

Publication list 1980 - 2019

2019

Chrystyn Henry, Raphaele Audibert, Manfred Keller, Benjamin Quaglia, Laurent Vecellio, Nicolas Roche: Real-life inhaler adherence and technique: Time to get smarter! Resp. Medicine, 158 (2019), 24-32. <https://doi.org/10.1016/j.rmed.2019.09.008>

2014

Matthias Giese, MD, Claudia Eismann, Gerhard Boerner, PhD, Oliver Denk, PhD, Joerg Michael Schierholz, MD, PhD, Manfred Keller, PhD, H. Mazurek, MD, and Matthias Kappler: A Pharmacokinetics and Safety Comparison of a Highly Concentrated Tobramycin Solution with TOBI. Jour. Aerosol Med and pulmonary drug delivery, 2014, June, 27 (3), p. 185-192. <https://doi.org/10.1089/jamp.2012.1022>

2011

Keller M, Knoch M, Schierholz J, Spescha H, Basek P, Inci D, Knauer N, Wildhaber J, Möller A: Did inappropriate delivery systems hamper therapeutic efficacy of di-sodium-cromo-glycate (DSCG)? time for a reappraisal. European Respiratory Society Annual Congress (ERS), Amsterdam, Netherlands, September 24-28, 2011.

Möller W, Schuschnig U, Khadem Saba G, Münzing W, Canis M, Becker S, Lübers C, Häussinger K, Keller M, Kreyling WG: Nasal Drug Delivery – Impact of Mucociliary Clearance. 18th International Congress of the International Society for Aerosols in Medicine (ISAM), Rotterdam, The Netherlands, June 18-22, 2011. JAMP 2011; 24 (3): 37-38.

Keller M, Knoch M, Schierholz J, Spescha H, Basek P, Inci D, Knauer N, Wildhaber J, Möller A: Did Inappropriate Delivery System Hamper Therapeutic Efficacy of Di-Sodium-Cromo-Glycate (DSCG)? – Time for a Reappraisal. 18th International Congress of the International Society for Aerosols in Medicine (ISAM), Rotterdam, The Netherlands, June 18-22, 2011. JAMP 2011;24 (3): 51.

Bucholski A, Bründl K, Keller M, Fuchs C, Bilstein A: In-Vitro Approach to Select an Appropriate Nebulizer Configuration for a Clinical Study of Ectoin Inhalation Solution. 18th International Congress of the International Society for Aerosols in Medicine (ISAM), Rotterdam, The Netherlands, June 18-22, 2011. JAMP 2011; 24 (3): 47-48.

Bucholski A, Denk O, Brendel E, Schmitt A, Keller M: Comparative In-Vitro Characterisation of Colistimethate Sodium 1 MIU / 3 ml versus 2 MIU / 4 ml in an eFlow®rapid nebuliser. 34th European Cystic Fibrosis Conference (ECFC), Hamburg, Germany, June 8-11, 2011.

Denk O, Bucholski A, Keller M, Knoch M: Medical Rationale for Nebulisation of a novel high concentrated (100 mg/ml) aqueous Azithromycin Inhalation Solution. 34th European Cystic Fibrosis Conference (ECFC), Hamburg, Germany, June 8-11, 2011.

Denk O, Bucholski A, Keller M, Knoch M: Development of a Concentrated, Aqueous Azithromycin Solution For Nebulization – Medical Rationale For Clinical Use. International Conference of the American Thoracic Society (ATS), Denver, Colorado, USA, May 13-18, 2011.

Denk O, Schierholz JM, Schwarzkopf A, Fischer I, Keller M: Antimicrobial Activity of Aerosolized Liposomal Cyclosporine (L-CsA) To Different Opportunistic Microorganism. International Conference of the American Thoracic Society (ATS), Denver, Colorado, USA, May 13-18, 2011.

Möller W, Khadem Saba G, Häussinger K, Becker S, Keller M, Schuschnig U: Nasally inhaled pulsating aerosols: lung, sinus and nose deposition. Rhinology 2011;49(3):286-291.

Coates AL, Denk O, Leung K, Ribeiro N, Chan J, Green M, Martin S, Charron M, Edwardes M, Keller M: Higher Tobramycin Concentration and Vibrating Mesh Technology Can Shorten Antibiotic Treatment Time in Cystic Fibrosis. Ped Pulm 2011; 46: 401-408.

Denk O, Schierholz J, Schwarzkopf A, Fischer I: Aerosolized Liposomal Ciclosporine (L-CsA) Shows Antimicrobial Activities to Different Opportunistic Microorganism. ISHLT 31st Annual Meeting and Scientific Sessions, San Diego, CA, USA, April 13-16, 2011.

Fuchs F, Prante S, Pokorski R, Lum H, Denk O, Seemann S, Knoch M, Keller M: Monitoring Patient Adherence in a Clinical Study of Inhaled Liposomal Cyclosporine after Lung Transplantation. ISHLT 31st Annual Meeting and Scientific Sessions, San Diego, CA, USA, April 13-16, 2011.

Keller M, Schierholz J: Have inadequate delivery systems hampered the clinical success of inhaled disodium cromoglycate? Time for reconsideration. Exp Opin Drug Deliv 2011,8 (1): 1-17.

Keller M: Measuring the performance characteristics of nebulizers and liquid formulations for nebulisation: "Fitting hard and software". Pharma Test Expo, Koeln, Germany, February 9, 2011.

2010

Keller M, Schuschnig U, Moeller W: Pulsating Aerosols For Sinus Drug Delivery: New Treatment Options & Perspectives In Chronic Rhinosinusitis. ONdrugDelivery Publishing 2010; December: 20-24 (ondrugdelivery.com).

Keller M: Ist Dinatrium-cromoglycat (DSCG) therapeutisch adäquat beurteilt – Fakten für eine Neubewertung. Oral Presentation. XV. Deutsches Aerosol Therapie Seminar, Marburg, Germany, November 5-6, 2010.

Keller M: Inhalation von Aztreonamlysin. Entwicklung des Altera®-Inhalationssystems für die Anwendung mit Aztreonamlysin. Thieme Drug Report 2010; 4(10):12-15.

Möller W, Schuschnig U, Khadem Saba G, Häussinger K, Keller M: Drug Delivery to the Sinuses Via Pulsating Aerosols – Results from a Scintigraphic Deposition Study in Healthy Volunteers. North American Cystic Fibrosis Conference (NACF), Baltimore, USA; October 21-23, 2010.

Schierholz J, Denk O, Schwarzkopf A, Fischer I, Keller M: Aerosolized Liposomal Ciclosporine (L-CsA) in Lung Transplantation – Impact of its Antimicrobial Properties. 24th North American Cystic Fibrosis Conference (NACF), Baltimore, USA; October 21-23, 2010.

Schuschnig U, Möller W, Khadem Saba G, Häussinger K, Keller M: Nasally inhaled pulsating aerosols: lung and nose deposition. AAO-HNSF Annual Meeting & OTO EXPO, Boston, USA, September 26-29, 2010.

Möller W, Schuschnig U, Khadem Saba G, Krüner A, Häussinger K, Keller M: Pulsating aerosols offer new perspectives for the treatment of upper airway diseases – a study in healthy volunteers. European Respiratory Society Annual Congress (ERS), Barcelona, Spain, September 18-22, 2010.

Scherer T, Geller DE, Owyang L, Tservistas M, Keller M, Boden N, Kesser KC, Shire SJ: A Technical Feasibility Study of Dornase Alfa Delivery with eFlow Vibrating Membrane Nebulizers: Aerosol Characteristics and Physicochemical Stability. Wiley InterScience. DOI 10.1002/jps.22231.

Möller W, Schuschnig U, Khadem Saba G, Meyer G, Junge-Hülsing B, Keller M, Häussinger K: Pulsating aerosols for drug delivery to the sinuses in healthy volunteers. Otolaryngol-Head Neck Surg 2010; 142, 382-388.

Schuschnig U, Möller W, Krüner A, Khadem Saba G, Knoch M, Häussinger K, Schierholz J, Keller M: Drug Delivery to Paranasal Sinuses – Deposition Pattern and Clearance in Healthy Volunteers. 33rd European Cystic Fibrosis Conference (ECFS), Valencia, Spain, June 16-19, 2010. J Cyst Fibros 2010; 9 (Suppl 1): S24.

Keller M, Brendel E, Luithlen A, Bruendl K, Mueller D, Tservistas M, Schierholz J, Denk O: Investigation of Colifin®, 1 and 2 million I.U. Colistimethate Sodium (CMS) for aerosolisation in the eFlow® rapid and PARI LC SPRINT® nebuliser. 33rd European Cystic Fibrosis Conference (ECFS), Valencia, Spain, June 16-19, 2010. J Cyst Fibrosis 2010; 9 (Suppl 1): S42.

Denk O, Coates AL, Giese M, Schierholz J, Keller M: In-vivo data support equivalent therapeutic efficacy of a new Tobramycin inhalation solution (150 mg/ 1.5 ml) administered by the eFlow® electronic nebuliser compared to TOBI in the PARI LC Plus®. 33rd European Cystic Fibrosis Conference (ECFS), Valencia, Spain, June 16-19, 2010. J Cyst Fibrosis 2010; 9 (Suppl 1): S22.

Keller M, Bucholski A, Hug M, Schierholz J, Denk O: Effect of the Nebulizer Type on In Vitro Aerosol Characteristics of Two Aqueous Tobramycin Inhalation Solutions. Proceedings Respiratory Drug Delivery (RDD) XII, Orlando, USA, April 25-29, 2010, pp. 725-728.

Brendel E, Luithlen A, Bruendl K, Mueller D, Tservistas M, Denk O, Keller M: In Vitro Testing of Colistimethate Sodium (CMS) in Different Nebulizer Systems. Proceedings Respiratory Drug Delivery (RDD) XII, Orlando, USA, April 25-29, 2010, pp. 707-712.

Keller M, Adriaens E, Lenoir J, Corbanie E, Gruber F: Comparative Assessment of Two Ciclosporine A Inhalation Formulations for Nebulization by the Slug Mucosal Irritation Test. Proceedings Respiratory Drug Delivery (RDD) XII, Orlando, USA, April 25-29, 2010, pp. 719-724.

Gallem T, Tservistas M, Waldner R, Loenner M, Knoch M, Keller M: Assessment of the Influence of the Holding Angle on Drainage and Output Properties of a new Ampoule-Based Nebulizer System. Proceedings Respiratory Drug Delivery (RDD) XII, Orlando, USA, April 25-29, 2010, pp. 713-718.

Möller W, Schuschnig U, Khadem Saba G, Krüner A, Meyer G, Junge-Hülsing B, Keller M, Häussinger K: Sinus Drug Delivery by Pulsating Aerosol: Clinical Proof of Concept Studies. Proceedings Respiratory Drug Delivery (RDD) XII, Orlando, USA, April 25-29, 2010, pp. 111-120.

Denk O, Keller M, Gruber F, Bucholski A, Prante S, Schierholz J: Assessment of a liposomal Ciclosporin inhalation formulation to better understand drug delivery, drug distribution and biopharmaceutical properties. ISHLT 30th Anniversary Meeting and Scientific Sessions, Chicago, USA; April 21-24, 2010.

Keller M, Knoch M: Optimising Drug and Device Together For Novel Aerosol Therapies. ONdrugDelivery Publishing 2010 ; April : 12-16 (ondrugdelivery.com).

2009

Steinführer K, Garn H, Grieblinger E, Bucholski A, Keller M: Drug delivery study of a GATA-3 DNAzyme formulation with different eFlow configurations and assessment of post aerosolisation activity. Drug Delivery to the Lungs - DDL20, Edinburgh, United Kingdom, December 9-11, 2009. Proceedings: 116-119.

Brendel E, Gruber F, Bruendl K, Tservistas M, Keller M: Aerosol characterisation of Curosurf® compared to a sophisticated drug carrier system nebulised in the eFlow. Drug Delivery to the Lungs - DDL20, Edinburgh, United Kingdom, December 9-11, 2009. Proceedings: 112-115.

Griese M, Eismann C, Kappler M, Mazurk H, Ameal-Godoy A, Hunger T, Denk O, Schierholz J, Prante S, Keller M: Randomized, Open-Labeled, Multi Center, Active Controlled, Parallel 28 Days Safety and Bioavailability Study of Tobramycin T100 PARI Nebulized With eFlow® Versus TOBi® Nebulized With PARI LC PLUS® in 76 Cystic Fibrosis (CF) Patients With Pseudomonas Aeruginosa Infections. 23rd Annual North American Cystic Fibrosis Conference (NACF), Minneapolis, USA, October 15-17, 2009. Ped. Pulm. 2009; Suppl 32:300.

Denk O, Keller M, Prante S, Gruber F, Fuchs C, Knoch M: Rationale for a Low Dose Liposomal Cyclosporin A for Inhalation Via a Customized eFlow® Electronic Nebulizer to Prevent and Treat Bronchiolitis Obliterans (BO). 23rd Annual North American Cystic Fibrosis Conference (NACF), Minneapolis, USA, October 15-17, 2009. Ped. Pulm. 2009; Suppl 32:371.

Schuschnig U, Kruener A, Keller M: Characterization of Paranasal Devices in a Human Nasal Cast – Do In-Vitro Data Support Promises? 23rd Annual North American Cystic Fibrosis Conference (NACF), Minneapolis, USA, October 15-17, 2009. Ped. Pulm. 2009; Suppl 32: 298-299.

Keller M, Denk O, Corbanie E, Fleschhut U, Maresch S, Bucholski A, Schuschnig U, Knoch M: Aerosol Characterization of Novel Stabilized Liquid Inhalation Solutions Containing up to 100 mg Azithromycin/ml for Nebulization via Electronic Nebulizers for Home and Hospital Use Based on the eFlow® Vibrating Membrane Technology. 23rd Annual North American Cystic Fibrosis Conference (NACF), Minneapolis, USA, October 15-17, 2009. Ped. Pulm. 2009; Suppl 32: 354.

Coates AL, Leung K, Green M, Chan J, Ribeiro N, Charron M: Comparison of Lung Deposition Using An Investigational eFlow® Nebulizer System vs. The PARI LC STAR®. 23rd Annual North American Cystic Fibrosis Conference (NACF), Minneapolis, USA, October 15-17, 2009. Ped. Pulm. 2009; Suppl 32: 350.

Schuschnig U, Kruener A, Keller M: Characterization of Paranasal Drug Delivery Devices Utilizing a Human Nasal Cast – Does In Vitro Data Support Promises? AAO-HNSF Annual Meeting & OTO EXPO 2009, San Diego, USA, October 4-7, 2009.

Keller M, Prante S, Schierholz J, Spescha H, Möller A, Knauer N, Inci D, Wildhaber J: A small droplet size nebulizer is required for administration of Di-Sodium-Cromo-Glycate (DSCG), a still undervalued potent drug. European Respiratory Society Annual Congress (ERS), Vienna, Austria, September 12-16, 2009.

Schuschnig U, Schierholz J, Möller W, Meyer G, Häussinger K, Mentzel H, Keller M: Characterization of paranasal drug delivery devices in a human nasal cast model – do in-vitro data support promises? European Respiratory Society Annual Congress (ERS), Vienna, Austria, September 12-16, 2009.

Tservistas M, Fuchs C, Egle R, Fleschhut U, Ederer S, Nikolai A, Bründl K, Hochwimmer G, Klein H, Keller M, Knoch M: Development of in-vitro models for aerosolized surfactant therapy to support

customization of a novel nebulizer system based on eFlow® technology. European Respiratory Society Annual Congress (ERS), Vienna, Austria, September 12-16, 2009.

Tservistas M, Gallem T, Uhlig M, Brendel E, Seemann S, Schierholz J, Schmidt A, Keller M, Knoch M: In-vitro characterization of a novel electronic nebulizer utilizing a customized single dose bfs-vial to improve handling and delivery performance. European Respiratory Society Annual Congress (ERS), Vienna, Austria, September 12-16, 2009.

Schuschnig U, Krüner A, Keller M: Characterization of Paranasal Drug Delivery Devices Utilizing a Human Nasal Cast – Does In Vitro Data Support Promises? 1st Meeting of the European Academy of ORL&HNS, Mannheim, Germany, June 27-30, 2009.

Keller M, Denk O, Egle R, Gruber F, Brendel E, Fleschhut U, Leuchte H, Behr J: Rationale for a low dose liposomal Ciclosporin A for inhalation via a customized eFlow® electronic nebuliser to prevent and treat bronchiolitis obliterans (BO). 32nd European Cystic Fibrosis Conference (ECFC), Brest, France, June 10-13, 2009. *J Cyst Fibrosis* 2009; 8 (Suppl 2):S67.

Denk O, Coates AL, Leung K, Green M, Chan J, Ribeiro N, Charron M, Keller M: Lung Delivery of a new Tobramycin nebuliser solution (150 mg/1.5 ml) by an investigational eFlow® nebuliser is equivalent to TOBI® but in a fraction of time. 32nd European Cystic Fibrosis Conference (ECFC), Brest, France, June 10-13, 2009. *J Cyst Fibrosis* 2009; 8 (Suppl 2): S66.

Gallem T, Tservistas M, Uhlig M, Waldner R, Seemann S, Keller M, Knoch M: Evaluation of an Ampoule-based Nebulizer System Intended to Facilitate Accurate Dosing. RDD Europe 2009, Lisbon, Portugal, May 19-22, 2009. Proceedings: 341-344.

Möller W, Schuschnig U, Meyer G, Häussinger K, Keller M, Junge-Hülsing B, Mentzel H: Ventilation and aerosolized drug delivery to the paranasal sinuses using pulsating airflow – a preliminary study. Reprint: *Rhinology* 2009; 47:405-412.

Schuschnig U, Krüner A, Keller M: Characterization of Paranasal Drug Delivery Devices Utilizing a Human Nasal Cast – Do In Vitro Data Support Promises? International Conference of the American Thoracic Society (ATS), San Diego, USA, May 15-20, 2009.

Keller M, Egle R, Hug M, Bitterle E, Bucholski A, Spescha H, Möller A, Knauer N, Inci D, Wildhaber J: Aerosol Characterization of Higher Concentrated Cromoglycate Solutions Delivered via a Small Droplet Size eFlow Nebulizer for the Treatment of Allergic Asthma. International Conference of the American Thoracic Society (ATS), San Diego, USA, May 15-20, 2009.

Keller M, Egle R, Hug M, Bitterle E, Bucholski A, Spescha H, Möller A, Knauer N, Inci D, Wildhaber J: Novel Therapeutic Perspectives of Di-Sodium-Cromo-Glycate (DSCG) Using an Investigational Small Droplet eFlow® Electronic Nebulizer. 17th International Congress of the International Society for Aerosols in Medicine (ISAM), Monterey, USA, May 10-14, 2009. *Journal of Medicine and Pulmonary Drug Delivery* (JAMP) 2009; 22 (2):189-190.

Keller M, Egle R, Gruber F, Bitterle E, Fleschhut U, Denk O, Leuchte H, Behr J: Rationale For a Low Dose Liposomal Ciclosporin A for Inhalation via a Customized eFlow® Electronic Nebuliser to Prevent and Treat Bronchiolitis Obliterans (BO). 17th International Congress of the International Society for Aerosols in Medicine (ISAM), Monterey, USA, May 10-14, 2009. *Journal of Medicine and Pulmonary Drug Delivery* (JAMP) 2009; 22 (2): 192.

Keller M, Corbanie E, Fleschhut U, Maresch S, Bucholski A, Schuschnig U, Knoch M: Development of Highly Concentrated, Stable and Taste-Masked Aqueous Azithromycin Solutions for Nebulization. 17th International Congress of the International Society for Aerosols in Medicine (ISAM), Monterey,

USA, May 10-14, 2009. Journal of Medicine and Pulmonary Drug Delivery (JAMP) 2009; 22 (2): 202.

Tservistas M, Gallem T, Uhlig M, Seidler A, Waldner R, Seemann S, Keller M, Knoch M: Evaluation of a Novel Electronic Nebulizer Utilizing a Customized Single Dose bfs-Ampoule (eDose™) to Improve Handling and Dosing Accuracy. 17th International Congress of the International Society for Aerosols in Medicine (ISAM), Monterey, USA, May 10-14, 2009. Journal of Medicine and Pulmonary Drug Delivery (JAMP) 2009; 22 (2):188.

Tservistas M, Fuchs C, Fleschhut U, Egle R, Reul K, Nikolai A, Uhlig M, Maresch S, Hochwimmer G, Keller M, Knoch M: In Vitro Models to Investigate Aerosolized Surfactant Therapy for Premature Newborns Using a Novel Nebulizer Based on eFlow® Technology. 17th International Congress of the International Society for Aerosols in Medicine (ISAM), Monterey, USA, May 10-14, 2009. Journal of Medicine and Pulmonary Drug Delivery (JAMP) 2009; 22 (2): 194-195.

Möller W, Schuschnig U, Meyer G, Häussinger K, Mentzel H, Keller M: Pulsating Aerosols Allow Topical Rhinosinusitis Therapy. 17th International Congress of the International Society for Aerosols in Medicine (ISAM), Monterey, USA, May 10-14, 2009. Journal of Medicine and Pulmonary Drug Delivery (JAMP) 2009; 22 (2):186-187.

Behr J, Zimmermann G, Baumgartner R, Leuchte H, Neurohr C, Brand P, Herpich C, Sommerer K, Seitz J, Menges G, Tillmanns S, Keller M: Lung Deposition of a Liposomal Cyclosporine A Inhalation Solution in Patients after Lung Transplantation. Journal of Medicine and Pulmonary Drug Delivery (JAMP) 2009; 22 (2): 121 - 129.

2008

Gallem T, Tservistas M, Uhlig M, Seidler S, Waldner R, Seemann S, Keller M, Knoch M: Advancements in ease of dosing for nebulised drug products: Development of a closed, ampoule-based electronic nebulizer system. Drug Delivery to the Lungs - DDL19, Edinburgh, United Kingdom, December, 10-12, 2008. Proceedings: 208 – 211.

Egle R, Bitterle E, Gruber F, Keller M: Physicochemical characteristics of a liposomal cyclosporin A formulation pre and post nebulisation in a customized eFlow® electronic nebulizer. Drug Delivery to the Lungs - DDL19, Edinburgh, United Kingdom, December, 10-12, 2008. Proceedings: 183 – 186.

Bitterle E, Denk O, Luithlen A, Reul K, Hoyer K, Uhlig M, Tservistas M, Keller M: Comparison of aerosol delivery efficiency nebulising Colistin by electronic and jet nebulizers. Drug Delivery to the Lungs - DDL19, Edinburgh, United Kingdom, December, 10-12, 2008. Proceedings: 151 – 154.

Bitterle E, Luithlen A, Reul K, Bucholski A, Tservistas M, Keller M: Recommendation to use a climate box for optimisation of cascade impaction measurements ensuring exact control of humidity and impactor temperature. Drug Delivery to the Lungs - DDL19, Edinburgh, United Kingdom, December, 10-12, 2008. Proceedings: 214-218.

Egle R, Bitterle E, Gruber F, Keller M: Characterization of a liposomal ciclosporin A formulation after and after lyophilization and nebulization. AAPS Annual Meeting, Atlanta, USA, November 10-16, 2008.

Keller M, Hug M, Bucholski A, Denk O: Differences in Aerosol Characteristics When Nebulizing Tobramycin Nebulizer Solutions (60 mg/ml and 100 mg/ml) Via the eFlow® Electronic Nebulizer.

22th Annual North American Cystic Fibrosis Conference (NACF), Orlando, USA, October 23-25, 2008. Ped. Pulm. 2008; Suppl. 31:363.

Schuschnig U, Kruener A, Klopfer E, Tiffin N, Weigand A, Luber M, Keller M: Drug Delivery to the Sinuses – Basics and Aerosol Dynamics. 22th Annual North American Cystic Fibrosis Conference (NACF), Orlando, USA, October 23-25, 2008. Ped Pulm 2008; Suppl 31: 303-304.

Coates AL, Leung K, Green M, Chan J, Ribeiro N, Keller M, Tservistas M, Charron M: Lung Delivery of a New Tobramycin Nebulizer Solution (150 mg / 1.5 ml) by a customized eFlow® Nebulizer is the Equivalent of TOBI® but in a Fraction of the Time. 22th Annual North American Cystic Fibrosis Conference (NACF), Orlando, USA, October 23-25, 2008. Ped. Pulm. 2008; Suppl. 31:367.

Trammer B, Amann A, Haltner-Ukomadu E, Tillmanns S, Keller M, Högger P: Comparative permeability and diffusion kinetics of cyclosporine A liposomes and propylene glycol solution from human lung tissue into human blood ex vivo. Eur J Pharm Biopharm 2008; 70 (3): 758-764.

Coates AL, Green M, Leung K, Chan J, Ribeiro N, Louca E, Ratjen F, Charron M, Tservistas M, Keller M: Rapid Pulmonary Delivery of Inhaled Tobramycin for Pseudomonas Infection in Cystic Fibrosis: A Pilot Project. Ped Pulm 2008;43:753-759.

Bitterle E, Luithlen A, Reul K, Bucholski A, Tservistas M, Keller M: Utilization of a climate box for optimization of cascade impaction measurements ensuring control of impactor temperature. IPAC-RS' 2nd Inhalation & Nasal Drug Products Conference “Doing the Right Thing” in the Changing Culture of Design and Development of Inhalation and Nasal Drug Products: Science, Quality, and Patient-Focus. Bethesda, USA, September 22-24, 2008.

Schuschnig U, Krüner A, Klopfer E, Tiffin N, Weigand A, Luber M, Keller M: Drug Delivery to the Sinuses – Basics and Aerosol Dynamics. AAO-HNS 2008 Annual Meeting & OTO EXPO, Chicago, USA, September 21-24, 2008.

Schuschnig U, Krüner A, Müller D, Luber M, Tiffin N, Weigand A, Keller M: Paranasal aerosol delivery of Budesonide using PARI VibrENT. AAO-HNS 2008 Annual Meeting & OTO EXPO, Chicago, USA, September 21-24, 2008.

Möller W, Schuschnig U, Meyer G, Mentzel H, Keller M: Ventilation and drug delivery to the paranasal sinuses: studies in a nasal cast using pulsating airflow. Rhinology 2008; 46, 213-220.

Schuschnig U, Klopfer E, Krüner A, Schmid R, Keller M: Colistin CF for aerosol therapy of the upper airways. An in-vitro deposition study with the PARI SINUS. 31st European Cystic Fibrosis Conference (ECFC), Prague, Czech Republic, June 11-14, 2008. J Cyst Fibrosis 2008;7 (Suppl 2): S27.

Bitterle E, Luithlen A, Reul K, Mueller D, Keller M: Aerosol Characteristics of Hypertonic Saline (HS) nebulised by the eFlow® rapid. 31st European Cystic Fibrosis Conference (ECFC), Prague, Czech Republic, June 11-14, 2008. J Cyst Fibros 2008;7(Suppl 2):S28.

Tservistas M, Hoyer K, Seemann S, Keller M, Knoch M: Aerosol Characteristics of eFlow® using different control units. 31st European Cystic Fibrosis Conference (ECFC), Prague, Czech Republic, June 11-14, 2008. J Cyst Fibrosis 2008;7 (Suppl 2): S28.

Schuschnig U, Keller M, Krüner A, Müller D, Luber M: In-vitro Characterization of Captisol Enabled Budesonide Inhalation Solution (CBIS) Using the PARI VibrENT, a New Electronic Paranasal Drug Delivery System. Proceedings Respiratory Drug Delivery (RDD) XI, Scottsdale, USA, May 11-15, 2008.

Gallem T, Tservistas M, Uhlig M, Hetzer U, Keller M, Knoch M: Effect of Facemask Design on Aerosol Delivery from an Electronic Nebulizer. Proceedings Respiratory Drug Delivery (RDD) XI, Scottsdale, USA, May 11-15, 2008.

Schuschnig U, Klopfer E, Luber M, Zimmermann J, Keller M: Drug Delivery to the Nasal And Paranasal Cavities – Critical Cast Dimensions and Aerosol Dynamics. Proceedings Respiratory Drug Delivery (RDD) XI, Scottsdale, USA, May 11-15, 2008.

Möller W, Schuschnig U, Meyer G, Mentzel H, Keller M: Human Nasal DTPA Clearance and Systemic Absorption after Pulsating Aerosol Delivery Using the Pari Sinus. Proceedings Respiratory Drug Delivery (RDD) XI, Scottsdale, USA, May 11-15, 2008.

2007

Tservistas M, Uhlig M, Gallem T, Hetzer U, Keller M, Knoch M: Development of a new nebuliser face mask using paediatric breathing patterns for the in-vitro assessment. . Drug Delivery to the Lungs - DDL18, Edinburgh, United Kingdom, December 12-14, 2007. Proceedings: 233-236.

Bitterle E, Reul K, Luithlen A, Keller M: Effect of different eFlow® configurations on aerosol delivery performance of a Liposomal Ciclosporin A Inhalation Solution. Drug Delivery to the Lungs - DDL18, Edinburgh, United Kingdom, December 12-14, 2007. Proceedings: 188-191.

Vaishnav A, Meyers R, Bitterle E, Keller M, Tservistas M, Lang G, Gollop J, DeVincenzo J: Clinical Evaluation of the Safety and Tolerability of inhaled ALN-RSV01 an RNAi-based therapy for Respiratory Syncytial Virus Infection. Drug Delivery to the Lungs - DDL18, Edinburgh, United Kingdom, December 12-14, 2007. Proceedings: 28-30.

Akkar A, Bitterle E, Gruber F, Keller M: Characterization of a liposomal Cyclosporin A formulation for nebulization into lungs of transplanted patients and useful for other topical applications. AAPS Annual Meeting, San Diego, USA, November 11-15, 2007.

Bitterle E, Seemann S, Denk O, Wolf R, Keller M: Aerosol characterization of hypertonic saline (MucoClear® 6%) in the eFlow®rapid nebulizer. 10. Deutsche Mukoviszidose Tagung, November 9-10, 2007, Würzburg, Germany.

Schuschnig U, Klopfer E, Krüner A, Schmid R, Keller M: Aerosoltherapie der oberen Atemwege mit Colistin CF unter Verwendung des PARI SINUS – In-vitro Ergebnisse einer humanen Nasenmodellstudie. 10. Deutsche Mukoviszidose Tagung, November 9-10, 2007, Würzburg, Germany.

Coates AL, Leung K, Green M, Chan J, Ribeiro N, Martin S, Menges G, Keller M, Charron M, Ratjen F: A Rapid Way to Deliver High Doses of Tobramycin to the Airways of Adult and Pediatric Patients with Cystic Fibrosis (CF). 21st Annual North American Cystic Fibrosis Conference (NACF), Anaheim, USA, October, 3-6, 2007. Ped Pulm 2007; Suppl. 30:323.

Tservistas M, Uhlig M, Grieblinger E, Dudley M, Bostian K, Surber M, Seemann S, Knoch M, Keller M: Characterization of the eFlow® Aerosol Delivery Performance of MP-376, a Novel Formulation of Levofloxacin for Management of Chronic Pulmonary Infections in Cystic Fibrosis Patients. 21st Annual North American Cystic Fibrosis Conference (NACF), Anaheim, USA, October, 3-6, 2007. Ped Pulm 2007; Suppl. 30:290.

Tservistas M, Grieblinger E, Ben Artzi H, Bauer S, Knoch M, Keller M: Nebulization of Alpha-1 Antitrypsin by the eFlow® Electronic Nebulizer. 21st Annual North American Cystic Fibrosis Conference (NACF), Anaheim, USA, October, 3-6, 2007. Ped Pulm 2007; Suppl. 30:289.

Schuschnig U, Möller W, Meyer G, Haeussinger K, Mentzel H, Zimmermann J, Keller M: Visualization of Human Sinus Ventilation by Radioactive Krypton Using the PARI SINUS™ Pulsating System. 21st Annual North American Cystic Fibrosis Conference (NACF), Anaheim, USA, October, 3-6, 2007. Ped Pulm 2007; Suppl. 30:302.

Bitterle E, Mueller D, Tiffin N, Warner R, Weigand A, Cambridge L, Keller M: Aerosol Characterization of Hypertonic Saline (Hyper-Sal™ 3.5% and 7%) in Jet Nebulizers and the eFlow®. 21st Annual North American Cystic Fibrosis Conference (NACF), Anaheim, USA, October, 3-6, 2007. Ped Pulm 2007; Suppl. 30:336.

Schuschnig U, Keller M, Luber M, Zimmermann J: Deposition of Ambroxol into the paranasal cavities of a human nasal cast model administered by the PARI SINUS™ pulsating aerosol generator. 6th European Congress of Oto-Rhino-Laryngology Head and Neck Surgery, Vienna, Austria, June 30 to July 4, 2007.

Keller M, Schuschnig U: Effect of formulation and delivery system on nasal and paranasal deposition performance of aerosolised fluticasone-propionate (FP) in a human cast model. 6th European Congress of Oto-Rhino-Laryngology Head and Neck Surgery, Vienna, Austria, June 30 to July 4, 2007. Oral presentation.

Schuschnig U, Möller W, Meyer G, Häussinger K, Mentzel H, Keller M: Visualization of human sinus ventilation by radioactive Krypton using the PARI SINUS pulsating system. 6th European Congress of Oto-Rhino-Laryngology Head and Neck Surgery, Vienna, Austria, June 30 to July 4, 2007.

Bucholski A, Hug M, Keller M: In-vitro equivalence of a generic Ipratropiumbromide inhalation solution versus Atrovent® in two jet-nebulisers and two electronic eFlow® nebuliser configurations 16th International Congress of the International Society of Aerosols in Medicine (ISAM), Tours, France, June 16-20, 2007.

Bitterle E, Reul K, Luithlen A, Müller D, Denk O, Keller M: Correlation of laser diffraction and cascade impaction data upon nebulisation of 1MIU colistimethate sodium/3 ml by the eFlow®/rapid nebuliser. 16th International Congress of the International Society of Aerosols in Medicine (ISAM), Tours, France, June 16-20, 2007.

Keller M, Menges G, Behr J, Baumgartner G, Sommerer K, Seitz J: Lung deposition and pharmacokinetics in 12 lung transplanted patients after inhalation of a liposomal Ciclosporin A (CsA) formulation by the eFlow electronic nebuliser. 30th European Cystic Fibrosis Conference (ECFC), Belek, Turkey, June 13-16, 2007. J Cyst Fibros 2007; 6 (Suppl 1): S12.

Schuschnig U, Möller W, Meyer G, Häussinger K, Keller M: Visualization of human sinus ventilation by radioactive Krypton using the PARI Sinus pulsating system. 30th European Cystic Fibrosis Conference (ECFC), Belek, Turkey, June 13-16, 2007. J Cyst Fibros 2007; 6 (Suppl 1): S13.

Keller M, Bucholski A, Hug M, Tillmanns S, Hunziker G: Nebulizers Producing Small Droplets Should Facilitate Deep Lung Deposition of Sodium Cromoglycate (DSCG) to Improve Therapeutic Efficacy. International Conference of the American Thoracic Society (ATS), San Francisco, USA, May 18-23, 2007.

Behr J, Baumgartner R, Zimmermann GS, Keller M, Menges G, Brand P, Haeussermann S, Herpich C, Sommerer K, Seitz J and the Munich Lung Transplant Group: Lung Deposition of a Liposomal

Cyclosporin-A Aerosol in Lung Transplant Patients. International Conference of the American Thoracic Society (ATS), San Francisco, USA, May 18-23, 2007.

Schuschnig U, Hug M, Klopfer E, Knoch M, Keller M: The Next Generation Impactor: Effects of Environmental Conditions and Impactor Temperature on Particle Size Measurement of an Aqueous Aerosol. Proceedings RDD Europe 2007, Paris, France, April 17-20, 2007, pp. 311-316.

Keller M, Schuschnig U, Hug M, Bucholski A: Importance of the Inhaler System and Relative Humidity on the Fine Particle Dose (FPD) of Disodium Cromoglycate (DSCG). Proceedings RDD Europe 2007, Paris, France, April 17-20, 2007, pp. 307-310.

Moeller W, Schuschnig U, Meyer G, Haeussinger K, Mentzel H, Bitterle E, Keller M: Visualization of Human Sinus Ventilation by Radioactive Krypton Using the PARI SINUS Pulsating System. Proceedings RDD Europe 2007, Paris, France, April 17-20, 2007.

Keller M, Hug M, Bucholski A: Überlegenheit der Dinatriumcromoglycat (DNCG)-Verneblertherapie gegenüber der Applikation mittels Dosieraerosolen und Pulverinhalatoren. 29. Jahrestagung der Gesellschaft für Pädiatrische Pneumologie (GPP), Munich, Germany, March 22-24, 2007.

2006

Keller M, Gallem T, Stangl R, Bucholski A, Tillmanns S, Knoch M: Requirements on Formulations and Nebuliser Design / Features to Improve Pulmonary Drug Delivery in Pre-School Children, Toddlers, and Infants. Drug Delivery to the Lungs - DDL17, Edinburgh, United Kingdom, November 30 to December 1, 2006. Proceedings: 10-13.

Behr J, Menges G, Keller M, Bitterle E, Baumgartner R, Zimmermann G, Herpich C, Sommerer K, Seitz J: Lung Deposition of a Liposomal Ciclosporin A Inhalation Solution in Patients after Lung Transplantation. Drug Delivery to the Lungs - DDL17, Edinburgh, United Kingdom, November 30 to December 1, 2006. Proceedings: 22-25.

Bitterle E, Keller M, Tservistas M, Lang G, Meyers R, Elbashir S, DeVincenzo J, Radesca L, Cehelsky J: Integrity, In-Vitro Activity and Aerosol Delivery Performance of RSV Specific siRNA (ALN-RSV01) Inhalation Solutions Nebulised by an eFlow® Electronic Nebuliser. Drug Delivery to the Lungs - DDL17, Edinburgh, United Kingdom, November 30 to December 1, 2006. Proceedings: 86-89.

Keller M, Bucholski A, Hug M, Leung K, Coates AL: Attempts to Predict Lung Deposition by In-Vitro / In-Vivo Correlation Using Tobramycin Inhalation Solutions and Different Nebuliser Systems as an Example. Drug Delivery to the Lungs - DDL17, Edinburgh, United Kingdom, November 30 to December 1, 2006. Proceedings: 180.

Schuschnig U, Hug M, Klopfer E, Knoch M, Keller M: The Next Generation Impactor (NGI): Effect of environmental conditions, impactor temperature and flow rate on particle size measurement of an aerosol using the eFlow® nebuliser. Drug Delivery to the Lungs - DDL17, Edinburgh, United Kingdom, November 30 to December 1, 2006. Proceedings: 260-263.

Schuschnig U, Stock M, Luber M, Keller M, Zimmermann J: Strategien zur Therapie von Erkrankungen der Nasennebenhöhlen mittels Aerosolen – Wie erreicht man den Wirkort? XI. Deutsches Aerosol Therapie Seminar, Marburg, Germany, November 10-11, 2006.

Keller M, Schuschnig U, Knoch M, Zimmermann J, Boden N, Kullmann K-H, Mainz J: Characterization of Nebulized Pulmozyme® Administered by the PARI SINUS™ Utilizing a Human Nasal Cast Model. 20th Annual North American Cystic Fibrosis Conference (NACF), Denver, USA, November 2-5, 2006.

Keller M, Bucholski A, Hug M, Leung K, Coates A: Ways for an In Vitro / In Vivo Correlation for Predicting Lung Deposition of Aqueous Nebulized Tobramycin Formulations Linking Breath Simulation and Cascade Impaction Methods. 20th Annual North American Cystic Fibrosis Conference (NACF), Denver, USA, November 2-5, 2006.

Keller M, Bauer S, Tillmanns S, Bitterle E, Tservistas M, Haltner-Ukomadu E: Effect of Alpha-1 Antitrypsin on the Vitality of Calu-3 Cells Representing an Epithelial Bronchial Cell Model and Assessment of Nebulization Efficiency by eFlow®. 20th Annual North American Cystic Fibrosis Conference (NACF), Denver, USA, November 2-5, 2006.

Bitterle E, Keller M, Akkar A, Steinfuehrer K, Menges G: Nebulization of a Liposomal Cyclosporin A Formulation by eFlow® 30L: Correlation Between In Vitro and In Vivo Results. 20th Annual North American Cystic Fibrosis Conference (NACF), Denver, USA, November 2-5, 2006.

Coates A, Leung K, Louca E, Green M, Chan J, Ribeiro N, Menges G, Tservistas M, Keller M, Charron M: Can Vibrating Membrane Nebulizers Deliver Tobramycin Faster than Jet Nebulizers? 20th Annual North American Cystic Fibrosis Conference (NACF), Denver, USA, November 2-5, 2006.

Schuschnig U, Urbischek M, Luber M, Selzer T, Tiffin NH, Friedrich I, Keller M: Comparison of Delivery Efficiency in a Nasal Cast Model of Fluticasone (Flutide®) Nasal Spray versus a Novel Solution Aerosolized via the PARI VibrENT™. AAO-HNSF Annual Meeting & OTO EXPO, Toronto, Canada, September 17-20, 2006.

Tservistas M, Luithlen A, Hug M, Keller M: Aerosol performance of two Ambroxol inhalation products upon nebulisation by the eFlow® rapid and the PARI LC STAR®. 16th European Respiratory Society Annual Congress (ERS), Munich, Germany, September 2-6, 2006.

Schuschnig U, Klopfer E, Luber M, Selzer T, Keller M: In-vitro deposition study of levofloxacin solution into a novel human nasal cast model by the PARI VibrENT™. 16th European Respiratory Society Annual Congress (ERS), Munich, Germany, September 2-6, 2006.

Keller M, Bucholski A, Hug M: Effect of different nebulizers on the aerosol delivery performance of isotonic disodium cromoglycate (IsoCROM™). 16th European Respiratory Society Annual Congress (ERS), Munich, Germany, September 2-6, 2006.

Keller M, Hug M, Bucholski A, Gallem T, Stangl R, Knoch M: Characterization of three inhalation products by the Sofia Anatomical Infant Nose Throat (SAINT) model upon nebulization by the eFlow® Baby electronic nebulizer. 16th European Respiratory Society Annual Congress (ERS), Munich, Germany, September 2-6, 2006.

Tservistas M, Bitterle E, Keller M, Bauer S: Aerosol characterization of alpha-1 Antitrypsin after nebulisation with the eFlow®, a vibrating membrane nebuliser. 16th European Respiratory Society Annual Congress (ERS), Munich, Germany, September 2-6, 2006.

Keller M: Paediatric Inhaled Products – An Unmet Challenge for the Industry. APS Inhalation Focus Group Workshop, Loughborough, United Kingdom, June 28, 2006 (oral presentation).

Keller M, Hug M, Bitterle E, Bucholski A: Reduced Treatment Time for Colistimethate Sodium Solution (Colistin CF) Aerosolised by eFlow® rapid, a Novel Electronic Nebuliser. 29th European Cystic

Fibrosis Conference (ECFC), Copenhagen, Denmark, June 15-18, 2006. J Cyst Fibros 2006; 5 (Suppl.1): S13.

Schuschnig U, Klopfer E, Luber M, Selzer T, Mentzel H, Zimmermann J, Keller M: In-vitro deposition study of a levofloxacin solution aerosolised into a novel human nasal cast model by the PARI SINUS™. 29th European Cystic Fibrosis Conference (ECFC), Copenhagen, Denmark, June 15-18, 2006. J Cyst Fibros 2006; 5 (Suppl.1): S13.

Tservistas M, Gotschlich A, Bucholski A, Keller M: Nebulisation of a novel antimicrobial „Quorum Sensing Blocker“ against *Pseudomonas Aeruginosa* and *Burkholderia cenocepacia* by the eFlow® electronic nebuliser. 29th European Cystic Fibrosis Conference (ECFC), Copenhagen, Denmark, June 15-18, 2006. J Cyst Fibrosis 2006; 5 (Suppl.1): S12.

Tservistas M, Bauer S, Keller M, Knoch M: Protein integrity and activity of Alpha-1-Antitrypsin following nebulization by the eFlow® electronic nebulizer. International Conference of the American Thoracic Society (ATS), San Diego, USA, May 19-24, 2006.

Keller M, Bucholski A, Hug M, Selzer T, Luber M, Bitterle E, Fischer R, Zimmermann J: Assessment of the new jet nebulizer platform PARI LC® SPRINT designed for different age groups and a faster delivery of aqueous inhalation formulations. International Conference of the American Thoracic Society (ATS), San Diego, USA, May 19-24, 2006.

Keller M, Tservistas M, Bucholski A, Hug M, Knoch M: Correlation of laser diffraction and cascade impaction data for aqueous solutions aerosolized by the eFlow® electronic nebulizer. Proceedings Respiratory Drug Delivery (RDD) X, Boca Raton, USA, April 23-27, 2006, pp. 745-748.

Keller M, Tservistas M, Bitterle E, Bauer S: Aerosol characterization of alpha-1 Antrypsin after nebulization with the eFlow®: A novel vibrating perforated membrane nebulizer. Proceedings: Respiratory Drug Delivery (RDD) X, Boca Raton, USA, April 23-27, 2006, pp. 733-736.

Schuschnig U, Keller M, Knoch M, Boden N, Kullmann K-H: Deposition of Pulmozyme® into the sinus cavities of a human nasal cast model using PARI SINUS™. Proceedings Respiratory Respiratory Drug Delivery (RDD) X, Boca Raton, USA, April 23-27, 2006, pp. 737-740.

Schuschnig U, Urbischek M, Luber M, Selzer T, Tiffin N, Friedrich I, Keller M: Comparison of delivery efficiency in a nasal cast model of fluticasone propionate suspensions and a novel solution aerosolized via the PARI VibrENT. Proceedings Respiratory Drug Delivery (RDD) X, Boca Raton, USA, April 23-27, 2006, pp. 741-744.

Keller M, Bitterle E, Tservistas M, Steinführer K, Akkar A, Müller J, Bock U, Haltner E: Cyclosporine A: Investigation on formulation dependent toxicity in a Calu-3 cell culture model and characterization of aerosols generated by the eFlow® electronic nebulizer. Proceedings Respiratory Drug Delivery (RDD) X, Boca Raton, USA, April 23-27, 2006, pp. 729 – 732.

Haltner-Ukomadu E, Keller M, Akkar A, Mehrwald R, Raposo A, Bock U: Calu-3 Cells, a Bronchial Epithelial Cell Model to Assess the Applicability and Tolerability of Drugs, Excipients and Formulations Designed for Inhalation. 5th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology, Geneva, Switzerland, March 27-30, 2006.

Friedrich I, von Opolski S, Luithlen A, Tservistas M, Keller M: Colloidal formulations to improve drug delivery by eFlow®, a new electronic nebuliser: 5th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology, Geneva, Switzerland, March 27-30, 2006.

Tillmanns S, Ledermüller R, Keller M: Natriumcromoglycat (DNCG) und Inhalationssysteme in der Therapie von kindlichem Asthma – Zeit für ein Update?. 28. Jahrestagung der Gesellschaft für

Pädiatrische Pneumologie (GPP), Frankfurt, Germany, March 23-25, 2006. Atemwegs- und Lungenkrankheiten 2006; 32 (3): 124.

Tillmann S, Hug M, Ledermüller R, Keller M: Verbesserung der Verneblungseffizienz von isotonischer Natriumcromoglicat Lösung (IsoCROM®) mit eFlow® 30S und LC® SPRINT versus Micromist®. 28. Jahrestagung der Gesellschaft für Pädiatrische Pneumologie (GPP), Frankfurt, Germany, March 23-25, 2006. Atemwegs- und Lungenkrankheiten 2006; 32 (3): 124-125.

2005

Tservistas M, Reul K, Luithlen A, Friedrich I, Bucholski A, Keller M: Correlation of data from Andersen and Next Generation Impactor compared to Laser Diffractometry. Drug Delivery to the Lungs – DDL16, Edinburgh, United Kingdom, December 7-9, 2005. Proceedings: 257-260.

Friedrich I, von Opolski S, Braun A, Tservistas M, Keller M: Colloidal formulations to improve drug delivery by eFlow®, a new electronic nebuliser. Drug Delivery to the Lungs – DDL16, Edinburgh, United Kingdom, December 7-9, 2005. Proceedings: 125-128.

Keller M, Akkar A, Krüner A, Mehrwald R, Haltner E: Assessment of Applicability and Tolerability of Drugs and Excipients on Calu-3 Cells, a Bronchial Epithelial Cell Model. Drug Delivery to the Lungs – DDL16, Edinburgh, United Kingdom, December 7-9, 2005. Proceedings: 161-164.

Evans R, Bogden ME, Tservistas M, Braun A, Seemann S, Keller M: Comparison of the Rates of Drug Delivery and the Relative Efficiencies of Emitted and Respirable Dose for Two Different Nebulizers Yielding Qualitatively Similar Aerosols. Drug Delivery to the Lungs – DDL16, Edinburgh, United Kingdom, December 7-9, 2005. Proceedings: 121-124.

Raposo A, Akkar A, Haltner E, Keller M: Cyclodextrin Nanoparticles Loaded with Cyclosporin A for Inhalation. AAPS Annual Meeting, Nashville, USA, November 6-10, 2005.

Schuschnig U, Keller M, Surber M, Bostian K: In-Vitro Nebulization Assessment of the Efflux Pump Inhibitor MP-601,205 Delivered by the eFlow® Electronic Inhaler. 19th North American Cystic Fibrosis Conference (NACF), Baltimore, USA, October 20-23, 2005.

Akkar A, Raposo A, Mehrwald R, Bultmann M, Knoch M, Keller M: Assessment of the Nebulization Efficiency of a Novel Aqueous Cyclosporin Formulation by eFlow®. 19th North American Cystic Fibrosis Conference (NACF), Baltimore, USA, October 20-23, 2005.

Schuschnig U, Luber M, Waehner Y, Hunziker G, Mentzel H, Raposo A, Keller M: In-Vitro Deposition Study of a Novel Antibiotic Solution into Nasal Cast Cavities by the PARI SINUSTM Aerosol Delivery System. 19th North American Cystic Fibrosis Conference (NACF), Baltimore, USA, October 20-23, 2005.

Evans R, Ellis Bogden M, Tservistas M, Seemann S, Keller M: Optimization of Aerosol Characteristics of the eFlow® Electronic Nebulizer for Pulmonary Delivery of a P2Y2 Agonist. 19th North American Cystic Fibrosis Conference (NACF), Baltimore, USA, October 20-23, 2005.

Keller M, Bucholski A, Seemann S, Hug M, Schmitt A, Knoch M: Reduction in nebulisation time of aqueous drug solutions by the eFlow® rapid in comparison to a jet nebuliser to improve patient convenience and compliance. European Respiratory Society Annual Congress (ERS), Copenhagen, Denmark, September 17-21, 2005. Eur. Respir. J 2005; 26 (Suppl. 49): s338.

Keller M, Bucholski A, Balcke A, Reul K, Knoch M: Assessment of nebulisation efficiency of a reduced Glutathion-Sodium solution (GSH) by a PARI LC STAR® and the eFlow® electronic nebuliser. 28th European Cystic Fibrosis Conference (ECFC), Crete, Greece, June 22-25, 2005.

Schuschnig U, Luber M, Waehner Y, Hunziker G, Mentzel H, Raposo A, Keller M: In-vitro deposition study of a novel antibiotic solution into nasal cast cavities by the PARI SINUS™ aerosol delivery system. 28th European Cystic Fibrosis Conference (ECFC), Crete, Greece, June 22-25, 2005.

Keller M, Bucholski A, Hug M, Meyer H, Knoch M: Shorter nebulisation time and droplet design for drug targeting of a novel tobramycin formulation (100 mg/ml) achieved by the eFlow® electronic nebuliser compared to TOBI® nebulised by the PARI LC PLUS®. 28th European Cystic Fibrosis Conference (ECFC), Crete, Greece, June 22-25, 2005.

Keller M., A. Bucholski, M. Hug: Effect of Nebulizer Type on the Delivery Efficiency of Pulmicort® Suspension Respules Compared to Novel Aqueous Budesonide Solutions. International Conference of the American Thoracic Society (ATS), May 20-25, 2005, San Diego, USA.

Keller M., Bucholski A, Lang G, Meyer H: In-Vitro Equivalence and Shorter Nebulization Time Using a Novel Tobramycin (100 mg/ml) Solution and eFlow® Compared to TOBI® (300 mg/5 ml) Nebulized by the PARI LC PLUS®. International Conference of the American Thoracic Society (ATS), May 20-25, 2005, San Diego, USA.

Knoch M & Keller M: The customised electronic nebuliser: a new category of liquid aerosol drug delivery system. *Exp Opin. Drug Deliv* 2005; 2(2): 377-390.

Tservistas M, Lintz F-C, von Opolski S, Hug M, Keller M, Knoch M: Improving drug delivery performance by customization of formulation and nebulizer. 15th International Congress of the International Society of Aerosols in Medicine (ISAM), Perth, Australia, March 14-18, 2005.

2004

Tservistas M, Ohl S, Keller M: Influence of inspiratory flow rate on the delivered dose and droplet size distribution of tobramycin delivered by bebuliser systems utilising breath simulation and the Next Generation Impactor (NGI). *Drug Delivery to the Lungs – DDL15*, Dec. 9-10, 2004, London, United Kingdom. Proceedings: 220-223.

Lintz F-C, Keller M: A Novel formulation approach for improved nebulised drug delivery of poorly water soluble drugs. *Drug Delivery to the Lungs – DDL15*, Dec. 9-10, 2004, London, United Kingdom. Proceedings: 216-219.

Lintz F-C, von Opolski S, Hug M, Bucholski A, Keller M: Development of Aqueous Solubilized Corticoid Formulations for Nebulization with a Vibrating Membrane Nebulizer. *AAPS Annual Meeting*, Baltimore, USA, November 7-11, 2004.

Tservistas M, Lichtinghagen R, Boden N, Knoch M, Keller M: Increased Efficiency of Pulmozyme® Delivered by the Novel eFlow® Electronic Inhaler. *18th Annual North American Cystic Fibrosis Conference (NACF)*, St. Louis, USA, October 14-17, 2004.

Keller M, Balcke A, Bucholski A, Hug M, Waldner R: Performance Characteristics of Colistimethate Sodium Solution (Colistin) Nebulized by a Novel Electronic Inhaler (eFlow®). *18th Annual North American Cystic Fibrosis Conference (NACF)*, St. Louis, USA, October 14-17, 2004.

Keller M: Setting the Right Targets and Specifications for a Successful Product Development of Aqueous Droplet Inhalers. Aqueous Droplet Inhalers: Conference organised by Management Forum, London, October 11-12, 2004 (oral presentation).

Keller M, Jauernig J, Ohl S, Knoch M: Prediction of the lung dose in young children by cascade impaction methods alternatively to the SAINT model. European Respiratory Society Annual Congress (ERS), Glasgow, Scotland, Sept. 4-8, 2004. Eur Respir J 2004; 24 (S48): 621s-622s.

Friedrich I, Keller M, Döhmen H, Pfannenstiel C, Ledermüller R: Comparison of tobramycin serum plasma levels in 5 CF patients after inhalation via a PARI LC PLUS® nebuliser and via eFlow®, a novel electronic inhaler. 27th European Cystic Fibrosis Conference (ECFC), Birmingham, United Kingdom, June 13-17, 2004. J Cyst Fibros 2004; 3, (Suppl 1): S64.

Balcke A, Bucholski A, Waldner R, Knoch M, Keller M: Performance characteristics of colistinmethate sodium solution (Colistin) nebulised by jet nebulisers compared to the novel electronic inhaler (eFlow®). 27th European Cystic Fibrosis Conference (ECFC), Birmingham, United Kingdom, June 13-17, 2004. J Cyst Fibros 2004; 3, (Suppl 1): S63.

Tservistas M, Lichtenhagen R, Boden N, Schmitt A, Seemann S, Keller M: Assessment of enzyme activity following nebulization with the eFlow™ electronic nebulizer. 27th European Cystic Fibrosis Conference (ECFC), Birmingham, United Kingdom, June 13-17, 2004 (oral presentation).

Seemann S, Waldner R, Knoch M, Keller M: A New Electronic Inhaler (eFlow®) to Improve Delivery of Inhaled Medications on CF Patients. International Conference of the American Thoracic Society (ATS), Orlando, USA, May 21-26, 2004.

Jauernig J, Ohl S, Keller M: A Novel Budesonide Formulation (BUDeFlow™) to Improve Asthma Treatment in Babies Using a New Electronic Inhaler (eFlow® baby). International Conference of the American Thoracic Society (ATS), Orlando, USA, May 21-26, 2004.

Keller M, Jauernig J, Schuepp K, Stangl R, Ohl S, Roller C, Devadason S, Wildhaber J: Using Infant Deposition Models to Improve Inhaler System Design. Proceedings Respiratory Drug Delivery (RDD) IX, Palm Desert, USA, April 25-29, 2004, pp. 221-231.

Boehm A, Luber M, Mentzel H, Knoch M: Investigating Drug Delivery to the Sinuses – An In-Vitro Deposition Study Using a Nasal Cast Model. Proceedings Respiratory Drug Delivery (RDD) IX, Palm Desert, USA, April 25-29, 2004. pp. 601 – 604.

Borgschulte M, Germer M, Hug M, Keller M, Knoch M, Stangl R: Means to Optimize Drug Delivery from a Novel Electronic Inhaler (eFlow®). Proceedings Respiratory Drug Delivery (RDD) IX, Palm Desert, USA, April 25-29, 2004, pp. 605 – 608.

Jauernig J, Ohl S, Knoch M, Keller M: Effects of the Test Set-Up, Formulation, and Nebulizer Type on Aerodynamic Droplet Characteristics. Proceedings Respiratory Drug Delivery (RDD) IX, Palm Desert, USA, April 25-29, 2004, pp. 609 – 612.

Tservistas M, Lintz F-C, Keller M: Impact of the Nebulization Principle on the Biological Activity of Labile Formulations Containing Liposomes, Peptides, Proteins. Proceedings Respiratory Drug Delivery (RDD) IX, Palm Desert, USA, April 25-29, 2004, pp. 613-615.

Keller M, Balcke A, Stempfle P, Ledermüller R, Knoch M: Einfluss des Verneblertyps und der Medikamenten-Formulierung auf die inhalativ in-vitro verfügbare Tobramycin-Dosis. 45. KONGRESS DER DEUTSCHEN GESELLSCHAFT FÜR PNEUMOLOGIE, Frankfurt, Germany, March 10-13, 2004.

Tservistas M, Schuschnig U, Ledermüller R, Knoch M, Keller M: Unterschiede in der Vernebelungseffizienz von Pulmicort in Abhängigkeit vom Verneblertyp. 45. KONGRESS DER DEUTSCHEN GESELLSCHAFT FÜR PNEUMOLOGIE, Frankfurt, Germany, March 10-13, 2004.

2003

Jauernig J, Ohl S, Luber M, Keller M: Differences in Results Obtained with the Next Generation Impactor (NGI) for Pulmicort® Suspension and According to the CEN Standard EN-13544-1 for a NaF-Solution. Drug Delivery to the Lungs – DDL14, London, United Kingdom, December 11-12, 2003. Proceedings: 41 – 44.

Tservistas M, Balcke A, Stempfle P, Reul K, Keller M, Knoch M: Nebuliser systems and formulation characteristics: Two factors effecting in-vitro inhaler system performance for cystic fibrosis treatment. Drug Delivery to the Lungs – DDL14, London, United Kingdom, December 11-12, 2003. Proceedings: 176 – 179.

Lintz F-C, von Opolski S, Keller M: Nebulization Perspectives Utilizing a Customized Electronic Inhaler (eFlow™) for Pulmonary Administration of Drug Products. AAPS Annual Meeting, Salt Lake City, USA, October 26-30, 2003.

Lang G, Jahn D, Bucholski A, Keller M: Assessment of Tobramycin and its impurities by a novel rapid and simple derivatization method. AAPS Annual Meeting, Salt Lake City, USA, October 26-30, 2003.

Keller M: Formulations Options and Challenges for Aqueous Inhalation Drug Products. Aqueous Droplet Inhalers: Conference organised by Management Forum, London, October 20-21, 2003 (oral presentation).

Bucholski, Keller M, Balcke A, Lintz F-C, Seemann S, Flitter WD, Hofmann T, Stapleton KW: In-Vitro Performance of eFlow™, an Electronic Inhaler for Administration of a Novel Aztreonam Formulation to CF Patients. 17th Annual North American Cystic Fibrosis Conference (NACF), Anaheim, USA, October 16-19, 2003. Ped Pul. 2003; S 25: 321.

Keller M, Balcke A, Tservistas M, Bucholski A, Stempfle P, Stangl R, Knoch M: Reduced Treatment Time for Tobramycin Application by Device and Formulation Customization. 17th Annual North American Cystic Fibrosis Conference (NACF), Anaheim, USA, October 16-19, 2003. Ped Pul. 2003; S 25: 297.

Keller M, Stempfle P, Reul K, Waldner R, Lintz F-C, von Opolski S, Menges G, Seemann S, Stapleton K: High Efficiency Pulmonary Drug Delivery of a Novel Formulation of Aztreonam by the eFlow™. 14th International Congress of the International Society for Aerosols in Medicine (ISAM), Baltimore, USA, June 14-18, 2003. Journal of Aerosol Medicine (JAM) 2003; 16 (2): 194.

Balcke A, Tservistas M, Schuschnig U, Stempfle P, Reul K, Knoch M, Keller M: Effect of nebuliser systems on the in-vitro nebulisation efficiency of Tobramycin solutions. 26th European Cystic Fibrosis Conference (ECFC), Belfast, Northern Ireland, June 4- 7, 2003.

Schuepp KG, Keller M, Jauernig J, Stangl R, Janssens HM, Tiddens HAWM, Wildhaber JH: Assessment of a Novel Budesonide Solution and Electronic Inhaler (eFlow™) utilizing a Baby Cast Model applying different Breathing Patterns. ATS 99th International Conference, Seattle, USA, May 16-21, 2003. Am J Respir Crit Care Med 2003; 167 (7), Supplement: A507.

Keller M, Lintz F-C, von Opolski S, Schuschnig U, Flitter B, Hofmann T: Perspectives in Nebulization of the Monobactam Antibiotic Aztreonam by an Electronic Inhaler (eFlow™). ATS 99th International Conference, Seattle, USA, May 16-21, 2003. Am J Respir Crit Care Med 2003;167(7), Supplement: A373.

Seemann S, Schuschnig U, Waldner R, Hug M, Keller M, Knoch M: In-Vitro Characteristics of the PARI eFlow™ Electronic Inhaler. International Conference of the American Thoracic Society (ATS), Seattle, USA, May 16-21, 2003. Am J Respir Crit Care Med 2003; 167 (7), Supplement: A94.

Keller M: The PARI eFlow™ - A sophisticated electronic nebuliser for improved pulmonary drug delivery. Pharmapack, Paris, January 29-30, 2003 (oral presentation).

2002

Schuschnig U, Keller M, Lintz F-C, Hug M, Pfichner A, Borgschulte M, Knoch M: Customisation of the eFlow™ Electronic Inhaler to Target Pulmonary Delivery of Aztreonam Formulations for the Treatment of Lung Infections. Drug Delivery to the Lungs – DDL13, London, United Kingdom, December 12-13, 2002. Proceedings: 252-256.

Jauernig J, Hug M, Knoch M, Keller M: Contribution to the aerodynamic particle size assessment of nebulised drugs using the New Generation Impactor (NGI). Drug Delivery to the Lungs – DDL13, London, United Kingdom, December 12-13, 2002. Proceedings: 44-47.

Keller M, Schuschnig U, Balcke A, Waldner R, Knoch M: Salbutamol nebulisation performance of eFlow™ versus air-jet nebulisers. Drug Delivery to the Lungs – DDL13, London, United Kingdom, December 12-13, 2002. Proceedings: 160-164.

Lintz F-C, von Opolski S, Keller M: Evaluation of a one-step granulation and neutralization process. AAPS Annual Meeting, Toronto, Canada, November 10-14, 2002.

Keller M, Jauernig J, Lintz F-C, Knoch M: Nebulizer Nanosuspensions: Important Device and Formulation Interactions. Proceedings Respiratory Drug Delivery (RDD) VIII, Tucson, USA, May 12-16, 2002, pp. 197-206.

Jauernig J, Schuschnig U, Hug M, Keller M: Validation of a test set-up utilizing the 28.3 l/min Andersen Cascade Impactor (ACI) for the aerodynamic assessment of nebulized aqueous formulations. Proceedings Respiratory Drug Delivery (RDD) VIII, Tucson, USA, May 12-16, 2002, pp.537-540.

Lintz F-C, Walther E, Keller M: Use of a Knowledge Based System (KBS) to shorten and streamline development of nebulizer formulations. Proceedings Respiratory Drug Delivery (RDD) VIII, Tucson, USA, May 12-16, 2002., pp. 541-544.

Keller M, Balcke A, Schuschnig U, Stempfle P, Jahn D: Respirable Drug Delivery Rate (RDDR) - An Objective Parameter to Assess The Efficiency Of Nebulizers. International Conference of the American Thoracic Society (ATS), Atlanta, USA, May 17-22, 2002.

Lintz F-C, Keller M, Walther E: Enhancement of nebuliser performance by formulation optimisation. 4th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology, Florence, Italy, April 8-11, 2002.

Keller M, Ledermüller R, Balcke A: Respirable Drug Delivery Rate - ein objektiver Parameter zur Bestimmung der Effizienz von Verneblersystemen. 43. Kongress der Deutschen Gesellschaft für Pneumologie (DGP), Bochum, March 13-16, 2002. Pneumologie 2002; 56 (S1): 78.

Keller M: Novel Formulations For Inhalation - Interactions, Challenges And Limitations To Deliver Drug By Nebulisers. Conference organised by Valois: Practical Approaches to Nasal and Pulmonary Drug Delivery, Paris, January 24-25, 2002, (oral presentation).

2001

Balcke A, Jahn D, Stempfle P, Schuschnig U, Keller M: Effect of operating pressure, drug concentration and volume fill on the nebulisation efficiency of jet nebulisers. Drug Delivery to the Lungs – DDL12, London, United Kingdom, December 13-14, 2001. Proceedings: 183-186.

Jauernig J, Jahn D, Stempfle P, Balcke A, Keller M: In-vitro assessment of a PARI LC PLUS® nebuliser utilising a standard inhalation pattern compared to breathing profiles of 3 Cystic Fibrosis (CF) patients. Drug Delivery to the Lungs – DDL12, London, United Kingdom, December 13-14, 2001. Proceedings: 179-182.

Keller M, Lintz F-C, Walther E: Novel liquid formulation technologies as a tool to design the aerosol performance of nebulisers using an air jet (LC PLUS®) or a vibrating membrane principle (eFlow™). Drug Delivery to the Lungs – DDL12, London, United Kingdom, December 13-14, 2001. Proceedings: 99-102.

Bucholski A, Balcke A, Stempfle P, Keller M: Comparison of mass spectrometric and evaporative light scattering detection for direct quantification of tobramycin in inhalation solutions. AAPS Annual Meeting, Denver, USA, October 21-25, 2001.

Balcke A, Jahn D, Bucholski A, Stempfle P, Schuschnig U, Keller M, Knoch M: Effect of different nebulizer / compressor configurations on the nebulization efficiency of a salbutamol solution. 13th International Congress of the International Society for Aerosols in Medicine (ISAM), Interlaken, September 17-21, 2001. Proceedings: 390.

Bucholski A, Balcke A, Stempfle P, Keller M: Quantification of tobramycin in inhalation solutions by HPLC utilizing mass spectrometric and evaporative light scattering detection. 13th International Congress of the International Society for Aerosols in Medicine (ISAM), Interlaken, September 17-21, 2001. Proceedings: 389.

Lintz F-C, Walther E, Keller M: Effect of novel pharmaceutical formulations on nebulization efficiency of a common (PARI LC STAR®) and new electronic nebuliser (eFlow™). 13th International Congress of the International Society for Aerosols in Medicine (ISAM), Interlaken, September 17-21, 2001. Proceedings: 390.

Knoch M: New Prospects in Nebulized Drug Delivery. 13th International Congress of the International Society for Aerosols in Medicine (ISAM), Interlaken, September 17-21, 2001. Proceedings: 381.

Sommer E, Luangkhot N: Assessment of a New System for Monitoring Aerosol Output of Breath Enhanced Nebulizers. 13th International Congress of the International Society for Aerosols in Medicine (ISAM), Interlaken, September 17-21, 2001. Proceedings: 410.

Stangl R, Häuser D, Hug M, Jauernig J, Waldner R: Comparing Particle/Droplet Image Analysis (PDIA) with other Particle Sizing Methods. 13th International Congress of the International Society for Aerosols in Medicine (ISAM), Interlaken, September 17-21, 2001. Proceedings: 416.

Keller M, Jauernig J, Schuschnig U, Balcke A, Jahn D, Hinrichs C, Lintz F-C, Walther E: Effect of individual CF-Patients' Breathing Profiles on the Delivery Efficiency of a PARI LC PLUS Nebuliser utilising a Tobramycin solution. 24th European Cystic Fibrosis Conference (ECFC), Vienna, Austria, June 6-9, 2001.

Keller M and Lintz F-C: New liquid formulation technologies for inhalation products. 24th European Cystic Fibrosis Conference (ECFC), Vienna, Austria, June 6-9, 2001.

2000

Stangl R, Luangkhot N, Jauernig J, Häuser D, Lintz F-C, Liening-Ewert R, Jahn D, Keller M, Knoch M: Estimating the Efficiency of a Vibrating Membrane Nebuliser. Drug Delivery to the Lungs – DDL11, London, United Kingdom, December 11-12, 2000; Proceedings: 207-210.

Luangkhot N, Jauernig J, Balcke A, Lintz F-C, Liening-Ewert R, Stangl R, Keller M: Characterisation of salbutamol solution compared to budesonide suspensions consisting of submicron and micrometer particles in the PARI LC STAR® and a new PARI electronic Nebuliser (e-Flow). Drug Delivery to the Lungs – DDL11, London, United Kingdom, December 11-12, 2000; Proceedings: 14-17.

Luangkhot N, Jauernig J, Balcke A, Jahn D, Liening-Ewert R, Stangl R, Lintz F-C, Keller M, Knoch M: Characterisation of salbutamol solution compared to budesonide suspensions consisting of submicron- and micrometer particles in the PARI LC STAR® and a PARI Electronic Nebuliser (e-Flow) Prototype. AAPS Annual Meeting, Indianapolis, USA, Oct. 29 - Nov. 2, 2000.

Winnips C & Keller M: The role of pMDIs in pulmonary drug delivery. Innovations in Pharmaceutical Technology 2000; 6:70-75.

1999

Keller M., Müller-Walz R., Gilchrist P., Lefrangoise G and Niederländer C.: Effects of storage on the in-vitro performance of Formoterol-fumarate powder blends in the SkyePharma multidose dry powder inhaler (mDPI). Drug Delivery to the Lungs X , Dec. 2 & 3, 1999 in London sponsored by the Aerosol Society.

Keller M.: Chemistry, Manufacturing and Controls (CMC) - An industry commentary on the FDA draft guidance for MDI and DPI products. Paper presentation on: European/FDA regulatory issues in oral inhalation & nasal delivery. Management Forum conference E1CI-1399, October 25 & 26, 1999 London, UK.

Keller M.: Innovations and perspectives of metered dose inhalers in pulmonary drug delivery. International Journal of Pharmaceutics. Vol 186 (1999), p. 81-90.

Keller M., Müller-Walz R., Gilchrist P., Eggimann T. and Winnips C.: The SkyePharma multidose DPI - When hardware meets software: Recent advances in DPIs, Management Forum conference E6-1099, 8th annual conference on DPIs , June 28 &29, 1999 at the Langham Hilton Hotel, London, UK.

Keller M. Methoden zur Bestimmung der Dosiergenauigkeit - Was ist die Dosis? APV-Kurs Nr. 381 vom 8,6,91: Analytik inhalativer Arzneiformen, Atrium Hotel Kurmainz, D-55118 Mainz.

Keller M., Pignatelli G., Müller-Walz R., Herzog K., and Hendry P.: Effects of formulation and valve-type on the in-vitro performance of novel formoterol MDIs. 12th congress of ISAM, Vienna, June 12- 16, 1999 - J. Aerosol Med. 1999, Vol. 12, No. 2, p.121.

Keller M., Müller R., Eggimann T. et al.: Effects of storage on the in-vitro performance of a low dose powder in the SkyePharma multidose dry powder inhaler (mDPI). 12th congress of ISAM, Vienna, June 12- 16, 1999 - J. Aerosol Med. 1999, Vol. 12, No. 2, p.123.

Keller M., Kraus H., Pignatelli G. et al.: Effects of the test method on content uniformity of a non-CFC-MDI. 12th congress of ISAM, Vienna, June 12- 16, 1999 - J. Aerosol Med. 1999 Vol. 12, No. 2, p.124.

1998

Keller M.: Development and trends in pulmonary drug delivery. Chimica Oggi /Chemistry today, Vol. 16, No. 11/12, Nov. / Dec., 1998, p. 16- 24.

Müller-Walz R. and Keller M.: Improved fine particle fraction of carrier based salbutamol dry powders for inhalation. Proceedings drug delivery to the Lungs IX sponsored by The Aerosol Society, Dec. 14 & 15, 1998, p. 80 - 83.5

Keller M.: Novel non-CFC MDIs deliver higher fine particle doses compared to CFC-driven MDIs. Proceedings drug delivery to the Lungs IX sponsored by The Aerosol Society, Dec. 14 & 15, 1998, p. 147 -150.

Keller M., Müller-Walz R. and Pignatelli G.: Improvement in aerodynamic particle size distribution of MDIs. Poster presented at the AAPS in San Francisco, Nov. 15 - 19, 1998.

Keller M.

, Kraus Holger and Pignatelli G.: Higher variability of the emitted compared to the metered salbutamol dose due to method, cleaning, handling, operator and actuator effects. Proceedings Respiratory Drug Delivery VI, Hilton Head Island, May 3-7, 1998, p. 353 -354.

Keller M.: Developing Portable Inhalers - Optimising the technologies to obtain market approval. Management Forum Conference, No. E4-1298, April 27, 1998, The Rembrandt hotel, London, UK.

1997

Keller M., Kraus H., Comparone A., and Herzog K.: Improvement in dose-uniformity and fine particle dose of beclomethasone-dipropionate (BDP) metered dose inhalers (MDIs) powered by non-CFC propellants. Poster presentation at the 11th int. congress of ISAM Sept. 23 -26 , 1997, Sendai, Japan.

Keller M.: The JAGO multidose DPI - A sophisticated concept for advanced pulmonary drug delivery. Management Forum Conference on new DPls, June 23 & 24, 1997, London, UK.

Keller M., Kraus H., Comparone A., and Pignatelli G.: Effect of formulation and valve-type on the in-vitro performance of salbutamol MDIs powered by CFCs, 134a and 227. APV-Kurs no. 267 - Neue Inhalationssysteme, March 13 & 14, Tübingen, Germany.

1996

Meier M., Fischer F.X., Keller M., and Halfmann H.J.: Influence of alternative propellants on microbial viability in comparison to chlorofluorocarbons. Pharm. Ind. Vol. 58, No. 1, p. 78-82 (1996).

Keller M.: The JAGO DPI prototype 10 - in-vitro assessment compared to Pulmicort Turbuhaler. Management Forum Conference - Recent advances in DPIs, June 18, 1996 London , UK.

1995

Keller M., Kraus H., Comparone A., and Herzog K.. In-vitro characterisation of salbutamol MDIs powered by a CFC-blend and hydrofluoroalkane propellants. Proceedings drug delivery to the Lungs VI sponsored by The Aerosol Society, Dec. 14 & 15, 1995, p. 18 -21.

Keller M and Hattersly J.: Perspectives for pulmonary drug delivery approaching the late 1990's: Conference paper on drug delivery systems sponsored by Technomics, Nov. 1995 in Basel, CH.

Keller M., Kraus H., Trächslin E.: Usefulness of the twin impinger for characterisation of the invitro deposition of MDIs. Poster P90 presented at the 10th Int. congress of ISAM, May 17, 1995, Hamilton, Ontario. J. Aerosol in Medicine (1995), Vol. 8, No. 1, P 90.

Trächslin E., Keller M. and Gaibrois U.: In-vitro performance of JAGO's DPi, Glaxo's Diskhaler and Astra's Turbuhaler using the twin stage impinger BP93 as test device.6 Poster P142 presented at the 10th Int. congress of ISAM, May 18, 1995, Hamilton Ontario. J. Aerosol in Medicine (1995), Vol. 8, No. 1, P 142.

1994

Keller M.: Entwicklung von Inhalationsaerosolen. Fortbildungsveranstaltung der Apothekerkammer Westfalen-Lippe am 30.9.1992 in Münster, Germany.

Keller M., Trächslin E. and Gaibrois U.: Results on the JAGO dry powder inhaler (prototype series 9) - Dose uniformity and in-vitro deposition of Lactose powder containing 5% salbutamol-sulphate. Management Forum Conference on portable inhalers, Oct., 1994, London, UK.

Keller M.: The JAGO dry powder inhaler. A solution for advanced pulmonary drug administration. Management Forum Conference - Selecting a multidose DPI, May 19th, 1994, London, UK.

1992

Keller M.: Entwicklung von Inhalationsaerosolen. Fortbildungsveranstaltung der Apothekerkammer Westfalen-Lippe am 6. Nov. 1992 in Münster, Germany.

Keller M.: Technologische Probleme bei Formulierungen auf der Basis von P 134a. APV-Kurs Nr. 588, 29 -30.10.92 in Königswinter, Germany. 1991

Keller M.: The future of aerosols for inhalation therapy. Pharmaceutical Manufacturing International. Sterling publishing London, Dec. 1991, p. 165 - 167.

Keller M.. Pharmazeutische Aerosole - Eigenschaften , Anforderungen, FCKWUmweltproblematik und mögliche Alternativen. Deutsche Apotheker Zeitung, 131, No. 7 p. 263 -269, 1991.

Keller M.: Überlegungen zur Entwicklung von Inhalations-Dosieraerosolen auf Basis der alternativen Treibgase Tetrafluorethan (134a) und Heptafluorpropan (227). APV-Kurs Nr. 538, 12 & 12. März, 1991, Köln, FRG.

1989

Keller M., Leifke E., Seregi A.: Effect of clonixin-lysinate on eicosanoid sysnthesis. Naunyn Schmiedebergs Archiv Pharmacol. Suppl. 315, R 79. Kongress der deutschen Gesellschaft für Pharmakologie und Toxikologie vom 16 - 19.3.1989 in Mainz, FRG.

1988

Keller M.: Bioäquivalenz-Studien: Komplexe Materie. Deutsche Apotheker Zeitung, 128, Nr. 36, 1860 -1861, 1988.

Keller M., Bezier H. und Nieder M.: Doxycyclin - In-vitro Freisetzung und Bioverfügbarkeit von sechs Fertigarzneimitteln. Deutsche Apotheker Zeitung, 128, Nr. 30, 1565 -1571, 1988.

Keller M.: Bioäquivalenzstudien - Komplexe Materie. Deutsche Apotheker Zeitung, 128, Nr. 36, 1860 - 1861, 1988.7

Keller M.: Generika - Bioverfügbarkeit und Bioäquivalenz; Ergebnisse von Bioverfügbarkeitsuntersuchungen. Pharm. Rundschau, 1/2, 84-88, 1988.

1987

Gebicke-Haerter P., Brenner A., Keller M. and Hertting G.: Phorbolesters, R 59022, a diacylglycerolkinase inhibitor, and extracellular calcium synergistically promote prostaglandin synthesis in primary astrocyte cultures. Naunyn Schmiedebergs Archiv Pharmacol. Suppl. 165, R 42. Kongress der deutschen Gesellschaft für Pharmakologie und Toxikologie im 10,- 13.3.1987 in Mainz, FRG.

Keller M., Seregi A., Hertting G. and Jackisch R.: Prostanoid formation in primary astroglial cell cultures: Ca-dependnacy and stimulation by A 23187, Melittin and phospholipase f\2 and C. Neurochem. Int. Vol. 7, No. 4, 433 - 443, 1987.

Seregi A., Keller M., and Hertting G.: Are cerebral prostanoids of astroglial origin ? Studies on the prostanoid forming system in developing rat brain and primary cultures of rat astrocytes. Brain Res. Vol. 404, 113 -120, 1997.

Keller M.: Generika - Bioverfügbarkeit and Bioäquivalenz. Vortrag beim Selbstmedikationskongress in der Alten Oper in Frankfurt am 5./6. 10.1997.

1986

Seregi A., Keller M., Jackisch R. and Hertting G.: Characterization of the prostanoid forming system of astrocytes in primary cultures. 6th Int. conference on prostaglandins and related compounds. June 3-6, 1986, Florence, Italy.

1985

Hertting G., Keller M., and Seregi A.: Cellular origin and ontogenesis of prostanoid synthesis in rat brain tissue. 10th Int. meeting of Int. society for neurochemistry, May, 19-24, 1985 in Riva del Garda, Italy.

Seregi A., Keller M., and Hertting G.: Cellular origin of prostanoids in the brain. Proc. 4th Cong. Hung. Pharmacol. Soc. Budapest, 3, 539 - 545, 1985. Keller M., Jackisch R., Seregi A., and Hertting G.: Comparision of prostanoid forming capacity of neuronal and astroglial cells in primary cultures. Neurochem. Int. 7, No. 4, 655 - 665, 1985.

Keller M. und Philipp F.: In-vitro Bestimmung der Chlorhexidin Aufnahme und -Abgabe verschiedener harter und weicher Kontaktlinsen. Acta Pharmazeutika Technologica, Vol. 31, Nr. 3, 167 - 180, 1985.

1984

Seregi A., Keller M., Jackisch R. and Hertting G.: Comparison of the prostanoid forming capacity in homogenates from primary neuronal and astroglial cell cultures. Biochem. Pharmacol. Vol. 33, No. 20, 3315 - 3318, 1984.8

1983

Keller M., Seregi A., Jackisch R.; and Hertting G.: Comparision of prostaglandin forming capacity of neuronal and astroglial cells in primary cultures. Naunyn Schmiedebergs Archiv Pharmacol. Suppl. 324, 243, R 61. Kongress der deutschen Gesellschaft für Pharmakologie und Toxikologie im September 1983 in Freiburg, FRG. 1982

Keller M.: Die Problematik der Reinigung harter, gasdurchlässiger Kontaktlinsen. Der Schweizer Optiker, Nr. 4, 191 -193, 1982.

Keller M.: Krümmungsverhalten von HEMA-Kontaktlinsen. Mögliche Ursachen von Änderungen durch Aufbewahrungslösungen. Neues Optiker Journal, 24, Nr. 8, 61 -63, 1982.

1981

Keller M. Kontaktlinsen - Ihre Materialien und Eigenschaften. Pharm. Zeitung, 126, Nr. 27, 58 - 63, 1981.

Keller M. Kontaktlinsen - Ursachen möglicher Unverträglichkeiten. Pharm. Zeitung, 126, Nr. 27 , 58 -63, 1981. Fries S. und Keller M.: Enzyme in der Kontaktlinsenpflege. Neue Optiker Zeitung, 23, Nr. 3, 58-63, 1981.

1980

Keller M. und Schnee P.: Gaschromatographische Bestimmung von Äthylenglykolsalicylat in einem Gel- und Salbenpräparat. Deutsche Apotherk Zeitung, 120, Nr. 36, 1703 -1704, 1980.