

## LSTAT2330

2010-2011

## Statistics in clinical trials.

5.0 credits 22.5 h + 7.5 h 2q
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Teacher(s) :	Legrand Catherine ; Robert Annie ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	The following topics will be discussed: - International guidelines in clinical trials Phase 1: pharmacokinetics and pharmacodynamics Phase 1: dose determination: the continual reassessment method Phases 2 & 3: hypothesis tests in efficacy, superiority or equivalence trials Phases 2 & 3: power and sample size computation, randomisation and blinding. Application to sequential trials Phases 2 & 3: cross-over and factorial designs Phase 4: pharmacovigilance. Rare events and risk factors Reporting in clinical trials.
Aims:	Objectives The goal of this course is to propose a broad overview of the statistical aspects of phase 1, 2, 3 and 4 clinical trials. The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".
Content :	The following topics will be discussed: International guidelines in clinical trials. Phase 1: pharmacokinetics and pharmacodynamics. Phase 1: dose determination: the continual reassessment method. Phases 2 & 3: hypothesis tests in efficacy, superiority or equivalence trials. Phases 2 & 3: power and sample size computation, randomisation and blinding. Application to sequential trials. Phases 2 & 3: cross-over and factorial designs. Phase 4: pharmacovigilance. Rare events and risk factors. Reporting in clinical trials.
Other infos :	References: Redmond, C. K. and Colton T. (2001), Biostatistics ub Clinical Trials, Wiley. Fleiss J. (1986), The Design and Analysis of Clinical Experiments. Wiley.
Cycle and year of study :	➤ Master [120] in Statistics: Biostatistics     ➤ Certificat universitaire en statistique     ➤ Master [120] in Biomedicine     ➤ Master [60] in Biomedicine     ➤ Master [120] in Public Health     ➤ Master [120] in Biomedical Engineering
Faculty or entity in charge:	LSBA