

PRA Health Sciences Laboratory Publication List

Author(s)	Title	Publication
P. Bults, A. Sonesson, M. Knutsson, R. Bischoff, N.C. van de Merbel	Intact protein quantification in biological samples by liquid chromatography – high-resolution mass spectrometry: somatropin in rat plasma.	J. Chromatogr. B (2020) in press
C. Ohnmacht, M. Cooley, R. Darling, S. Lei, V. Patel	Sample stabilization strategies: a case study review of unique sample collection and handling procedures	Bioanalysis 11 (2019) 1867-1880
C. Briscoe, R. Islam	Stability issues in bioanalysis	Bioanalysis 11 (2019) 1813-1814
S. Pihl, B.W.A. van der Strate, M. Golob, J. Ryding, L. Vermet, B. Jaitner, J. Goodman, Ph. Timmerman	EBF recommendation on practical management of critical reagents for antidrug antibody ligand-binding assays	Bioanalysis 11 (2019) 1787-1798
K.R. Pail, R.D. Yeole, M. de Zwart, P. Pruim	Simultaneous determination of novel ketolide antibiotic nafithromycin and its major metabolite in human plasma using liquid chromatography tandem mass spectrometry	Bioanalysis 11 (2019) 1767-1776
C. Briscoe, C. Nehls, M. Buonarati, S. Cape, R. Islam, C. Satterwhite, R. Hayes	Contract research organization commentary on the importance of harmonization and the impact of ICH M10	Bioanalysis 11 (2019) 1727-1729
N.C. van de Merbel, R.A. Koster, C. Ohnmacht	Very complex internal standard response variation in LC-MS/MS bioanalysis: root cause analysis and impact assessment	Bioanalysis 11 (2019) 1693-1700
C. Nehls, M. Buonarati, C. Briscoe et al	GCC Consolidated Feedback to ICH on the 2019 ICH M10 Bioanalytical Method Validation Draft Guideline	Bioanalysis 11s (2019) 1-228



Author(s)	Title	Publication
C. Liu, P. Bults, R. Bischoff, J. Crommen, Q. Wang, Z. Jiang	Separation of deamidated peptides with mixed-mode chromatography using phospholipid-functionalized monolithic stationary phases	J. Chromatogr. A 1603 (2019) 417-421
H. Veenhof, R.A. Koster, R. Brinkman, E. Senturk, S.J.L. Bakker, S.P. Berger, O.W. Akkerman, D.J. Touw, J.W.C. Alffenaar	Performance of a web-based application measuring spot quality in dried blood spot sampling	Clin. Chem. Lab Med. 2019 - 57 (12)
C. Briscoe, N Hughes, R. Hayes et al	12th GCC Closed Forum: critical reagents; oligonucleotides; CoA; method transfer; HRMS; flow cytometry; regulatory findings; stability and immunogenicity	Bioanalysis 11 (2019) 1129-1138
S. Capiou, H. Veenhof, R. Koster, Y. Bergqvist, M. Boettcher, O. Halmingh, B. Keevil, B. Koch, R. Linden, C. Pistos, L. Stolk, D. Touw, C. Stove, J.W. Alffenaar	Official International Association for Therapeutic Drug Monitoring and Toxicology guideline: Development and Validation of Dried Blood Spot-based Methods for Therapeutic Drug Monitoring	Ther Drug Monit. 41 (2019) 409-430
H. Veenhof, R.A. Koster, J.W.C. Alffenaar, A.P. van den Berg, M.R. de Groot, E.A.M. Verschuuren, S.P. Berger, S.J.L. Bakker, D.J. Touw	Clinical application of a dried blood spot assay for sirolimus and everolimus in transplant patients	Clin. Chem. Lab. Med. 2019 - 57 (12)
R. Islam, S. Kar, H. Ritzén, A. Hays et al	Recommendations for classification of commercial immunoassay kits for biomarkers in drug development from the Global CRO Council	Bioanalysis 11 (2019) 645-653
N.C. van de Merbel	Protein quantification by LC-MS: a decade of progress through the pages of <i>Bioanalysis</i>	Bioanalysis 11 (2019) 629-644
C. Briscoe	Assessing stability in bioanalysis: reflections on the last 10 years	Bioanalysis 11 (2019) 579-582
F. Klont, S.D. Pouwels, P. Bults, N.C. van de Merbel, N.H.T. ten Hacken, P. Horvatovich, R. Bischoff	Quantification of surfactant protein D (SPD) in human serum by liquid chromatography-mass spectrometry (LC-MS)	Talanta 202 (2019) 507-513
R.A. Koster, P. Niemeijer, H. Veenhof, K. van Hateren, J.W.C. Alffenaar, D.J. Touw	A volumetric absorptive microsampling LC-MS/MS method for five immunosuppressants and their hematocrit effects	Bioanalysis 11 (2019) 485-493



Author(s)	Title	Publication
N.C. van de Merbel	Sample preparation for LC-MS bioanalysis of proteins	Sample preparation in LC-MS bioanalysis, First Edition, W. Li, W. Jian and Y. Fu (Eds), John Wiley and Sons, (2019) 304-318
J. Kuhlin, M.G.G. Sturkenboom, S. Ghimire, I. Margineanu, S.H.J. van den Elsen, N. Simbar, O.W. Akkerman, E.M. Jongedijk, R.A. Koster, J. Bruchfeld, D.J. Touw, J.W.C. Alffenaar	Mass spectrometry for therapeutic drug monitoring of anti-tuberculosis drugs	Clin. Mass Spectrom. (2019) 14 (2019) 34-45
N.C. van de Merbel, K.J. Bronsema, S.H. Gorman, R. Bakhtiar	Monitoring of the deuterated and nondeuterated forms of levodopa and five metabolites in plasma and urine by LC-MS/MS	Bioanalysis 11 (2019) 279-293
P. Bults, B. Spanov, O. Olaleye, N.C. van de Merbel, R. Bischoff	Intact protein bioanalysis by liquid chromatography - high-resolution mass spectrometry	J. Chromatogr. B 1110-1111 (2019) 155-167
J. Welink, Y. Xu, E. Yang, N.C. van de Merbel et al	2018 White Paper on Recent Issues in Bioanalysis: 'A global bioanalytical community perspective on last decade of incurred samples reanalysis (ISR)' (Part 1 - small molecule regulated bioanalysis, small molecule biomarkers, peptides, & oligonucleotide bioanalysis)	Bioanalysis 10 (2018) 1781-1801
M.A. Kall, M. Michi, B. van der Strate, A. Freisleben, D. Stoellner, Ph. Timmerman	Incurred sample reproducibility: 10 years of experiences: views and recommendations from the European Bioanalysis Forum	Bioanalysis 10 (2018) 1719-1721
S. Pihl, B.W.A. van der Strate et al	EBF recommendation on practical management of critical reagents for PK ligand binding assays	Bioanalysis 10 (2018) 1557-1565
K.J. Bronsema, F. Klont, F.B. Schalk, R. Bischoff, I.P. Kema, N.C. van de Merbel	A quantitative LC-MS/MS method for insulin-like growth factor 1 in human plasma	Clin. Chem. Lab. Med. 11 (2018) 1905-1912
P. Bults, M. Meints, A. Sonesson, M. Knutsson, R. Bischoff, N.C. van de Merbel	Improving selectivity and sensitivity of protein quantitation by LC-HR-MS/MS: determination of somatropin in rat plasma	Bioanalysis 10 (2018) 1009-1021
J.M. Boonstra, E.M. Jongedijk, R.A. Koster, D.J. Touw, J.W.C. Alffenaar	Simple and robust LC-MS/MS analysis method for therapeutic drug monitoring of micafungin	Bioanalysis 10 (11) (2018) 877-886



Author(s)	Title	Publication
R. Islam, C. Briscoe, B. van der Strate et al	11th GCC Closed Forum: Cumulative stability; matrix stability; immunogenicity assays; laboratory manuals; biosimilars; chiral methods; hybrid LBA/LCMS assays; fit for purpose validation; China Food and Drug Administration bioanalytical method validation	Bioanalysis 10 (7) (2018) 433-444
E. Poelman, M. Hoogeveen-Westerveld, M.A. Kroos-de Haan, J.M.P. van den Hout, K.J. Bronsema, N.C. van de Merbel, A.T. van der Ploeg, W.W.M.P. Pijnappel	High sustained antibody titers in patients with classic infantile Pompe disease following immunomodulation at start of enzyme replacement therapy	J. Pediatr. 195 (2018) 236-243
F. Klont, S.D. Pouwels, J. Hermans, N.C. van de Merbel, P. Horvatovich, N.H.T. ten Hacken, R. Bischoff	A fully validated liquid chromatography-mass spectrometry method for the quantification of the soluble receptor of advanced glycation end-products (sRAGE) in serum using immunopurification in a 96-well plate format	Talanta 182 (2018) 414-421
S. Gupta, L. Amaravadi, B. Desilva, B. Van der Strate et al	2017 White Paper on Recent Issues in Bioanalysis: A Global Perspective on Immunogenicity Guidelines & Biomarker Assays Performance	Bioanalysis 9 (2017) 1967-1996
N.C. van de Merbel, K.J. Bronsema, S.H. Gorman, R. Bakhtiar	Sensitivity improvement of the LC-MS/MS quantification of carbidopa in human plasma and urine by derivatization with 2,4-pentanedione	J. Chromatogr. B 1064 (2017) 62-67
B. van der Strate, R. Longdin, M. Geerlings, N. Bachmayer, M. Cavallin, V. Litwin, M. Patel, W. Passe-Coutrin, C. Schoelch, A. Companjen, M. Scheel Fjording	Best practices in performing flow cytometry in a regulated environment: feedback from experience within the European Bioanalysis Forum	Bioanalysis 9 (2017) 1253-1264
N. Spooner, M. Anderson, L. Dillen, L. Ferrari, M. Hilhorst, Z. Lam, M. Michi, J. Munday, J. Smeraglia, S. Summerfield, D. Zimmer	The changing world of bioanalysis: summary of panel discussions	Bioanalysis 9 (2017) 1175-1179
M.J. Hilhorst, B.W.A. van der Strate, C.J. Briscoe, N.C. van de Merbel	Method transfer: a CRO perspective	Bioanalysis 9 (2017) 1131-1134
S. Cape, R. Islam, C. Nehls, C. Briscoe, B. van der Strate et al	The 10th GCC Closed Forum: rejected data, GCP in bioanalysis, extract stability, BAV, processed batch acceptance, matrix stability, critical reagents, ELN and data integrity and counteracting fraud	Bioanalysis 9 (2017) 505-516



Author(s)	Title	Publication
M. de Zwart, B. Lausecker, S. Globig, D. Nedderman, B. Le Bras, A. Guenzi, S. White, M. Scheel Fjording, P. Timmerman	Co-medication and interference testing in bioanalysis: a European Bioanalysis Forum recommendation	Bioanalysis 8 (2016) 2065-2070
D. Wilffert, R. Donzelli, A. Asselman, J. Hermans, N. Govorukhina, N.H. ten Hacken, W.J. Quax, N.C. van de Merbel, R. Bischoff	Quantitative antibody-free LC-MS/MS analysis of sTRAIL in sputum and saliva at the sub-ng/mL level	J. Chromatogr. B, 1032 (2016) 205-210
D. Wilffert, A. Asselman, R. Donzelli, J. Hermans, N. Govorukhina, W.J. Quax, N.C. van de Merbel and R. Bischoff	Highly sensitive antibody-free μ LC-MS/MS quantification of rhTRAIL in serum	Bioanalysis 8 (2016) 881-890
C.L. Green, J.J. Stewart, C.M. Högerkorp, A. Lackey, N. Jones, M. Liang, Y. Xu, J. Ferbas, M. Moulard, K. Czechowska, T.W. Mc Closkey, B.W.A. van der Strate, D.E.C. Wilkins, D. Lanham, T. Wyant, V. Litwin	Recommendations for the Development and Validation of Flow Cytometry-Based Receptor Occupancy Assays	Cytometry Part B 90B (2016) 141-149
J.J. Stewart, C.L. Green, N. Jones, M. Liang, Y. Xu, D.E.C. Wilkins, M. Moulard, K. Czechowska, D. Lanham, T.W. McCloskey, J. Ferbas, B.W.A. van der Strate, C.M. Högerkorp, T. Wyant, A. Lackey, V. Litwin	Role of Receptor Occupancy Assays by Flow Cytometry in Drug Development	Cytometry Part B 90B (2016) 110-116
R. Hayes, R. LeLacheur, I. Dumont, N.C. van de Merbel et al	9th GCC Closed Forum: CAPA in regulated bioanalysis; method robustness, biosimilars, preclinical method validation, endogenous biomarkers, whole blood stability, regulatory audit experiences and electronic laboratory notebooks	Bioanalysis 8 (2016) 487-495
P. Bults, R. Bischoff, H. Bakker, J.A. Gietema, N.C. van de Merbel	LC-MS/MS based monitoring of in vivo protein biotransformation: quantitative determination of trastuzumab and its deamidation products in human plasma	Anal. Chem, 88 (2016) 1871-1877
C. Briscoe and L. He (Eds)	Implementation and effective use of computerized systems in bioanalysis	ISBN: 978-1-910419-66-3 (Online) (2015)



Author(s)	Title	Publication
A.T. Podany, C. Sheldon, D. Grafelman, C.M. Ohnmacht	Assay development for determination of tenofovir in human plasma by solid phase analytical derivatization and LC-MS/MS	Bioanalysis 7 (2015) 3085-3095
J. Welink, E. Fluhler, N. Hughes, M. Arnold, F. Garofolo, M. Bustard, L. Coppola, R. Dhodda, C. Evans, C. Gleason, S. Haidar, R. Hayes, K. Heinig, N. Katori, O. Le Blaye, W. Li, G. Liu, G. Mendes Lima Santos, M. Meng, B. Nicholson, N. Savoie, M. Skelly, L. Sojo, N. Tampal, N.C. van de Merbel, T. Verhaeghe, S. Vinter, E. Wickremsinhe, E. Whale, A. Wilson, B. Witte and E. Woolf	2015 White Paper on recent issues in bioanalysis: focus on new technologies and biomarkers (Part 1 - small molecules by LCMS)	Bioanalysis 7 (2015) 2913-2925
N.C. van de Merbel	Advances in LC-MS/MS-based quantitation of biopharmaceuticals in biological samples	LC-GC Europe Supplement (2015) 38-44
P. Bults, N.C. van de Merbel and R. Bischoff	Quantification of biopharmaceuticals and biomarkers in complex biological matrices: a comparison of liquid chromatography coupled to tandem mass spectrometry and ligand binding assays	Expert Rev. Proteomics 12 (2015) 355-374
K.J. Bronsema, R. Bischoff, W.W.M.P. Pijnappel, A.T. van der Ploeg and N.C. van de Merbel	Absolute quantification of the total and antidrug antibody-bound concentrations of recombinant human α -glucosidase in human plasma using protein G extraction and LC-MS/MS	Anal. Chem. 87 (2015) 4394-4401
D. Wilffert, R. Bischoff and N.C. van de Merbel	Antibody-free workflows for protein quantification by LC-MS (review)	Bioanalysis 7 (2015) 763-779
M. Hilhorst, P. van Amsterdam, K. Heinig, E. Zwanziger, R. Abbott	Stabilization of clinical samples collected for quantitative bioanalysis - a reflection from the European Bioanalysis Forum	Bioanalysis 7 (2015) 333-343
A.J. Barbier, M. Hilhorst, A. van Vliet, P. Snyder, M.G. Palfreyman, M. Gawryl, N. Dgetluck, M. Massaro, R. Tiessen, W. Timmerman, D.C. Hilt	Pharmacodynamics, pharmacokinetics, safety, and tolerability of encenicline, a selective $\alpha 7$ nicotinic receptor partial agonist, in single ascending-dose and bioavailability studies	Clin. Ther. 37 (2015) 311-324



Author(s)	Title	Publication
K.J. Bronsema, R. Bischoff, M.P. Bouche, K. Mortier and N.C. van de Merbel	High-sensitivity quantification of a Nanobody in plasma by single-cartridge multi-dimensional SPE and ultra-performance LC-MS/MS	Bioanalysis 7 (2015) 53-64
M. Hilhorst, C. Briscoe and N.C. van de Merbel	Sense and nonsense of miniaturized LC-MS/MS for bioanalysis	Bioanalysis 6 (2014) 3263-3265
J. Bower, B. van der Strate, C. Briscoe, et al	8th GCC: Consolidated feedback to US FDA on the 2013 Draft FDA Guidance on Bioanalytical Method Validation	Bioanalysis 6 (2014) 2957-2963
M.E. Arnold, S. Bansal, B. Booth, M. Borenstein, P. Declerck, E. Ezan, J. Findlay, T. Garrett, P.T. Kissinger, R. MacNeill, R. Meesters, S. Rudaz, T. Sangster, L. Sleno, J. Smeraglia, C. Stove, P. Timmerman, N.C. van de Merbel, N. Weng, E. Woolf and D. Zhong	The Bioanalysis Glossary	Bioanalysis, 6 (2014) Supplement 1
S. Pihl, L. Michaut, J. Hendriks, R. Loebbert, J. Ryding, M. Nemansky, L. Vermet and A. Companjen	EBF recommendation for stability testing of anti-drug antibodies; lessons learned from anti-vaccine antibody stability testing	Bioanalysis, 6 (2014) 1409-1413
M.J. Hilhorst, G. Hendriks, R. de Vries, V. Hillewaert, T. Verhaeghe and N.C. van de Merbel	A high-performance liquid chromatography-tandem mass spectrometry method for the determination of artemether and dihydroartemisinin in human plasma	J. Chromatogr. B, 965 (2014) 45-53
N.C. van de Merbel, P. Walland, M. Tiensuu and C.J. Sennbro	Quantitative determination of the anti-tumor agent tasquinimod in human urine by liquid chromatography - tandem mass spectrometry	J. Chromatogr. B, 961 (2014) 42-48
N.C. van de Merbel	Matrix effects: more than just phospholipids (commentary)	https://www.bioanalysis-zone.com/2014/04/03/spotlight-matrix-effects-more-than-just-phospholipids/ (03 April 2014)
N.C. van de Merbel, N. Savoie, M. Yadav, Y. Ohtsu, J. White, M.F. Riccio, K. Dong R. de Vries and J. Diancin	Stability: Recommendation for best practices and harmonization from the Global Bioanalysis Consortium Harmonization Team	AAPS J., 16 (2014) 392-399



Author(s)	Title	Publication
S. Ongay, G. Hendriks, J. Hermans, M. van der Berge, N.H.T. ten Hacken, N.C. van de Merbel and R. Bischoff	Quantification of free and total desmosine and isodesmosine in human urine by LC-MS/MS: a comparison of surrogate-analyte and surrogate-matrix approach for quantitation	J. Chromatogr. A, 1326 (2014) 13-19
D. Wilffert, C.R. Reis, J. Hermans, N.Govorukhina, T. Tomar, S. de Jong, W.J. Quax, N.C. van de Merbel and R. Bischoff	Antibody-free LC-MS/MS analysis of recombinant tumor necrosis factor-related apoptosis inducing ligand (TRAIL) in human and mouse serum	Anal. Chem., 85 (2013) 10754-10760
K.J. Bronsema, R. Bischoff and N.C. van de Merbel	High-sensitivity LC-MS/MS quantification of peptides and proteins in complex biological samples: the impact of enzymatic digestion and internal standard selection on method performance	Anal. Chem., 85 (2013) 9528-9535
M. Reilly, R.M. Miller, M.H. Thomas, V. Patris, P. Ryle, L. McLoughlin, P. Mutch, C. Miller, M. Broekema, B. Keogh, W. McCormack and J van de Wetering de Rooij	Randomized, double-blind, placebo-controlled, dose-escalating phase I, healthy subjects study of intravenous OPN-305, a humanized anti-TLR2 antibody	Clin Pharmacol. Ther., 94 (2013) 593-600
N.C. van de Merbel and R. de Vries	Aging of biological matrices and its effect on bioanalytical method performance	Bioanalysis, 5 (2013) 2393-2407
Z. Cobb, R. de Vries, N. Spooner, S. Williams, L. Staelens, M. Doig, R. Broadhurst, M. Barfield, N.C. van de Merbel, B. Schmid, C. Siethoff, J. Ortiz, E. Verheij, B. van Baar, S. White and Ph. Timmerman	An in-depth study of homogeneity in dried blood spots (DBS) using two different techniques: results from the EBF DBS-microsampling consortium	Bioanalysis, 5 (2013) 2161-2169
R. de Vries, M. Barfield, N.C. van de Merbel, B. Schmid, C. Siethoff, J. Ortiz, E. Verheij, B. van Baar, Z. Cobb, S. White and Ph. Timmerman	The effect of hematocrit on bioanalysis of dried blood spots: results from the EBF DBS- microsampling consortium	Bioanalysis, 5 (2013) 2147-2160
R. Bischoff, K.J. Bronsema and N.C. van de Merbel	Analysis of biopharmaceutical proteins in biological matrices by LC-MS/MS - I. Sample preparation	Trends Anal. Chem., 48 (2013) 41-51



Author(s)	Title	Publication
N.C. van de Merbel	LC-MS bioanalysis of interconvertible compounds <i>Handbook of LC-MS Bioanalysis: Best Practices, Experimental Protocols, and Regulations, First Edition, W. Li, J. Zhang and F.L.S. Tse (Eds)</i>	John Wiley and Sons, (2013), 505-517
C. Ohnmacht	LC-MS bioanalysis of photosensitive and oxidatively labile compounds <i>Handbook of LC-MS Bioanalysis: Best Practices, Experimental Protocols, and Regulations, First Edition, W. Li, J. Zhang and F.L.S. Tse (Eds)</i>	John Wiley and Sons, (2013), 491-504
C. Briscoe	System suitability in LC-MS bioanalysis <i>Handbook of LC-MS Bioanalysis: Best Practices, Experimental Protocols, and Regulations, First Edition, W. Li, J. Zhang and F.L.S. Tse (Eds)</i>	John Wiley and Sons, (2013), 229-238
B. van der Strate	The use of flow cytometry can add value in phase I studies	Appl. Clin. Trials (2012) 6-7
N.C. van de Merbel, K.J. Bronsema and M. Nemansky	Protein quantification using LC-MS: can it make a difference?	Bioanalysis 4 (2012) 2113-2116
K.J. Bronsema, R. Bischoff and N.C. van de Merbel	Internal standards in the quantitative determination of protein biopharmaceuticals using liquid chromatography coupled to mass spectrometry	J. Chromatogr. B, 893-894 (2012) 1-14
N.C. van de Merbel, G. Hendriks, R. Imbos, J. Tuunainen, J. Rouru and H. Nikkanen	Quantitative determination of free and total dopamine in human plasma by LC-MS/MS: the importance of sample preparation	Bioanalysis, 3 (2011) 1949-1961
M.J. Hilhorst, G. Hendriks, M.W.J. van Hout, H. Sillén and N.C. van de Merbel	HPLC-MS/MS method for the determination of cytarabine in human plasma	Bioanalysis, 3 (2011) 1603-1611
N.C. van de Merbel, K.J. Bronsema, M.W.J. van Hout, R. Nilsson and H. Sillén	A validated liquid chromatography-tandem mass spectrometry method for the quantitative determination of 4 β -hydroxycholesterol in human plasma	J. Pharm. Biomed. Anal., 55 (2011) 1089-1095
G. Hendriks	Theoretical models in LC based bioanalytical method development	J. Pharm. Biomed. Anal., 49 (2009) 1-10



Author(s)	Title	Publication
G. Lappin, C.C. Wagner, O. Langer and N.C. van de Merbel	New ultra-sensitive detection technologies and techniques for use in microdosing studies (review)	Bioanalysis, 1 (2009) 357-366
R.G. Tiessen, J.P. Castaigne, J.F. Dreyfus, M. Nemansky, H.H. Kruizinga and A.A. van Vliet	Pharmacokinetics and tolerability of a novel long-acting glucagon-like peptide-1 analog, CJC- 1131, in healthy and diabetic subjects	Int. J. Clin. Pharmacol. Ther., 46 (2008) 443-452
N.C. van de Merbel	Quantitative determination of endogenous compounds in biological samples using chromatographic techniques (review)	Trends Anal. Chem., 27 (2008) 924-933
M. de Meulder, B.M.M. Remmerie, R. de Vries, L.L.A. Sips, S. Boom, E.W.J. Hooijschuur, N.C. van de Merbel and Ph.M.M.B.L. Timmerman	Validated LC-MS/MS methods for the determination of risperidone and the enantiomers of 9-hydroxyrisperidone in human plasma and urine	J. Chromatogr. B, 870 (2008) 8-16
G. Hendriks, D.R. Uges, J.P. Franke	New practical algorithm for modelling analyte recovery in bioanalytical reversed phase and mixed-mode solid phase extraction	J. Pharm. Biomed. Anal., 48 (2008) 158-170
G. Hendriks, D.R. Uges, J.P. Franke	pH adjustment of human blood plasma prior to bioanalytical sample preparation	J. Pharm. Biomed. Anal., 47 (2008) 126-133
N.C. van de Merbel, S. Giegold and T. Teutenberg	Practical comparison of different approaches to speed up LC separations	LC-GC Europe, 20 (2007) 32-40
G. Hendriks, D.R. Uges, J.P. Franke	Reconsideration of sample pH adjustment in bioanalytical liquid-liquid extraction of ionisable compounds	J. Chromatogr. B, 853 (2007) 234-241
T. Setoyama, W.J. Drijfhout, N.C. van de Merbel, T.J. Humphries and J. Hasegawa	Mass balance study of [¹⁴ C] rabeprazole following oral administration in healthy subjects	Clin. Pharmacol. Therap., 44 (2006) 557-565
G. Hendriks, D.R. Uges, J.P. Franke	New practical algorithm for modelling retention times in gradient reversed-phase high-performance liquid chromatography	J. Chromatogr. A, 1089 (2005) 193-202
N.C. van de Merbel, C.J.A.L. Mentink, G. Hendriks and B.H.R. Wolffenbuttel	Liquid chromatographic method for the quantitative determination of Nε -carboxymethyl-lysine in human plasma proteins	J. Chromatogr. B, 808 (2004)163-168
N.C. van de Merbel and H. Poelman	Experiences with monolithic LC phases in quantitative bioanalysis	J. Pharm. Biomed. Anal. 33 (2003) 495-50



Author(s)	Title	Publication
W.J. Tamminga, J. Wemer, B. Oosterhuis, A. De Boer, S. VranckX, B.F. Drenth, R.A. de Zeeuw, L.F.M.H. de Leij and J.H.G. Jonkman	Polymorphic drug metabolism (CYP2D6) and utilisation of psychotropic drugs in hospitalised psychiatric patients: a retrospective study	Eur. J. Clin. Pharmacol. 59 (2003) 57-64
B.M.M. Remmerie, L.L.A. Sips, R. de Vries, J. de Jong, A.M. Schothuis, E.W.J. Hooijschuur, N.C. van de Merbel	Validated method for the determination of risperidone and 9-hydroxyrisperidone in human plasma by liquid chromatography-tandem mass spectrometry	J. Chromatogr. B, 783 (2003) 461-472
N.C. van de Merbel	Is HPLC becoming obsolete for bioanalysis?	Chromatographia, 55 (2002) S53-S57
N.C. van de Merbel, J.H. van Veen, G. Wilkens and G. Loewen	Validated liquid chromatographic method for the determination of bexarotene in human plasma	J. Chromatogr. B, 775 (2002) 189-195
W.J. Tamminga, J. Wemer, B. Oosterhuis, R.A. de Zeeuw, L.F.M.H. de Leij and J.H.G. Jonkman	The prevalence of CYP2D6 and CYP2C19 genotypes in a population of healthy Dutch volunteers	Eur. J. Clin. Pharmacol. 57 (2001) 717-722
W.J. Tamminga, J. Wemer, B. Oosterhuis, J.P.G. Brakenhoff, M.G.F. Gerrits, R.A. de Zeeuw, L.F.M.H. de Leij and J.H.G. Jonkman	An optimized methodology for combined phenotyping and genotyping on CYP2D6 and CYP2C19	Eur. J. Clin. Pharmacol. 57 (2001) 143-146
W.J. Tamminga, J. Wemer, B. Oosterhuis, B. Wilffert, J. Wieling, E.P. Sakiman, D.J. Touw, R.A. de Zeeuw, L.F.M.H. de Leij and J.H.G. Jonkman	Mephentoin as a probe for the CYP2C19 phenotyping: effect of sample storage, intra-individual reproducibility and occurrence of adverse events	Br. J. Clin. Pharmacol. 51 (2001) 471-474
R.J. Mountfield, A.M. Panduro, O. Wassmann, M. Thompson, B. John and N. van der Merbel	Metabolism of levormeloxifene, a selective oestrogen receptor modulator, in the Sprague-Dawley rat, Cynomolgus monkey and postmenopausal woman	Xenobiotica, 30 (2000) 201-217
J. Wieling, W.J. Tamminga, E.P. Sakiman, B. Oosterhuis, J. Wemer and J.H.G. Jonkman	Evaluation of analytical and clinical performance of a dual-probe phenotyping method for CYP2D6 polymorphism and CYP3A4 activity screening	Ther. Drug Monitor. 22 (2000) 484-496
N.C. van de Merbel	Monstervoorbewerking en scheiding geïntegreerd	Chem. 2 Weekbl., 95 (1999) CH13-15



Author(s)	Title	Publication
J. Hempenius, R.J. Steenvoorden, F.M. Lagerwerf, J. Wieling and J.H.G. Jonkman	'High throughput' solid-phase extraction technology and turbo ionspray LC-MS-MS applied to the determination of haloperidol in human plasma	J. Pharm. Biomed. Anal., 20 (1999) 889-898
T.S. van der Werf, J.W. Fijen, N.C. van de Merbel, R. Spanjersberg, A.V. Moller, J.J. Ligtenberg, J.E. Tulleken, J.G. Zijlstra and C.A. Stegeman	Pharmacokinetics of cefpirome in critically ill patients with renal failure treated by continuous veno-venous hemofiltration	Intensive Care Med. 25 (1999) 1427-1431
W.J. Tamminga, J. Wemer, B. Oosterhuis, J. Wieling, B. Wilffert, L.F.M.H. de Leij, R.A. de Zeeuw and J.H.G. Jonkman	CYP2D6 and CYP2C19 activity in a large population of Dutch healthy volunteers: indications for oral contraceptive-related gender differences	Eur. J. Clin. Pharmacol. 55 (1999) 177-184
P.N.M. van Heiningen, V. Hatorp, K. Kramer Nielsen, K.T. Hansen, J.J. van Lier, N.C. van de Merbel, B. Oosterhuis and J.H.G. Jonkman	Absorption, metabolism and excretion of a single oral dose of (14)C-repaglinide during repaglinide multiple dosing	Eur. J. Clin. Pharmacol., 55 (1999) 521-525
N.C. van de Merbel	Membrane-based sample preparation coupled on-line to chromatography or electrophoresis (review)	J. Chromatogr. A, 856 (1999) 55-82
P.A.M. Peeters, J.J. van Lier, N.C. van de Merbel, B. Oosterhuis, J. Wieling, J.H.G. Jonkman, K. Klessing and A. Biber	Pharmacokinetics of [14C]-labelled losigamone and enantiomers after oral administration to healthy subjects	Eur. J. Drug Metab. Pharmacokin., 23 (1998) 45-53
J. Hempenius, J. Wieling, J.P.G. Brakenhoff, F.A. Maris and J.H.G. Jonkman	High-throughput solid-phase extraction for the determination of cimetidine in human plasma	J. Chromatogr. B, 714 (1998) 361-368
N.C. van de Merbel, A.P. Tinke, W.D. van Dongen, B. Oosterhuis J.H.G. Jonkman, Ph. Ladure and C. Puozzo	Validated method for the determination of idazoxan in human plasma by liquid chromatography with tandem mass spectrometric detection	J. Chromatogr. B, 708 (1998) 113-120
N.C. van de Merbel, A.P. Tinke, B. Oosterhuis J.H.G. Jonkman and J.F. Bohle	Determination of pilocarpine, isopilocarpine, pilocarpic acid and isopilocarpic acid in human plasma and urine by high-performance liquid chromatography with tandem mass spectrometric detection	J. Chromatogr. B, 708 (1998) 103-112



Author(s)	Title	Publication
N.C. van de Merbel, G. Wilkens, S. Fowles, B. Oosterhuis, J. H. G. Jonkman	LC phases improve, but not all assays do: metformin bioanalysis revisited	Chromatographia, 47 (1998) 542-546
J. Wieling	Robustness of liquid-liquid extraction of drugs from biological samples	Data Handling in Science and Technology 19 (1996) 265-307
N.C. van de Merbel, A.P. Tinke, B. Oosterhuis and J.H.G. Jonkman	De opmars van LC-MS in de bioanalyse	Conceptuur, 8 (1996) 4-5
J. Wieling, G. Hendriks, W.J. Tamminga, J. Hempenius, C.K. Mensink, B. Oosterhuis and J.H.G. Jonkman	Rational experimental design for bioanalytical methods validation. Illustration using an assay method for total captopril in plasma	J. Chromatogr. A. 730 (1996) 381-394
J. Hempenius, G. Hendriks, J. Hingstman, C.K. Mensink, J.H.G. Jonkman and C.C Lin	An automated analytical method for the determination of felbamate in human plasma by robotic sample preparation and reversed-phase high performance liquid chromatography	J. Pharm. Biomed. Anal. 12 (1994) 1443-1451
J. Wieling, H. Dijkstra, C.K. Mensink, J.H.G. Jonkman, P.M.J. Coenegracht, C.A.A. Duineveld and D.A. Doornbos	Chemometrics in bioanalytical sample preparation: a fractionated combined mixture and factorial design for the modeling of the recovery of five tricyclic amines from plasma after liquid-liquid extraction	J. Chromatogr. 629 (1993) 181-199
J. Wieling, P.M.J Coenegracht, C.K. Mensink, J.H.G. Jonkman and D.A. Doornbos	Selection of robust combinations of extraction liquid composition and internal standard: Monte Carlo simulation of improvement of methods with liquid-liquid extraction prior to HPLC	J. Chromatogr. 594 (1992) 45-64
J. Wieling, J. Schepers, J. Hempenius, C.K. Mensink and J.H.G. Jonkman	Optimisation of chromatographic selectivity of 12 sulphonamides in reversed-phase high-performance liquid chromatography using mixture designs and multi-criteria decision making	J. Chromatogr. 545 (1991) 101-114
J. Wieling, J. Hempenius, H.J. Jeuring, J.H.G. Jonkman, P.M.J. Coenegracht and D.A. Doornbos	Development of a laboratory robotic system for automated bioanalytical methods. Part II: a robot computer program for guarding totally automated bioanalytical methods	J. Pharm. Biomed. Anal. 8 (1990) 577-582



Author(s)	Title	Publication
J. Hempenius, J. Wieling, J.H.G. Jonkman, O.E. de Noord, P.M.J. Coenegracht and D.A. Doornbos	Development of a laboratory robotic system for automated bioanalytical methods. Part I: a comparison between the robotised and manual method	J. Pharm. Biomed. Anal. 8 (1990) 313-320
J.H.G. Jonkman, R. Schoenmaker, A.H. Holtkamp and J. Hempenius	Determination of ibuprofen in human plasma by solid phase extraction and reversed-phase high- performance liquid chromatography	J. Pharm. Biomed. Anal. 3 (1985) 433-438
J.H.G. Jonkman, R. Schoenmaker and J. Hempenius	Determination of amoxicillin in plasma by ion pair column extraction and reversed-phase ion pair high-performance liquid chromatography	J. Pharm. Biomed. Anal. 3 (1985) 359-365

PRA Health Sciences
Global Bioanalytical Services
Early Development Services

Amerikaweg 18, 9407 TK Assen
The Netherlands

PRA Health Sciences
Clinical Chemistry
Early Development Services

Van Swietenlaan 6, 9728 NZ Groningen
The Netherlands

PRA Health Sciences
Global Bioanalytical Services
Early Development Services

10836 Strang Line Road
Lenexa, KS 66221 USA