PHAR 632

"Transdermal Drug Delivery Systems (TDDS)"
&
"Dosage Form Stability"

Objectives:

1. Understand the significance of TDDS, its advantages and disadvantages.
2. What are the factors affecting percutaneous absorption and the limitations associated with TDDS?
3. Understand the approaches used to enhance percutaneous absorption i.e. percutaneous absorption enhancers.
4. Differentiate between various types of systems used for transdermal delivery and provide example of drugs delivered transdermally.
5. What are the experimental methods used to study skin permeability and percutaneous absorption?
6. Describe proper administration for TDDSs and important counseling information to share with the patient.
7. What are the mechanisms of drug degradation? What are the approaches used to stabilize of pharmaceutical preparation susceptible to degradation.
8. Describe the purpose and general protocol for accelerated stability studies.

Reading Assignment:

The following pages are your reading from ***Ansel's Pharmaceutical Dosage Form and Drug Delivery*** for the next topic: "**Transdermal Drug Delivery Systems"** Read **Chapter 11** pages; **342-352, 356-357**.

The following pages are your reading from ***Ansel's Pharmaceutical Dosage Form and Drug Delivery*** for the topic: "**Dosage Form Stability"** Read **Chapter 4** pages, **134-135, 137-138, 140-142, 146-150, Skip reaction order and –skip** all Physical Pharmacy Capsule **except Capsule 4.19 " Q_{10} Method of Shelf Life Estimation"** Go over the examples, you are not expected to derive the equation.

<u>Also read the lecture handout once posted.</u>

Final Reading Assignment
TDDS and Dosage Form Stability
Dec. 3rd, 2015 Dr. Elkeeb