

PERSONAL INFORMATION

Irja Lutsar

WORK EXPERIENCE

2009–Present

Professor in Medical Microbiology and Virology

University of Tartu, Faculty of Medicine, Department of Microbiology, Chair of Medical Microbiology and Virology, (Estonia)

[Related document\(s\):](#)

2004–2009

Professor in Medical Microbiology and Virology

University of Tartu, Faculty of Medicine, Department of Microbiology, Chair of Medical Microbiology and Virology, (Estonia)

[Related document\(s\):](#)

2003–2004

Director

Pfizer Ltd., Global Research and Development, (United Kingdom)

[Related document\(s\):](#)

1999–2003

Clinical Project Manager

Pfizer Ltd., Global Research and Development, (United Kingdom)

[Related document\(s\):](#)

1998–1999

Associated Professor in Paediatrics

Tartu University, Faculty of Medicine, Paediatric Department , (Estonia)

[Related document\(s\):](#)

1995–1998

Fellow in paediatric infectious diseases

Southwestern Medical Center at Dallas, (United States)

[Related document\(s\):](#)

1992–1995

Head of Paediatric Infectious Diseases Department

Tartu University Children's Hospital, (Estonia)

[Related document\(s\):](#)

1982–1992

Deputy Head of the Paediatric Hospital

Tartu University Children's Hospital, (Estonia)

[Related document\(s\):](#)

1979–1982 **Paediatrician**
Võru Hospital, (Estonia)

[Related document\(s\):](#)

1978–1979 **Internship in paediatrics**
First Children's Hospital, (Estonia)

[Related document\(s\):](#)

EDUCATION AND TRAINING

1995–1998 **Research Fellow in Paediatric Infectious Diseases**
Southwestern Medical School, Dallas, (United States)

[Related document\(s\):](#)

1992–1995 **PhD**
University of Tartu , (Estonia)

Irja Lutsar, Doctor's Degree, 1995, (sup) Tiina Talvik, Kesknärvisüsteemi põletikulised haigused lastel (kliinilis-epidemioloogiline iseloomustus ja kaugtulemused) (Infections of the central nervous system in children (epidemiologic, diagnostic and therapeutic aspects, long term outcome)), University of Tartu, Faculty of Medicine.

[Related document\(s\):](#)

1978–1979 **Internship in Paediatrics**
Tallinn First Children's Hospital , (Estonia)

[Related document\(s\):](#)

1972–1978 **MD**
University of Tartu , (Estonia)

[Related document\(s\):](#)

ADDITIONAL INFORMATION

Expertise
clinical trials
PK/PD
infectious diseases
clinical microbiology
neonatal infectious diseases

Publications
Mitt, P.; Metsvaht, T.; Adamson, V.; Telling, K..; Naaber, P.; Lutsar, I.; Maimets , M. (2013). Five-year prospective surveillance of nosocomial bloodstream infections in an Estonian paediatric intensive care unit. *Journal of Hospital Infection*, xx - xx.

Turner, MA.; Duncan, JC.; Shah, U.; Metsvaht, T.; Varendi, H.; Nellis, G.; Lutsar, I.; Yakkundi, S.; McElroy, JC.; Pandya, H.; Mulla, H.; Vaconsin, P.; Storme, T.; Rieutord, A.; Nunn, AJ. (2013). Risk

- assessment of neonatal excipient exposure: Lessons from food safety and other areas. *Advanced Drug Delivery Reviews*, x
- Turner, MA.; Duncan, J.; Shah, U.; Metsvaht, T.; Varendi, H.; Nellis, G.; Lutsar, I.; Vaconsin, P.; Storme, T.; Rieutord, A.; Nunn, AJ. (2013). European Study of Neonatal Exposure to Excipients: an update. *International Journal of Pharmacy Practice*, 457(1), 357 - 358.
- Brilene, T.; Soeorg, H.; Kiis, M.; Sepp, E.; Kõljalg, S.; Lövukene, K.; Jürna-Ellam, M.; Kalinina, J.; Stšepetova, J.; Metsvaht, T.; Lutsar, I. (2013). In vitro synergy of oxacillin and gentamicin against coagulase-negative staphylococci from blood cultures of neonates with late-onset sepsis. *APMIS*, 121(9), 859 - 864.
- Avi, R.; Huik, K.; Pauskar, M.; Ustina, V.; Karki, T.; Kallas, E.; Jõgeda, EL.; Krispin, T.; Lutsar, I. (2013). Transmitted Drug Resistance Is Still Low in Newly Diagnosed Human Immunodeficiency Virus - 1 CRF06_cpx Infected Patients in Estonia in 2010. *Aids Research and Human Retroviruses*, x
- Huik, K.; Avi, R.; Pauskar, M.; Kallas, E.; Jõgeda, EL.; Karki, T.; Marsh, K.; Des Jarlais, D.; Uusküla, A.; Lutsar, I. (2013). Association between TLR3 rs3775291 and resistance to HIV among highly exposed Caucasian intravenous drug users. *Infection, genetics and evolution*, 20, 78 - 82.
- Huik, K.; Avi, R.; Carrillo, A.; Harper, N.; Pauskar, M.; Sadam, M.; Karki, T.; Krispin, T.; He, W.; Lutsar, I. (2013). CCR5 Haplotypes Influence HCV Serostatus in Caucasian Intravenous Drug Users. *PLoS ONE*, 8(7), e70561
- Oeser, C.; Lutsar, I.; Metsvaht, T.; Turner, MA.; Heath, PT.; Sharland, M. (2013). Clinical trials in neonatal sepsis. *The Journal of Antimicrobial Chemotherapy*, 68(12), 2733 - 2745.
- Garazzino, S.; Lutsar, I.; Bertaina, C.; Tovo, PA.; Sharland, M. (2013). New antibiotics for paediatric use: A review of a decade of regulatory trials submitted to the European Medicines Agency from 2000-Why aren't we doing better? *International Journal of Antimicrobial Agents*, 42(2), 99 - 118.
- Soeorg, H.; Huik, K.; Parm, U.; Ilmoja, ML.; Metelskaja, N.; Metsvaht, T.; Lutsar, I. (2013). Genetic Relatedness of Coagulase-Negative Staphylococci from Gastrointestinal Tract and Blood of Preterm Neonates with Late-Onset Sepsis. *The Pediatric Infectious Disease Journal*, 32(4), 389 - 393.
- Quinlivan, M.; Sengupta, N.; Papaevangelou, V.; Sauerbrei, A.; Grillner, L.; Rousseva, R.; Hague, R.; Lutsar, I.; Jogi, P.; Leca, A.; Grytchol, R.; Alain, S.; Breuer, J. (2013). Use of oral fluid to examine the molecular epidemiology of varicella zoster virus in the United Kingdom and continental Europe. *The Journal of Infectious Diseases*, 207(4), 588 - 593.
- Lass, J.; Odlind, V.; Irs, A.; Lutsar, I. (2013). Antibiotic prescription preferences in paediatric outpatient setting in Estonia and Sweden. *SpringerPlus*, 2, 124 - xx.
- Lill, M.; Köks, S.; Soomets, U.; Schalkwyk, LC.; Fernandes, C.; Lutsar, I.; Taba, P. (2013). Peripheral blood RNA gene expression profiling in patients with bacterial meningitis. *Frontiers in Neuroscience*, 7, 33
- Standing, JF.; Tsolia, M.; Lutsar, I. (2013). Pharmacokinetics and pharmacodynamics of oseltamivir in neonates, infants and children. *Infectious Disorders - Drug Targets*, 13(1), 6 - 14.
- Huang, X.; Lodi, S.; Fox, Z.; Li, W.; Phillips, A.; Porter, K.; Lutsar, I.; Kelleher, A.; Li, N.; Xu, X.; Wu, H.; Johnson, AM. (2012). Rate of CD4 decline and HIV-RNA change following HIV Seroconversion in men who have sex with men: a comparison between the Beijing PRIMO and CASCADE cohorts. *Jaids-Journal of Acquired Immune Deficiency Syndromes*, x
- Lass, J.; Naelapää, K.; Shah, U.; Kääär, R.; Varendi, H.; Turner, MA.; Lutsar, I. (2012). Hospitalised neonates in Estonia commonly receive potentially harmful excipients. *BMC Pediatrics*, 12, 136
- Padari, H.; Metsvaht, T.; Kõrgvee, LT.; Germovsek, E.; Ilmoja, ML.; Kipper, K.; Herodes, K.; Standing, JF.; Oselin, K.; Lutsar, I. (2012). Short versus Long Infusion of Meropenem in Very-Low-Birth-Weight Neonates. *Antimicrobial Agents and Chemotherapy*, 56(9), 4760 - 4764.
- Esposito, S.; Cohen, R.; Domingo, JD.; Pecurariu, OF.; Greenberg, D.; Heininger, U.; Knuf, M.; Lutsar, I.; et al. (2012). Antibiotic Therapy for Pediatric Community-Acquired Pneumonia: Do We Know When, What and For How Long to Treat? *The Pediatric Infectious Disease Journal*, 31(6), e78 - e85.
- Soeorg, H.; Tamm, E.; Huik, K.; Pauskar, M.; Mägi, D.; Pruudel, K.; Vainomäe, L.; Moosar, L.; Kirss, K.; Tamm, S.; Närskä, M.; Pütsepp, A.; Nurm, H.; Pruunsild, K.; Jänes, A.; Zilmer, K.; Lutsar, I. (2012). Group A rotavirus genotypes circulating prior to implementation of a National Immunization Program in Estonia. *Human Vaccines*, 8(4), 465 - 469.
- Tamme, Kadri; Minajeva, Ave.; Adamson, Vivika; Ristmägi, Kaarina; Pöder, Jaak; Lutsar, Irja (2012). Clinical Findings and Pathologic Changes Associated with Fatal Cases of 2009/2010 Pandemic Influenza A/H1N1 Viral Infection in Estonia. A Retrospective Study. *Medicina (Kaunas)*, 48(1), 48 - 56.
- Jogi, P.; Oona, M.; Tamm, E.; Lutsar, I. (2012). Läkaköha nüüdisaegne diagnostika. *Eesti Arst*, 91(1), 19 - 25.

Prükk, T.; Maimets, M.; Lutsar, I. (2012). Lyme'i töve nüüdisaegne diagnostika ja ravi. Eesti Arst, 91(2), 141 - 147.

Lass, Jana; Metsvaht, Tuuli; Nellis, Georgi; Lutsar, Irja (2012). The comparability of different study methodologies for evaluating antibiotic consumption in neonatal intensive care units (NICU). ESPID . , 2012.

Nellis, Georgi; Varendi, Heili; Lass, Jana; Lutsar, Irja; Metsvaht, Tuuli. (2012). Antibiotic prescribing in European neonatal intensive care units: service evaluation study of the European study of neonatal exposure to excipients. In: Eesti Arst: TÜ Arstiteaduskonna päev, okt.2012. , 2012, (91), 11.

Nellis, Georgi; Varendi, Heili; Lass, Jana; Lutsar, Irja; Metsvaht, Tuuli. (2012). Potentially Harmful Excipients in Antibiotics Prescribed to European Neonates - ESNEE Survey. In: Acta Médica Portuguesa : 3rd International Congress of UENPS, 2012; Porto, nov 14-17. , 2012, (25; 2), 141.

Varendi, Heili; Nellis, Georgi; Metsvaht, Tuuli; Lass, Jana; Lutsar, Irja. (2012). European Study of the Neonatal Exposure to Excipients: Results of the Survey, Enterally Administered Products. In: Acta Médica Portuguesa: 3rd International Congress of UENPS 2012; Porto, nov 14-17. Portugal:, 2012, (25; S2), 141 - 142.

Parm, U.; Metsvaht, T.; Sepp, E.; Ilmoja, ML.; Pisarev, H.; Pauskar, M.; Lutsar, I. (2011). Risk factors associated with gut and nasopharyngeal colonization by common Gram-negative species and yeasts in neonatal intensive unit patients. Early Human Development, 87(6), 391 - 399.

Lass, J.; Irs, A.; Pisarev, H.; Leinemann, T.; Lutsar, I. (2011). Off label use of prescription medicines in children in outpatient setting in Estonia is common. Pharmacoepidemiology and Drug Safety, 20(5), 474 - 481.

Heidmets, LT.; Metsvaht, T.; Ilmoja, ML.; Pisarev, H.; Oselin, K.; Lutsar, I. (2011). Blood Loss Related to Participation in Pharmacokinetic Study in Preterm Neonates. Neonatology, 100(2), 111 - 115.

Avi, R; Huik, K; Pauskar, M; Ustina, V; Karki, T; Krispin, T; Ainsalu, K; Paap, P; Schmidt, J; Nikitina, N; Lutsar, I. (2011). Emerging Transmitted Drug Resistance in Treatment Naïve Human Immunodeficiency Virus - 1 CRF06_cpx Infected Patients in Estonia. Scandinavian Journal of Infectious Diseases, 43(2), 122 - 128.

Yakkundi, Shirish; McElroy, James; Millership, Jeff; Mulla, Hussain; Pandya, Hitesh; Shah, Utpal; Nunn, Tony; Rieutord, Andre; Storme, Thomas; Vasconsin, Pascal; Metsvaht, Tuuli; Varendi, Heili; Nellis, Georgi; Lutsar, Irja; Turner, Mark. (2011). Use of dried blood spots to study excipient kinetics in neonates. Bioanalysis, 3(24), 2691 - 2693.

Lutsar, I.; Trafojer, UM.; Heath, PT.; Metsvaht, T.; Standing, J.; Esposito, S.; de Cabre, VM.; Oeser, C.; Aboulker, JP. (2011). Meropenem vs standard of care for treatment of late onset sepsis in children of less than 90 days of age: study protocol for a randomised controlled trial. Trials, 12, 215

Metsvaht, T.; Ilmoja, ML.; Parm, U.; Merila, M.; Maipuu, L.; Müürsepp, P.; Julge, K.; Sepp, E.; Lutsar, I. (2011). Ampicillin versus penicillin in the empiric therapy of ELBW neonates at risk of early onset sepsis. Pediatrics International, 5(53), 873 - 880.

Freire-Moran, L.; Aronsson, B.; Manz, C.; Gyssens, IC.; So, AD.; Monnet, DL.; Cars, O.; ECDC-EMA Working Group (incl. Lutsar, I.) (2011). Critical shortage of new antibiotics in development against multidrug-resistant bacteria-Time to react is now. Drug Resistance Updates, 14, 118 - 124.

Parm, U.; Metsvaht, T.; Sepp, E.; Ilmoja, ML.; Pisarev, H.; Pauskar, M.; Lutsar, I. (2011). Mucosal surveillance cultures in predicting Gram-negative late-onset sepsis in neonatal intensive care units. Journal of Hospital Infection, 78(4), 327 - 332.

Lass, Jana; Kääär, Ruth; Jögi, Kaarin; Varendi, Heili; Metsvaht, Tuuli; Lutsar, Irja (2011). Drug utilisation pattern and off-label use of medicines in Estonian neonatal units. European Journal of Clinical Pharmacology, 12(67), 1263-1271 - 1271.

Knellwolf, A.L.; Bauzon, S.; Della Casa Alberighi, O.; Lutsar, I.; Bacsy, E.; Alfarez, D.; Panei, P. (2011). Framework conditions facilitating paediatric clinical research. Italian Journal of Pediatrics, 37, 12

Müürsepp, P.; Köivumägi, K.; Kumm, ML.; Zilmer, K.; Lutsar, I. (2011). Tuulerõuged laste ja noorukite hospitaliseerimise põhjusena Eestis aastatel 2000–2005. Eesti Arst, 91 (1), 27 - 32.

Lill, M.; Lutsar, I.; Taba, P. (2011). Community-acquired bacterial meningitis in Estonia 2008-2009. In: EUROPEAN JOURNAL OF NEUROLOGY: 15th Congress of the European-Federation-of-Neurological-Societies (EFNS) Location: Budapest, HUNGARY Date: SEP 10-13, 2011 . , 2011, (SI 2), 476.

Standing, J.; Morris, J.; Germovsek, E.; Lutsar, I.; Cortina-Borja, M. (2011). Methods for Optimising Neonatal Antimicrobial Use: Time- and Concentration-Dependent Agents. Page Conference, Athens 2011. , 2011.

Walsh, T.J.; Driscoll, T.; Milligan, P.A.; Wood, N.D.; Schlam, H.; Groll, A.H.; Jafri, H.; Arrieta, A.C.;

- Klein, N.J.; Lutsar, I. (2010). Pharmacokinetics, safety, and tolerability of voriconazole in immunocompromised children. *Antimicrobial Agents and Chemotherapy*, 54, 4116 - 4123.
- Parm, Ü.; Metsvaht, T.; Sepp, E.; Ilmoja, M.L.; Pisarev, H.; Pauskar, M.; Lutsar, I. (2010). Impact of empiric antibiotic regimen on bowel colonization in neonates with suspected early onset sepsis . *European Journal of Clinical Microbiology & Infectious Diseases*, 29(7), 807 - 816.
- Avi, R.; Huik, K.; Sadam, M.; Karki, T.; Krispin, T.; Ainsalu, K.; Paap, P.; Schmidt, J.; Nikitina, N.; Lutsar, I. (2010). Characterization of Integrase Region Polymorphisms in HIV-1 CRF06_cpx Viruses in Treatment Naïve Patients in Estonia . *Aids Research and Human Retroviruses*, 26(10), 1109 - 1113.
- Lutsar, I.; Metsvaht, T. (2010). Understanding pharmacokinetic/pharmacodynamic in managing neonatal sepsis. *Current Opinion in Infectious Diseases*, 23(3), 201 - 207.
- Metsvaht, T.; Ilmoja, M.L.; Parm, Ü.; Maipuu, L.; Merila, M.; Lutsar, I. (2010). Comparison of ampicillin plus gentamicin vs. penicillin plus gentamicin in empiric treatment of neonates at risk of early onset sepsis. *Acta Paediatrica*, 99(5), 665 - 672.
- Huik, K.; Sadam, M.; Karki, T.; Avi, R.; Krispin, T.; Paap, P.; Rüütel, K.; Uusküla, A.; Talu, A.; Abel-Ollo, K.; Lutsar, I. (2010). CCL3L1 copy number is a strong genetic determinant of HIV seropositivity in Caucasian intravenous drug users. *The Journal of Infectious Diseases*, 730 - 739.
- Lutsar, I.; Friedland, I. (2010). Clinical Trials of Anti-Infective Agents in Paediatrics. Rose, Klaus; van den Anker, John N. (Eds.). *Guide to Paediatric Drug Development* (170 - 177). Basel, Switzerland: Karger
- Lill, M.; Köks, S.; Soomets, U.; Schalkwyk, LC.; Fernandes, C.; Lutsar, I.; Taba, P. (2010). Peripheral blood RNA gene expression profiling in the patients with community-acquired bacterial meningitis. *20th European Congress of Clinical Microbiology and Infectious Diseases*, Vienna, Austria, 10 - 13 April. , 2010.
- Metsvaht, T.; Pisarev, H.; Ilmoja, M.L.; Parm, U.; Maipuu, L.; Merila, M.; Muurissepp, P.; Lutsar, I. (2009). Clinical parameters predicting failure of empirical antibacterial therapy in early onset neonatal sepsis, identified by classification and regression tree analysis. *BMC Pediatrics*, 9, 72
- Brown, AE.; Gifford, RJ.; Clewley, JP.; Kucherer, C.; Masquelier, B.; Porter, K.; Balotta, C.; Back, NK.; Jorgensen, LB.; de Mendoza, C.; Bhaskaran, K.; Gill, ON.; Johnson, AM.; Pillay, D.; CASCADE Collaboration including Lutsar, I. (2009). Phylogenetic reconstruction of transmission events from individuals with acute HIV infection: toward more-rigorous epidemiological definitions. *The Journal of Infectious Diseases*, 199(3), 427 - 431.
- Prymula, R; Anca, I; André, F; Bakir, M; Czajka, H; Lutsar, I; Mészner, Z; Salman, N; Simurka, P; Usonis, V. (2009). Central European Vaccination Advisory Group (CEVAG) guidance statement on recommendations for the introduction of HPV vaccines. *European Journal of Pediatrics*, 168, 1031 - 1035.
- Avi, R; Huik, K; Sadam, M; Karki, T; Krispin, T; Ainsalu, K; Paap, P; Schmidt, J; Nikitina, N; Lutsar, I. (2009). Absence of Genotypic Drug Resistance and Presence of Several Naturally Occurring Polymorphisms of Human Immunodeficiency Virus-1 CRF06_cpx in Treatment-Naïve Patients in Estonia. *Journal of Medical Virology*, 81(6), 953 - 958.
- Karlsson, MO.; Lutsar, I.; Milligan, PA. (2009). A population pharmacokinetic of voriconazole plasma concentration data from pediatric studies. *Antimicrobial Agents and Chemotherapy*, 53(3), 935 - 944.
- Lutsar, I.; Anca, I.; Bakir, M.; Usonis, V.; Prymula, R.; Salman, N.; Grezesiowski, P.; Greenberg, M. (2009). Epidemiological characteristics of pertussis in Estonia, Lithuania, Romania, the Czech Republic, Poland and Turkey-1945 to 2005. *European Journal of Pediatrics*, 168, 407 - 415.
- Lutsar, I.; Metsvaht, T.; Tamm, E. (2009). Meningokokiline infektsioon lastel ja täiskasvanutel . *Eesti Arst*, 88(1), 28 - 40.
- Huik, K.; Avi, R.; Sadam, M.; Karki, T.; Denks, K.; Krispin, T.; Ustina, V.; Rüütel, K.; Uusküla, A.; Murphy, G.; Lutsar, I. (2009). Performance of the BED-CEIA in population infected with HIV1 recombinant viruses CRF06cpx and CRF06A. In: *Clinical Microbiology and Infection: 19th European Congress of Clinical Microbiology and Infectious Diseases* Helsinki, Finland, 16 - 19 May 2009. , 2009.
- Lutsar Irja, Lass Jana (2009). Ravimite kasutamine lastel. *Lege Artis*, 5, 42 - 45.
- Jarrin, I.; Geskus, R.; Bhaskaran, K.; Prins, M.; Perez-Hoyos, S.; Muga, R.; Hernández-Aguado, I.; Meyer, L.; Porter, K.; del Amo, J.; Group author CASCADE Collaboration, (incl. I.Lutsar). (2008). Gender differences in HIV progression to AIDS and death in industrialized countries: slower disease progression following HIV seroconversion in women. *American Journal of Epidemiology*, 168(5), 532 - 540.
- Bhaskaran, K.; Hamouda, O.; Sannes, M.; Bonfassa, F.; Johnson, A.M.; Lambert, P.C.; Porter, K.; CASCADE, Collaboration (2008). Changes in the Risk of Death After HIV Seroconversion Compared

- With Mortality in the General Population. *JAMA : the journal of the American Medical Association*, 300(1), 51 - 59.
- Meriste, S.; Jacquet, J.-M.; Willems, P.; Lutsar, I. (2008). Immunologic response to Hib tetanus toxoid conjugated vaccine coadministered with DTPa either mixed or in two separate injections in toddlers not primed with Hib vaccine. *Human Vaccines*, 4(1), 31 - 35.
- Troke, P.; Aguirrebengoa, K.; Arteaga, C.; Ellis, D.; Heath, C.; Lutsar, I.; Rovira, M.; Nguyen, Q.; Slavin, M.; Chen, S. (2008). Treatment of Scedosporiosis with Voriconazole: Clinical Experience with 107 Patients. *Antimicrobial Agents and Chemotherapy*, 52(5), 1743 - 1750.
- Touloumi, G.; Pantazis, N.; Stirnadel, H.A.; Walker, A.S.; Boufassa, F.; Vanhems, P.; Porter, K.; Cascade including Lutsar, I. (2008). Rates and determinants of virologic and immunological response to HAART resumption after treatment interruption in HIV-1 clinical practice. *Jaids-Journal of Acquired Immune Deficiency Syndromes*, 49(5), 492 - 498.
- Pantazis, N.; Touloumi, G.; Vanhems, P.; Gill, J.; Buchere, H.C.; Porter, K.; CASCADE Collaboration (incl. Lutsar, I.) (2008). The effect of antiretroviral treatment of different durations in primary HIV infection. *AIDS*, 22(18), 2441 - 2450.
- Uudelepp, M.L.; Tamm, E.; Torm, S.; Urbsoo, K.; Pruunsild, K.; Part, R.; Lutsar, I. (2008). Bacterial meningitis in children in Estonia in 1980-1989 and 1998-2007. 17th ESPID; Graz, Austria; 13-17 May 2008. , 2008.
- Merila, M.; Metsvaht, T.; Parm, Ü.; Maipuu, L.; Müürsepp, P.; Lutsar, I. (2008). Maternal risk-factors of need for early change of empirical antibacterial treatment in neonates with high risk of sepsis.
- Eimra, K.; Parm, Ü.; Metsvaht, T.; Ilmoja, M.L.; Lutsar, I. (2008). Genotypic Relatedness of *Candida* spp. in Two NICU-s in Estonia. 26. European Congress of Clinical Microbiology and Infectious Diseases; Barcelona, Spain; 19-22 Apr 2008. , 2008.
- Parm, Ü.; Sepp, E.; Metsvaht, T.; Ilmoja, M.L.; Pruunsild, K.; Maipuu, L.; Kõljalg, S.; Makoid, E.; Lutsar, I. (2008). The association between mucosal colonisation with opportunistic pathogens and blood stream infections in the two NICUs in Estonia . 26. European Congress of Clinical Microbiology and Infectious Diseases; Barcelona; 19-22 Apr 2008. , 2008.
- Metsvaht, T.; Ilmoja, M.-L.; Parm, Ü.; Merila, M.; Maipuu, L.; Sepp, E.; Müürsepp, P.; Lutsar, I. (2008). Management of Early Onset Neonatal Sepsis (EOS): comparative study of ampicillin (AMP) vs penicillin (PEN) in combination with gentamicin (GEN) . International Conference of Antimicrobial Agents and Chemotherapy; Washington; 24-28 Oct 2008. , 2008.
- Truusalu, K.; Kõljalg, S.; Parm, Ü.; Sepp, E.; Metsvaht, T.; Naaber, P.; Löivukene, K.; Lutsar, I. (2008). Staphylococcal Infection and Colonization of Pediatric Intensive Care Unit Patients: MRSA versus MRSE. In: Abstract book : Emerging Technologies of Medical Importance for the Diagnosis of Infectious Diseases and the Detection of Pathogenic Microbes. 1 st Intenational ASM Conference in Beijing, April 6-10, 2008. , 2008, 44.
- Mitt, P.; Adamson, V.; Truusalu, K.; Parm, Ü.; Kõljalg, S.; Sepp, E.; Löivukene, K.; Lutsar, I.; Maimets, M. (2008). An outbreak of meticillin-resistant *Staphylococcus aureus* (spa type t008) in the paediatric intensive care unit of a university hospital, Tartu . In: Clinical Microbiology and Infection: 18th European Congress of Clinical Microbiology and Infectious Diseases. , 2008, (S7), Abstract number: P1439.
- Huik, K.; Avi, R.; Sadam, M.; Karki, T.; Albert, J.; Lutsar, I. (2008). Drug Resistance Mutations in HIV-1 CRF06_cpx Viruses Isolated from Treatment Naïve and Experienced Patients. In: European Journal of Medical Research: 19th European Students' Conference; Berlin; 28 September - 3 October 2008. , 2008.
- Avi, R.; Huik, K.; Karki, T.; Sadam, M.; Krispin, T.; Ainsalu, K.; Paap, P.; Schmidt, J.; Nikitina, N.; Lutsar, I. (2008). Drug Resistance Mutations and Genetic Barrier for Drug Resistance Development in Estonian HIV-1 CRF06_cpx Integrase Sequences. 14th International Bioinformatics Workshop on Virus Evolution and Molecular Epidemiology; Cape Town, South Africa; 1-5 September 2008. , 2008.
- Avi, R.; Huik, K.; Sadam, M.; Karki, T.; Krispin, T.; Paap, P.; Ainsalu, K.; Schmidt, J.; Nikitina, N.; Lutsar, I. (2008). Natural polymorphisms associated with integrase inhibitor drug resistance in Estonian HIV-1 CRF06_cpx strains. 18th European Congress of Clinical Microbiology and Infectious Diseases; Barcelona; 19.04-22.04.2008. , 2008.
- Sadam, M.; Karki, T.; Huik, K.; Avi, R.; Rüütel, K.; Uusküla, A.; Lutsar, I (2008). CCL3L1 Variable Gene Copy Number Influence on the Susceptibility to HIV-1/AIDS Among Estonian Intravenous Drug User. The 15th Conference on Retroviruses and Opportunistic Infections (CROI), Boston, 03.02-06.02.2008. , 2008.
- Tamm, E.; Naaber, P.; Maimets, M.; Oona, M.; Kõljalg, S.; Lutsar, I. (2007). Antimicrobial susceptibility and serogroup/serotype distribution of nasopharyngeal isolates of *Streptococcus pneumoniae* in healthy Estonian children in 1999-2003. *Clinical Microbiology and Infection*, 13(8), 824 - 826.

- Metsvaht, T.; Oselin, K.; Ilmoja, M.; Anier, K.; Lutsar, I. (2007). Pharmacokinetics of penicillin G in very-low-birth-weight neonates. *Antimicrobial Agents and Chemotherapy*, 51(6), 1995 - 2000.
- Sergejev, M.; Lutsar, I. (2007). Gripivastased ravimid. *Eesti Arst*, 86(2), 82 - 84.
- Denks, K.; Huik, K.; Avi, R.; Sadam, M.; Krispin, T.; Lutsar, I. (2007). GB virus C infection among HIV-positive patients in Estonia . *International Journal of Antimicrobial Agents*, 29(3), S155 - S155.
- Avi, R.; Huik, K.; Karki, T.; Sadam, M.; Paap, P.; Smidt, J.; Ainsalu, K.; Krispin, T.; Lutsar, I (2007). The coexistence of secondary PR mutations M36I, K20I and L63H predominates in CRF06_cpx and its next generation recombinant viruses circulating in Estonian treatment naive patients. In: *INTERNATIONAL JOURNAL OF ANTIMICROBIAL AGENTS*; 2007, S549 - S549.
- Parm, Ü., Sepp, E., Metsvaht, T., Ilmoja, M.L., Lutsar, I. (2007). Oportunistlike mikroobide esinemine intensivravi osakonnas viibivatel vastsündinutel . In: *Eesti Arst: Öppejöudude, teadurite, doktorantide, magistrantide ja üliõpilaste teaduskonverents 18. oktoobril 2007 TÜ Biomeedikumis*. Eesti Arst, 2007, (9), 673.
- Lutsar, I.; Mikelsaar, M.; Karki, T. (2007). Meditsiiniline mikrobioloogia II. Tartu: Tartu Ülikooli Kirjastus
- Meriste, S.; Lutsar, I.; Tamm, E.; Willems, P. (2006). Safety and immunogenicity of a primary course and booster dose of a combined diphtheria, tetanus, acellular pertussis, hepatitis B and inactivated poliovirus vaccine. *Scandinavian Journal of Infectious Diseases*, 38(5), 350 - 356.
- Meriste, S.; Oona, M.; Tamm, E.; Lutsar, I. (2006). Immuniseerimisega välditavate nakkushaiguste levik ja preventsoon Euroopas ja Eestis. *Eesti Arst*, 85(2), 107 - 126.
- Mikelsaar, M.; Karki, T.; Lutsar, I.; Mändar, R. (2006). Meditsiiniline mikrobioloogia I. Tartu: Tartu Ülikooli Kirjastus
- Mouas, H.; Lutsar, I.; Dupont, B.; Fain, O.; Herbrecht, R.; Lescure, F.; Lortholary, O. (2005). Voriconazole for invasive bone aspergillosis: a worldwide experience of 20 cases. *Clinical Infectious Diseases*, 40(8), 1141 - 1147.
- Usonis, V.; Meriste, S.; Bakasenas, V.; Lutsar, I.; Collard, F.; Stoffeld, A.; Tomieporth, N. (2005). Immunogenicity and safety of a combined hepatitis A and B vaccine administered concomitantly with either a measles-mumps-rubella or a diphtheria-tetanus-acellular pertussis-inactivated poliomyelitis vaccine mixed with a Haemophilus influenzae type b conjugate vaccine in infants aged 12-18 months. *Vaccine*, 23(20), 2602 - 2606.
- Schwartz, S.; Ruhnke, M.; Ribaud, P.; Corey, L.; Driscoll, T.; Cornely, OA.; Schuler, U.; Lutsar, I.; Troke, P.; Thiel, E. (2005). Improved outcome in central nervous system aspergillosis, using voriconazole treatment. *Blood*, 106(8), 2641 - 2645.
- Lutsar, I. (2005). HI-virusinfektsioon kui globaalne probleem. *Eesti Arst*, 4, 238 - 243.
- Lutsar, I.; Tamm, E.; Metsvaht, T.; Roos, R. (2005). Antimikroobsete ravimite manustamine lastele. Tallinn: Medicina
- Roos, R.; Adamson, V.; Lutsar, I.; Metsvaht, T. (2005). Antibiotikumide (AB) tarbimise ja koormuse hindamine TÜ Kliinikumi lasteintensiivravi osakonnas: modifitseeritud DDD-metoodika. In: *Eesti Arst* ;, 2005, (9), 679 - 679.
- Metsvaht, T.; Padari, H.; Lutsar, I. (2005). Ampitsilliin-gentamütsiin versus penitsilliin-gentamütsiin varase empiirilise antibakteriaalse ravi valikuna vastsündinutel . In: *Eesti Arst: Eesti Arst*, 2005, (9), 672 - 673.
- Walsh, T.J.; Karlsson, M.O.; Driscoll, T.; Arguedas, A.G.; Adamson, P.; Saez-Llorens, X.; Vora, A.J.; Arrieta, A.C.; Blumer, J.; Lutsar, I.; Milligan, P.; Wood, N. (2004). Pharmacokinetics and safety of intravenous voriconazole in children after single and multiple dose administration. *Antimicrobial Agents and Chemotherapy*, 48(6), 2166 - 2172.
- Steinbach, W.J.; Benjamin, D.K.; Kontoyiannis, D.P.; Perfect, J.R.; Lutsar, I.; Marr, K.A.; Lionakis, M.S.; Torres, H.A.; Jafri, H.; Walsh, T.J. (2004). Infections due to Aspergillus terreus: multicenter retrospective analysis of 83 cases. *Clinical Infectious Diseases*, 39, 192 - 198.
- Lutsar, I.; Roffey, S.; Troke, P. (2003). Voriconazole concentrations in the cerebrospinal fluid and brain tissue of guinea pigs and immunocompromised patients. *Clinical Infectious Diseases*, 37(5), 728 - 732.
- Lutsar, I.; Hodges, MR.; Tomaszewski, K.; Troke, PF.; Wood, ND. (2003). Safety of voriconazole and dose individualisation. *Clinical Infectious Diseases*, 36(8), 1087 - 1088.
- Lutsar, I.; Friedland, IR.; Wubbel, L.; Ahmed, A.; Trujillo, M.; McCoig, CC.; Jafri, HH.; McCracken, GH.Jr. (2003). Factors influencing the anti-inflammatory effect of dexamethasone therapy in experimental pneumococcal meningitis. *Journal of Antimicrobial Chemotherapy*, 52(4), 651 - 655.
- Perfect, JR.; Marr, KA.; Walsh, TJ.; Greenberg, RN.; Dupont, B.; De La Torre-Cisneros, J.; Just-

- Nübling, G.; Schlamm, H.; Lutsar, I.; Espinel-Ingroff, A.; Johnson, E. (2003). Voriconazole treatment for less common, emerging or refractory fungal infections. *Clinical Infectious Diseases*, 36(9), 1122 - 1131.
- Tamm, E.; Kõljalg, S.; Lutsar, I.; Maimets, M.; Naaber, P. (2003). Pneumokokkinfektsioon lapseas. *Eesti Arst*, 82(7), 464 - 471.
- Walsh, TJ.; Lutsar, I.; Driscoll, T.; Dupont, B.; Roden, M.; Ghahramani, P.; Hodges, M.; Groll, AH.; Perfect, JR. (2002). Voriconazole in the treatment of aspergillosis, scedosporiosis and other invasive fungal infections in children. *The Pediatric Infectious Disease Journal*, 21(3), 240 - 248.
- Lutsar, I.; Friedland, IR. (2000). Pharmacokinetics and pharmacodynamics of cephalosporins in cerebrospinal fluid. *Clinical Pharmacokinetics*, 39(5), 335 - 343.
- Ng, W.; Olsen, K.; Lutsar, I.; Wubbel, L.; Ghaffar, F.; Jafri, H.; McCracken, GH.; Friedland, I. (2000). Buffy coat PCR for diagnosis of experimental pneumococcal pneumonia. *APMIS*, 108(11), 729 - 733.
- Meriste, S.; Tamm, E.; Willems, P.; Lutsar, I. (1999). Safety and immunogenicity of combined DTPa-IPV for primary and booster vaccination. *Scandinavian Journal of Infectious Diseases*, 31(6), 587 - 591.
- Ahmed, A.; Jafri, H.; Lutsar, I.; McCoig, CC.; Trujillo, M.; Wubbel, L.; Shelton, S.; McCracken, GH. (1999). Pharmacodynamics of vancomycin for the treatment of experimental penicillin- and cephalosporin-resistant pneumococcal meningitis. *Antimicrobial Agents and Chemotherapy*, 43(4), 876 - 881.
- Lutsar, I.; Friedland, IR.; Jafri, HS.; Wubbel, L.; Ng, W.; Ghaffar, F.; McCracken, GH.Jr. (1999). Efficacy of gatifloxacin in experimental Escherichia coli meningitis. *Antimicrobial Agents and Chemotherapy*, 43(7), 1805 - 1807.
- McCoig, CC.; Friedland, IR.; Lutsar, I.; Jafri, HS.; Wubbel, L.; Olsen, K.; Shelton, S.; McCracken, GH.Jr. (1999). Pharmacodynamics and bactericidal activity of trovafloxacin in cerebrospinal fluid in experimental cephalosporin-resistant pneumococcal meningitis. *Journal of Antimicrobial Chemotherapy*, 43(5), 683 - 688.
- Ng, W.; Lutsar, I.; Wubbel, L.; Jafri, H.; Ghaffar, F.; McCracken, GH.Jr.; Friedland, IR. (1999). Pharmacodynamics of trovafloxacin in the cephalosporin-resistant pneumococcal pneumonia in immunocompetent mice. *Journal of Antimicrobial Chemotherapy*, 43(6), 811 - 816.
- Lutsar, I.; Friedland, I.; Wubbel, L.; McCoig, C.; Jafri, H.; Ghaffar, F.; McCracken, G. (1998). Pharmacodynamics of gatifloxacin in cerebrospinal fluid in experimental cephalosporin-resistant pneumococcal meningitis. *Antimicrob Agents and Chemotherapy*, 42(10), 2650 - 2655.
- Lutsar, I.; McCracken, GH.; Friedland, IR. (1998). Antibiotic pharmacodynamics in cerebrospinal fluid. *Clinical Infectious Diseases*, 27(5), 1117 - 1127.
- Friedland, IR.; Lutsar, I. (1998). New Antibiotics. *Current Opinion in Pediatrics*, 10(1), 41 - 45.
- Lutsar, I.; Ahmed, A.; Friedland, IR.; Trujillo, M.; Wubbel, L.; Olsen, K.; McCracken, GH. (1997). Pharmacodynamics and bactericidal activity of ceftriaxone therapy in experimental cephalosporin-resistant pneumococcal meningitis. *Antimicrobial Agents and Chemotherapy*, 41(11), 2414 - 2417.
- Lutsar, I.; Friedland, IR.; McCracken, GH.Jr. (1997). Pathogenesis of bacterial meningitis. *Annales Nestle*, 55, 92 - 102.
- Siigur, U.; Tamm, E.; Torm, S.; Lutsar, I.; Salminen, S. (1996). Effect of bacterial infection and administration of a probiotic on fecal short-chain fatty acids. *Microbial Ecology in Health and Disease*, 9(6), 271 - 277.
- Lutsar, I.; Gontmacher, A.; Närksa, M.; Rüütel, V.; Topman, M.; Ilves, P.; Siirde, T.; Beilmann, A. (1995). Five days of antibacterial therapy for bacterial meningitis in children. *Infection*, 23(2), 113 - 118.
- Lutsar, I.; Siirde, T.; Soopold, T. (1995). Long term follow-up of Estonian children after bacterial meningitis. *The Pediatric Infectious Disease Journal*, 14(7), 624 - 625.
- Sepp, E.; Tamm, E.; Torm, S.; Lutsar, I.; Mikelsaar, M.; Salminen, S. (1995). Impact of a lactobacillus probiotic on the faecal microflora in children with shigellosis. *Microecology and Therapy*, 23, 74 - 80.
- Lutsar, I.; Haldre, S.; Topman, M.; Talvik, T. (1994). Enzymatic changes in the cerebrospinal-fluid in patients with infections of the central-nervous-system. *Acta Paediatrica*, 83(11), 1146 - 1150.

Projects

Current grants & projects

Infection and immunocompromised host - from mechanisms to translation into clinical practice

Väikesemahulise teaduse infrastruktuuri kaasajastamine teadusteema SF0180004s12 raames

Development of research-based functional dairy foods and establishment of innovative

biotechnological applications/platforms for food enterprises (microbiological, biochemical and clinical approach).

Laste seeninfektsioonide rahvusvaheline võrgustik

Pharmacokinetics of intravenous phenobarbital and lidocaine in the treatment of neonatal seizures of term neonates in therapeutic hypothermia

Appropriate dosing of antibiotics in severe infections

Bridging the gap in knowledge and practice of prevention and care for HIV in Estonia

Translational research for improvement of diagnostics and treatment of neuroimmunological diseases

Memberships European Society for Paediatric Infectious Diseases

Estonian Society of Infectious Diseases

Estonian Society for Paediatrics

Fellowship award of the European Society for Paediatric Infectious Diseases in 1995

Editorial Board of The Pediatric Infectious Diseases Journal

Other Relevant Information	Administrative responsibilities 2012 - ... Estonian Science Agency, Member of Evaluation Committee 2011 - ... senat member of University of Tartu 2010 - ... European Society for Paediatric Infectious Diseases - board member 2007 - ... EMEA, Pediatric Committe, member 2005 - ... EMEA, Scietific Advisory Group on antiinfectives 2006 - 2012 Estonian Science Foundation, Expert Committe of Health Sciences, chair 2002 - 2005 European Society for Pediatric Infectious Diseases, Member of scientific committee 1998 - 1999 Estonian Infectious Diseases Society, president 1994 - 1994 Congress of Estonian Pediatric Association, Tallinn - member of organizing committee 1993 - 1993 2nd International Meeting of Baltic Association of Child Neurology, Riga - member of organizing committee 1993 - 1993 International symposium Impact of the environment to children's health, Tartu - secretary general 1992 - 1994 Estonian Infectious Diseases Society, Board member 1991 - 1991 1st International Meeting of Baltic Association of Child Neurology, Tartu - secretary general 1990 - 1995 Estonian Pediatric Association, Board member 1990 - 1993 Baltic Association of Child Neurology, Board member 1989 - 1989 Congress of Estonian Pediatric Association, Tallinn - member of organizing committee Honours & Awards 2010, Irja Lutsar; Estonian Government Annual Award in Medical Sciences 2010, Yearly Award, Health - Irja Lutsar; Infektsioonide käsitlus omandatud immuunpuudulikkusega isikutel 1995, Irja Lutsar; European Society for Pediatric Infectious Diseases fellowship award 1994, Irja Lutsar; Estonian Government award in medical science, 1994European Society for Pediatric Infectious Diseases fellowship award Field of research 3. Health, 3.7. Clinical Medicine(Inflections in neonates, their pathogenesis and management. Infections of the central nervous system in children, their pathogenesis, treatment and long term outcome . Pharmacokinetic and pharmacodynamic properties of antiinfective agents in children . HIV infection, the importance of recombinant viruses in the disease process.) 3. Health, 3.7. Clinical Medicine, B510 Infections
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