

SCR-PRA-012

SCREENING METHODS

Biosensors

• Context

Screening methods are defined as analytical strategies providing strong indications for the presence of a drug residue in a sample. The residue present may be in the form of a parent drug or of its metabolite. Desirable features for screening tests are high throughput possibilities combined with a low rate of false negative results. Amongst the potential screening technologies, biosensors, which have been applied to a wide variety of analytical problems in medicine, drug discovery, environment, security and more recently food quality and safety, are promising.

• General objective(s)

The course is dedicated to the demonstration of an SPR bioassay on a Biacore® instrument.

• Main items

Chip activation / Ligand immobilisation / Regeneration / Sensorgram interpretation

• Pedagogical objectives

- ✓ To list the main steps required to perform an SPR bioassay
- ✓ To interpret a sensorgram
- ✓ To calculate ligand immobilisation rate
- ✓ To calculate the rate of interaction between ligand and target analyte

• Pedagogical tools

- ✓ Demonstration on an SPR instrument
- ✓ Group of maximum 10 persons

• Duration

- ✓ 1h20

• Pre-requisite

- ✓ Theoretical lectures on screening methods (SCR-THE-010, SCR-THE-020)