

COEUR Course Vascular Clinical Epidemiology

Course organizers: Professor E. Boersma and Dr. D.W.J. Dippel

Intervention studies are the core business of clinical epidemiologists. However, before an intervention can be evaluated for its ability to influence clinical outcome, we will have made a long and exciting journey leading from prognostic studies and laboratory experiments via feasibility or “pilot” studies. will have been taken to our final destination, large phase III trials, proving clinical benefit.

When an intervention has been proven successful, the clinical epidemiologists’ work is not done. Economic studies will be needed to assess the efficiency of an intervention. Effective and efficient interventions have to be introduced and implemented, and guidelines have to be developed. Most importantly perhaps, everyday clinical practice will have to be studied in order to answer the question whether the intervention has been accepted and disseminated sufficiently, and is likely to positively influence the health of our patients.

In this course you will be given an overview of these four stages of clinical epidemiologic research. Each course chapter will be introduced by a keynote speaker who discusses research methodology suitable for that particular stage of vascular research. Two speakers will present an in-depth discussion of typical studies. After that, the assignment that you have prepared at home will be discussed.

Observational studies in vascular disease

Moderator: Professor E. Boersma

Thursday,

08:30-09.00 General introduction and outline of the course
Professor E. Boersma

09:00-0945 Methodological background presentation
Identifying potentially modifiable vascular risk factors
Professor E. Boersma

09:45-10.30 Example 1
Prediabetes and ischemic stroke: risk and treatment
Dr. M.H. den Hertog

10:45-11:30 Example 2
Identification of myocardial ischemia in patients undergoing noncardiac surgery
Professor D. Poldermans

11:30-12:15 Discussion of home assignments
Professor E. Boersma

From laboratory to clinical trial

Moderator:

- 13:30-14:15 Methodological background presentation
Methodology en external validity of animal studies for vascular intervention research
Dr. M.H. van Beusekom
- 14:15-15:00 Example 1
Neuroprotective agents: the role of animal studies
Dr. H.B. van der Worp (UMCU)
- 15:15-16:00 Example 2
How to analyse and interpret phase 0-2 studies: the case of nimodine and lubeluzole.
Dr. D.W.J. Dippel
- 16:00-17:00 Discussion of home assignments
Dr. D.W.J. Dippel

From clinical trial to clinical procedure

Moderator: Professor E. Boersma

Friday,

- 08:30-09:45 Methodological background presentation
Design and analysis of clinical trials
Professor J.G.P. Tijssen (AMC)
- 09:45-10:30 Example 1
Atrial fibrillation (EAFT trial and new developments)
Professor P.J. Koudstaal
- 10:45-11:30 Methodological background presentation
From trial result to individualized treatment decision: prediction tools and decision analysis
Professor E.W. Steyerberg
- 11:30-12:15 Discussion of home assignments
Professor E. Boersma

From trial result to clinical practice

Moderator: Dr. D.W.J. Dippel

- 13:30-14:15 Example 2
Thrombolytic therapy in acute brain infarction
Dr. D.W.J. Dippel
- 14:15-15:00 Example 3
Guideline development and evaluation: quality of care
Dr. M.J. Lenzen
- 15:15-16:00 Example 4
Economic evaluation of vascular interventions
Dr. Redekop/iBMG/iMTA
- 16:00-17:00 Discussion of home assignments / Closure
Dr. D.W.J. Dippel