Course handouts July 12 16:00-17:30

**High-performance liquid chromatography (HPLC)**

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**Presentation notes**

Lecture objective:

Describe scientific basis for HPLC

Describe the types of analysis commonly used for

pharmacopoeia assays

What could go wrong? Give two examples of misleading or

erroneous HPLC data. Explain how to spot each error.

List five experiments used to show that the HPLC is working right

1) Scientific basis for HPLC

Chromatography

Detection

Internal and External Standards

Integration and data processing

2) Samples

What question are we trying to answer with HPLC?

Sampling statistics

Sample preparation

3) Common pharmacopoeia methods

Assay

Impurities

Uniformity

Forensic use of HPLC data

4) What could go wrong?

class exercise

5) System suitability testing: How do you tell your HPLC is working right?

Control charts

Establishing the linear range

Measuring accuracy and precision

Spike-recovery experiment

Internal controls

Intermediate precision/interlab testing

**One thing I learned is:**

**One question I have is:**