

**CURRICULUM VITAE****Tomasz Burzykowski****Personal Data**

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International Drug Development Institute  
30, Av. Provinciale  
B-1340 Louvain-la-Neuve, Belgium

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*Email:* tomasz.burzykowski@iddi.com

*Birth:* Warsaw, Poland, 30/09/1965

## Education

*University:* University of Warsaw, Poland (10/1984-06/1990)  
 Department of Mathematics, Computer Science & Mechanics  
 Master Studies in Applications of Mathematics  
 Graduation on June 12, 1990, Master of Mathematics

Hasselt University, Diepenbeek, Belgium (10/1990-10/1991)  
 Department of Mathematics  
 Postgraduate Master Studies in Biostatistics  
 Graduation on October 5, 1991, Master of Biostatistics

Hasselt University, Diepenbeek, Belgium (02/1998-02/2002)  
 Department of Mathematics  
 Doctoral Research in Biostatistics  
 Completed on September 21, 2001, Ph.D. in Mathematics

## Professional Experience

03/1992-09/2001 Biostatistician (full-time), Institute of Oncology, Warsaw  
 (Acting Head of Clinical-Trials Office and Biostatistical Unit.  
 Clinical data analyses; design, organization, monitoring and analysis of clinical trials; consultation of research projects.)

01/1997-01/1998 Statistician (part-time), Central Statistical Office, Warsaw  
 (Research on and applications of survey methodology.)

10/2006-12/2008 Senior Biostatistician (part-time), MSOURCE Medical Development, Warsaw  
 (Design and analysis of clinical trials.)

01/2009-present Vice-President of Research (part-time), International Drug Development Institute (IDDI), Louvain-la-Neuve, Belgium  
 (Design and analysis of clinical trials.)

## Academic Appointments

02/1998-02/2002 Research Assistant, Hasselt University (HU), Diepenbeek, Belgium

04/2002-12/2005 Lecturer (docent) of Biostatistics/Bioinformatics, HU

01/2006-12/2008 Senior Lecturer (hoofddocent) of Biostatistics/Bioinformatics, HU

01/2009-12/2011 Associate Professor (hoogleraar) of Biostatistics/Bioinformatics, HU

01/2012-present Full Professor (gewoon hoogleraar) of Biostatistics/Bioinformatics, HU  
 (Chairman of the Bioinformatics trajectory of the Master of Statistics program.)

10/2011-present Visiting Professor, Medical University of Bialystok (Poland)  
 (Acting Head of the Statistics and Medical Informatics Unit.)

## Languages

Polish (native speaker), English (fluent), Flemish (fluent), Spanish (good), French (basic)

## Permanent Education (Attended Courses)

“Group Sequential Trials” (teaching team: Anastasios Tsiatis), a short course organized by HU (06/1993, Hasselt)

“Exact Methods for Contingency Tables and Logistic Regression” (teaching team: Cyrus Mehta), a short course organized by HU (09/06/1995, Hasselt)

“Meta-Analysis: Methods and Practice” (teaching team: J Berlin, Luc Bijnenes, Jean-Pierre Boissel, Marc Buyse, Mike Clarke, J Kleijnen, Max Parmar, Pascal Piedbois, Jean-Pierre Pignon, J Pogue, Lesley Stewart, Richard Sylvester, Simon Thompson), a course organized by the European Agency for Research and Treatment of Cancer (26-27/04/1996, Brussels)

“Spatial Statistical Methods” (teaching team: Andre Lawson), a short course organized by the Biostatistical Centre of K.U. Leuven (24-26/03/1998)

“Repeated Categorical Data Analysis: Marginal Models” (teaching team: Patrick Heagerty, Geert Verbeke, Emmanuel Lessafre, Geert Molenberghs, Helena Geys), a short course organized by the Biopharmaceutical Section of the Belgian Statistical Society, HU (Biostatistics), and the Biostatistical Centre of K.U. Leuven (27-28/08/1998, Diepenbeek)

“Repeated Categorical Data Analysis: Mixed Models” (teaching team: Walter Stroup, Geert Verbeke, Emmanuel Lessafre, Geert Molenberghs, Helena Geys), a short course organized by the Biopharmaceutical Section of the Belgian Statistical Society, HU (Biostatistics), and the Biostatistical Centre of K.U. Leuven (28-29/09/1998, Leuven)

“Bayes and Empirical Bayes methods for data analysis” (teaching team: Tom A. Louis), a short course organized by the Biostatistical Centre of K.U. Leuven, the Belgian Statistical Society, and the University Center for Statistics of K.U.L. (09-11/12/1998, Leuven)

“Bayesian Methods in Biostatistics” (teaching team: Don Berry), a short course organized by the Biostatistical Section of the the Belgian Statistical Society (04/02/2000, Brussels)

“Introduction to Genetic Epidemiology” (teaching team: David Balding, Andrew Morris, John Whittaker), a short course organized by HU (13/04/2000, Diepenbeek)

“Interim Analyses in Clinical Trials” (teaching team: KyungMann Kim), a short course organized by the Biostatistical Centre of K.U. Leuven (08-09/05/2000, Leuven)

“Handling Non-Response in Surveys” (teaching team: Pamela Campanelli and Chris Skinner), a short course organized by the Centre for Applied Social Surveys, University of Southampton, U.K. (17-19/05/2000, Southampton)

“Analysis of Data from Longitudinal Studies: Current Topics” (teaching team: Kyung-Yee Liang, Scott Zeger), a short course organized as a part of the XXth International Biometric Conference (01/07/2000, Berkeley)

“Smoothing and Generalised Additive Models” (teaching team: Mikis Stasinopoulos and Brain Francis), a short course organized as a part of the 21<sup>st</sup> International Society for Clinical Biostatistics Meeting (04/09/2000, Trento)

“Bayesian Hierarchical Modelling Using WinBUGS” (teaching team: Sylvia Richardson and Nicky Best), a short course organized as a part of the XXIst International Biometric Conference (21/07/2002, Freiburg)

“Introduction to Bioinformatics” (teaching team: Geert Vriend), a course for HBO Teachers, organized by the Center for Molecular and Biomolecular Informatics (04-06/10/2002, Nijmegen)

“Association-Based Methods of Gene Mapping” (teaching team: David Balding, Andrew Morris, John Whittaker), a short course organized as a part of the Theme Conference of the Royal Statistical Society (14/07/2003, Diepenbeek)

“Statistics for Microarray Data Analysis”, (teaching team: Gordon Smyth, Yee Hwa Yang, Matthew Ritchie), a short course organized as a part of the International Biometric Conference (11/07/2004, Cairns)

“Competing Risks: Some Events are More Important Than Others”, (teaching team: Melania Pintilie), a tutorial organized as a part of the ENAR Spring Meeting (17/03/2008, Washington, D.C.)

### Teaching (University Courses)

- 1999/2000 *Data Management* (Master of Science in Biostatistics, HU)
- 2000/2001 *Data Management* (Master of Science in Biostatistics, HU)
- 2001/2002 *Data Management* (Master of Science in Biostatistics, HU)
- 2002/2003 *Bioinformatics & Statistical Genetics* (Bachelor in Biomedical Sciences, 3<sup>rd</sup> year, HU)  
*Data Management* (Master of Science in Biostatistics, HU)
- 2003/2004 *Introduction to Biostatistics and Epidemiology* (course for postgraduate students, Karolinska Institute, Stockholm)  
*Bioinformatics & Statistical Genetics* (Bachelor in Biomedical Sciences, 3<sup>rd</sup> year, HU)  
*Bioinformatics* (Bachelor in Biomedical Sciences, 2<sup>nd</sup> year, HU)  
*Data Management* (Master of Science in Applied Statistics, HU)  
*Clinical Trials* (Master of Science in Biostatistics, HU)
- 2004/2005 *Introduction to Biostatistics and Epidemiology* (course for postgraduate students, Karolinska Institute, Stockholm)  
*Bioinformatics* (Bachelor in Biomedical Sciences, 2<sup>nd</sup> year, HU)  
*Bioinformatics* (Minor, Bachelor in Biomedical Sciences, 3<sup>rd</sup> year, HU)  
*Data Management* (Master of Science in Applied Statistics, HU)  
*Clinical Trials* (Master of Science in Biostatistics, HU)  
*Bioinformatics* (Master of Science in Biostatistics, HU)
- 2005/2006 *Introduction to Biostatistics and Epidemiology* (course for postgraduate students, Karolinska Institute, Stockholm)  
*Survival Analysis* (course for postgraduate students, Karolinska Institute, Stockholm)  
*Clinical Trials* (Master of Science in Biostatistics, HU)  
*Bioinformatics* (Master of Science in Biostatistics, HU)
- 2006/2007 *Introduction to Biostatistics and Epidemiology* (course for postgraduate students, Karolinska Institute, Stockholm)  
*Survival Analysis* (course for postgraduate students, Karolinska Institute, Stockholm)  
*Clinical Trials* (Master of Science in Biostatistics, HU)  
*Bioinformatics* (Master of Science in Biostatistics, HU)
- 2007/2008 *Introduction to Biostatistics and Epidemiology* (course for postgraduate students, Karolinska Institute, Stockholm)  
*Survival Analysis* (course for postgraduate students, Karolinska Institute, Stockholm)  
*Clinical Trials* (Master of Science in Biostatistics, HU)
- 2008/2009 *Introduction to Biostatistics and Epidemiology* (course for postgraduate students, Karolinska Institute, Stockholm)  
*Clinical Trials* (Master of Statistics: Biostatistics, HU)  
*Analysis of Protein-expression Data* (Master of Statistics: Bioinformatics, HU)
- 2009/2010 *Clinical Trials* (Master of Statistics: Biostatistics, HU)  
*Analysis of Protein-expression Data* (Master of Statistics: Bioinformatics, HU)  
*Bioinformatics* (Bachelor in Biomedical Sciences, 3<sup>rd</sup> year, HU)

- 2010/2011 *Clinical Trials* (Master of Statistics: Biostatistics, HU)  
*Advanced Topics in Clinical Trials* (Master of Statistics: Biostatistics, HU)  
*Analysis of Protein-expression Data* (Master of Statistics: Bioinformatics, HU)  
*Bioinformatics* (Bachelor in Biomedical Sciences, 3<sup>rd</sup> year, HU)  
*Survival Analysis* (Master course, Dep. of Mathematics, Warsaw University of Technology)  
*Survival Analysis* (Facultative course, Dep. of Mathematics, Warsaw University)
- 2011/2012 *Clinical Trials* (Master of Statistics: Biostatistics, HU)  
*Advanced Topics in Clinical Trials* (Master of Statistics: Biostatistics, HU)  
*Analysis of Protein-expression Data* (Master of Statistics: Bioinformatics, HU)  
*Bioinformatics* (Bachelor in Biomedical Sciences, 3<sup>rd</sup> year, HU)  
*Clinical Trials* (Master course, Dep. of Mathematics, Warsaw University of Technology)  
*Survival Analysis* (Master course, Dep. of Mathematics, Warsaw University of Technology)  
*Basic Statistics* (Doctoral course, Medical University of Bialystok, Poland)
- 2012/2013 *Clinical Trials* (Master course, Dep. of Mathematics, Warsaw University of Technology)  
*Basic Statistics* (Doctoral course, Medical University of Bialystok, Poland)  
*Clinical Trials* (Master of Statistics: Biostatistics, HU)  
*Advanced Topics in Clinical Trials* (Master of Statistics: Biostatistics, HU)  
*Analysis of Protein-expression Data* (Master of Statistics: Bioinformatics, HU)  
*Bioinformatics* (Bachelor in Biomedical Sciences, 3<sup>rd</sup> year, HU)  
*Survival Analysis* (Master course, Dep. of Mathematics, Warsaw University of Technology)  
*Basic Statistical Models* (Doctoral course, Medical University of Bialystok, Poland)
- 2013/2014 *Clinical Trials* (Master course, Dep. of Mathematics, Warsaw University of Technology)  
*Basic Statistics Refreshment* (Doctoral course, Medical University of Bialystok, Poland)  
*Basic Statistics* (Doctoral course, Medical University of Bialystok, Poland)  
*Clinical Trials* (Master of Statistics: Biostatistics, HU)  
*Advanced Topics in Clinical Trials* (Master of Statistics: Biostatistics, HU)  
*Analysis of Protein-expression Data* (Master of Statistics: Bioinformatics, HU)  
*Survival Analysis* (Master course, Dep. of Mathematics, Warsaw University of Technology)  
*Basic Statistical Models* (Doctoral course, Medical University of Bialystok, Poland)  
*Survival Analysis* (Postgraduate studies in Biostatistics, Medical University of Bialystok, Poland)  
*Clinical Trials* (Postgraduate studies in Biostatistics, Medical University of Bialystok, Poland)
- 2014/2015 *Clinical Trials* (Master course, Dep. of Mathematics, Warsaw University of Technology)  
*Statistical Methods in Epidemiology* (Doctoral course, Medical University of Bialystok, Poland)  
*Clinical Trials* (Master of Statistics: Biostatistics, HU)  
*Advanced Topics in Clinical Trials* (Master of Statistics: Biostatistics, HU)  
*Analysis of Protein-expression Data* (Master of Statistics: Bioinformatics, HU)  
*Survival Analysis* (Master course, Dep. of Mathematics, Warsaw University of Technology)  
*Basic Statistical Models* (Doctoral course, Medical University of Bialystok, Poland)  
*Survival Analysis* (Postgraduate studies in Biostatistics, Medical University of Bialystok, Poland)  
*Clinical Trials* (Postgraduate studies in Biostatistics, Medical University of Bialystok, Poland)
- 2015/2016 *Clinical Trials* (Master course, Dep. of Mathematics, Warsaw University of Technology)  
*Clinical Trials* (Master of Statistics: Biostatistics, HU)  
*Advanced Topics in Clinical Trials* (Master of Statistics: Biostatistics, HU)  
*Analysis of Protein-expression Data* (Master of Statistics: Bioinformatics, HU)  
*Statistical Methods in Epidemiology* (Doctoral course, Medical University of Bialystok, Poland)  
*Survival Analysis* (Master course, Dep. of Mathematics, Warsaw University of Technology)  
*Basic Statistical Models* (Doctoral course, Medical University of Bialystok, Poland)  
*Survival Analysis* (Postgraduate studies in Biostatistics, Medical University of Bialystok, Poland)

**Teaching (Short Courses)**

Burzykowski T “Foundations of Statistical Inference”, for Eli Lilly Poland, Warsaw (24-25/06/2002).

Burzykowski T, and Buyse M “Statistical Validation of Surrogate Endpoints in Clinical Trials”, preconference workshop, 3<sup>rd</sup> Joint Meeting of the International Society for Clinical Biostatistics and the Society for Clinical Trials, London, UK (20-24/07/2003).

Burzykowski T “Survival Analysis”, for Janssen Pharmaceutica, Beerse, Belgium (22/02, 24/02, 01/02, 03/03/2005).

Burzykowski T, and Gałecki A “Linear Mixed Effects Models and Meta-analysis: Basic Concepts and Applications”, organized by Polish National Group of the International Society for Clinical Biostatistics, Kraków, Poland (28-30/06/2006).

Burzykowski T “Survival Analysis”, organized by MSOURCE Medical Development and the Polish National Group of the International Society for Clinical Biostatistics, Warsaw (17-18/06/2008).

Burzykowski T “Basic Epidemiology”, organized by Project DESAFIO, University Eduardo Mondlane, Maputo, Mozambique (15-17/06/2008).

Burzykowski T, and Gałecki A “Generalized Linear (Mixed-effects) Models”, organized by Polish National Group of the International Society for Clinical Biostatistics, Kraków, Poland (01-03/07/2009).

Burzykowski T “Survival Analysis”, organized by the Medical University of Białystok, Poland (15-16/05 and 22-23/05/2010).

Burzykowski T “Survival Analysis”, organized by the Medical University of Białystok, Poland (19-20/05 and 26-27/05/2012).

Burzykowski T “Validation of Surrogate Endpoints”, a half-day tutorial at the Joint BfArM/DIA Statistics Workshop, Bonn (17/10/2012).

Burzykowski T “Generalized Linear Mixed-effects Models”, organized by the Czech National Group of the International Society for Clinical Biostatistics, Prague (31/05/2013).

Burzykowski T “Dealing With Missing Data: Concepts, Methods, and Applications”, organized by Polish National Group of the International Society for Clinical Biostatistics, Kraków, Poland (25-26/10/2013).

Burzykowski T “Validation of Surrogate Endpoints”, a half-day tutorial at Roche Germany, Grenzach-Wyhlen (03/07/2014).

Burzykowski T “Generalized Linear Mixed-effects Models”, a three-day course at the Department of Health Sciences of the University of Milano-icocca, Monza (18-20/05/2016).

**Member of a PhD Jury**

- Rosemary Wangeci Nguti (28/11/2003): “Random Effects Survival Models Applied to Animal Breeding Data” (HU)
- Fabian Santiago Tibaldi (12/03/2004): “Modeling of Correlated and Multivariate Survival Data” (HU)
- José Cortiñas Abrahantes (18/05/2004): “Estimation Procedures for Mixed-Effects Models With Applications to Normally Distributed and Survival Data” (HU)
- Ariel Alonso Abad (19/05/2004): “Investigating Validity of Psychiatric Symptom Scales and Surrogate Markers” (HU)
- Laurence Collette (25/01/2006): “Prostate Cancer: Prognostic Factors, Markers of Outcome and Design of Clinical Trials” (Erasmus University Rotterdam)
- Feng Liu (12/07/2007): “*In silico* identification of novel bioactive peptides in *Metazoa*” (HU)
- Caroline Beunckens (07/09/2007): “Analysis and Sensitivity Analysis for Incomplete Longitudinal Data” (HU)
- Dan Lin (28/03/2008): “Classification, Dose-response Modelling, and the Evaluation of Biomarkers in a Microarray Setting” (HU)
- ChuenSeng Tan (05/09/2008): “Statistical Methods for Biomarker Discovery in Proteomics” (Karolinska Institute, Stockholm)
- Goele Massonnet (08/09/2008): “Contributions to Frailty and Copula Modelling With Applications to Clinical Trials and Dairy Cows Data” (HU)
- Kristien Wouters (09/09/2008): “Classification Methods for Multi-class Multivariate Longitudinal Data” (HU)
- Suzy Van Sanden (11/09/2008): “Statistical Methods for Microarray-based Analysis of Gene-expression, Classification, and Biomarker Validation” (HU)
- Dirk Valkenburg (12/09/2008): “Statistical Methods for the Analysis of High-resolution Mass Spectrometry Data” (HU)
- Abel Tilahun Eshete (29/05/2009): “Marker Methodology With Focus on Hierarchical Outcomes” (HU)
- Pryseley Assam (25/09/2009): “Marker Methodology With Focus on Time-to-event Outcomes” (HU)
- Adetayo S. Kassim (08/09/2010): “Statistical Methods for A@ymetrix Microarray Experiments in Early Drug Development Studies: Gene Signatures, Dose-response Study, and Probe Level Analysis ” (HU)
- Philippe Haldermans (10/09/2010): “Analysis of Gene Expression Data: Normalization of cDNA Microarrays and Large-scale Response Prediction” (HU)
- Natalia Kwasnikowska (07/06/2011): “Data Flows and Provenance: From Nested Relational Calculus to the Open Provenance Model” (HU)
- Bogusław Kluge (11/07/2011): “Computational Methods and Stochastic Models in Proteomics” (Warsaw University)
- Setia Pramana (09/09/2011): “Statistical Methods for Microarray Experiments: Analysis of Dose-response Studies and Software Development in R” (UH)
- Elasma Milanzi (26/09/2013): “Flexible Modeling for Hierarchical Data, Data With Random Sample Sizes and Selection Bias, With Applications in Pharmaceutical Research” (UH)
- Chiara Forchheh (26/09/2013): “Mixed Models and Mixture Models for Analyzing Microarray Data” (KULeuven)
- Tatsyana Khamiakova (11/10/2013): “Statistical Methods for Analysis of High-throughput Experiments in Early Drug Development” (UH)
- Fatemeh Zamanzad Ghavidel (11/10/2013): “Statistical Methods for the Analysis of High-throughput Proteomic and Genomic Data” (UH)
- Martin Otava (10/09/2015): “Modeling High-dimensional Dose-response Data” (UH)

- Leandro Garcia Barrado (18/09/2015): “On the Estimation and Validation of Biomarker-index’ accuracy” (UH)
- Nolen Joy Perualila (06/11/2015): “Integrative methods for the analysis of structure-transcription-assay relationships in drug discovery and early development” (UH)

### Supervision of PhD Students

- José Cortiñas Abrahantes (05/2000-05/2004), PhD researcher (Special Research Funds (BOF) UH).  
Project: Estimation procedures for mixed-effects models with applications to normally distributed and survival data.  
Co-supervision with Geert Molenberghs.
- Roel Straetemans (10/2003-02/2005), PhD researcher.  
Project: Drug synergism (stopped).  
Co-supervision with Marc Aerts.
- Dan Lin (04/2004-28/03/2008), PhD researcher.  
Project: Classification, dose-response modelling, and the evaluation of biomarkers in a microarray setting  
Co-supervision with Ziv Shkedy.
- Goele Massonett (10/2002-08/09/2008), staff member of HU (regular assistant).  
Project: Contributions to frailty and copula modelling with applications to clinical trials and dairy cows data  
Co-supervision with Paul Janssen.
- Suzy Van Sanden (10/2002-11/09/2008), staff member of HU (regular assistant).  
Project: Statistical methods for microarray-based analysis of gene-expression, classification, and biomarker validation  
Co-supervision with Ziv Shkedy.
- Dirk Valkenburg (10/2004-12/09/2008), PhD researcher (Special Research Funds (BOF) UH).  
Project: Statistical methods for the analysis of high-resolution mass spectrometry data
- Qi Zhu (11/2006-05/11/2010), PhD researcher.  
Project: Modeling for the analysis of high-resolution mass spectrometry data.
- Jurgen Claesen (10/2009-28/06/2013), PhD researcher (Special Research Funds (BOF) UH).  
Project: Statistical models for high-throughput proteomic and genomic data.
- Fatemeh Zamanzad Ghavidel (01/2011-12/12/2014), PhD researcher.  
Project: Statistical methods for the analysis of high-throughput proteomic and genomic data.
- Bedilu Alamirie Ejigu (10/2011-30/09/2013), PhD researcher.  
Project: Novel informatics algorithms for the analysis of post-translational modifications in mass spectrometry data. (Stopped.)  
Co-supervision with Dirk Valkenburg.
- Leandro Garcia Barrado (10/2011-18/09/2015), PhD researcher.  
Project: Bayesian statistics and bioinformatics for biomarker validation in Alzheimer's Disease.
- Trishanta Padayachee (10/2013-), PhD researcher.



Project: Statistical methods for the integrated analysis of “omics” datasets.

### **Supervision of Master’s Theses**

- Kristien Wouters (2003): Classification of microarray data with penalized logistic regression. University of Antwerp, co-supervision with Anja Struyf and Marc Aerts.
- Anna Cena (2012): Estimation of Cox’s proportional hazard model with covariates observed with a measurement error. Warsaw University of Technology.
- Dominika Ewertowska (2016): Influence of measurement-error on Bayesian-adaptive randomization. Warsaw University of Technology.
- Piotr Prostko (2016): Influence of the follow-up schedule on the estimates of treatment-effects on survival endpoints. Warsaw University of Technology.

### **Supervision of Final Projects Applied Statistics (Hasselt University)**

(The Hasselt University Master of Statistics: Applied Statistics programme required completion of a practical project during the third trimester of the academic year in an applied statistics working environment.)

1. Josphat Kamau Kinyanjui (2000): The Achilles project: the quality of life analysis.
2. Richard Sabwami Wachana (2001): Investigation of the properties of the truncated-adjusted estimators of determination coefficient ( $R^2$ ), by means of the simulations.
3. Silvia Cecere (2002): Models of schizophrenia: behavioural and histological validation. Co-supervision with Luc Bijmens.
4. Tonderai Mapako (2003): Statistical analysis of SAGE libraries. Co-supervision with Luc Michiels.
5. Ann Manjiru Mwangi (2003): Class prediction of individuals based on their genetic structure using penalised logistic regression. Co-supervision with Ludo Muller.
6. Fred Nghania (2003): Classification system for quality of apples based on fluorescence images. Co-supervision with Roland Valcke.
7. Abel Tilahun (2004): Assessment of 2-D gel electrophoresis reproducibility and effects of methods of analysis using Z3 software package. Co-supervision with Marc Aerts and Debora Dumont.
8. Katarina Seghers (2005): Longitudinal data analysis for the quality of life and oesophagus toxicity in lung cancer patients treated with radiotherapy.

### **Supervision of Summer Projects Biostatistics (Hasselt University)**

(The Hasselt University Master of Statistics: Biostatistics programme requires completion of a summer training project of two to three months in an applied statistics working environment.)

1. Anthony Wanjoya (2002): Assessing the effects of ketamine on bispectral index and auditory evoked potential index during propofol anesthesia. Co-supervision with Geert Byttebier.
2. Godefroid Rubomboza (2002): Sample size reassessment for binary data in clinical trials. Co-supervision with Harry Goyvaerts.
3. Niko Speybroek (2002): Beyond logistic regression in veterinary studies: two case studies. Co-supervision with Dirk Berkvens.

4. Fetene Bekele Tekle (2003): Software implementation of designs for phase II clinical trials with binary responses. Co-supervision with Emmanuel Quinaux.
5. Kinfemichael Alemu (2003): An evaluation of the use of Bayesian analysis to estimate F-statistics. Co-supervision with Ludo Muller.
6. Tonderai Mapako (2004): Adjustment for zero counts in the analysis of Serial Analysis of Gene Expression data using the beta-binomial model.
7. Vaclav Faltus (2004): Sequencing errors in Serial Analysis of Gene Expression.
8. Kristien Wouters (2004): Variability of measurements of 2D-electrophoresis gels. Co-supervision with Marc Aerts.
9. Martin Mutuah (2005): Analysis of interobserver variability: tumor volume delineation in radiotherapy.
10. Aduri Chinappa Reddy (2005): Mortality and complications after CABG surgery in Belgian hospitals.
11. Nyankomo Marwa (2006): Meta-analysis of the accuracy of cervical cancer screening methods with adjustment for imperfect gold standard bias.
12. Michele Ampe (2006): The EM algorithm for modelling Serial Analysis of Gene Expression (SAGE) data.
13. Fanghong Zhang (2007): Correlation and definition transposition from CDAI to HBI scores in Crohn's disease trials.
14. Laurence Fissette (2007): Multiplicity in a clinical trial with multiple endpoints and multiple doses of active treatment.
15. Shi Xiaofeng (2007): Development of Cox-regression models to evaluate the predictive value of gene signatures in the survival of lung cancer patients.
16. Mahachie John Jestinah Mutuku (2008): Testing for genetic association in an affected sibling pair - control design taking account phenotypic information of relatives without genotype information.
17. Oluwaseyi Akindunjoye (2008): Outcome of breast cancer care in a large regional hospital in Flanders: results of 750 consecutive women treated according to standard treatment protocols.
18. Edmund Njagi (2009): Longitudinal analysis of fast fluorescent induction in plants to study the effects of "non-photosynthetic oxidative stresses" on the photosynthetic process.
19. Ali Mohamed Ali (2009): Analysis of vaccine efficacy under time-dependent variation.
20. Dirk Valkenborg (2009): An automated method to detect conformational isomers using hydrogen/deuterium exchange and FTICR mass spectrometry.
21. Maria Carolina Medina Gomez (2010): Estimation of genetically homogeneous clusters within Europe.
22. Ondrej Blaha (2010): Prevention of cancers caused by infection with human papilloma virus: modeling of the natural history of HPV infection.
23. Chantal Quinten (2010): Introducing frailty models as a random effect model for a pooled trial analysis.
24. Leandro Garcia Barrado (2011): Statistical analysis of selected yeast segregants.
25. Geraldine Manyi Agbor (2012): Exploratory analyses to assess the impact of a CNV infection on the immunogenicity of a flu vaccine.
26. Guohui Hu (2012): The application of gatekeeping strategies in dose-response clinical trials with multiple endpoints.

27. Julius Nangosyah (2013): Evaluation of progression free survival as a surrogate for overall survival for patients who have been newly diagnosed with glioblastoma.
28. Susan Gachau (2013): Impact of institution variability on patient outcome in a soft tissue sarcoma clinical trial.
29. Abang Felix Tabotson (2015): Analysis of patterns of health care delivery in the last year of life.
30. Aresnio Nhacolo (2015): Using prognostic factors in the design and analysis of clinical trials: a simulation study.
31. Chrysostomos Kalyvas (2016): Incorporating historical controls in the planning and analysis of randomized clinical trials.
32. Ndugbu Rawlings (2016): Followup of surface contamination with antineoplastic agents in Flemish hospital pharmacies.

### **Supervision of Summer Projects Bioinformatics (Hasselt University)**

(The Hasselt University Master of Statistics: Bioinformatics programme requires completion of a summer training project of two to three months in an statistical bioinformatics working environment.)

1. Jurgen Claesen (2008): A comparative study of inferential techniques for regulatory networks in plants. Co-supervision with Dirk Valkenborg.

### **Scholarships**

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|-----------------|---|
| 10/1990-10/1991 | “TEMPUS Individual Mobility Grant” for the postgraduate studies at HU.        |
| 02/1998-02/2002 | “Hasselt University Special Research Funds” grant for the PhD research at HU. |

### **Research grants (Principal Investigator)**

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|-----------------|---|
| 01/2004-12/2007 | “Analysis of Complex Data in Functional Genomics”, Groot Project (Large Project) funded by “The Hasselt University Special Research Funds”.         |
| 01/2009-12/2012 | “Statistical analysis of isotope-labeled MALDI-TOF mass spectra”, New Initiative Project funded by “The Hasselt University Special Research Funds”. |

### **Research grants (Participant)**

- |                 |  |
|-----------------|--|
| 09/2011-09-2014 | “Bayesian statistics and Bioinformatics for Biomarker validation using Biobanks in Alzheimer's Disease (B4AD)” (EurotransBio Initiative)   |
| 01/2012-06-2014 | “Statistical Monitoring Applied to Research Trials” (BioWiN)   |
| 09/2012-09-2016 | “Methods for Integrated analysis of Multiple Omics datasets (MIMOmics)” EU-funded Collaborative Project (FP7-HEALTH-2012-INNOVATION-1). Promotor: Jeanine Houwing-Duistermaat (Leiden University, The Netherlands) |
| 09/2012-09-2016 | “National Leading Scientific Center”. Promotor: Adam Kretowski (Medical University of Bialystok, Poland)   |

### **Educational grants (Principal Coordinator)**

10/2013-09/2015 “Postgraduate studies in Biostatistics” at Medical University of Bialystok, Poland, funded by the National Center for Research and Development.

### **Travel/research visit grants**

07/2006 A grant for the trip to XXII<sup>nd</sup> International Biometric Conference in Cairns, Australia (11-16/07/2004), funded by the Flemish Research Foundation (FWO).

03/2008 A grant for a short research visit at the University of Michigan (Ann Arbor, Michigan, U.S.A.), funded by the FWO.

02/2011 A grant for a short research visit at the University of New South Wales (Sydney, Australia), funded by the FWO.

08/2012 A grant for the trip to the 26<sup>th</sup> International Biometric Conference in Kobe, Japan (26-31/08/2012), funded by the Flemish Research Foundation (FWO).

### **Fellowships, Honours, and Awards**

*Student Paper Award*, 21<sup>st</sup> International Society for Clinical Biostatistics Meeting, Italy, 04-08/09/2000.

*Student Fellow*, the International Conferences on Survey Nonresponse, USA, 28-31/10/1999.

*Student Paper Award*, Biopharmaceutical Section of the American Statistical Association, the Joint Statistical Meetings, USA, 08-12/08/1999.

### **Organizing Committees**

18<sup>th</sup> Workshop on Statistical Modelling, 7-11/07/2003, Katholieke Universiteit Leuven, Leuven, Belgium; member of the Scientific Programme Committee.

Theme Conference of the Royal Statistical Society, 14-17/07/2003, HU, Hasselt-Diepenbeek, Belgium; member of the Local Organizing Committee.

25<sup>th</sup> Annual Meeting of the International Society for Clinical Biostatistics, 25-28/08/2004, Leiden, The Netherlands; member of the Scientific Programme Committee.

Symposium on Statistical Genetics, 17/05/2005, Ghent, Belgium; member of the Organizing & Scientific Programme Committees.

Workshop “Computational methods for peptide-centric label-free quantitative proteomics,” 17-18/02/2011, Hasselt University, Belgium; member of the Local Organizing Committee.

8<sup>th</sup> Symposium “Statistics and Clinical Practice”, 8-11/06/2011, Warsaw, Poland; member of the Scientific Programme Committee.

Symposium on Causal Mediation Analysis, 28-29/01/2013, Ghent, Belgium; member of the Scientific Programme Committee.

34<sup>th</sup> Annual Meeting of the International Society for Clinical Biostatistics, 25-28/08/2013, Munich, Germany; member of the Scientific Programme Committee.

International Hexa-Symposium on Biostatistics, Bioinformatics, and Epidemiology, 14-15/11/2013, Diepenbeek, Belgium; chairman of the Local Organizing Committee.

### Membership of Professional Societies

American Statistical Association  
 Belgian Statistical Society  
 International Society for Clinical Biostatistics  
 International Biometrical Society  
 Polish Biometrical Society

### Functions in Professional Societies

International Biometrical Society: Education Committee member (2007-2010)  
 International Biometrical Society: Representative Council (2014-present)  
 International Society for Clinical Biostatistics: Executive Committee member (2011-2015)

### Editorial Tasks

2004-present *Advances in Medical Sciences* (formerly *Annales Academiae Medicae Bialostocensis*), member of the Editorial Board  
 2007-2015 *Biometrics*, Associate Editor  
 2008 *Statistical Methods in Medical Research*, Guest Editor (vol. 17, issue 5)  
 2011-present *Progress in Health Sciences*, member of the Editorial Advisory Board  
 2012-present *Mathematica Applicanda*, Bioinformatics Section Editor  
 2013-present *Pharmaceutical Statistics*, Associate Editor

### Refereeing

Only refereeing of first submissions is listed.

1998 Applied Statistics (1 paper)  
 1999 Biostatistics (1)  
 2001 Biometrics (1)  
 2002 Statistics in Medicine (2), Journal of Statistical Modeling (2)  
 2004 Statistics in Medicine (1), Journal of Clinical Oncology (1), Journal of the Royal Statistical Society A (1), Clinical Trials (1)  
 2005 Statistics in Medicine (2), Journal of Clinical Oncology (2), Bioinformatics (1), Applied Statistics (1)  
 2006 Journal of Clinical Oncology (2), Pharmaceutical Statistics (1), Biometrics (2), Biometrical Journal (1), Biostatistics (1), Statistics in Biopharmaceutical Research (1), Wspolczesna Onkologia (Contemporary Oncology) (1)  
 2007 Journal of Clinical Oncology (1), Journal of Clinical Epidemiology (1), Biometrics (3)  
 2008 Statistics in Medicine (2), STATA Journal (2), Biometrics (7), Clinical Trials (1)  
 2009 British Journal of Cancer (1), Journal of Clinical Oncology (2), Journal of Applied Statistics (1), Biometrics (9)  
 2010 Statistical Applications in Genetics and Molecular Biology (1), Journal of Clinical Oncology (1), Statistics in Medicine (1), Journal of Proteomics and Bioinformatics (1), Biometrics (6)  
 2011 Advances in Medical Sciences (1), Journal of Clinical Oncology (1), Progress in Health Sciences (1), Statistics and Computing (1), Statistics in Medicine (1), Biometrics (10)  
 2012 Advances in Medical Sciences (1), PLOS ONE (1) Statistics in Biopharmaceutical Research (1), Progress in Health Sciences (1), Biometrics (5)

2013 Biometrics (3), Pharmaceutical Statistics (2), Journal of Clinical Oncology (1), Bioinformatics (1),  
Studies in Logic, Grammar, and Rhetoric (1)  
2014 Biometrics (8), Pharmaceutical Statistics (3), Statistics in Medicine (2)  
2015 Biometrics (3), Pharmaceutical Statistics (8), Statistics in Medicine (2), Annals of Oncology (1)

### **Grant proposal reviews**

2010 FWO post-doc mandate  
2012 MRC UK Fellowship

### **Expert tasks, committees**

2010 ESMO-transETOP Translational Research in Lung Cancer Meeting, Lugano (19-20/05)  
2010 Meeting "Developing Effective Quality Systems in Clinical Trials: An Enlightened Approach",  
Clinical Trials Transformation Initiative and FDA, Washington, DC (13-14/10).

### **Computing Experience**

Statistical software: SAS, Stata, R, EaSt, StatXact  
Editors: Word, LaTeX  
Database management software: Access

### **Main Research Interests**

Clinical trials, meta-analysis, survival analysis, surrogate endpoints, bioinformatics, oncology.

### **Miscellanea**

Consulting projects for research organizations and pharmaceutical companies.

## Publications

### *International refereed journals*

1. Niklinski J, Furman M, Burzykowski T, Chyczewski L, Laudanski J, Chyczewska E, Rapellino M (1996) Preoperative CYFRA 21-1 level as a prognostic factor in resected primary squamous cell lung cancer. *British Journal of Cancer*, 74, 956-960.
2. Niklinski J, Burzykowski T, Niklinska W, Laudanski J, Chyczewski L, Rapellino M, Furman M (1998) Preoperative CYFRA 21-1 level as a prognostic indicator in resected nonsmall cell lung cancer. *European Respiratory Journal*, 12, 1424-1428. (IF 2.233)
3. Laudanski J, Burzykowski T, Niklinska W, Chyczewski L, Furman M, Niklinski J (1998) Prognostic value of serum p53 antibodies in patients with resected non-small lung cancer. *Lung Cancer*, 22, 191-200. (IF 1.902)
4. Ceremuzynski L, Budaj A, Czepiel A, Burzykowski T, Achremczyk P, Smielak-Korombel W, Maciejewicz J, Dziubinska J, Nartowicz E, Kawka-Urbaneck T, Piotrowski W, Hanzlik J, Cieslinski A, Kawecka-Jaszcz K, Gessek J, Wrabec K (1999) Low-dose Glucose-Insulin-Potassium is ineffective in acute myocardial infarction: results of a randomized multicenter Pol-GIK trial. *Cardiovascular Drugs and Therapy*, 13 (3), 191-200. (IF 0.950)
5. Czochrowska E, Burzykowski T, Buyukyilmaz T, Øgaard B (1999) The effect of long-term water storage on the tensile strength of orthodontic brackets bonded with resin-reinforced glass-ionomer cements. *Journal of Orofacial Orthopedics (Fortschritte der Kieferorthopadie)*, 60 (5), 361-370.
6. Burzykowski T, Molenberghs G, Tafforeau J, Van Oyen H, Demarest S, Bellamammer L (1999) Missing data in the Health Interview Survey 1997 in Belgium. *Archives of Public Health*, 57, 107-129.
7. Molenberghs G, Burzykowski T, Michiels B, Kenward MG (1999) Analysis of incomplete public health data. *Revue d'épidémiologie et de santé publique (Rev Epidém et Santé Publ)*, 47: 499-514.
8. Buyse M, Molenberghs G, Burzykowski T, Renard D, Geys H (2000) The validation of surrogate endpoints in meta-analyses of randomized experiments. *Biostatistics*, 1, 49-67.
9. Niklinska W, Burzykowski T, Chyczewski L, Rusin MR, Furman M, Laudanski J, Chyczewska E, Sulik M, Niklinski J (2000) P53 gene mutation and protein expression in operable non-small cell lung cancer in Poland. *European Journal of Cancer Prevention*, 9, 81-87. (IF 1.351)
10. Buyse M, Molenberghs G, Burzykowski T, Renard D, Geys H (2000) Statistical validation of surrogate endpoints: problems and proposals. *Drug Information Journal*, 34, 447-454. (IF 0.616)
11. Buyse M, Thirion P, Carlson RW, Burzykowski T, Molenberghs G, Piedbois P (2000) Relation between tumour response to first-line chemotherapy and survival in advanced colorectal cancer: a meta-analysis. *Lancet*, 356, 373-378. (IF 10.232)
12. Niklinska W, Burzykowski T, Chyczewski L, Laudanski J, Niklinski J (2001) Strong association between p53 protein accumulation, serum antibodies and gene mutation in non-small cell lung cancer. *Folia Histochemica et Cytobiologica*, 39, 51-56. (IF 0.594)
13. Laudanski J, Niklinska W, Burzykowski T, Chyczewski L, Niklinski J (2001) Prognostic significance of p53 and bcl-2 abnormalities in operable non-small cell lung cancer. *European Respiratory Journal*, 17, 660-666. (IF 2.989)
14. Buyse M, Thirion P, Carlson RW, Burzykowski T, Molenberghs G, Piedbois P (2001) Re: A model to select chemotherapy regimens for phase III trials for extensive-stage small-cell lung cancer. *Journal of the National Cancer Institute*, 93, 399-401. (IF 14.240)
15. Burzykowski T, Molenberghs G, Buyse M, Geys H, Renard D (2001) Validation of surrogate endpoints in multiple randomized clinical trials with failure-time endpoints. *Applied Statistics*, 50, 405-422. (IF 0.737)

16. Niklinska W, Burzykowski T, Chyczewski L, Niklinski J (2001) Expression of vascular endothelial growth factor (VEGF) in non-small cell lung cancer (NSCLC): association with p53 gene mutation and prognosis. *Lung Cancer*, 34 (suppl.), S59-S64. (IF 2.915)
17. Meta-Analysis Group In Cancer. (2002) Tumour response and survival in advanced colorectal cancer [Letter to the Editor]. *Lancet*, 356, 1771. (IF 15.397)
18. Vinh-Hung V, Burzykowski T, Van de Steene J, Storme G, Soete G (2002) Post-surgery radiation in early breast cancer: survival analysis of registry data. *Radiotherapy and Oncology*, 64, 281-290. (IF 2.838)
19. Cserni G, Vinh-Hung V, Burzykowski T (2002) Is there a minimum number of lymph nodes that should be histologically assessed for a reliable nodal staging of T3N0M0 colorectal carcinomas? *Journal of Surgical Oncology*, 81(2), 63-69. (IF 1.502)
20. Molenberghs G, Buyse M, Geys H, Renard D, Burzykowski T, Alonso A (2002) Statistical challenges in the evaluation of surrogate endpoints in randomized trials. *Controlled Clinical Trials*, 23, 607-625. (IF 1.862)
21. Renard D, Geys H, Molenberghs G, Burzykowski T, Buyse M (2002) Validation of surrogate endpoints in multiple randomized clinical trials with discrete outcomes. *Biometrical Journal*, 44, 921-935. (IF 0.250)
22. Renard D, Geys H, Molenberghs G, Burzykowski T, Buyse M, Vangeneugden T, Bijmens L (2003) Validation of a longitudinally measured surrogate for a time-to-event endpoint. *Journal of Applied Statistics*, 30, 235-247. (IF 0.597)
23. Vinh-Hung V, Cserni G, Burzykowski T, Van De Steene J, Voordeckers M, Storme G (2003) Effect of the number of uninvolved nodes on survival in early breast cancer. *Oncology Reports*, 10, 363-368. (IF 1.256)
24. Vinh-Hung V, Burzykowski T, Cserni G, Voordeckers M, Van De Steene J, Storme G. (2003) Functional form of the effect of the numbers of axillary nodes on survival in early breast cancer. *International Journal of Oncology*, 22, 697-704. (IF 2.536)
25. Burzykowski T, Szubiakowski J, Ryden T (2003) Analysis of photon count data from single-molecule fluorescence experiments. *Chemical Physics*, 288, 291-307. (IF 2.070)
26. Buyse M, Burzykowski T, Parmar M, Torri V, Omura G, Colombo N, Williams C, Conte P, Vermorken J (2003) Using the "expected" survival to explain differences between the results of randomized trials: a case in advanced ovarian cancer. *Journal of Clinical Oncology*, 21 (9), 1682-1687. (IF 10.864)
27. Regula J, Hennig E, Burzykowski T, Orlowska J, Przytulski K, Polkowski M, Dziurkowska-Marek A, Marek T, Nowak A, Butruk E, Ostrowski J (2003) Multivariate analysis of risk factors for development of duodenal ulcer in *Helicobacter pylori*-infected patients. *Digestion*, 67, 25-31. (IF 1.399)
28. Tibaldi FS, Cortinas Abrahantes J, Molenberghs G, Renard D, Burzykowski T, Buyse M, Parmar M, Stijnen T, Wolfinger R (2003) Simplified hierarchical linear models for the evaluation of surrogate endpoints. *Journal of Statistical Computation and Simulation*, 73, 643-658 (IF 0.224)
29. Speybroeck N, Boelaert F, Renard D, Burzykowski T, Mintiens K, Molenberghs G, Berkvens DL (2003) Design-based analysis of surveys: a bovine herpesvirus 1 case study. *Epidemiology and Infection*, 131, 991-1002. (IF 1.509)
30. Burzykowski T, Molenberghs G, Abeck D, Haneke E, Hay R, Katsambas A, Roseeuw D, van de Kerkhof P, van Aelst R, Marynissen G (2003) High prevalence of foot diseases in Europe: results of the Achilles Project. *Mycoses*, 46, 496-505. (IF 0.755)



31. Buyse M, Vangeneugden T, Bijmens L, Geys H, Renard D, Burzykowski T, Molenberghs G (2003) Validation of biomarkers as surrogates for clinical endpoints. *Drugs and the Pharmaceutical Sciences*, 132, 148-168.
32. Burzykowski T, Molenberghs G, Buyse M (2004) The validation of surrogate end points by using data from randomized clinical trials: a case-study in advanced colorectal cancer. *Journal of the Royal Statistical Society A*, 167, 103-124. (IF 0.796)
33. Sakamoto J, Ohashi Y, Hamada C, Buyse M, Burzykowski T, Piedbois P for the Meta-Analysis Group of the Japanese Society for Cancer of the Colon and Rectum and the Meta-Analysis Group in Cancer (2004) Efficacy of oral adjuvant therapy after resection of colorectal cancer: 5-year results from three randomized trials. *Journal of Clinical Oncology*, 22, 484-492. (IF 9.835)
34. Tibaldi F, Molenberghs G, Burzykowski T, Geys H (2004) Pseudo-likelihood estimation for a marginal multivariate survival model. *Statistics in Medicine*, 23, 947-963. (IF 1.389)
35. Molenberghs G, Burzykowski T, Alonso A, Buyse M (2004) A perspective on surrogate endpoints in controlled clinical trials. *Statistical Methods in Medical Research*, 13, 177-206. (IF 2.583)
36. Molenberghs G, Buyse M, Burzykowski T (2004) Surrogate endpoints. *Bulletin of the International Statistical Association*, January 2004, 29-33.
37. Alonso A, Molenberghs G, Burzykowski T, Renard D, Geys H, Shkedy Z, Tibaldi F, Abrahantes JC, Buyse M (2004) Prentice's approach and the meta-analytic paradigm: a reflection on the role of statistics in the evaluation of surrogate endpoints. *Biometrics*, 60, 724-728. (IF 1.211)
38. Cortiñas Abrahantes J, Molenberghs G, Burzykowski T, Shkedy Z, Alonso Abad A, Renard D (2004) Choice of units of analysis and modeling strategies in multilevel hierarchical models. *Computational Statistics and Data Analysis*, 47, 537-563. (IF 1.022)
39. Cserni G, Burzykowski T, Vinh-Hung V, Kocsis L, Boross G, Sinko M, Tarjan M, Bori R, Rajtar M, Tekle E, Maraz R, Baltas B, Svebis M (2004) Axillary sentinel node and tumour-related factors associated with non-sentinel node involvement in breast cancer. *Japanese Journal of Clinical Oncology*, 34, 519-524.
40. Nguti R, Burzykowski T, Rowlands J, Renard D, Janssen P (2005) Joint modelling of repeated measurements and event time: application to performance traits and survival of lambs bred in sub-humid tropics. *Genetics Selection Evolution*, 37, 175-198. (IF 1.783)
41. Katsambas A, Abeck D, Haneke E, van de Kerkhof P, Burzykowski T, Molenberghs G, Marynissen G (2005) The effects of foot disease on quality of life: results of the Achilles Project. *Journal of the European Academy of Dermatology and Venereology*, 19, 191-195. (IF 1.638)
42. Vinh-Hung V, Burzykowski T, Van de Steene J, Voordeckers M, Lamote J, Storme G (2005) Statistical interaction in the survival analysis of early breast cancer using registry data: role of breast conserving surgery and radiotherapy. *Tumori*, 91, 9-14. (IF 0.739)
43. Boelaert F, Speybroeck N, Kruif A, Aerts M, Burzykowski T, Molenberghs G, Berkvens DL (2005) Risk factors for bovine herpesvirus-1 seropositivity. *Preventive Veterinary Medicine*, 69: 285-95. (IF 1.354)
44. Burzykowski T (2005) New experimental techniques in genomics: challenges for data processing and analysis. *Annual Proceedings of Medical Science*, 50 (suppl 2), 12-14.
45. Straetemans R, O'Brien T, Wouters L, Van Dun J, Janicot M, Bijmens L, Burzykowski T, Aerts M (2005) Design and analysis of drug combination experiments. *Biometrical Journal*, 47, 299-308. (IF 0.768)
46. van Breda S, van Agen E, van Sanden S, Burzykowski T, Kienhuis A, Kleinjans J, van Delft J (2005) Vegetables affect the expression of genes involved in anticarcinogenic processes in the colonic mucosa of C57BL/6 female mice. *Journal of Nutrition*, 135, 1879-1888. (IF 3.689)

47. van Breda S, van Agen E, van Sanden S, Burzykowski T, Kienhuis A, Kleinjans J, van Delft J (2005) Vegetables affect the expression of genes involved in carcinogenic and anticarcinogenic processes in the lungs of female C57BL/6 mice. *Journal of Nutrition*, 135, 2546-2452. (IF 3.689)
48. Collette L, Burzykowski T, Carroll KJ, Newling D, Morris T, Schröder FH (2005) Is PSA a valid surrogate endpoint for survival in hormonally treated patients with metastatic prostate cancer? *Journal of Clinical Oncology*, 23, 6139-6148. (IF 11.810)
49. Cortiñas Abrahantes J, Burzykowski T (2005) A version of the EM algorithm for proportional hazards model with random effects. *Biometrical Journal*, 47, 847-862. (IF 0.768)
50. Vanderlocht J, Burzykowski T, Somers V, Stinissen P, Hellings N (2005) No association of leukemia inhibitory factor (LIF) DNA polymorphisms with multiple sclerosis. *Journal of Neuroimmunology*, 171, 189-192. (IF 2.824)
51. Collette L, Burzykowski T, Schröder FH (2006) Prostate-specific antigen (PSA) alone is not an appropriate surrogate marker of long term therapeutic benefit in prostate cancer trials. *European Journal of Cancer*, 42, 1344-50. (IF 13.598)
52. Massonnet G, Burzykowski T, Janssen P (2006) Resampling plans for frailty models. *Communications in Statistics - Simulation and Computation*, 35, 497-514. (IF 0.174)
53. Van Sanden S, Burzykowski T (2006) The use of background signal in transformation of cDNA-microarray measurements. *Applied Bioinformatics*, 50, 161-172.
54. Burzykowski T, Buyse M (2006) Surrogate threshold effect: An alternative measure for meta-analytic surrogate endpoint validation. *Pharmaceutical Statistics*, 5, 173-186. (IF 0.867)
55. Van Sanden S, Wouters L, Burzykowski T, Molenberghs G, Van Remoortere M, Meert T, Bijmens L (2006) A modeling approach to the analysis of nerve regenerative experiments. *Journal of Biopharmaceutical Statistics*, 16, 843-859.
56. Cortiñas Abrahantes J, Burzykowski T, Legrand C, Janssen P, Ducrocq V, Duchateau L (2007) Comparison of different estimation procedures for proportional hazards model with random effects. *Computational Statistics and Data Analysis*, 51, 3913-3930. (IF 1.029)
57. Van Sanden S, Lin D, Burzykowski T (2007) Performance of classification methods in a microarray setting: a simulation study. *Biocybernetics and Biomedical Engineering*, 27, 15-28.
58. Haldermans P, Shkedy Z, Van Sanden S, Burzykowski T, Aerts M (2007) Using linear mixed models for normalization of cDNA microarrays. *Statistical Applications in Genetics and Molecular Biology*, 6, Article19. (IF 0.189)
59. de Gramont A, Buyse M, Cortinas Abrahantes J, Burzykowski T, Quinaux E, Cervantes A, Figer A, Lledo G, Flesh M, Mineur L, Carola E, Etienne P-L, Rivera F, Chirivella I, Perez-Staub N, Louvet C, André T, Tabah-Fisch I, Tournigand C (2007) Reintroduction of oxaliplatin is associated with improved survival in advanced colorectal cancer. *Journal of Clinical Oncology*, 25, 3224-3229. (IF 13.753)
60. Valkenborg D, Assam P, Thomas G, Krols L, Kas K, Burzykowski T (2007) Using a Poisson approximation to predict the isotopic distribution of sulphur-containing peptides in a peptide-centric proteomic approach. *Rapid Communications in Mass Spectrometry*, 21, 3387-3391. (IF 0.436)
61. Lin D, Shkedy Z, Yekutieli D, Burzykowski T, Gohlmann HWH, De Bondt A, Perera T, Geerts T, Bijmens L (2007) Testing for trend in dose-response microarray experiments: comparison of several testing procedures, multiplicity and resampling-based inference. *Statistical Applications in Genetics and Molecular Biology* 6, Article 26. (IF 0.189)
62. Buyse M, Burzykowski T, Carroll K, Michiels S, Sargent D, Miller LL, Elfring GL, Pignon J-P, Piedbois P (2007) Progression-free survival is a surrogate for survival in advanced colorectal cancer. *Journal of Clinical Oncology*, 25, 5218-5224. (IF 13.753)

63. Collette L, Buyse M, Burzykowski T (2007) Are prostate-specific antigen changes valid surrogates for survival in hormone refractory prostate cancer? A meta-analysis is needed! *Journal of Clinical Oncology*, 25, 5673-5674. (IF 13.753)
64. Alonso A, Molenberghs G, Burzykowski T, Renard D, Geys H, Shkedy Z, Tibaldi F, Abrahantes JC, Buyse M (2007) Author's reply [Letter to the Editor]. *Biometrics*, 63, 960-962. (IF 2.184)
65. Sterna J, Burzykowski T (2007) The assessment of the usefulness of hemilaminectomy without fenestration in the treatment of thoracolumbar disc disease in chondrodystrophic dogs. *Polish Journal of Veterinary Sciences*, 10 (3), 165-172. (IF 0.291)
66. Molenberghs G, Burzykowski T, Alonso A, Assam P, Tilahun A, Buyse M (2008) The meta-analytic framework for the evaluation of surrogate endpoints in clinical trials. *Journal of Statistical Planning and Inference* 138, 432-449. (IF 0.679)
67. Burzykowski T, Buyse M, Yothers G, Sakamoto J, Sargent D (2008) Exploring and validating surrogate endpoints in colorectal cancer. *Lifetime Data Analysis*, 14, 54-64. (IF 0.783)
68. Speybroeck N, Marcotty T, Aerts M, Dolan T, Williams B, Lauer J, Molenberghs G, Burzykowski T, Mulumba M, Berkvens D (2008) Titrating *Theileria parva*: single stocks against combination of stocks. *Experimental Parasitology*, 118, 522-30. (IF 1.751)
69. Valkenburg D, Van Sanden S, Lin D, Kasim A, Zhu Qi, Haldermans P, Jansen I, Shkedy Z, Burzykowski T (2008) A cross-validation study to select a classification procedure for clinical diagnosis based on proteomic mass spectrometry. *Statistical Applications in Genetics and Molecular Biology* 7(2), article 12 (available at: <http://www.bepress.com/sagmb/vol7/iss2/art12>). (IF 1.773)
70. Van Sanden S, Lin D, Burzykowski T (2008) Performance of gene selection and classification methods in a microarray setting: A simulation study. *Communications in Statistics – Simulation and Computation*, 37, 409-424. (IF 0.319)
71. Burzykowski T, Buyse M, Piccart-Gebhart MJ, Sledge G, Carmichael J, Luck H-J, Mackey JR, Nabholz J-M, Paridaens R, Biganzoli L, Jassem J, Bontenbal M, Bonnetterre J, Chan S, Atalay Basaran G, Therasse P (2008) Evaluation of tumor response, disease control, progression-free survival, and time to progression as potential surrogate endpoints in metastatic breast cancer. *Journal of Clinical Oncology*, 26, 1987-1992. (IF 17.157)
72. Piccart-Gebhart MJ, Burzykowski T, Buyse M, Sledge G, Carmichael J, Luck H-J, Mackey JR, Nabholz J-M, Paridaens R, Biganzoli L, Jassem J, Bontenbal M, Bonnetterre J, Chan S, Atalay Basaran G, Therasse P (2008) Effects of taxanes alone or in combination with anthracyclines as first-line therapy of patients with metastatic breast cancer. *Journal of Clinical Oncology*, 26, 1980-1986. (IF 17.157)
73. Valkenburg D, Jansen I, Burzykowski T (2008) A model-based method for the prediction of the isotopic distribution of peptides. *Journal of the American Society of Mass Spectrometry*, 19, 703-712. (IF 3.181)
74. Massonnet G, Janssen P, Burzykowski T (2008) Fitting conditional survival models to meta-analytic data by using a transformation towards mixed-effects models. *Biometrics*, 64, 834-842. (IF 2.352)
75. Burzykowski T (2008) Surrogate endpoints: wishful thinking or reality? *Statistical Methods in Medical Research*, 17, 463-466. (IF 2.177)
76. Buyse M, Burzykowski T, Michiels S, Carroll K (2008) Individual- and trial-level surrogacy in colorectal cancer. *Statistical Methods in Medical Research*, 17, 467-475. (IF 2.177)
77. Lin D, Shkedy Z, Burzykowski T, Ion R, Göhlmann HW, Bondt AD, Perer T, Geerts T, Van den Wyngaert I, Bijnsens L (2008) An investigation on performance of Significance Analysis of Microarray (SAM) for the comparisons of several treatments with one control in the presence of small-variance genes. *Biometrical Journal*, 50, 801-823. (IF 1.114)

78. Sterna J, Burzykowski T (2008) Assessment of the usefulness of the fenestration method in cases of disc extrusion in the cervical and thoraco-lumbar spine in chondrodystrophic dogs. *Polish Journal of Veterinary Sciences*, 11 (1), 55-62. (IF 0.465)
79. Galecki AT, Chen S, Faulkner JA, Ashton-Miller J, Burzykowski T (2009) Statistical power calculations for clustered continuous data. *International Journal of Knowledge Engineering and Soft Data Paradigms*, 1, 40-48.
80. Lin D, Shkedy Z, Yekutieli D, Dilba G, Burzykowski T, Goehlmann HWH, De Bondt A, Perera T, Geerts T, Bijnsens L (2009) Multiple contrast test for detecting monotonic dose-response relationship and FDR-adjusted confidence intervals for selected parameters in a microarray setting. *Online Journal of Bioinformatics*, 10(1), 67-73.
81. Valkenburg D, Thomas G, Krols L, Kas K, Burzykowski T (2009) A strategy for the prior processing of high-resolution mass spectral data obtained from high-dimensional combined fractional diagonal chromatography. *Journal of Mass Spectrometry*, 44, 516-529. (IF 3.411)
82. Michiels S, Le Maître A, Buyse M, Burzykowski T, Maillard E, Bogaerts J, Vermorken JB, Budach W, Pajak TF, Ang KK, Bourhis J, Pignon JP; on behalf of the MARCH and MACH-NC Collaborative Groups (2009) Surrogate endpoints for overall survival in locally advanced head and neck cancer: meta-analyses of individual patient data. *Lancet Oncology*, 10, 341-350. (IF 14.470)
83. Lin D, Shkedy Z, Burzykowski T, Talloen W, Bijnsens L (2009) A comparison of procedures for controlling the false discovery rate in the presence of small variance genes: a simulation study. *Communications in Statistics – Simulation and Computation*, 38, 2111-2122. (IF 0.383)
84. Lin D, Shkedy Z, Burzykowski T, Aerts M, Goehlmann HWH, De Bondt A, Perera T, Geerts T, Talloen W, Bijnsens L (2009) Classification of trends in dose-response microarray experiments using information theory selection methods. *The Open Applied Informatics Journal*, 3, 34-43.
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#### National non-refereed journals

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1. Molenberghs G, Burzykowski T, Buyse M, Renard D, and Geys, H (1999) The validation of surrogate endpoints in meta-analyses of randomized experiments. In: *Proceedings of the 14th International Workshop on Statistical Modelling, Graz, Austria* (Friedl H, Berghold A, and Kauerman G, eds), 281-288.
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12. Massonnet G, Janssen P, Burzykowski T (2006) Fitting frailty models via linear mixed models using model transformation. *International Conference on Statistical Models for Biomedical and Technical Systems, 2006* (Vonta, Filia, ed.), 387-391.
13. Koch K, Schonauer S, Jansen I, Van den Bussche J, Burzykowski T (2007) Finding clusters of positive and negative coregulated genes in gene expression data. *Proceedings of the 7th IEEE International Conference on Bioinformatics and Bioengineering, vol. I*. (Yang JY, Yang MQ, Zhu MM, Zhang Y, Arabnia HR, Deng Y, Bourbakis NG, eds.), 93-99. IEE Press, ISBN 1-4244-1509-8.
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17. Burzykowski T (2012) Design and analysis of experiments: 'omics' does not mean 'an exception'. *From Analytical to Functional Proteomics. Proceedings of the First Symposium of the Belgian Proteomics Association.* (Laukens K, eds), 25. ISBN 9789057284014.

#### *Invited presentations*

1. "The Validation of Surrogate Endpoints From Several Randomized Experiments", Fourth International Seminar on "Statistics and Clinical Practice", International Center of Biocybernetics, Warsaw, Poland (26-29/06/2000).
2. "Statistical Validation of Surrogate Endpoints: An Overview and Examples in Cancer", Drug Information Association EuroMeeting, Barcelona, Spain (06-09/03/2001).
3. "A Version of the EM Algorithm for Proportional Hazards Models With Random Effects", Fifth International Seminar on "Statistics and Clinical Practice", International Center of Biocybernetics, Warsaw, Poland (03-05/06/2002).
4. "Methodology for the validation of surrogate endpoints in multiple randomized experiments", XXI<sup>st</sup> International Biometric Conference, Freiburg, Germany (21-26/07/2002).
5. "Meta-Analytic Approaches to the Validation of Surrogate Endpoints", 39<sup>th</sup> Annual Drug Information Association Meeting, San Antonio, USA (15-19/06/2003).
6. "Meta-Analytic Approaches in Validation of Surrogate Endpoints", 25<sup>th</sup> Annual Meeting of the Society for Clinical Trials, New Orleans, USA (23-26/05/2004).
7. "Estimation of multivariate frailty models", XXII<sup>nd</sup> International Biometric Conference. Cairns, Australia (11-16/07/2004).
8. "Surrogate endpoints in cancer clinical trials", Statisticians in Pharmaceutical Industry (PSI) One-Day Meeting, London, UK (07/12/2004).
9. "New experimental techniques in genomics: challenges for data management and analysis", Euroregional Conference on "Building Information Society in the Healthcare in Euroregion Niemen", Bialystok, Poland (17-19/02/2005).
10. "Performance of classification methods in microarray setting", Sixth International Seminar on "Statistics and Clinical Practice", International Center of Biocybernetics, Warsaw, Poland (16-17/06/2005).
11. "Numerical validation of biomarkers in oncology", EMEA/CHMP Biomarkers Workshop, London, UK (16/12/2005).
12. "Evaluating the use of biomarkers as surrogate endpoints", Conference "Phase III Clinical Trials in Oncology: From Design to Approval", Amsterdam, The Netherlands (27/02/2006).
13. "Recent advances in surrogate endpoint evaluation", ENAR Spring Meeting, Tampa, USA

- (26-29/03/2006).
14. "Dealing with missing data", Bioscope-IT Workshop on Biostatistics, Tervuren, Belgium (22/09/2006).
  15. "Statistical issues in the validation of surrogate endpoints", Third International Clinical Trials Symposium, Sydney (23-26/09/2007).
  16. "The use of the isotopic distribution in the processing of high-resolution maldi-tof mass spectrometry data", Seventh International Seminar on "Statistics and Clinical Practice", International Center of Biocybernetics, Warsaw, Poland (19-20/06/2008).
  17. "Review of basic concepts and methods of survival analysis" and "Competing risks", Second MSOURCE Biostatistics Symposium on "Advanced Topics in Survival Analysis", MSOURCE Medical Development, Kraainem, Belgium (7/11/2008).
  18. "The Use of Wavelets in the Analysis of Mass Spectrometry Data", Warsaw Seminar on Industrial Mathematics, Faculty of Mathematics and Information Science, Warsaw University of Technology, Warsaw, Poland (19/03/2010).
  19. "Practical issues related to the use of biomarkers in a seamless Phase II/III design", EFSPi-SFdS B&S Joint European Statistics Meeting, Paris (18-19/11/2010).
  20. "Clinical trial design: Bayesian approach can be useful?", BAYES 2011, 2<sup>nd</sup> Applied Bayesian Biostatistics Workshop, Louvain-la-Neuve, Belgium (27-29/4/2011).
  21. "Interpretation of the gaseous Hydrogen/Deuterium exchange mass-spectrometry data", Eighth International Seminar on "Statistics and Clinical Practice", International Center of Biocybernetics, Warsaw, Poland (08-10/06/2011).
  22. "Choice of endpoints in cancer clinical trials: OS, DFS, PFS?", 2<sup>nd</sup> Conference of the Central European Network CEN 2011, Zurich, Switzerland (12-16/09/2011).
  23. "Predictive biomarkers", workshop on "Biomarkers and Surrogate Endpoints", organized by European Diploma in Pharmaceutical Medicine, Brussels (22-23/09/2011).
  24. "Surrogate biomarkers and endpoints", workshop on "Biomarkers and Surrogate Endpoints", organized by European Diploma in Pharmaceutical Medicine, Brussels (22-23/09/2011).
  25. "Introduction to surrogate endpoints", 2<sup>nd</sup> Joint DIA/EMA Statistics Workshop, London (26-28/10/2011).
  26. "Statistical methodology to evaluate surrogate endpoints in oncology", IBC 2012 Satellite Symposium on "Meta-analysis and Surrogate Endpoints in the Evaluation of Cancer Chemotherapy – Introduction to the GASTRIC Project" (31/08/2012).
  27. "Central statistical monitoring: methodological and practical considerations", MRC HTMR workshop on "Implementing central statistical monitoring in multicentre clinical trials", CTSU, Oxford University (05/10/2012).
  28. "Surrogate endpoints in oncology", Joint BfArM/DIA Statistics Workshop, Bonn (17-19/10/2012).
  29. "Biomarkers: concepts and applications in clinical trials", 2<sup>nd</sup> Munich Biomarker Conference (22-23/11/2012).
  30. "Design and analysis of experiments: 'omics' does not mean 'an exception'", The First Symposium of the Belgian Proteomics Association, Ghent (29-30/11/2012).
  31. "Central statistical monitoring of randomized clinical trials", European Clinical Research Infrastructures Network Conference, Warszawa (17/05/2013).
  32. "Surrogate endpoints in oncology", European Clinical Research Infrastructures Network Conference, Warszawa (17/05/2013).

33. "The meta-analytic approach to the validation of surrogate endpoints", 34<sup>th</sup> Annual Meeting of the International Society for Clinical Biostatistics, Munich (25-28/08/2013).
34. "What challenges are biostatisticians faced with?", The 1<sup>st</sup> International Workshop on Advanced Analytics and Data Science, Warszawa (05/11/2013).
35. "Introduction to genetics and applications of statistics in genetics," XXIX<sup>th</sup> Conference "Mathematical Statistics – Wisla 2013", Wisla, Poland (02-06/12/2013).
36. "A review of problems and methods related to the analysis of gene-expression data" XXIX<sup>th</sup> Conference "Mathematical Statistics – Wisla 2013", Wisla, Poland (02-06/12/2013).
37. "A review of problems and methods related to the analysis of protein-expression data" XXIX<sup>th</sup> Conference "Mathematical Statistics – Wisla 2013", Wisla, Poland (02-06/12/2013).
38. "QTL mapping with the use of next-generation sequencing technologies", XXIX<sup>th</sup> Conference "Mathematical Statistics – Wisla 2013", Wisla, Poland (02-06/12/2013).
39. "In the quest for biomarkers: pitfalls, statistics, and education", 4<sup>th</sup> International Thoracic Oncology Congress Dresden, Dresden, Germany (12-14/09/2014).
40. "Is overall survival a reasonable endpoint in cancer drug development?" 12<sup>th</sup> International Conference of the Polish Pharmacoeconomics Society, Warszawa, Poland (3-5/12/2014).
41. "Improving trial monitoring to reduce the costs", Symposium on "Health outcomes in an era of cost containment. Improving efficiency of interventional research: decreasing costs, increasing quality", Paris, France (12/03/2015).
42. "The use of hidden Markov-models to analyze QTL-mapping experiments based on the whole-genome next-generation-sequencing data", 61<sup>st</sup> Biometrical Colloquium of the German Region of the International Biometric Society, Dortmund, Germany (15-18/03/2015).
43. "Molecular markers – why are not we there yet?", 7<sup>th</sup> International Conference of Contemporary Oncology, Poznan, Poland (25-27/03/2015).
44. "Statistical considerations for clinical trial design for rare diseases", 27<sup>th</sup> Annual EuroMeeting of DIA, Paris, France (13-15/04/2015).
45. "Use of biomarkers in oncology clinical trials – benefits and limitations", XVIII<sup>th</sup> Congress of Polish Society of Clinical Oncology, Gdansk, Poland (27-29/08/2015).

#### *Contributed presentations*

1. Szutkowski Z, Hliniak A, Burzykowski T, Wasilewski M, Bujko K (1992) Radiotherapy of glottic, supraglottic and oropharyngeal cancer. Pretreatment and treatment related factors. 11th Annual Meeting of ESTRO, Malmoe, Sweden, 09/1992 (poster)
2. Fijuth J, Burzykowski T (1995) Interstitial brachytherapy for cancer of the oral cavity: analysis of treatment results and complications. International Brachytherapy Conference, Nice, France, 11/1995 (poster)
3. Fijuth J, Danczak-Ginalska Z, Burzykowski T (1995) Interstitial brachytherapy for oral cavity carcinoma: search of the factors responsible for late complications. ECCO-8, Paris, France, 11/1995 (poster). Abstract published in *European Journal of Cancer Part A*, 31A, 975.
4. Burzykowski T (1996) Quality of data in a clinical trial: Experience of first months of the trial "Estimation of the effect of total treatment time on results of radiotherapy of supraglottic and glottic cancer patients". 10th Scientific Conference of the Section of Radiotherapy of Polish Oncological Society: "Radiotherapy of head and neck cancers - new concepts and controversies". Kraków, Poland, 04/1996 (oral presentation)

5. Bujko K, Skoczylas J, Burzykowski T (1996) Supraglottic cancer patients: radiotherapy or surgery. 10th Scientific Conference of the Section of Radiotherapy of Polish Oncological Society: "Radiotherapy of head and neck cancers - new concepts and controversies". Kraków, Poland, 04/1996 (oral presentation)
6. Niklinski J, Furman M, Burzykowski T, Laudański J, Chyczewski L (1997) Preoperative CYFRA21-1 levels as a prognostic indicator in resected non-small cell lung cancer /NSCLC/. 8th World Conference on Lung Cancer. Dublin, Ireland, 08/1997. Published abstract (*Lung Cancer*, 18 (Suppl.1), 183).
7. Regula J, Hennig E, Burzykowski T, Przytulski K, Dziurkowska, Marek A, Marek T, Nowak A, Ostrowski J, Butruk E (1997) Multivariate analysis of duodenal ulcer risk factors. European Helicobacter pylori Study Group - Xth International Workshop on Gastroduodenal Pathology and Helicobacter pylori. Lisbon, 11-14/09/1997. Published abstract (*Gut*, 41 (Suppl.1), A110).
8. Regula J, Hennig E, Burzykowski T, Przytulski K, Dziurkowska, Marek A, Marek T, Nowak A, Ostrowski J, Butruk E (1997) Difference between Helicobacter pylori gastritis and duodenal ulcer. Multivariate analysis. 6<sup>th</sup> United European Gastroenterology Week. Birmingham, UK, 18-23/10/1997. Published abstract (*Gut*, 41 (Suppl.3), A109).
9. Burzykowski T, Molenberghs G, Tafforeau J, Van Oyen H, Demarest S, Bellamammer L (1998) Missing data in the Health Interview Survey in Belgium. Conference on "Methods in Public Health Research", Liege, 27/11/1998.
10. Burzykowski T, Molenberghs G, Buyse M, Renard D, Geys H (1999) Validation of surrogate endpoints in multiple randomized clinical trials with failure-time endpoints. Joint Statistical Meetings, Baltimore, USA, 8-12/08/1999 (oral presentation).
11. Haneke E, Burzykowski T, Meuleners L, Molenberghs G, Marynissen G (1999) The relation between sport and mycotic feet. 8th Congress of the European Academy of Dermatology and Venerology. Amsterdam, the Netherlands, 10/1999 (poster).
12. Marynissen G, Burzykowski T, Molenberghs G (1999) The prevalence of fungal foot diseases in Europe from the Achilles project. 8th Congress of the European Academy of Dermatology and Venerology. Amsterdam, the Netherlands, 10/1999 (poster).
13. Roseeuw D, Katsambas A, Burzykowski T, Meuleners L, Molenberghs G, Marynissen G (1999) The risk of fungal foot infections in diabetic patients. 8th Congress of the European Academy of Dermatology and Venerology. Amsterdam, the Netherlands, 10/1999 (poster).
14. Abeck D, Marynissen G, De Doncker P, Molenberghs G, Burzykowski T, van de Kerkhof P (1999) The prevalence of fungal foot infections in elderly. 8th Congress of the European Academy of Dermatology and Venerology. Amsterdam, the Netherlands, 10/1999 (poster).
15. Burzykowski T, Molenberghs G, Tafforeau J, Van Oyen H, Demarest S, Bellamammer L (1999) Methods used to address missing data issues in the design and analysis of the Belgian Health Interview Survey 1997. International Conference on Survey Non-Response, Portland, USA, 28-31/10/1999 (oral presentation).
16. Burzykowski T (2000): The Achilles Project. Annual Meeting of Nederlandstalige Werkgroep voor Epidemiologie En Dermatologie "Nederweed" (Dutch-speaking Working Group on Epidemiology and Dermatology), Antwerp, May 26, 2000 (oral presentation).
17. Burzykowski T, Molenberghs G, Buyse M, Geys H, Renard D (2000) Validation of an ordinal categorical endpoint in multiple randomized clinical trials with failure-time primary endpoints. International Biometric Conference. Berkeley, USA, 01-07/07/2000 (oral presentation).
18. Burzykowski T, Buyse M (2000) Using the "expected" survival to explain differences between results of a meta-analysis and a randomized trial. 21<sup>st</sup> International Society for Clinical Biostatistics Meeting, Trento, Italy, 04-08/09/2000 (oral presentation).

19. Vinh-Hung V, Cserni G, Burzykowski T, Van de Steene J, Stomme G (2001) Are high numbers of negative nodes indicators of poor outcome in breast cancer? Forum de Cancerologie / Eurocancer 2001, Paris, 06-08/06/2001 (poster).
20. Burzykowski T, Buyse M, Molenberghs G (2001) Surrogate threshold effect: a new measure of the validity of a surrogate endpoint. 22<sup>nd</sup> Annual Conference of the International Society for Clinical Biostatistics. Stockholm, 19-23/08/2001 (oral presentation).
21. Speybroeck N, Boelaert F, Molenberghs G, Burzykowski T, Renard D, Mintiens K, Madder M, Berkvens D (2002) The usefulness of Stata in the analysis of complex veterinary surveys. Combined Dutch & German Stata User Meeting. Maastricht, The Netherlands, 23/05/2002.
22. Cortiñas Abrahantes J, Burzykowski T (2002) A version of the EM algorithm for proportional hazards models with random effects. First Barcelona Workshop on Survival Analysis. Barcelona, 12-14/06/2002 (poster).
23. Torres F, Tibaldi F, Burzykowski T, Cortiñas Abrahantes J, Geys H, Allende S, Molenberghs G (2002) Bayesian models in the evaluation of surrogate endpoints. XXI<sup>st</sup> International Biometric Conference. Freiburg, 21-26/07/2002 (oral presentation).
24. Burzykowski T, Buyse M (2003) Using the “expected” survival to explain differences between results of a meta-analysis and a randomized trial. XXXV<sup>e</sup> Journées de Statistique, Lyon, France, 02-06/06/2003 (oral presentation).
25. Cserni G, Burzykowski T, Vinh-Hung V, Boross G, Sinkó M, Svébis M, Tarjan M, Bori R, Kocsis L, Rajtar M, Tekle EW, Baltás B (2003) Sentinel node biopsy based factors associated with non-sentinel node involvement in breast cancer. J Jpn Surg Soc 2003;104:575.
26. Cortiñas Abrahantes J, Burzykowski T (2003) A version of the EM algorithm for proportional hazards models with random effects. 18<sup>th</sup> International Workshop on Statistical Modelling. Leuven, 07-11/07/2003 (oral presentation).
27. Boelaert F, Speybroeck N, de Kruif A, Aerts M, Burzykowski T, Molenberghs G, Berkvens DL (2004) Survey-based epidemiological investigation of risk factors for bovine herpesvirus 1 seropositivity. Annual Conference of the Society for Veterinary Epidemiology and Preventive Medicine, Martigny, Switzerland, March 24th-26th, 2004 (poster).
28. Burzykowski T, Mapako T, Verlinden I, Michiels L (2004) Analysis of SAGE data using the beta-binomial model. XXII<sup>nd</sup> International Biometric Conference. Cairns, Australia, 11-16/07/2004 (poster).
29. Burzykowski T (2005) The validation of surrogate endpoints in clinical trials. German Biometric Conference, Halle, 20-23/03/2005 (oral presentation).
30. Alonso A, Molenberghs G, Burzykowski T, Renard D, Geys H, Shkedy Z, Tibaldi F, Abrahantes J, Buyse M (2005) Prentice's Approach and the Meta-analytic paradigm: A reflection on the role of statistics in the evaluation of surrogate endpoints. International Biometric Society, Multi-Regional Conference, Leceister, UK, 05-08/04/2005 (oral presentation).
31. Van Sanden S, Burzykowski T (2005) The use of background signal in transformation of cDNA microarray measurements. International Biometric Society, Multi-Regional Conference, Leceister, UK, 05-08/04/2005 (oral presentation).
32. Van Sanden S, Lin D, Burzykowski T (2005) Performance of class prediction methods in a microarray setting. International Biometric Society, Multi-Regional Conference, Leceister, UK, 05-08/04/2005 (poster).
33. Buyse M, Burzykowski T, Carroll K, Piedbois P, Michiels S, Pignon JP, for the Meta-Analysis Group In Cancer (MAGIC) (2005) Progression-free survival (PFS) as a surrogate for overall survival (OS) in patients with advanced colorectal cancer. Annual Meeting of the American Society for Clinical Oncology, Orlando, USA, 13-17/05/2005 (poster).

34. Piccart MJ, Burzykowski T, Sledge G, Carmichael J, Luck HJ, Mackey JR, Nabholz JM, Paridaens R, Biganzoli L, Jassem J, Blohmer JU, Bontenbal M, Bonnetterre J, Chan S, Atalay G, Therasse P, Buyse M (2005) Effects of taxanes alone or in combination with anthracyclines on tumor response, progression-free survival and overall survival in first-line chemotherapy of patients with metastatic breast cancer: an analysis of 4,256 patients randomized in 12 trials. 28th Annual San Antonio Breast Cancer Symposium, San Antonio, USA, 8-10/12/2005 (poster).
35. Burzykowski T, Piccart MJ, Sledge G, Carmichael J, Luck HJ, Mackey JR, Nabholz JM, Paridaens R, Biganzoli L, Jassem J, Blohmer JU, Bontenbal M, Bonnetterre J, Chan S, Atalay G, Therasse P, Buyse M (2005) A quantitative study of tumor response and progression-free survival as surrogate endpoints for overall survival in first-line treatment of metastatic breast cancer. 28th Annual San Antonio Breast Cancer Symposium, San Antonio, USA, 8-10/12/2005 (poster).
36. Valkenburg D, Burzykowski T, Krols L, Thomas G, Kas K (2006) An algorithm to process and analyse COFRADIC data. 10<sup>th</sup> Annual International Conference "Research in Computational Molecular Biology", RECOMB 2006, Venice, Italy, 2-5/04/2006 (poster).
37. Valkenburg D, Burzykowski T, Assam P, Krols L, Thomas G, Kas K (2006) Monoisotopic peak finding using a Poisson approximation in COFRADIC setting. 10<sup>th</sup> Annual International Conference "Research in Computational Molecular Biology", RECOMB 2006, Venice, Italy, 2-5/04/2006 (poster).
38. Burzykowski T (2006) Poisson approximation based monoisotopic peak finding in COFRADIC setting. XXIII<sup>rd</sup> International Biometrical Conference, Montreal, Canada, 16-21/07/2006 (oral presentation).
39. Burzykowski T (2006) Meta-analysis: why and how? XXXVI<sup>th</sup> International Biometrical Colloquium, Olsztyn, Poland, 11-14/09/2006 (oral presentation).
40. Valkenburg D, Krols L, Thomas G, Kas K, Burzykowski T (2006) An algorithm to process and analyse COFRADIC data. Conference on Proteome Analysis in Systems Biology, Antwerp, Belgium, 7-8/12/2006 (poster).
41. Jansen I, Koch K, Kwasnikowska N, Burzykowski T (2007) An algorithm to find co-regulated gene clusters: adjustment for random variability of gene expression data. 11<sup>th</sup> RECOMB Conference, Oakland, USA, 21-25/04/2007 (poster).
42. Valkenburg D, Burzykowski T (2007) A new method for monoisotopic mass determination. 11<sup>th</sup> RECOMB Conference, Oakland, USA, 21-25/04/2007 (poster).
43. Michiels S, Le Maître A, Buyse M, Burzykowski T, Bogaerts J, Vermorken JB, Budach W, Ang K, Pajak T, Pignon J-P, on behalf of the MARCH and MACH-NC Collaborative Groups (2007) Surrogate endpoints for overall survival (OS) in head and neck squamous cell carcinoma (HNSCC): evaluation using individual data of 23,737 patients. 43<sup>rd</sup> ASCO Meeting, Chicago, USA, 1-5/06/2007 (oral presentation).
44. Zhu Q, Valkenburg D, Jansen I, Burzykowski T (2007) Identifiability of <sup>16</sup>O-<sup>18</sup>O labeled mass spectra: A simulation study. The Benelux Bioinformatics Conference, Leuven, 12-13/11/2007 (poster).
45. Valkenburg D, Burzykowski T (2007) Estimating the ion ratio of proteolytic <sup>18</sup>O stable-isotope labeled peptides. The Benelux Bioinformatics Conference, Leuven, 12-13/11/2007 (poster).
46. Burzykowski T, Valkenburg D (2008) A model for the analysis of proteolytic <sup>18</sup>O stable-isotope labeled peptides in MALDI-TOF mass-spectra. The International Biometric Society/Eastern North American Region (ENAR) 2008 Spring Meeting, Arlington (Virginia, USA), 16-19/03/2008 (oral presentation).
47. Jansen I, Koch K, Burzykowski T (2008) An Algorithm to Find Co-regulated Gene Clusters: Important Improvements. XXIV<sup>th</sup> International Biometrical Conference, Dublin, Ireland, 13-18/07/2008 (oral presentation).



48. Burzykowski T, Valkenborg D (2008) A model for the analysis of proteolytic  $^{18}\text{O}$  stable-isotope labeled peptides in MALDI-TOF mass-spectra. XXIV<sup>th</sup> International Biometrical Conference, Dublin, Ireland, 13-18/07/2008 (poster).
49. Burzykowski T, Zhu Q, Valkenborg D, Kasim A, Jansen I (2009) A Bayesian approach to the identification of overlapping peptides in a MALDI-TOF mass spectrum. 5th Conference of the Eastern Mediterranean Region of the International Biometric Society, Istanbul, Turkey, 10-14/05/2009 (oral presentation).
50. Burzykowski T, Zhu Q, Valkenborg D, Kasim A, Jansen I (2009) A Bayesian approach to the quantification of overlapping peptides in a MALDI-TOF mass spectrum. The ISMB/ECCB 2009 Conference, Stockholm, Sweden, 29/06-02/07/2009 (poster).
51. Burzykowski T (2009) Meta-analysis and validation of surrogate endpoints. European Statistical Meeting on Meta-analysis, Basel, Switzerland, 26/06/2009 (oral presentation).
52. Burzykowski T, Zhu Q, Valkenborg D (2009) A Bayesian approach to the quantification of overlapping peptides in a MALDI-TOF mass spectrum. The IBS Australasian Region Conference, Taupo, New Zealand, 29/11-03/12/2009 (oral presentation).
53. Burzykowski T (2010) Meta-analytic approach to the validation of surrogate endpoints: the past decade. Joint Statistical Meetings, Vancouver, Canada, 1-5/08/2010 (oral presentation).
54. Burzykowski T (2010) Genomics and proteomics in clinical research: a statistician's perspective. Workshop on Advances in Clinical Proteomics, Luxembourg Clinical Proteomics Center, 09/09/2010 (oral presentation).
55. Nuciforo P, Burzykowski T, Lambertini C, Gardner H, Liu WH, Lee B, Barzaghi-Rinaudo P, Rheinhardt J, Barrett C, Linnartz R, Dugan M, Hackl W, Eiermann W, Pienkowski T, Crown J, Robert N, Pawlicki M, Martin M, Finn R, Lindsay M-A, Slamon D, Press M (2010) Fibroblast Growth Factor Receptor 1 amplification and overexpression in breast cancer tissue microarrays using chromogenic in situ hybridization and immunohistochemistry. 33<sup>rd</sup> Annual San Antonio Breast Cancer Symposium, San Antonio, USA, 8-12/12/2010 (poster).
56. Claesen J, Valkenborg D, Burzykowski T (2012) Estimation of individual-atom exchange rates in H/D exchange experiments. Joint Conference of Polish Mass Spectrometry Society and German Mass Spectrometry Society, Poznan, Poland, 4-7/3/2012 (poster).
57. Ejigu B, Valkenborg D, Burzykowski T, Berg M, Dujardin J-C (2012) Normalization of large-scale mass spectrometry-based metabolic profiling experiments. NVMS-BSMS International Congress on Mass Spectrometry, Rolduc, The Netherlands, 28-30/3/2012 (poster).
58. Burzykowski T (2012) Extracting the signal from (MALDI-TOF) mass spectra by using the expected isotopic distribution. Joint Statistical Meetings, San Diego, USA, 29/07-02/08/2012 (oral presentation).
59. Burzykowski T (2012) High resolution QTL mapping with whole-genome sequencing data. 33<sup>th</sup> Annual Conference of the International Society for Clinical Biostatistics, Bergen, Norway, 19-23/08/2010 (oral presentation).
60. Burzykowski T (2012) High resolution QTL mapping with whole-genome sequencing data. XXVI<sup>th</sup> International Biometric Conference, Kobe, Japan, 26-31/08/2012 (oral presentation).
61. Burzykowski T (2014) Bi-directional hidden Markov-model for gene-mapping based on whole-genome sequencing data. XXVII<sup>th</sup> International Biometric Conference, Florence, Italy, 06-11/07/2014 (oral presentation).
62. Burzykowski T (2014) Toward a unified approach for designing and developing software for mixed-effects models: challenges and opportunities - discussion. Joint Statistical Meetings, Boston, USA, 02/08-07/08/2014 (oral presentation).

*Seminars*

1. Burzykowski T “Validating tumor response as a surrogate for survival in advanced colorectal cancer”, Institute of Medical Statistics and Biometry, Milan, Italy (16/05/2000).
2. Burzykowski T (2000) The Achilles Project. Annual Meeting of Nederlandstalige Werkgroep voor Epidemiologie En Dermatologie “Nederweed” (Dutch-speaking Working Group on Epidemiology and Dermatology), Antwerp, Belgium (26/05/2000).
3. Burzykowski T “Validation of surrogate endpoints in multiple randomized clinical trials with a failure-time true endpoint”. Seminar, Department of Applied Mathematics, University of Ghent, Belgium (16/11/2001).
4. Burzykowski T “Validation of surrogate endpoints from multiple randomized clinical trials”. Seminar, Institute of Statistics, Catholic University of Louvain-la-Neuve, Belgium (01/02/2002).
5. Burzykowski T “Statistical validation of surrogate endpoints in clinical trials”. Seminar, Erasmus Medical Centrum, Rotterdam, The Netherlands (20/03/2006).
6. Burzykowski T “An overview of the meta-analytic approach to the validation of surrogate endpoints in clinical trials”. Seminar *Modern Advanced Methods in Biostatistics*, Department of Statistics, the University of Milano Bicocca, Italy (07/07/2008).
7. Burzykowski T “Statistical significance of sequence alignment”. Seminar, Faculty of Mathematics and Information Science, Warsaw University of Technology, Warsaw, Poland (25/03/2010).
8. Burzykowski T “Does a meta-analysis offer more than a clinical trial?” Invited lecture, Medical University of Bialystok, Poland (24/05/2010).
9. Burzykowski T, Buyse M “Statistical validation of biomarkers for use in the clinic” Webinar (22/06/2010).
10. Burzykowski T “Design of genomics and proteomics experiments: new challenges and old caveats.” Seminar, Institute Rommelaere, Department of Medical Protein Research, Ghent University (21/12/2010).
11. Burzykowski T, Tellier Y “Central statistical monitoring of clinical trials” Webinar (19/04/2012).
12. Burzykowski T, Saad E “The need for better endpoints: Towards a more efficient drug development in oncology” Webinar (04/10/2012).
13. Burzykowski T “Signal extraction and statistical modelling of peptide-centric mass spectrometry data”. Seminar, Faculty of Mathematics, Computer Science, and Mechanics, Warsaw University, Warsaw, Poland (21/11/2012).
14. Burzykowski T “Biomarkers: development, validation, and clinical utility”. Seminar, Greifswald University, Germany (26/06/2013).
15. Burzykowski T “Biomarkers: concepts, validation, and applications in clinical trials”. Seminar, Dept. of Mathematic Statistics, Goettingen University, Germany (11/12/2013).
16. Burzykowski T “A successful experiment starts from a correct design”. Seminar, Medical University of Bialystok, Poland (31/05/2014).
17. Burzykowski T “An overview of various approaches to surrogate endpoint validation”. ISPED, University Bordeaux Segalen, France (23/06/2014).