Methods for Evaluation of medical prediction Models, Tests And Biomarkers

Monday 2nd & Tuesday 3rd July 2018

Utrecht, The Netherlands

#Memtab2018

VENUE
Mitland Hotel Utrecht
Ariënslaan 1
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ABSTRACTS
https://diagnprognres.biomedcentral.com/articles/supplements/volume-2-supplement-1

PROGRAM

MONDAY 2 JULY 2018

09:00 - 09:30 **Registration**

09:30 - 09:45 **Welcome & Introduction**
K.G.M. Moons

09:45 - 11:00 **What Evidence is enough: the regulatory perspective**

Chairperson: L. Hooft

Evidence for precision medicine: the IQWiG perspective
Dr S. Lange, IQWiG

From evidence to decision making
Dr S. Byron, NICE

Discussion - All

11:00 - 11:45 **Coffee Break**

SESSION 1

11:45 -12:30 **Systematic reviews using aggregate or individual data I**

Chairperson: J.B. Reitsma

Are Cochrane reviews of diagnostic test accuracy informing clinical guidelines? 017
J. Deeks

An interactive web application to aid diagnostic test accuracy meta-analysis. 028
S. Freeman

Quantifying how diagnostic test accuracy depends on threshold in a meta-analysis. 045
H. Jones

Correction for confounding in comparative accuracy reviews. 055
M. Leeflang

Biomarkers to detect active tuberculosis: a systematic review of the evidence, quality, and progress from 2010-2016. 060
E. MacLean

12:30 - 13:30 **Lunch**

13:30 - 14:30	**Test Accuracy**	
	Chairperson: S. Lord	
	The impact of outlier detection and removal on studies of biological variability (BV). *A. Sitch*	080
	Dichotomization of the reference standard: Do we force expert panels into wrong decisions? *K. Jenniskens*	043
	Understanding the effects of conditional dependence in research studies involving imperfect diagnostic tests. *Z. Wang*	093
	Pragmatic versus explanatory diagnostic accuracy studies. *P.M. Bossuyt*	006
	Defining methods to evaluate IVDs for WHO's new Essential Diagnostics List. *J. Deeks*	018

SESSION 2

	What Evidence is enough: the methodologist perspective	
	Chairperson: K.G.M. Moons	
14:30 - 15:15	Current Challenges and Opportunities in Clinical Prediction Modeling *Prof. F.E. Harrell Jr* *Vanderbilt University School of Medicine*	
	Discussion - All	
15:30 - 16:15	**Break & Poster viewing**	
	Chairpersons: H. Burger, Ch. Hyde, Ch. Naaktgeboren, N. Skoetz	

SESSION 3

16:15 - 17:00	**Prediction Models I**	
	Chairperson: E. Steyerberg	
	Empirical evidence on the impact of study characteristics on the performance of prognostic models: a meta-epidemiological study. *J. Damen*	014
	Sample size formulae for developing a multivariable prediction model based on expected shrinkage. *R. Riley*	075
	ROC curves and classification plots for clinical prediction models: from waste of ink towards useful insight. *J. Verbakel*	091
	Incremental value of a new risk predictor: does the analysis method match the research question? *E. Schuit*	078

SESSION 4

17:00 - 17:55	**The use of big data in the evaluation of tests, markers and models**	
	Chairperson: J. Zamora	
	Impact of non-transportable diverse measurement of predictors on performance of prediction models: a measurement error perspective. *K. Luijken*	059
	Harnessing individual participant trial data alongside electronic health records to evaluate the potential of precision medicine: application to type 2 diabetes drug therapy. *J. Dennis*	021
	Practical recommendations for diagnostic accuracy studies in low prevalence situations. *G.A. Holtman*	035
	Estimating diagnostic test accuracy in the context of incomplete reporting across cutoff thresholds: A comparison of conventional meta-analysis of published data, two modelling approaches using published data, and individual participant data meta-analysis. *B. Levis*	057
	Developing and updating prediction models in large clustered data sets. *V.M.T. de Jong*	047

17:55	**Closing Remarks**	
	K.G.M. Moons	

19:30 **Conference dinner & party**

19:30 Drinks
20:00 Dinner
Party

Venue
Winkel van Sinkel
Oudegracht 158
3511 AZ Utrecht

TUESDAY 3 JULY 2018

09:00 - 10:15	**What Evidence is enough: the clinical perspective**	
	Chairperson: M. Leeflang	
	Diagnostic evaluation in global health: the example of tuberculosis *Prof.dr. F.G.J. Cobelens, AMC*	
	New laboratory tests: the quest for developing the evidence" – a clinical chemistry perspective *Prof.dr. C.M. Cobbaert, LUMC*	
	Discussion -All	
10:15 - 11:00	**Break & Poster viewing**	
	Chairpersons: L. Askie, L. Peelen, I. Stegeman, R. Wolff	

SESSION 5

11:00 - 12:00	**Precision Medicine**	
	Chairperson: J. Deeks	
	Risk model based stratified patient management of cardiac chest pain versus uniform "non-invasive first" strategies: A summary of short term findings from the CE-MARC2 randomised trial. *C. Everett*	025
	Methodologies for evaluation of clinical tests in their early stages of development. *S. Graziadio*	032
	Quantifying overdiagnosis. Lessons learnt from a health technology assessment of low dose CT screening for lung cancer. *Ch. Hyde*	040
	Challenges in evaluating biomarker tests to determine eligibility for immunotherapy that has pan-tumour activity: one sized evaluation does not fit all *J. Morona*	064
	Markers for targeted therapy: evaluation and implementation of a prognostic genomic test for individualized decision-making in breast cancer *E.W. Steyerberg*	087
12:00 - 12:55	**Prediction Models II**	
	Chairperson: R. Riley	
	A framework for meta-analysis of prediction model studies with binary and time-to-event outcomes. *Th. Debray*	016
	Tailoring prediction models for use in new settings: Individual participant data meta-analysis for ranking model recalibration methods. *J. Ensor*	023
	Implementation and effects of risk-dependent obstetric care in the Netherlands: a clinical impact study (Expect Study II). *P. van Montfort*	063
	Sample size for binary logistic prediction models: beyond events per variable criteria. *M. van Smeden*	081
	Variation in the measurement of predictors affects the discriminative ability and transportability of a prediction model. *R. Pajouheshnia*	072
12:55 - 13:40	**Lunch**	

SESSION 6

What Evidence is enough: the manufacturers perspective

Chairperson: P. Bossuyt

13:40 - 14:10 The New EU IVD regulation and the challenges for manufacturers and health care providers
Dr. P. Kaars-Wiele, Abbott

14:10 - 14:40 Breath Biopsy: Building a new diagnostic category
Dr. M. van der Schee, MD, PhD, CMO Owlstone Medical

14:40 - 14:50 Discussion - All

14.50-15.30 **Break & Poster viewing**

Chairpersons: A. van den Bruel, J. Ensor, J. in 't Hout, S. Mallett, S. Thangaratinam

SESSION 7

15:30 - 16:30 **Impact assessment tests, markers and models**

Chairperson: H. Koffijberg

Understanding the adoption and use of new tests using Multi-Criteria Decision Analysis: a case study on point-of-care tests in Dutch general practices. 052
M.M.A. Kip

Use of test accuracy study design labels in NICE's Diagnostic Guidance. 041
Ch. Hyde

Challenges in the management of trials of medical tests. 061
S. Mallett

Development of Medical Device Key Evidence Tool ('MEDKET'): an evidence-based framework to explain Medical Device (MD) success in selected European and US companies. 062
S. Manetti

From test impact assessment to optimizing test impact: Maximizing colorectal screenig benefits using a meta-model including capacity-constraints. 053
H. Koffijberg

SESSION 8

16:30 - 17:15 **Systematic reviews using aggregate or individual data II**

Chairperson: M. Trivella

Network meta-analysis of diagnostic test accuracy studies allowing for multiple tests at multiple thresholds. 071
R.J. Owen

Meta-analysis of diagnostic test accuracy studies with multiple cutoffs: The R package diagmeta. 076
G. Rücker

The effects of correlation between the test positive rate and prevalence on tailored meta-analysis 095
B. Willis

Evidence for reducing cancer specific mortality due to screening for breast cancer in Europe: a systematic review. 101
N. Zielonke

17:15 - 17:30 **Closing Remarks**

K.G.M. Moons