LSM4221 Drug design and clinical trials
Exam questions
[guest lectures are important, please do not skip them]

1. a) If you have identified a new therapeutic target NUS2018, which is a tyrosine kinase receptor. How to prove that this target is of therapeutic value experimentally? b) If use fragment-based screening, what are the procedures and what do you expect to see?

2. What is prognostic biomarker? Any examples? (I'd suggest you remember the definition of all biomarkers since there will always be a question about them.)

3. Questions about group presentations: what does group X said about the shortcomings of the phase 3 clinical trials they presented? What does group Y said about things that can be done in the future to improve drug YY? According to group Z, why the new drug ZZ is superior to the old drug ZZold?

4. Read something about the anti-anxiety clinical trial that lead to 1 death and many hospitalized (have a similar case in the lecture notes:
Phase1 Victim:
Where: 150 beds for human subjects, Rennes, France
Aim: New drug to treat anxiety and motor disorders associated with Parkinson's disease, and chronic pain in people with cancer and other conditions. How: does the drug work: fatty acid amide hydrolase inhibitor

what did the research do wrongly in this trial? (I'd suggest you answer according to the ethic principles)

5. Which drug was withdrawn after marketing? Why? What are the things that can be done after a drug has been marketed?

Questions & suggestions from past year exams (accuracy cannot be guaranteed as I did not take these exams):
1. write a consent form according to the clinical trial information given
2. critique a clinical trial
3. please remember the drug discovery notes carefully

Questions for the midterm:
1. which of the following is not from Lipinski's rule of 5?
2. which of the following does not follow GMP, GLP etc
3. what is the z score for the ligand and why
4. which of the following is wrong about phase 2 clinical trials?
5. which is the correct chronological order in which the ethic principles are published?
6. which is wrong according to the ethic principles
7. which is wrong about the description of biomarkers: differentiate between predictive and prognostic
8. which of the following is wrong about lead discovery process?