

Faculty of Medicine



ESP3530

Strategy of the medical decision

[30h]

Teacher(s): Olivier Devuyst, Annie Robert
Language: French
Level: Third cycle

Aims

To teach the rationale of the diagnostic procedure and the basis of clinical reasoning, using methods taken from epidemiology and statistics.

Main themes

The first part addresses the use and interpretation of diagnostic tests. That includes the basic characteristics (sensitivity, specificity, predictive value) ; the potential biases ; the ROC curves ; the Bayesian analysis ; the threshold probabilities. The second part analyzes the expected outcomes from a test or a treatment : utility concept, life expectancy. The third part includes clinical reasoning, decision-making, and cost-efficacy. These concepts are illustrated by clinical examples taken from the diagnostic procedures used in medicine.

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Written examination.

References : 1. Sox HC, Medical decision making, Butterworths ; 2. Grenier B, Evaluation de la décision médicale, Masson ; 3. Kassirer JP et Kopelman RI, Learning clinical reasoning, Williams & Wilkins ; 4. Friedland DJ et al, Evidence-based medicine, Lange ; 5. Weinstein, Clinical decision analysis, Saunders.

Other credits in programs

STAT3DA/B diplôme d'études approfondies en statistique (biostatistique et épidémiologie) (5 credits)