

MAY 2011

[KY 361]

Sub. Code: 2922

**M.PHARM. DEGREE EXAMINATION**

**(Regulations 2010)**

**(Candidates admitted from 2010-2011 onwards)**

**FIRST YEAR**

**BRANCH VII – PHARMACY PRACTICE**

**PAPER IV – CLINICAL PHARMACY**

*Q.P. Code : 262922*

**Time : Three hours**

**Maximum : 100 marks**

**Answer All questions**

**I. Essay Questions :**

**(6 x 10 = 60)**

1. What is ward round participation? Describe the types, procedure and the significances of ward round participation.
2. Discuss the protocol and importance of Drug utilization review programme of a hospital.
3. Discuss the design and protocol of clinical trial of new drugs.
4. Discuss the importance of medication history in therapeutic management of patients.
5. Discuss the tests associated with cardiac disorders.
6. Discuss the therapeutic drug monitoring process for an anti-convulsant drugs.

**II. Write Short Notes :**

**(8 x 5 = 40)**

1. Volume of distribution and its significance.
2. How dose adjustment is done in geriatric patient? Explain.
3. Liver function tests and their significance.
4. Write a note on adverse drug reactions management.
5. Sources of drug information.
6. Patient counseling.
7. Discuss the treatment of poisoning.
8. Hepatic clearance.

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October 2011

[KZ 361]

Sub. Code: 2922

**M.PHARM. DEGREE EXAMINATION**  
**FIRST YEAR**  
**BRANCH VII – PHARMACY PRACTICE**  
**PAPER IV – CLINICAL PHARMACY**

*Q.P. Code : 262922*

**Time : 3 hours**  
**(180 Min)**

**Maximum : 100 marks**

**Answer ALL questions in the same order.**

**I. Elaborate on :**

	<b>Pages</b>	<b>Time</b>	<b>Marks</b>
	<b>(Max.)</b>	<b>(Max.)</b>	<b>(Max.)</b>
1. a) Explain with examples the necessity and method of dose adjustment in geriatric and paediatric patients.	17	40	20
b) Discuss the setting up of drug information centre.			
2. What are the principles of pharmaceutical care? Add a note on quality assurance of clinical pharmacy services.	17	40	20

**II. Write notes on :**

1. Sensitivity screening for selection appropriate antimicrobial Agents.	4	10	6
2. Plasma protein binding of drugs.	4	10	6
3. Reporting of adverse drug reaction.	4	10	6
4. Estimation of Bioavailability by pharmacokinetic method.	4	10	6
5. Guidelines for good clinical research practice.	4	10	6
6. Discuss the laboratory tests and interpretation associated with cardiac disorders.	4	10	6
7. Malnutrition disorders and their treatment.	4	10	6
8. Drug clearance.	4	10	6
9. Selection of drugs for Therapeutic Drug Monitoring.	4	10	6
10. Ward round participation.	4	10	6

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[LA 361]

**MAY 2012**  
**M.PHARM. DEGREE EXAMINATION**  
**FIRST YEAR**  
**BRANCH VII – PHARMACY PRACTICE**  
**PAPER IV – CLINICAL PHARMACY**  
*Q.P. Code: 262922*

**Sub. Code: 2922**

**Time: 3 hours**  
**(180 Min)**

**Maximum: 100 marks**

**Answer ALL questions in the same order.**

**I. Elaborate on:**

**Pages    Time    Marks**  
**(Max.)   (Max.)   (Max.)**

- |  |    |    |    |
|--|----|----|----|
| 1. a) Explain the role of a clinical pharmacist in the design and establishment of clinical trials. What are the legal requirements to be fulfilled before carrying out clinical trials? |    |    |    |
| b) Explain the role of clinical pharmacist in clinical trials.   | 17 | 40 | 20 |
| 2. Enumerate the different compartmental models and explain any one compartmental model with its clinical significance.  | 17 | 40 | 20 |

**II. Write notes on:**

- |  |   |    |   |
|--|---|----|---|
| 1. Patient medication history review.                              | 4 | 10 | 6 |
| 2. Briefly discuss the terms renal clearance and plasma clearance. | 4 | 10 | 6 |
| 3. Tests associated with cardiac disorder.                         | 4 | 10 | 6 |
| 4. Write a note on estimation of bioavailability.                  | 4 | 10 | 6 |
| 5. Write the importance of drug utilization evaluation (DUE).      | 4 | 10 | 6 |
| 6. Discuss the importance of therapeutic drug monitoring.          | 4 | 10 | 6 |
| 7. How does patient counseling improve therapeutic out come?       | 4 | 10 | 6 |
| 8. Explain “volume of distribution” and its significance.          | 4 | 10 | 6 |
| 9. Selection of anti-microbial regimen.                            | 4 | 10 | 6 |
| 10. Write brief notes on drug and poison information.              | 4 | 10 | 6 |

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[LB 361]

**NOVEMBER 2012**  
**M.PHARM. DEGREE EXAMS**  
**FIRST YEAR**  
**BRANCH VII – PHARMACY PRACTICE**  
**PAPER IV – CLINICAL PHARMACY**  
*Q.P. Code : 262922*

**Sub. Code: 2922**

**Time : 3 hours**  
**(180 Min)**

**Maximum : 100 marks**

**Answer ALL questions in the same order.**

**I. Elaborate on :**

	<b>Pages (Max.)</b>	<b>Time (Max.)</b>	<b>Marks (Max.)</b>
1. a) How would you assess acute myocardial infarction with the aid of various laboratory investigations? Explain.	17	40	20
b) Discuss the importance of medication history in therapeutic management of patients.			
2. What is clinical trial? What are the legal requirements to be fulfilled before carrying out clinical trials? Discuss the role of clinical pharmacist in clinical trials.	17	40	20

**II. Write Notes on :**

1. Drug utilization evaluation.	4	10	6
2. Principles of pharmaceutical care.	4	10	6
3. Liver function tests and their significance.	4	10	6
4. Dose adjustment in Geriatrics.	4	10	6
5. Calculations of loading and maintenance doses.	4	10	6
6. Laboratory tests carried out on urine.	4	10	6
7. Quality assurance in clinical pharmacy services.	4	10	6
8. Classification of Adverse Drug Reactions with examples.	4	10	6
9. Multiple dosing.	4	10	6
10. Drug information resources with their benefits and limitations.	4	10	6

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[LC 361]

**APRIL 2013**  
**M.PHARM. DEGREE EXAMS**  
**FIRST YEAR**  
**BRANCH VII – PHARMACY PRACTICE**  
**PAPER IV – CLINICAL PHARMACY**  
*Q.P. Code : 262922*

**Sub. Code: 2922**

**Time : 3 hours**

**Maximum : 100 marks**

**I. Elaborate on :**

**(2x20=40)**

1. What is clinical trial? What are the legal requirements to be fulfilled before carrying out clinical trials? Discuss the role of clinical pharmacist in clinical trials.
2. Explain the importance of Drug Utilisation Evaluation (DUE) and Review (DUR) implementing rational therapeutic management.

**II. Write notes on :**

**(10x6=60)**

1. Quality assurance of clinical pharmacy services.
2. Classification of Adverse Drug Reactions with examples
3. What are the various methods of bioavailability determinations? Explain any one briefly.
4. Calculations of loading and maintenance doses
5. Laboratory tests and interpretation associated with cardiac disorders.
6. Dose adjustment in hepatic dysfunction?
7. Volume of distribution and its significance
8. Patient counseling
9. Drug information resources
10. Dose adjustment in geriatric patients

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[LD 361]

OCTOBER 2013

Sub. Code: 2922

**M.PHARM. DEGREE EXAMINATIONS**  
**FIRST YEAR**  
**BRANCH VII – PHARMACY PRACTICE**  
**PAPER IV – CLINICAL PHARMACY**

*Q.P. Code : 262922*

**Time: Three Hours**

**Maximum: 100 marks**

**Answer ALL questions in the same order.**

**I. Elaborate on :**

**(2 x 20 = 40)**

1. Explain the significance of clinical pharmacokinetics in determining. Loading dose, maintenance dose, bioavailability hepatic clearance, multiple dosage with appropriate models and illustrations.
2. Enumerate the common laboratory tests and write their procedure with clinical significance. Pertaining to hematology, liver, kidney and cardiology.

**II. Write notes on :**

**(10 x 6 = 60)**

1. Disorders of malnutrition and their treatment.
2. Applied biomedical statistics.
3. Quality assurance in clinical pharmacy services.
4. Classification of ADR with example.
5. Medication chart review
6. Objectives of phase IV clinical trials.
7. What are the principles of pharmaceutical care?
8. Role of emetics in poison management.
9. Dose adjustment in Geriatrics.
10. Write on Drug information resource.

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[LE 361]

APRIL 2014

Sub. Code: 2922

**M.PHARM. DEGREE EXAMS  
FIRST YEAR  
BRANCH VII – PHARMACY PRACTICE  
PAPER IV – CLINICAL PHARMACY**

*Q.P. Code : 262922*

**Time : 3 hours**

**Maximum : 100 marks**

**I. Elaborate on :**

**(2x20=40)**

1. Describe the applications of various clinical pharmacokinetic Models.  
Add a note on physiological determinants of drug clearance and volumes of distribution.
2. Write about the principles of establishing drugs and poison information center and write a note on management and provision of services in drugs and poison information center in a teaching hospital.

**II. Write notes on :**

**(10x6=60)**

1. Total Parenteral Nutrition.
2. Renal Function Test
3. Opioids poisoning management.
4. Therapeutic drug monitoring.
5. Patient medication counseling.
6. Phases of clinical trials
7. Evaluation of drug therapy.
8. Sensitivity screening for common pathogens. .
9. Reporting of adverse drug reactions.
10. What is students't' test? How is it performed?

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[LF 361]

OCTOBER 2014

Sub. Code: 2922

**M.PHARM. DEGREE EXAMINATION  
FIRST YEAR  
BRANCH VII – PHARMACY PRACTICE  
PAPER IV – CLINICAL PHARMACY**

*Q.P. Code : 262922*

**Time : Three hours**

**Maximum : 100 marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Explain the need of dosage adjustment in pathological condition. Give an example of Dosage. Adjustment in Renal failure.
2. What is clinical trial? What are the legal requirements to be fulfilled before carrying out clinical trials? Discuss the role of clinical pharmacist in clinical trials.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Common laboratory tests carried out on urine.
2. Drug information resources.
3. Adverse drug reactions management.
4. How does patient counseling improve the drug therapy?
5. Calculations of loading and maintenance doses.
6. Importance of clearance and apparent volume of distribution in clinical practice?
7. Malnutrition and their treatment.
8. Loading and maintenance doses.
9. Therapeutic Drug Monitoring.
10. Plasma protein binding.

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[LG 361]

APRIL 2015

Sub. Code: 2922

**M.PHARM. DEGREE EXAMINATION**  
**FIRST YEAR**  
**BRANCH VII – PHARMACY PRACTICE**  
**PAPER IV – CLINICAL PHARMACY**

*Q.P. Code : 262922*

**Time: Three Hours**

**Maximum: 100 marks**

**Answer ALL questions**

**I. Elaborate on :**

**(2 x 20 = 40)**

1. What is therapeutic drug monitoring?  
Explain the indications and criteria for therapeutic drug monitoring.  
Discuss the individualization of drug therapy with help of therapeutic drug monitoring.
2. Define adverse drug reaction. Explain the classification, risk factors and mechanism of adverse drug reaction with examples.

**II. Write notes on :**

**(10 x 6 = 60)**

1. Discuss objectives and types of clinical pharmacist ward rounds.
2. Note on test for abnormal content of urine with clinical significance.
3. Explain the drug information resources with examples.
4. Enumerate the steps of drug utilization evaluation.
5. Write a note on total parenteral nutrition.
6. Discuss the various phases of clinical trials.
7. Enumerate the types of pharmacokinetics models.
8. Dose adjustment in renal failure patients.
9. Note on determination of bioavailability.
10. What is critical appraisal of literatures? Brief about critical appraisal of cohort studies.

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[LH 361]

OCTOBER 2015

Sub. Code: 2922

**M.PHARM. DEGREE EXAMINATION  
FIRST YEAR  
BRANCH VII – PHARMACY PRACTICE  
PAPER IV – CLINICAL PHARMACY**

*Q.P. Code: 262922*

**Time : Three hours**

**Maximum : 100 marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. What is pharmaceutical care? Explain the essential component of pharmaceutical care. Discuss the role of clinical pharmacist in Pharmaceutical Care.
2. Enumerate the pharmacokinetics models and explain the determination of drug clearance and volume of distribution in one compartment open model - Intravenous administration.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Discuss the stages of patient counseling.
2. Liver function test and its clinical significance.
3. Discuss the systemic approach in answering the drug queries.
4. Poison Information center organization and resources.
5. Brief about assessing causality, reporting of adverse drug reaction.
6. Write note on major intracellular electrolytes and its clinical significance.
7. Role of pharmacist in monitoring and auditing of clinical trials.
8. Calculation of loading dose.
9. Dose adjustment in paediatric patients.
10. Criteria for therapeutic drug monitoring.

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[LI 361]

APRIL 2016

Sub. Code: 2922

**M.PHARM. DEGREE EXAMINATION  
FIRST YEAR  
BRANCH VII – PHARMACY PRACTICE  
PAPER IV – CLINICAL PHARMACY**

*Q.P. Code : 262922*

**Time : Three hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Explain the various phases of Clinical Trial and discuss the guidelines of good Clinical Research Practice and ethical requirements to conduct Clinical Trials.
2. a) What is Ward Round Participation? Describe the types, procedure and the significances of Ward Round Participation?  
b) Discuss the communication skills required for effective patient Counseling.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Describe the sensitivity screening for selection appropriate antimicrobial Agents.
2. Note on Cardiac markers with its clinical significance.
3. Discuss the classification adverse drug reaction with examples.
4. Quality assurance of clinical pharmacy services.
5. Write a note on management of Opiate poisoning.
6. Brief about malnutrition and deficiency states.
7. Calculation of loading and maintenance dose.
8. Dose adjustment in hepatic dysfunction.
9. Brief about estimation of Renal clearance.
10. Drug and therapeutic newsletter.

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[LJ 361]

OCTOBER 2016

Sub. Code: 2922

**M.PHARM. DEGREE EXAMINATION  
FIRST YEAR  
BRANCH VII – PHARMACY PRACTICE  
PAPER IV – CLINICAL PHARMACY**

*Q.P. Code : 262922*

**Time : Three hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Discuss in detail about Drug utilization evaluation.
2. Describe the therapeutic drug monitoring process with suitable examples.

**II. Write notes on:**

**(10 x 6 = 60)**

1. ADR Monitoring.
2. Phases of clinical trials.
3. Non-linear pharmacokinetics.
4. Renal function test.
5. Parental Nutrition.
6. Ward round participation.
7. Source of drug information.
8. Dose adjustment for renal failure patients.
9. Patient medication counseling.
10. Liver functions test.

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[LK 361]

MAY 2017

Sub. Code: 2922

**M.PHARM. DEGREE EXAMINATION  
FIRST YEAR  
BRANCH VII – PHARMACY PRACTICE  
PAPER IV – CLINICAL PHARMACY**

*Q.P. Code : 262922*

**Time : Three hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Define and classify ADR with suitable examples. Discuss the various methods of ADR monitoring including their merits and demerits.
2. Explain about various stages of clinical trial for new drugs. Explain the role of the pharmacist in the programme.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Renal function test.
2. Drug utilization evaluation review.
3. Therapeutic drug monitoring.
4. Q.A of clinical pharmacy services.
5. Laboratory tests and interpretation associated with cardiac disorders.
6. Volume of distribution.
7. Selection of anti-microbial regimen.
8. Patient data analysis.
9. Patient medication counseling.
10. Multi compartment model.

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[LL 361]

OCTOBER 2017

Sub. Code: 2922

**M.PHARM. DEGREE EXAMINATION  
FIRST YEAR  
BRANCH VII – PHARMACY PRACTICE  
PAPER IV – CLINICAL PHARMACY**

*Q.P. Code : 262922*

**Time : Three hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. List Liver function tests. How do the values differ in intra and extra hepatic jaundice? Give examples of drugs that can cause elevation in Liver function test.
2. Describe the therapeutic drug monitoring process with suitable examples.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Quality assurance of clinical pharmacy services.
2. Classification of Adverse Drug Reactions with examples.
3. Ward round participation.
4. Calculations of loading and maintenance doses.
5. Laboratory tests and interpretation associated with cardiac disorders.
6. Dose adjustment in hepatic dysfunction?
7. Volume of distribution and its significance.
8. Patient medication counselling.
9. Drug information resources.
10. Selection of anti-microbial regimen.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LM 361]

MAY 2018

Sub. Code: 2922

**M.PHARM. DEGREE EXAMINATION  
FIRST YEAR  
BRANCH VII – PHARMACY PRACTICE  
PAPER IV – CLINICAL PHARMACY**

*Q.P. Code : 262922*

**Time : Three hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Write briefly about various pharmacokinetics models. How to determine drug clearance and volume of distribution in one compartment open model?
2. What are the various phases of clinical trial? Explain about guidelines of good clinical research practice for clinical trials.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Write note on Cardiac markers.
2. Write a note on adverse drug reaction management.
3. Explain plasma protein binding of drugs.
4. Explain patient medication review.
5. Poison management in drug dependence and drug abuse.
6. Dose adjustment in renal failure patients.
7. Write the importance of drug utilization evaluation (DUE).
8. Haematological tests and their significance.
9. How to establish a drug Information centre?
10. Parenteral Nutrition.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LN 361]

OCTOBER 2018

Sub. Code: 2922

**M.PHARM. DEGREE EXAMINATION  
FIRST YEAR  
BRANCH VII – PHARMACY PRACTICE  
PAPER IV – CLINICAL PHARMACY**

*Q.P. Code : 262922*

**Time : Three hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. What are the principles of pharmaceutical care? Add a note on quality assurance of clinical pharmacy services.
2. Define and classify ADR with suitable examples. Discuss the various methods of ADR Monitoring including their merits and demerits.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Patient's case history and its utilization in clinical practice.
2. Phases of clinical trials.
3. Drug and therapeutic newsletter.
4. Patient medication counselling.
5. Multi-compartment model.
6. Drug utilization evaluation review.
7. Parenteral nutrition.
8. Liver function tests.
9. Therapeutic drug monitoring.
10. Discuss the sources of drug information.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LO 361]

MAY 2019

Sub. Code: 2922

**M.PHARM. DEGREE EXAMINATION  
FIRST YEAR  
BRANCH VII – PHARMACY PRACTICE  
PAPER IV – CLINICAL PHARMACY**

*Q.P. Code : 262922*

**Time : Three hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Describe adverse drug reaction with its classification risk factors and mechanism of adverse drug reaction with example.
2. Discuss the objectives, types and roles of clinical pharmacist ward rounds.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Enumerate the steps of drug utilization and evaluation.
2. Types of pharmacokinetic models.
3. Write a note on determination of bioavailability.
4. Explain in detail about drug information resources.
5. Calculation of loading and maintenance dose.
6. Write a note on phases of clinical trial.
7. Poison management in drug dependence and drug abuse.
8. Volume of distribution and significance.
9. Discuss importance of medication history in therapeutic management of patient.
10. Dose adjustments in hepatic failure.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LP 122]

OCTOBER 2019

Sub. Code: 8122

**MPT DEGREE EXAMINATION  
SECOND YEAR  
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY  
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT**

*Q.P. Code : 278122*

**Time : Three hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Describe in detail about the assessment of Limbic system.
2. Describe in detail about the assessment of stroke patients according to Brunnstorm approach.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Primitive, spinal and cortical reflexes.
2. Myasthenia gravis.
3. Aging of Nervous system.
4. Connections of basal ganglia.
5. Vestibular disorders.
6. Nerve conduction velocity.
7. Personality and coping styles.
8. NAGI Model.
9. Modified Hoehn and Yahr Scale.
10. Assessment of cognitive functions.

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**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

**[MPHARM 0921]**

**SEPTEMBER 2021  
(OCTOBER 2020 EXAM SESSION)**

**Sub. Code: 2922**

**M.PHARMACY DEGREE EXAMINATION  
FIRST YEAR  
BRANCH VII – PHARMACY PRACTICE  
PAPER IV – CLINICAL PHARMACY  
*Q.P. Code : 262922***

**Time : Three hours**

**Answer ALL Questions**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. a) Define Patient Counseling. Enumerate the steps involved in the patient counseling techniques.  
b) Add note on “skills of pharmacist in patient counseling”.
2. Explain the role of Invasive and Non – Invasive test involved in the diagnosis and management of cardiovascular diseases.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Lung Volumes in Respiratory diseases.
2. Clinical importance of blood urea, serum creatinine and plasma sodium levels.
3. Clinical review.
4. Concept of clinical pharmacy.
5. Poison information center.
6. Structure of patient case history.
7. Quality assurance of clinical pharmacy services.
8. Medication History Interview.
9. Multiple dosing.
10. Guidelines for good clinical research practice.

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