Annsofi Nihlén, Ph.D
CEO, Senior Consultant and Advisor
annsofi.nihlen@pkxpert.com
+46(0)765 698175
www.PKxpert.com

PKXPERT | AB

PRESENTATION

Specialist in pharmacokinetics with over 19 years of experience in pharmaceutical industry from Active Biotech AB (Lund), Novo Nordisk A/S (Copenhagen), and since 2010 as senior consultant and advisor first employed as senior consultant at Semcon Caran AB (Stockholm) and then founder of PKxpert AB (2013). Before that 8 years in academia; PhD and post-doc studies within the field of pharmacokinetics (PK), drug metabolism (DM), toxicology and bioanalysis. As consultant various assignments in over 20 companies, developing both small molecule drugs (NCE) and biologics (NBE). Supporting preclinical and clinical programs with PK expertise covering all development phases from drug discovery until regulatory filing for market authorization. Additional training in good laboratory practice (GLP) and quality assurance (QA) activities, including audits, and implementation of GLP into a CRO.
Ability to work with multiple customers and projects, excellent track record, timely delivery, result oriented, structured and proactive.

PROFESSIONAL EXPERIENCE LIFE SCIENCE

Founder and CEO PKxpert AB - Life Science Consulting, Stockholm *March 2013-present*
Senior consultant and advisor supporting big pharma, midsize to small biotech companies and CRO's within drug development.

Senior Consultant at Semcon Drug Development Consulting Semcon Caran AB, Stockholm, Sweden *August 2010 – March 2013,*
Consultant supporting small biotech companies and CRO's within drug development. Assignments included strategy plans, study design of preclinical and clinical studies, preclinical and discovery animal DMPK studies, scaling from in vitro studies and animal studies to humans, PK simulations and evaluation both in animals and in humans, and working with contract research organizations (see further page 2).

DMPK Specialist, DMPK & Bioanalysis, Global Development, *October 2008 – August 2010,* Novo Nordisk A/S, Denmark
Advisory Scientist, DMPK & Bioanalysis, *October 2007 – September 2008¸* Novo Nordisk A/S, Denmark
Research Scientist, Pharmacokinetics and Biomodelling**,** *January 2005 – September 2007,* Novo Nordisk A/S, Denmark
DMPK coordinator in preclinical and clinical projects, both NCE and NBE. Principal Investigator in multisite studies. Evaluating dose levels in first human dose studies, writing and compiling regulatory documents, due diligence in-licensing of biopharmaceuticals and being part of bringing several products into clinical development. In addition, responsible for PK documentation in filing of a new drug application, Victoza® (type 2 diabetes), approved for market authorization in Europe and Japan 2009, and in the US 2010. Functioning as mentor to younger colleagues. Novo Nordisk develops small molecules, peptides and proteins against diabetes, cancer and anti-inflammatory diseases.

Pharmacokineticist*,* Preclincal Development, *January 2000 – December 2004,* Active Biotech Research AB, Lund, Sweden
PK representative in project groups, both NCE and NBE projects, within the therapeutic areas, autoimmunity/inflammation and cancer. Responsible for co-ordinating, designing, evaluating and reporting pharmacokinetic and drug metabolism GLP or nonGLP studies as Principal Investigator or Study Director within the preclinical & drug discovery phases, multi-site toxicology and safety pharmacology. Calculated PK and performed various data simulations. Interpreted, evaluated and wrote the corresponding reports as well as summarised the data for regulatory purposes. Further, analysed clinical PKPD data (phase I and phase II) using WinNonlin and NONMEM.

Post-doctoral fellow Institute of Occupational Health Sciences (IST), Lausanne, Switzerland, *1999 – 2000.*
Grant from Swedish Council for Work Life Science Developed a toxicokinetic model, describing the exposure and biological monitoring of methylformate, published in a peer-reviewed journal.

Ph.D. student National Institute for Working Life (NIWL) and IMM, Karolinska Institute, Solna, Sweden. 1994 – 1999.
Supervisors: Prof. Gunnar Johanson (main), Agneta Löf and Peter Moldeus.
Evaluation of toxicokinetics and acute effects of gasoline additives in volunteers. Summarized it in 7 peer-reviewed publications covering bioanalysis, pharmacokinetics, metabolism, statistics, acute effects, to developing a physiological based pharmacokinetic (PBPK) model. Beside the research work, also involved in different risk assessment projects as that was the aim of the institute.

Research engineer National Institute of Occupational Health (NIOH), Solna, Sweden, 1992-1994.
Involved in laboratory work and the position was transformed to a PhD-student position.

Inspector Swedish Nuclear Power Inspectorate, Stockholm, Sweden, 1990-1991. Responsible inspector, Nuclear Research Facility Studsvik.

Graduate student Department of Bio-Organic Chemistry, Utrecht University, The Netherlands 1989.
Final work in bio-organic chemistry, 20p (=20 weeks) exchange program between Lund and Utrecht University.

Laboratory engineer 1985-86 and **Process operator/laboratory assistant** (summer vacations 1983-89) Perstorp AB, Perstorp, Sweden

ACADEMIC DEGREES

Ph. D. in Toxicology (Toxicokinetics) 1999 Karolinska Institute, Sweden. Thesis: Ethers as Gasoline Additives – Toxicokinetics and Acute Effects in Humans". Published in *Arbete och Hälsa*, 1998:28. http://diss.kib.ki.se/1999/91-7045-504-X/
B. Sc. in Chemistry 1990 Lund University, Sweden. Chemistry (120 p = 3 yr), Biology (20 p = 0.5 yr), Mathematics (20 p = 0.5 yr).
In total 160 p, equivalent to a M.Sc. degree today.

PKxpert AB, ANNSOFI NIHLÉN Ph.D.
CEO and Founder of PKxpert AB, Senior Consultant and Advisor
• +46 (0)765 698175 • E-MAIL • annsofi.nihlen@pkxpert.com • www.pkxpert.com

Annsofi Nihlén, Ph.D
CEO, Senior Consultant and Advisor
annsofi.nihlen@pkxpert.com
+46(0)765 698175
www.PKxpert.com

LIFE SCIENCES COURSES

Pharmacokinetics courses

- DMDG & Swedish Academy of Pharmaceutical Sciences Joint Meeting 16th-18th October 2018
- DMDG - Peptide ADME Discussion Group - 1st Workshop 15th October 2018
- DMDG 4th Biologics Symposium: Development of Peptide and Oligonucleotide Drugs: DMPK and Regulatory Perspectives. Mar 1-2, 2017, DK
- PKPD data analysis: A hands-on workshop using WinNonlin, Oct 2015, Lissabon
- Training Course DMDG Large Molecules. Oct 7-10, 2014, UK
- Phoenix WinNonlin, Dec 5-8, 2011, Pharsight, FR
- PBPK modelling and risk assessment course, Feb 14-19, 2008, Research Triangle Park, NC, US
- Kinetica 3-days hands-on course, Jun 13-15, 2006, Thermo Election Corp, UK
- PK and PD analysis with NONMEM, Sept 15-18 2006, Pharmacokinetics Inc. NJ, US
- NONMEM 5 days intensive training workshop, May 12-16, 2003, FR
- Preclinical Pharmacokinetics workshop, DMDG, 26 Feb-1 Mar 2002, UK
- Intermed Level Workshop PKPD Data Analysis: hands-on WinNonlin, Oct 15-18, 2001, FR
- PKPD data analysis: A hands-on workshop using WinNonlin, June 3-6, 1997 Cambridge, UK
- Pharmacokinetics, 7p / 7 weeks, 1995 Pharmaceutical faculty, Uppsala University, SE
- Toxicokinetic modelling in occupational / environmental medicine, 2wks, 1992, NIOH, SE
- 1 Week Workshop in Basic PK, 1992, Manchester, UK

Quality Assurance (QA) and GLP training

- Good Laboratory Practice (GLP), Workshop Multi-Site studies, Aug 2018, PKxpert AB, Broeders
- Principles on GLP & Compliance Monitoring Advisory Doc No. 17 and GLP to Computerised Systems, Mar 2017, PKxpert AB, Broeders
- RQA EL0030: Advanced Good Laboratory Practice (GLP), Feb 2016, PKxpert AB, Broeders
- Refresher training course in GLP, 2014 PKxpert, SE
- Auscultation of QA audits with three senior QA and QA work at Adlego: G. Nyborg (2010-11), A. Broeders (2011-12), A. Wichman (2012-present)
- Refresher course in GLP, May 29, 2013 Adlego, SE
- Refresher training course in GLP, Aug 25, 2011 Semcon, SE
- Refresher training course in GCP and GLP, Jun 27, 2008, Novo Nordisk A/S, DK
- GLP sponsor seminar, Sept 19, 2007, Novo Nordisk A/S, DK
- GLP course for study directors/principal invest, 2 days, 2003, Active Biotech, SE

Other Life Science courses

- Human Skills for Project leaders, Nov 13-16 2012, Semcon, SE
- Immunology, 2.5 days, Mar 2009, Novo Nordisk A/S, DK
- Clinical Pharmacology and Biostatistics, MIND 10-day course, May 2008, Pharma University of Copenhagen
- Regulatory Affairs Course, Dec 5-6, 2007, Apotekarsociteten, SE
- Immunology and inflammation pharmacology, Oct 8, 2007, Apotekarsoc, SE
- Clinical trials and critical evaluation of clinical research, 2 w, 1998, Kl, SE
- Masspectrometry for biotechnology, 2 weeks, 1996, Kl, SE
- Statistics, Analysis of Variance (ANOVA), 1 week, 1995, Kl, SE
- Occupational toxicology, 2 weeks, 1995, NIWL, SE
- Drug metabolism, 2 weeks, 1994, NIWL, SE
- Education in handling animals for scientific research, Dec 22, 1994, NIOH, SE
- Toxicology, 20p / 20 weeks, 1993 Karolinska Institute, SE
- Designing clinical research, 2 weeks, 1993 NIOH, SE
- Parametric and nonparametric statistics, 4 weeks, 1993/1994, KI, SE

MEMBERSHIPS

SARQA, Swedish Association of Research Quality Assurance
Apotekarsociteten

PEER-REVIEWED PUBLICATIONS

Steele, Anthony, Saunders, Esmarck, Ehrnrooth, Kristjansen, *Nihlén*, Hansen and Cassidy (2012) A phase 1 trial of recombinant human IL-21 in combination with cetuximab in patients with metastatic colorectal cancer *British Journal of Cancer*, 7 February 2012

Krishnan K, *Nihlen A*, Ernstgard L and Johanson G. (2005) Simulation of the inhalation pharmacokinetics of MTBE in humans. Proceedings of Int. Health Sciences Simulation Conference, The Society for Computer Simulation Int., San Diego, pp 105-110.

Nihlén A, Droz P-O. (2000) Toxicokinetic Modeling of Methyl Formate Exposure and Implications for Biological Monitoring. *Int. Arch. Occup. Environ. Health.* 73(7):479-487.

Nihlén A, Johanson G. (1999). Physiologically based toxicokinetic modelling of inhaled ethyl *tertiary*-butyl ether in male volunteers. *Toxicol. Sci.* 51, 184-194.

Nihlén A, Sumner S, Löf A, Johanson G. (1999) ^{13}C-labeled-MTBE: Toxicokinetics and characterization of urinary metabolites in humans. *Chem. Res. Toxicol.* 12, 822-830.

Nihlén A. (1999) Scientific basis Swedish Occupational Standards XX. Criteria Group for Occupational Standards: Methyl *tert*-butyl ether. *Arbete och Hälsa* 1999: 26: 22-36.

Nihlén, A., Löf, A., Johanson, G. (1998). Controlled ethyl *tertiary*-butyl ether (ETBE) exposure of male volunteers: I. Toxicokinetics. *Toxicol. Sci.* 46, 1-10.

Nihlén, A., Löf, A., Johanson, G. (1998). Controlled ethyl *tertiary*-butyl ether (ETBE) exposure of male volunteers: II. Acute effects. *Toxicol. Sci.,* 46, 143-150. *Nihlén, A.*, Johanson, G., Löf, A. (1998). Experimental exposure to methyl *tertiary*-butyl ether: I. Toxicokinetics in humans. *Toxicol. Appl. Pharmacol.* 148, 274-280. *Nihlén, A.,* Wålinder, R., Johanson, G., Löf, A. (1998). Experimental exposure to MTBE: II. Acute effects in humans. *Toxicol. Appl. Pharmacol.* 148, 281-287. Gillner, M. (1998) *Nihlén, A*. "Chap 6. Kinetics and Metabolism in Humans and Laboratory Animals", p. 80-100. Environmental Health Criteria 206, (IPCS), WHO, Geneva.

Johanson, G., *Nihlén, A.*, Löf, A. (1995) "Toxicokinetics and acute effects of MTBE and ETBE in male volunteers" *Toxicol. Lett.* 82-3: 713-718.

Nihlén A., Löf A., Johanson G. (1995) "Liquid/air partition coefficients of methyl and ethyl t-butyl ethers, t-amyl methyl ether, and t-butyl alcohol" *J. Expos. Anal. Environ. Epidem.* 5: 4: 573-582 Reprinted in *J. Clean Technol., Environ. Toxicol., & Occup. Med.* 1997: 6: 205-213.

PKxpert AB, ANNSOFI NIHLÉN Ph.D.
CEO and Founder of PKxpert AB, Senior Consultant and Advisor
PHONE • +46 (0)765 698175 • E-MAIL • annsofi.nihlen@pkxpert.com • www.pkxpert.com •