a requirement for approval of a clinical study?

- The study does not lead to risks for the patient.
- The study will lead to advancement of science.
- The study does not subject patients to actions.
- The study is performed in adult patients.

IF choice b. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

You would like to include a 6-year old boy with diabetes mellitus I in a study that aims to investigate cortisol levels in young diabetics. The burden of the study consists of a questionnaire and blood withdrawal through a venipuncture. Can you include this patient into your study according to the Medical Research Involving Human Subjects Act (WMO)?

- Yes, after informed consent of both parents and the boy you include him in the study.
- Yes, after informed consent of both parents you include him in the study.
- No, this study does not fulfill the WMO criteria for clinical research in children.
- Yes, after informed consent from one parent you include him in the study.

IF choice c. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

What item should not be included in the Methods section of a scientific article?

- description of the study sample
- definition of the study endpoints
- the study sample size calculation
- the number of included patients

IF choice d. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Which condition is part of the finer criteria for a good research question?

- The research question requires unique research devices.
- The research question refutes previous research findings.
- The research question is risk full for study participants.
- The research question concentrates on a rare disease condition.

IF choice b. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

You follow a population sample over a period of time to study the impact of aging on cognition. What is the name for this study design?

- non-randomized controlled study
- cohort study
- case-control study
- case series

IF choice b. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

What is the best condition for reaching statistical significance?

- a small sample size and small effect size
- a small sample size and large effect size
- a large sample size and large effect size
- a large sample size and small effect size

IF choice c. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

What does statistical power of a study mean?

- The ability of a test to detect an effect, if the effect actually exists.
- The deviation of the mean of a study sample with the mean of a population.
- The difference in the effect observed for the control and intervention arm.
- The maximal sample size that is required to detect an effect.

IF choice a. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

What is meant by human endpoints for the use of animals in laboratory experiments?

- the circumstances that enforce premature ending of the experiment
- the ethical regulations for animal experiments
- the levels of suffering by the animal during the experiment
- the expected sustained injury induced by the experiments

IF choice a. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Since the introduction of the law on animal experiments on December 18 2014, the central authority for scientific procedures on animals (competent authority; CCD) and institutional animal care and use committee (IACUC) have distinct roles in the licensing of animal experiments.

What is the role of the IACUC in this license decision?

- The IACUC grants the license partly on the advice of the CCD.
- The CCD decides about the license without involvement of the IACUC.
- The IACUC decides about the license without involvement of the CCD.
- The CCD grants the license partly on the advice of the IACUC.

IF choice d. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Light and optical techniques for the diagnosis and treatment of disease are worldwide used in modern medicine. During abdominal surgery, optical techniques are used to visualize abdominal metastases in cancer patients.

What would be the most suitable optical technique for this purpose?

- photothermolysis
- photoacoustics
- laser-assisted lead extraction
- fluorescence

IF choice d. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

What is a publication bias?

- publication of flawed systematic reviews
- selective reporting of study outcomes
- non-publication of negative studies
- over-estimating a study effect size

IF choice c. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

What is not considered to be a conflict of interest?

- membership of an advisory board of a medical device company
- the possession of shares of a pharmaceutical company by your partner
- participation as lecturer during an industrial symposium at a conference
- the review of articles for an international scientific journal

IF choice d. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

What type of analysis is included in the pharmacovigilance of a drug?

- drug ineffectiveness analysis
- drug efficacy analysis
- drug cost-benefit analysis
- drug cost-effectiveness analysis

IF choice a. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

You would like to know how family members of patients with a depression look at the value of antidepressant drug intake and write a research proposal to investigate this study objective. You approach 10 patients with depression and their family members for a semi-structured interview in which their opinion about antidepressant drugs is questioned. At the end of your study you hope to be able to write a scientific publication on this topic. Does this research proposal require ethical review by the medical research ethics committee (MREC)?

- Yes, you are required to approach the MREC for a non-WMO declaration.
- Yes, this is a study proposal that fulfills the criteria of the Medical Research Involving Human Subjects Act (WMO).
- No, because subjects are not exposed to procedures or are required to follow rules of behavior.
- No, because the study proposal does not include medical/scientific research.

IF choice a. is selected
Set score to 1

Correct.

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Security Briefing : Briefing

LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

In a clinical study investigators aim to evaluate the validity of a cardiac output measurement device to assess heart function in clinical practice. How is the validity of the cardiac output (CO) measurements be described?

- The degree to which repeated CO measurements show the same results.
- The technical limitations of the CO device to measure heart function.
- The reality that the CO measurements indeed reflect heart function.
- The predictive value of CO measurements in the diagnosis of heart disease.

IF choice c. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

What is the optimal sequence in the design of a study hypothesis?

- The hypothesis is derived from a research question.
- The hypothesis is used to formulate the research question.
- The hypothesis is based on statistical associations in a database.
- The hypothesis is formulated after completing the study design.

IF choice a. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

It is hypothesized that monitoring of vital functions by a hemodynamic monitor in patients undergoing a nephrectomy influences the risk for pulmonary infections.

How can the hypothesis be changed in such a way that the hypothesis enables a sample size calculation?

- by a better definition of the study endpoint
- by a better description of the study population
- by a better description of the hemodynamic monitor
- by a better definition of vital functions

IF choice a. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

In a randomized controlled trial in two groups of 500 patients with prostate cancer it was shown that disease-free survival increased by 2 weeks in the immunotherapy group compared to the conventional chemotherapy group with a P-value of 0.06.

What is the best description of this study?

- no clinical relevance without an observed effect
- no clinical relevance with an observed effect
- clinically relevant without an observed effect
- clinically relevant with an observed effect

IF choice a. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

How can one decrease the required sample size during a sample size calculation?

- Reduce the expected P-value.
- Reduce the expected effect size
- Reduce the expected variation.

- Increase the expected power.

IF choice c. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

How does animal telemetry confer to the 3Rs in animal experimentation?

- Animal telemetry replaces the animals.
 Animal telemetry leads to refinement by the reduction of stress.
 Animal telemetry leads to both reduction and refinement.
 Animal telemetry reduces the number of required animals.

IF choice c. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

How can a seeding trial be classified?

- as a Phase I study
 as a Phase II study
 as a Phase III study
 as a Phase IV study

IF choice d. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

You found that dexamethasone reduces the risk for pulmonary infections in patients undergoing lung surgery. While writing the publication you doubt whether you should disclose a personal conflict of interest due to a financial relationship with the manufacturer of dexamethasone. How is this disclosure linked to the principles of the Code of Conduct for Academic Practice?
The disclosure is linked to the principle of:

- honesty
 independency
 reliability
 verifiability

IF choice b. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Genetically-edited, healthy cells are transplanted into a patient. What is the name of this type of therapy?

- vesicle therapy
 personalized therapy
 immunotherapy
 biomarker therapy

IF choice b. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level

PorterGamGad : include

The level of suffering during an animal experiment is ranked from low to high.
What is the correct ranking considering the suffering of animals from low to high?

- behavioral experiment with electrical stimulus / terminal experiment under anesthesia / behavioral experiment / toxicological experiment
- terminal experiment under anesthesia / toxicological experiment / behavioral experiment / behavioral experiment with electrical stimulus
- behavioral experiment with electrical stimulus / terminal experiment under anesthesia / toxicological experiment / behavioral experiment
- terminal experiment under anesthesia / behavioral experiment / behavioral experiment with electrical stimulus / toxicological experiment

IF choice d. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Based on which point of view of the Medical Research Involving Human Subjects Act (WMO) should the World War II experiments not proceed?

- The participants were not given the opportunity to give informed consent.
- The participants were subjected to an unapproved medicine.
- The participants were not compensated for study participation.
- The participants were exposed to a non-therapeutic intervention.

IF choice a. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

A patient is submitted to the intensive care unit due to severe sepsis, and is sedated and mechanically ventilated. You aim to include the patient in a drug trial.

How is the informed consent procedure defined in this situation?

- Informed consent is provided by the relatives of the patient.
- Informed consent is provided by relatives and the patient after becoming competent.
- This type of study cannot be performed in sedated, incompetent patients.
- Informed consent is not required in sedated, incompetent patients.

IF choice b. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

What is the reason that drug trials should be published in public trial registers before the onset of the study?

- to claim ownership of a study design
- to reduce publication bias
- to decrease selection bias
- to disclose conflicts of interest

IF choice b. is selected
Set score to 1

Correct.

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Case 1 - total of 3 points (questions 32, 33 and 34)

A pharmaceutical company discovered a new compound that is effective as analgesic drug in rats and monkeys. The company now decided to initiate the clinical development phase for this drug.

Question 32 (1 point)

What type of subjects are included in:
phase I, phase II and phase III

Describe the type of subjects.

(phase I, phase II, phase III,)

Anything else
Set score to 1

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Continuation case 1

A pharmaceutical company discovered a new compound that is effective as analgesic drug in rats and monkeys. The company now decided to initiate the clinical development phase for this drug.

Question 33 (1 point)

What study endpoints will be tested in:
phase I, II and III?

Describe two endpoints that will be tested

(phase I, phase II, phase III,)

Anything else
Set score to 1

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Continuation case 1

A pharmaceutical company discovered a new compound that is effective as analgesic drug in rats and monkeys. The company now decided to initiate the clinical development phase for this drug.

Question 34 (1 point)

When can a clinical development phase considered as successful?

(phase I, phase II, phase III,)

Anything else
Set score to 1

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Security Briefing : Briefing

LC : y

Test name : Test 1 or 2

Difficulty : CTT Level

PorterGamGad : include

Question 35 (1 point)

Describe two methods than can be used in animals to study the importance of a certain protein in an organism and its role in disease.

Anything else
Set score to 1

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Security Briefing : Briefing

LC : y

Test name : Test 1 or 2

Difficulty : CTT Level

PorterGamGad : include

Question 36 (1 point)

Name two requirements of a biomarker before it can serve in the diagnosis and monitoring of disease.

Anything else
Set score to 1

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Security Briefing : Briefing

LC : y

Test name : Test 1 or 2

Difficulty : CTT Level

PorterGamGad : include

Question 37 (1 point)

A pharmaceutical company discovered a novel compound that targets brain cancer cells. Unfortunately, the scientists that evaluate the compound in rats discover that the compound can not pass the blood-brain barrier.

Describe in maximal 100 words how you can improve the penetration of this new compound into the brain of the rat



Anything else
Set score to 1

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Question 38 (1 point)

Scientific validity is one of the ethical principles which are considered conditional for ethical research. A protocol of which scientific validity is hampering is thus by definition considered unethical.

Provide one argument in favor and one argument against this normative stance.



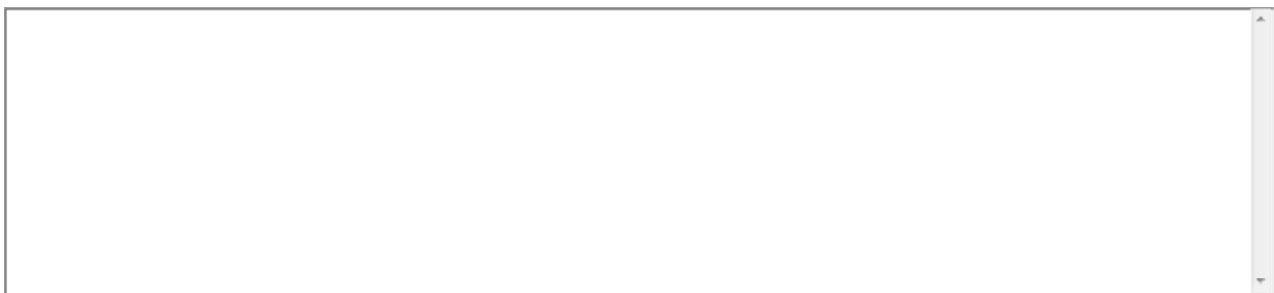
Anything else
Set score to 1

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Question 39 (1 point)

Why is the sample size calculation always an issue for METC's reviewing protocols? Answer the question from two points of view: a sample size that is too small or a sample size that is too large.



Anything else
Set score to 1

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Question 40 (3 points)

What questions should be raised on the methodology of a scientific article before it can be included in a systematic review.
Name three possible answers.

(1....., 2....., 3.....)

Anything else
Set score to 3

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Question 41 (2 points)

You focus your systematic review on the benefits of robot-assistance during abdominal surgery. In the definition of your literature search you aim to only include randomized controlled trials.

Describe a PICO for this systematic review.

P
I
C
O

Anything else
Set score to 2

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Question 42 (3 points)

You focus your systematic review on the benefits of robot-assistance during abdominal surgery. In the definition of your literature search you aim to only include randomized controlled trials (2).

Define a study hypothesis that fits the PICO as defined under question 41. Be sure that the hypothesis is well-defined and can be used to perform a sample size calculation.

Anything else
Set score to 3

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Case 2 - total of 9 points (questions 43, 44 and 45)

As an investigator, you recently showed that markers of shock in trauma patients, such as a low pH, are frequently paralleled by excessive clot breakdown, which in turn is associated with higher bleeding rates and mortality. One of the proposed mechanisms is that shock leads to thrombin formation, and this subsequently results into excessive clot breakdown.

Question 43 (3 points)

Formulate a research question to evaluate this proposed mechanism.

Anything else
Set score to 3

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Continuation case 2

As an investigator, you recently showed that markers of shock in trauma patients, such as a low pH, are frequently paralleled by excessive clot breakdown, which in turn is associated with higher bleeding rates and mortality. One of the proposed mechanisms is that shock leads to thrombin formation, and this subsequently results into excessive clot breakdown.

Question 44 (3 points)

What would be a relevant clinical endpoint for this new study?

Anything else
Set score to 3

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Continuation case 2

As an investigator, you recently showed that markers of shock in trauma patients, such as a low pH, are frequently paralleled by excessive clot breakdown, which in turn is associated with higher bleeding rates and mortality. One of the proposed mechanisms is that shock leads to thrombin formation, and this subsequently results into excessive clot breakdown.

Question 45 (3 points)

Propose a study design that enables you to prove a causal relationship between shock parameters and the excessive clot breakdown as observed in trauma patients following the PICO method.

Anything else
Set score to 3

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Introduction 3 - total of 2 points (questions 46 and 47)

Liquid biopsies may serve as a monitoring tool to detect cancer.

Question 46 (1 point)

What is measured using this method and how does this detect cancer?

Anything else
Set score to 1

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Continuation introduction 3

Liquid biopsies may serve as a monitoring tool to detect cancer.

Question 47 (1 point)

Why are liquid biopsies an interesting new tool to be implemented in clinical practice for the diagnosis of cancer?

Anything else
Set score to 1

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Question 48 (3 points)

The following project abstract was submitted to the institutional committee for animal experimentation.

Background. Type 2 diabetes mellitus (T2DM) increases the risk of myocardial ischemia, followed by increased perioperative risk of cardiovascular morbidity. We investigated whether reducing caloric intake reduces ischemic injury and myocardial dysfunction and affects the protective effects of the volatile anesthetic sevoflurane in diet-induced T2DM rats.

Methods. Rats receive a western (WD) or control diet (CD). Caloric intake is reduced by reversing WD-fed rats to CD. Myocardial function is determined with echocardiography. After 8 weeks of diet feeding, myocardial infarction is induced and the effect of sevoflurane is studied on myocardial function and ischemia/reperfusion injury. On estimation, each group requires 12 rats.

The committee asked the investigator to apply the 3Rs to this proposal.
Propose two improvements that lead to refinement, replacement or reduction.

Anything else
Set score to 3

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Question 49 (1 point)

Your scientific society organizes a scientific conference that is sponsored by a large pharmaceutical company. The pharmaceutical company pays for the conference registration, the flight to the conference venue and the accommodation during the conference stay for all attendees.

What is the rule according to the Code of Conduct for Pharmaceutical Advertising with respect to the costs that a pharmaceutical company can cover for a Dutch medical doctor?

Anything else
Set score to 1

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Case 3 - total of 3 points (questions 50, 51 and 52)**Introduction 4**

The following rationale for a study was submitted to the MERC:

Worldwide, the anticoagulant heparin is administered to prevent thromboembolic complications in patients undergoing arterial vascular surgery. There is however no consensus with regard to perioperative heparin dosing requirements in these patients, although the side effects of heparin can be severe. Preliminary results from a heparin management study in patients undergoing cardiac surgery show individual differences in the response to heparin dosing among patients. In contrast to cardiothoracic surgery, there is however no standard monitoring of the effect of heparin during vascular surgery on blood coagulation. When heparin is underdosed this might lead to thrombotic events, while overdosing of heparin may prolong bleeding times.

Use this rationale to design the following study items.

Question 50 (1 point)

What is a research question that fits this rationale?

Anything else
Set score to 1

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Continuation case 3**Introduction 4**

The following rationale for a study was submitted to the MERC:

Worldwide, the anticoagulant heparin is administered to prevent thromboembolic complications in patients undergoing arterial vascular surgery. There is however no consensus with regard to perioperative heparin dosing requirements in these patients, although the side effects of heparin can be severe. Preliminary results from a heparin management study in patients undergoing cardiac surgery show individual differences in the response to heparin dosing among patients. In contrast to cardiothoracic surgery, there is however no standard monitoring of the effect of heparin during vascular surgery on blood coagulation. When heparin is underdosed this might lead to thrombotic events, while overdosing of heparin may prolong bleeding times.

Use this rationale to design the following study items.

Question 51 (1 point)

What is the study endpoint?

Anything else
Set score to 1

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Continuation case 3**Introduction 4**

The following rationale for a study was submitted to the MERC:

Worldwide, the anticoagulant heparin is administered to prevent thromboembolic complications in patients undergoing arterial vascular surgery. There is however no consensus with regard to perioperative heparin dosing requirements in these patients, although the side effects of heparin can be severe. Preliminary results from a heparin management study in patients undergoing cardiac surgery show individual differences in the response to heparin dosing among patients. In contrast to cardiothoracic surgery, there is however no standard monitoring of the effect of heparin during vascular surgery on blood coagulation. When heparin is underdosed this might lead to thrombotic events, while overdosing of heparin may prolong bleeding times.

Use this rationale to design the following study items.

Question 52 (1 point)

What patients should be selected for this study?



Anything else
Set score to 1

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Case 4 - total of 8 points (questions 53, 54, 55 and 56)

Introduction 5

The following results are presented in an abstract of a clinical study report:

RESULTS: A total of 1917 patients underwent randomization from November 2011 through January 2014. The median age was 67 years, and the median PSA level was 53 ng per milliliter. A total of 52% of the patients had metastatic disease, 20% had node-positive or node-indeterminate non-metastatic disease, and 28% had node-negative, nonmetastatic disease; 95% had newly diagnosed disease. The median follow-up was 40 months. There were 184 deaths in the combination group as compared with 262 in the ADT-alone group (hazard ratio, 0.63; 95% confidence interval [CI], 0.52 to 0.76; P<0.001); the hazard ratio was 0.75 in patients with nonmetastatic disease and 0.61 in those with metastatic disease. There were 248 treatment-failure events in the combination group as compared with 535 in the ADT-alone group (hazard ratio, 0.29; 95% CI, 0.25 to 0.34; P<0.001); the hazard ratio was 0.21 in patients with nonmetastatic disease and 0.31 in those with metastatic disease. Grade 3 to 5 adverse events occurred in 47% of the patients in the combination group (with nine grade 5 events) and in 33% of the patients in the ADT-alone group (with three grade 5 events). (James et al. NEJM 2017; 377:338-351)

Question 53 (2 points)

Complete the abstract by designing an abstract title, and writing an introduction, methods and conclusion section. Every section has a maximum of 75 words.

Complete the abstract by an abstract title.



Anything else
Set score to 2

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Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Continuation case 4

Introduction 5

The following results are presented in an abstract of a clinical study report:

RESULTS: A total of 1917 patients underwent randomization from November 2011 through January 2014. The median age was 67 years, and the median PSA level was 53 ng per milliliter. A total of 52% of the patients had metastatic disease, 20% had node-positive or node-indeterminate non-metastatic disease, and 28% had node-negative, nonmetastatic disease; 95% had newly diagnosed disease. The median follow-up was 40 months. There were 184 deaths in the combination group as compared with 262 in the ADT-alone group (hazard ratio, 0.63; 95% confidence interval [CI], 0.52 to 0.76; P<0.001); the hazard ratio was 0.75 in patients with nonmetastatic disease and 0.61 in those with metastatic disease. There were 248 treatment-failure events in the combination group as compared with 535 in the ADT-alone group (hazard ratio, 0.29; 95% CI, 0.25 to 0.34; P<0.001); the hazard ratio was 0.21 in patients with nonmetastatic disease and 0.31 in those with metastatic disease. Grade 3 to 5 adverse events occurred in 47% of the patients in the combination group (with nine grade 5 events) and in 33% of the patients in the ADT-alone group (with three grade 5 events). (James et al. NEJM 2017; 377:338-351)

Question 54 (2 points)

Write an introduction section with a maximum of 75 words for this abstract.



Anything else
Set score to 2

55 of 56

Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Continuation case 4

Introduction 5

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Question 55 (2 points)

Write a methods section with a maximum of 75 words for this abstract.



Anything else
Set score to 2

56 of 56

Security Briefing : Briefing
LC : y
Test name : Test 1 or 2
Difficulty : CTT Level
PorterGamGad : include

Continuation case 4

Introduction 5

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Question 56 (2 points)

Write a conclusion section with a maximum of 75 words for this abstract.



Anything else
Set score to 2

Feedback
0% to 100%

%SESSION.SCORE% of %SESSION.MAX% of the closed questions are correctly answered.
The open questions have not yet been assessed.

