

CURRICULUM VITAE: Akseli Eetu Hemminki, MD, PhD

Date of birth: July 27th, 1973, Helsinki, Finland.

Nationality: Finnish.

Civil status: Married, 3 children.

Current positions:

1 Jul 17 - present Professor of Oncology, University of Helsinki
7 Nov 02 - present Group leader, Cancer Gene Therapy Group, University of Helsinki.
15 Apr 13 - present Chief Executive Officer, TILT Biotherapeutics Ltd (part time).

ORCID ID 0000-0001-7103-8530

Previous research appointments:

1 Jun - 16 Jul 93 Visiting researcher at the Center for Nutrition and Toxicology (CNT), Novum, Karolinska Institute, Sweden.
1 Jan 94 - 22 May 98 Graduate student, Dept. Medical Genetics, University of Helsinki, Finland.
7 - 18 Jan 96 Visiting researcher at USC Dept. Pathology in Los Angeles, California.
22 May 98 - Jan 00 Post-Doctoral Researcher, Dept. Medical Genetics, University of Helsinki.
5 Jan 00 - 31 Aug 01 Damon Runyon-Walter Winchell Research Fellow, Division of Human Gene Therapy, University of Alabama at Birmingham (UAB), USA
1 Sep 01 - 6 Nov 02 Research Assistant Professor, Division of Human Gene Therapy, UAB, USA
1 Oct 01 - 6 Nov 02 Res. Asst. Professor (secondary), Dept. Biomedical Engineering, UAB
1 Sep 01 - 6 Nov 02 Director of Clinical Trials, Division of Human Gene Therapy, UAB, USA
12 Feb 01 - 6 Nov 02 Group Leader, Ovarian Cancer, Division of Human Gene Therapy, UAB
1 Aug 00 - 6 Nov 02 Technical Director, Correlative Laboratories for Gene Therapy Clinical Trials, Gene Therapy Center, Division of Human Gene Therapy, UAB.
1 Jul 06 - 30 Apr 13 University Lecturer, Haartman Institute, University of Helsinki. Part time.
8 Oct 07 - 31 Mar 13 K. Albin Johansson Research Professor, Finnish Cancer Institute.
1 May 13-31 Jan 15 Research director, Haartman Institute, University of Helsinki (part time).
1 Feb 15 - 30 Jun 17 Jane and Aato Erkkö foundation Professor of Oncology, University of Helsinki.

Biotechnology experience

2008 Scientific founder of Oncos Therapeutics Ltd, a University spin-off company founded for clinical translation of oncolytic viruses. Oncos performed the first oncolytic virus clinical trial in Northern Europe and then merged with Targovax AG in 2015.
2008 Co-founder of Oncos Therapeutics Ltd, a University spin-off company founded for clinical translation of oncolytic viruses
2008 - 2010 Chairman of the Board, Oncos Therapeutics Ltd.
2010 - present Board member, Oncos Therapeutics Ltd.
2008 - 2012 Head of Research and Development, Oncos Therapeutics Ltd.
2012 - 2013 Consultant, Oncos Therapeutics Ltd.
2009 - 2011 Chief Scientific Officer, Oncos Therapeutics Ltd.
2012 - 2013 Medical monitor, Oncos Therapeutics Ltd.
2013 Founder of TILT Biotherapeutics Ltd, a University spin-off company aiming at enhancing the efficacy of adaptive T cell therapy.
2013 - present Chairman of the Board, TILT Biotherapeutics Ltd.
2013 - present Chief Executive Officer of TILT Biotherapeutics Ltd.

Academic degrees:

31 May 94 Bachelor of Medicine, University of Helsinki.

31 Mar 99 Medical Doctor (MD), University of Helsinki.
 31 Mar 99 Doctor of Medical Science (PhD), University of Helsinki.
 13 Mar 02 Docent (equivalent of associate professor or senior lecturer) of Cancer Biology, University of Helsinki.
 7 Oct 07 Specialist in Oncology and Radiotherapy, University of Helsinki.

Formal professional education:

91-99 Medical student, Faculty of Medicine, University of Helsinki, Finland.
 95-98 Graduate School in Medical Genetics, University of Helsinki, Finland.
 5 Oct 99 - 7 Oct 07 Oncology specialization program, University of Helsinki, Finland.
 5 Jan 00 - 31 Aug 01 Post-doctoral trainee, Division of Human Gene Therapy, UAB, USA.
 6 Sep 00 - 31 Dec 01 Clinical Research Training Program, UAB, USA.
 7 Feb 05 Good Clinical Practice training program and certification test, Helsinki.
 17 Sep 07 Helsinki Biomedical Graduate School leadership training.
 19 Sep 07 - 7 May 08 University pedagogics training course (10 credits), University of Helsinki.
 10 Feb 17 - Aalto EE eMBA program, Helsinki, Finland.

Clinical work:

18 May - 31 Jul 98 Physician (Resident), Kuusankoski Hospital, Internal Medicine and ER.
 31 Jul 98 - 31 Jan 99 Physician (Resident), Kuusankoski Hospital Emergency Room, 40-80 h/mo.
 1 - 31 Jan 99 Assistant (Intern), Department of Oncology, HUCH.
 1 - 28 Feb 99 Assistant (Intern), II Department of Surgery, HUCH.
 7 Jun - 7 Dec 99 General Practitioner (Resident), Järvenpää Health Center and ER.
 2 Jan 03 - 7 Oct 07 Resident, Department of Oncology, HUCH.
 1 Aug 06 - 30 Jun 08 Consultant. Transplantation Laboratory, HUSLAB, Helsinki University Central Hospital (HUCH). Part time.
 12 Nov 07 - Specialist in oncology. Docrates Hospital, Helsinki, Finland. Ad hoc.
 1 Jul 08 - 28 Feb 10 Senior physician, HUSLAB, HUCH. Part time.
 15 Feb 15 – present Chief physician, HUCH Comprehensive Cancer Center. Part time.

Awards:

1995 Award for Best Research Project by a Student, Faculty of Medicine, U. Hel.
 1998 PhD thesis "Approved with Distinction", given to the top 5%.
 1999 PhD thesis selected best of the Helsinki University Medical Faculty in 1998.
 2001 Young Cancer Researcher Award, European Association for Cancer Res.
 2003 Finnish Medical Society Duodecim Young Investigator Award.
 2005 Sigrid Juselius Young Investigator Award.
 2006 The Outstanding Young Person award by Junior Chamber Intl Finland.
 2006 Research award from Schering Research Found. and Finnish Oncol. Assc.
 2006 The Outstanding Young Person of the World award by Junior Chamber Intl.
 2006 Ranked 50th most influential person in Finnish health care (Mediuutiset)
 2007 Outstanding Young Investigator Award, American Society of Gene Therapy.
 2007 Young Investigator Award, European Society of Cell and Gene Therapy.
 2007 Ranked 36th most influential person in Finnish health care (Mediuutiset)
 2008 Pekka Häyry medal recipient.
 2009 Oncos Therapeutics wins 1st place (out of 212) in VentureCup, a competition for business plans of startup companies.
 2010 American Society of Clinical Oncology career development award.
 2010 Ranked 9th most significant scientist in Finland (Tiede-lehti)
 2011 Oncos awarded BioFinland prize from Finnish Bioindustries.
 2012 Oncos listed in the 20 most promising start-ups in Finland (Talouselämä)
 2012 Ranked 9th most influential person in Finnish health care (Mediuutiset)
 2013 Oncos again among the 20 most promising start-ups (Talouselämä)

- 2014 Oncos listed among the 20 promising start-ups for a record 4th time (Talouselämä)
- 2016 “Crossing the Valley of Death with Advanced Cancer Therapy” enters the finals for Science book of the Year, The Federation of Finnish Learned Societies

Post docs and senior scientists mentored, and their subsequent position:

- 1 Aug 00 – 6 Nov 02 John Lam, MD. House officer, Dept Pathol., U Mississippi (1)
- 1 Nov 00 – 6 Nov 02 Gerd J. Bauerschmitz, MD. Continued in group (2)
- 12 Feb 01 - 11 Jun 01 Dirk Nettelbeck, PhD. Group leader, DKFZ, Germany (3)
- 31 May 02 – 30 Aug 02 Shannon D. Barker, PhD. Post-doc in Seattle, WA & Zurich, SUI (4)
- 1 Apr 03 – 31 May 04 Kirsi Saukkonen, PhD (part time). Roche Finland (5)
- 22 May 04 – present Anna Kanerva, MD, PhD. (6)
- 13 May 05 – 31 Aug 07 Tanja Hakkarainen, PhD. IP Finland Ltd (7)
- 10 Oct 05 – 13 Apr 07 Minna Eriksson, PhD. Finnish National Bureau of Investigation (8)
- 7 Aug 06 – 31 Jan 13 Sari Pesonen, PhD. Oncos Therapeutics Ltd. (9)
- 6 Aug 07 – 2 Jul 08 Camilla Ribacka, PhD. Novia University of Applied Sciences (10)
- 2 Jan 08 – 13 Jun 10 Laura Ahtiainen, PhD. Institute of Biotechnology, Helsinki (11)
- 7 Jan 08 – 31 Aug 12 Vincenzo Cerullo, PhD. Received tenure track professorship at the University of Helsinki Department of Pharmacology. (12).
- 23 Jun 08 – 14 Aug 12 Sophie Escutenaire, DVM, PhD (13)
- 26 Nov 10 – 6 Mar 12 Iulia Diaconu, PhD. Post-doc in Baylor, Houston (14)
- 5 Jan 11 – 31 Aug 13 Markus Vähä-Koskela, PhD. Institute of Biotechnology, Helsinki (15)
- 1 Nov 11 – 30 Sep 12 Kilian Guse, PhD. CEO of GeneQuine Biotherapeutics, Hamburg (16)
- 27 Aug 12 – present Dipongkor Saha, DVM, PhD (17)
- 5 Oct 12 – present Anniina Koski, MD, PhD (18)
- 24 Apr 15 – Suvi Parviainen, PhD (19)
- 13 Nov 15 – Otto Hemminki, MD, PhD (20)
- 19 Jan 17 – Mikko Siurala, PhD (21)

Graduate students mentored, and their subsequent position:

- 1 Aug 00 - 30 May 02 Shannon D. Barker, BS. Continued in group (1)
- 1 Aug 00 – 21 May 04 Anna Kanerva, MD. Continued in group (2)
- 1 May 01 – 13 May 05 Tanja Hakkarainen, MSc. Continued in group (3)
- 1 Feb 03 – 30 Aug 09 Mari Raki, MSc. Post doc at University of Helsinki (Arto Urtti) (4)
- 1 Apr 03 – 31 Dec 09 Lotta Kangasniemi, MSc. Oncos Therapeutics, Ltd. (5)
- 1 Apr 03 – 1 Aug 10 Tuuli Ranki, MSc. Oncos Therapeutics, Ltd. (6)
- 1 May 03 – 30 Oct 09 Merja Särkioja, MSc. Post doc at FIMM (Emmy Verschuren) (7)
- 1 July 04 – 31 Dec 10 Maria Rajecki, BM. Resident at Women’s Hospital, HUCH (8)
- 6 Jan 05 – 15 Sep 09 Kilian Guse, MPharm. Post doc at Baylor, Houston, (Brandon Lee) (9)
- 1 May 06 – 30 Apr 07 Gerd J. Bauerschmitz, MD. Senior House Officer, Women’s Hospital, Dusseldorf, Germany (10)
- 12 May 2006 – 31 Dec 10 Joao Dias, MSc. Consultant, Alcimed, Lausanne, Switzerland (11)
- 13 July 2006 – 4 May 12 Sergio Lavilla-Alonso, MPharm. Post-doc at NIH (12)
- 24 July 2006 – 5 Oct 12 Anniina Koski, MD. Continued in group (13)
- 7 Sep 2006 – 15 Feb 13 Petri Nokisalmi, MSc, BM. Resident in Oncology, Lahti Hospital (14)
- 7 Nov 2006 – 26 Nov 10 Iulia Diaconu, MSc. Post-doc, Baylor College of Medicine (15)
- 4 Jun 2007 – present Ilkka Liikanen, BM (16)
- 25 Jun 2007 – present Marko Ahonen, BDent (17)
- 1 Oct 2007 - present Otto Hemminki, MD (18)
- 1 Jan 2009 – 2 Mar 2012 Hongjie Wang, MD. Post-doc, University of Washington, Seattle (19)
- 9 Feb 2010 – present Karoliina Autio, DVM (20)

25 Feb 2010 – present	Noora Rouvinen-Lagerström, MSc (21)
1 Apr 2010 – present	Suvi Parviainen, MSc (22)
1 Nov 2010 – present	Simona Bramante, MSc (23)
1 Jan 2012 – present	Siri Tähtinen, MSs (24)
1 Jan 2012 – present	Mikko Siurala, MSc (25)
24 May 2012 – present	Mari Hirvinen, MSc (26)
1 Jan 2013 – 3 Nov 16	Kristian Taipale, BM. General practitioner (27)
1 Apr 2014 – present	Riikka Havunen, MSc (28)
1 Jun 2015 – present	Sadia Zafar, MSc (29)
7 Jan 2016 – present	Joao Santos, MSc (30)
29 Feb 2016 – present	Victor Carrascon, MSc (31)
2 Jan 2017 – present	Camilla Heiniö, MSc (32)

Completed PhD theses

30 May 2002	Shannon Barker: The regulatory sequences of the secretory leukoprotease inhibitor gene as a tissue-specific promoter for gene therapy of ovarian cancer. (1)
21 May 2004	Anna Kanerva: Adenoviral gene therapy for ovarian cancer. (2)
13 May 2005	Tanja Hakkarainen: Enhancement of cancer gene therapy with modified viral vectors and fusion genes.(3)
30 Mar 2007	Gerd Bauerschmitz: Oncolytic adenoviruses for gynecologic cancer.(4)
3 Oct 2008	Merja Särkioja: Adenoviral gene therapy for non-small cell lung cancer.(5)
8 May 2009	Kilian Guse: Genetically engineered oncolytic adenoviruses for the treatment of kidney and breast cancer. (6)
22 May 2009	Mari Raki: Oncolytic adenoviruses for treatment of ovarian cancer. (7)
29 Jan 2010	Lotta Kangasniemi: Improving oncolytic adenoviral therapies for gastrointestinal cancers and tumor initiating cells. (8)
19 Nov 2010	Tuuli Ranki: Controlling transduction and replication of oncolytic adenoviruses. (9)
26 Nov 2010	Iulia Diaconu: Approaches for improving the safety and efficacy of adenoviral gene therapy. (10)
10 Dec 2010	Joao Dias: Adenoviral gene therapy for advanced head and neck cancer. Approved with distinction (typically awarded to top 10%). (11)
14 Jan 2011	Maria Rajecki: Oncolytic adenoviruses with radiation therapy for treatment of prostate cancer. (12)
2 Mar 2012	Hongjie Wang: Basic and translational studies on species B adenoviruses. Approved with distinction. (13)
4 May 2012	Sergio Lavilla-Alonso: Adenoviral vectors with modified tropism for the treatment of colorectal cancer. (14)
5 Oct 2012	Annina Koski: Improving efficacy of adenoviral cancer gene therapy. Approved with distinction. (15)
15 Feb 2013	Petri Nokisalmi: Experimental adenovirus gene therapy for cancer patients with advanced tumors. (16)
13 Feb 2015	Ilkka Liikanen: Combining Oncolytic Immunotherapy with Conventional Cancer Treatments. (17)
24 Apr 2015	Suvi Parviainen: Developing genetically engineered oncolytic viruses for cancer gene therapy. (18)
28 Aug 2015	Karoliina Autio: Efficacy and Safety of Oncolytic Vaccinia and Semliki Forest Virus in the Treatment of Canine and Feline Malignant Solid Tumors. (19)
2 Oct 2015	Simona Bramante: Oncolytic adenovirus coding for GMCSF in the treatment of cancer. (20).
13 Nov 2015	Otto Hemminki: Cancer immunotherapy with a gene modified serotype 3 oncolytic adenovirus. (21).
1 Apr 2016	Mari Hirvinen: Immunological boosting and personalization of oncolytic virotherapies for cancer treatment. (22)

- 10 Jun 2016 Siri Tähtinen: Combining oncolytic immunotherapies to break tumor resistance. (23)
- 3 Nov 2016 Kristian Taipale: Immunologic effects of cancer therapy with oncolytic adenoviruses. (24)
- 20 Jan 2017 Mikko Siurala. Improving adenovirus-based immunotherapies for treatment of solid tumors. (25)

Undergraduate students mentored , and their subsequent position:

- 21 Jun–31 Dec 04 Harri Katajamäki. Pro Gradu 2006: Utility of the Cox-2 promoter for adenoviral cancer gene therapy. **Grade: Magna cum laude.** (HUSLAB). (1)
- 1 Jun 04–31 Dec 05 Tommi Pisto. Pro Gradu 2007: [Gene therapy for pancreatic cancer - targeting of conditionally replicating adenoviruses] (Finnish) Grade: **Eximia cum laude.** (VTT Medical technology) (2)
- Summer 2008 Topi Turunen, MD/PhD student rotation (3)
- 9 Jun 08 – 31 May 09 Theresia Gutmann. Dipl. Biol. Cancer Gene Therapy with Adenovirus Expressing Monoclonal Antibody Trastuzumab. **Grade: 1.1** (scale 1-5); Very Good (4)
- 16 Jun 08 – 7 Apr 09 Matteo Ugolini. Manipulating different arms of the immune system to orchestrate tumor-specific immunity and enhance tumor clearance by adenovirus –based gene therapy. **Grade: 110/110** (Univ. Bergen) (5)
- 5 Jan 09 – 31 May 09 Cristina Mirantes. Defects in innate responses mediates permissivity to oncolytic adenovirus in mammary and ovarian normal and cancer stem cells. **Grade 9.4** (out of 9.6). (University of Lleida) (6)
- 14 Jan 09 – 30 Oct 09 Federica Madarena. DC-based cancer immunotherapy. **Grade 106/110.** (7)
- Summer 2009 Sini Heinonen, MD/PhD student rotation (8)
- 20 Oct 10 – 24 May 12 Mari Hirvinen, BSc. **Eximia cum laude** (Continued as PhD student) (9)
- Spring 2012 Åse Karttunen, MSc. Univ. Applied Sciences BSc thesis. Grade 4/5 (10)
- 1 Jul 11 – present Kristian Taipale (11)
- 2 Jul 12 – 31 Aug 13 Paula Savola, BM (12)
- Fall 2012 Suvi Vallius. University of Applied Sciences BSc thesis. **Grade 5/5** (13)
- 23 Aug 12–27 Jun 13 Joonas Lehikoinen, BM (14)
- Summer 2013 Taavi Kaartinen, MD/PhD student rotation (15)
- Summer 2015 Juuso Rusanen, MD/PhD student rotation (16)
- 1 Mar 17 – 31 Aug 17 Eleonora Munaro, BSc (17).

Duties as Scientific Expert:

Ad hoc peer reviewer for Lancet, Lancet Oncol, J Natl Cancer Inst, J Clin Invest, Cancer Res, Trends Immunol, Mol Ther, BMJ, Gene Ther, Hum Gene Ther, J Gene Med, Int J Cancer, Cancer, Cancer Gene Ther, Mol Cancer Ther, Clin Exp Med, Acta Oncol, J Orthoped Res, Kidney Int, Finn Med J, John Wiley & Sons, Future Virol, J Virol, Vaccine, Exp Opin Biol Ther, BMC Cancer, PLOSONe, Gene Therapy and Regulation, J Transl Med, Elsevier Inc, ASGCT, ESGCT, Cancer Immunol Immunother, J Immunother, Oncoimmunology, Oncotarget, others.

Ad hoc grant reviewer the Finnish Cancer Organizations, Cancer Research UK, the Netherlands Organisation for Health Research and Development (ZonMw), the Swiss Cancer League, the University of Helsinki, University of Alabama at Birmingham, University of Washington, Association for International Cancer Research, Science Foundation Ireland, Prostate Cancer Foundation of Australia, Medical Research Council (UK), Agence Nationaly de la Reserche France, Barts and the London Charity, Cancer Research UK, Skolkovo Foundation, Institut National du Cancer, Neye Foundation.

1995-98 Executive board of the Haartman-institute, University of Helsinki, Finland.

1999	Organizer of the Genetics day for young scientists University of Helsinki.
2002	Co-organizer and chairman, Intl Soc. Genet. Anticancer Agents, Amsterdam.
2003 - present	Executive board of the Finnish Society of Gene Therapy
2004 – present	Session chairman, committee and faculty member, abstract reviewer at ASGT/ASGCT
2004 - present	Co-organizer, session chairman, abstract reviewer and invited lecturer at ESGT/ESGCT
2004 – 2008	Editorial board of the journal of the Finnish Cancer Organizations.
2005, 2007, 2008	Scientific Expert for the Finnish Ministry of Social Affairs and Health
2005 - present	Vice President of the Finnish Society of Gene Therapy
2007 –present	European Society of Cell and Gene Therapy Vector committee member
2008 – 2010	Editorial board of <i>Gene Therapy</i>
2009	Chairman of the Gene Technology session at Tieteen päivät [National Science Fair], University of Helsinki
2009	Scientific expert for the Social Affairs and Health Committee, Parliament of Finland.
2010 – present	Editorial board of <i>Human Gene Therapy</i>
2014 – present	Editorial board of <i>Molecular Therapy – Oncolytics</i>
2015	Scientific expert for The National Advisory Board on Social Welfare and Health Care Ethics ETENE, Finland.
2015	Professorship committee member, Medical Faculty, University of Helsinki.
2016	Co-organizer, T-cell immunology networking seminar, University of Helsinki.
2016	Co-organizer, Finnish cancer institute symposium - cancer and immune system, June 16-17 2016, Jyväskylä, Finland.
2016 – 2017	Data safety Monitoring Board member, AdVince oncolytic adenovirus clinical trial, Uppsala University, Sweden.

Thesis examinations and committees

2002	Pre-examiner, Marcus Watkins, Dept. Pharmacology, Univ. W. Australia.
2005	Pre-examiner of PhD thesis of Tiina Wahlfors, University of Kuopio
2006 – 2010	Thesis committee of Tanja Holopainen, University of Helsinki
2006	Pre-examiner of PhD thesis of Outi Saramäki, University of Tampere.
2006	Pre-examiner of PhD thesis of Kristiina Tyynelä, University of Kuopio.
2006	Pre-examiner of PhD thesis of Miina Ollikainen, University of Helsinki.
2007 – 2009	Thesis committee of Tea Blom, University of Helsinki.
2007	Pre-examiner of PhD thesis of Maria Sundvall, University of Turku.
2008	Official opponent of PhD thesis of Jonna Koponen. University of Kuopio.
2011	Official opponent of PhD thesis of Justyna Leya. University of Uppsala.
2015	Custos (Medical Faculty appointed referee) at thesis defenses (x3), U. Hel.
2016	Custos (Medical Faculty appointed referee) at thesis defenses (x2), U. Hel
2017	Custos (Medical Faculty appointed referee) at thesis defenses (x1), U. Hel

Professional memberships:

1997-99	HUGO (Human Genome Organization)
1997- present	Finnish Medical Society Duodecim
1997- present	Finnish Medical Association
1997- 2008	Finnish Young Doctor's Association
2000- present	Finnish Society of Gene Therapy
2000- present	American Society of Gene and Cell Therapy (#4132)
2001- present	American Association for Cancer Research (#77351)
2001- present	European Association for Cancer Research (#3282)
2002- present	American Society of Clinical Oncology (#38514)
2003- present	European Society of Gene and Cell Therapy

2004- present Finnish Oncology Association
2004- present European Society of Medical Oncology (ESMO) (#5785)
2004- present Finnish Oncology Association Young Oncologist Representative at ESMO
2009- present American Society for Microbiology (#56625254)
2016 – present Member (no H118) of the Association for Cancer Immunotherapy (CIMT).

Languages:

Finnish Excellent (native language)
English Excellent (lived in USA for 6 years, in England for 8 months, Laudatur in High School finals for 10 year course)
Swedish Good (worked in Sweden for 2 Summers, Laudatur in High School finals for 6 year course, completed “Swedish for Physicians” at University)
Russian Moderate (Laudatur in High School finals for 8 year course)
German Adequate (1 year course at the University)

Publications in peer-reviewed journals (* equal contribution):

1. **Hemminki A**, Peltomäki P, Mecklin J-P, Järvinen H, Salovaara R, Nyström-Lahti M, de la Chapelle A & Aaltonen LA. Loss of the wild type MLH1 gene is a feature of hereditary nonpolyposis colorectal cancer. *Nat Genet*, 1994; 8: 405-410.
2. **Hemminki A**, Väyrynen T & Hemminki K. Reaction kinetics of alkyl epoxides with DNA and other nucleophiles. *Chemicobiol Interact*, 1994; 93: 51-58.
3. Canzian F, Salovaara R, **Hemminki A**, Kristo P, Chadwick RB, Aaltonen LA & de la Chapelle A. Semiautomated assessment of loss of heterozygosity and replication error in tumors. *Cancer Res*, 1996; 56:3331-3337.
4. **Hemminki A**, Tomlinson I, Markie D, Järvinen H, Sistonen P, Björkqvist A-M, Knuutila S, Salovaara R, Bodmer W, Shibata D, de la Chapelle A & Aaltonen LA. Localization of a susceptibility locus for Peutz-Jeghers syndrome to 19p using comparative genomic hybridization and targeted linkage analysis. *Nat Genet* 1997; 15: 87-90.
5. Marsh DJ, Roth S, Lunetta KL, **Hemminki A**, Dahia PLM, Sistonen P, Zheng Z, Caron S, van Orsouw NJ, Bodmer WF, Cottrell SE, Dunlop MG, Eccles D, Hodgson SV, Järvinen H, Kellokumpu I, Markie D, Neale K, Phillips R, Rozen P, Syngal S, Vigg J, Tomlinson IPM, Aaltonen LA, Eng C. Exclusion of PTEN and 10q22-24 as the susceptibility locus for juvenile polyposis syndrome. *Cancer Res*; 1997; 57: 5017-21.
6. **Hemminki A**, Markie D, Tomlinson I, Avizienyte E, Roth S, Loukola A, Bignell G, Warren W, Aminoff M, Höglund P, Järvinen H, Kristo P, Pelin K, Ridanpää M, Salovaara R, Toro T, Bodmer W, Olschwang S, Olsen AS, Stratton MR, de la Chapelle A & Aaltonen LA. A Serine/Threonine Kinase Gene Defective In Peutz-Jeghers Syndrome. *Nature* 1998; 391: 184-187.
7. Olschwang S, Markie D, Seal S, Neale K, Phillips R, Cottrell S, Ellis I, Hodgson S, Zauber P, Spigelman A, Iwama T, Loff S, McKeown C, Marchese C, Sampson J, Davies S, Talbot I, Wyke J, Thomas G, Bodmer W, **Hemminki A**, Avizienyte E, de la Chapelle A, Aaltonen LA, Stratton M, Houlston R, Tomlinson I. Peutz-Jeghers disease: most, but not all, families are compatible with linkage to 19p13.3. *J Med Genet*, 1998; 35: 42-44.
8. **Hemminki A**, Höglund P, Pukkala E, Salovaara R, Järvinen H, Norio R, Aaltonen LA. Intestinal cancer in patients with a germline mutation in the down-regulated in adenoma (DRA) gene. *Oncogene* 1998; 16: 681-4.
9. Avizienyte E, Roth S, Loukola A, **Hemminki A**, Lothe RA, Stenwig AE, Fosså SD, Salovaara R, Aaltonen LA. Somatic mutations in LKB1 are rare in sporadic colorectal and testicular tumors. *Cancer Res* 1998; 58: 2087-90.
10. **Hemminki A**, Avizienyte E, Roth S, Loukola A, Järvinen H, de la Chapelle A & Aaltonen LA. [A serine/threonine kinase gene defective in Peutz-Jeghers syndrome], *Duodecim*, 1998; 114: 667-8. Finnish.
11. Aaltonen LA, Salovaara R, Kristo P, Canzian F, **Hemminki A**, Peltomäki P, Chadwick RB, Percesepe A, Kääriäinen H, Ahtola H, Eskelinen M, Härkönen N, Julkunen R, Kangas E, Ojala S, Tulikoura J, Valkamo E, Järvinen H, Mecklin J-P, de la Chapelle A. *New Eng J Med* 1998; 338: 1481-7.

12. Wolf M, **Hemminki A**, Kivioja A, Sistonen P, Kaitila I, Ervasti H, Kinnunen J, Karaharju E, Knuutila S. A novel splice site mutation of the EXT2 gene in a Finnish hereditary multiple exostoses family. *Mutations in brief* no. 197, online. **Human Mut** 1998; 12: 362.
13. Aaltonen LA, Salovaara R, Kristo P, Canzian F, **Hemminki A**, Peltomäki P, Chadwick RB, Percesepe A, Kääriäinen H, Ahtola H, Eskelinen M, Härkönen N, Julkunen R, Kangas E, Ojala S, Tulikoura J, Valkamo E, Järvinen H, Mecklin J-P, de la Chapelle A. Periytyvän paksusuolisyövän yleisyys ja molekyyliogeneettinen seulonta Suomessa. **Duodecim** 1998; 114: 2084-5.
14. Ylikorkala A, Avizienyte E, Tomlinson IPM, Tiainen M, Roth S, Loukola A, **Hemminki A**, Johansson M, Sistonen P, Markie D, Neale K, Phillips R, Zauber P, Twama T, Sampson J, Järvinen H, Mäkelä TP, Aaltonen LA. Mutations and impaired function of LKB1 in familial and non-familial Peutz-Jeghers syndrome and a sporadic testicular cancer. **Hum Mol Genet** 1999; 8: 45-51.
15. Avizienyte E, Loukola A, Roth S, **Hemminki A**, Tarkkanen M, Salovaara R, Arola J, Bützow R, Husgafvel-Pursiainen K, Kokkola A, Järvinen H, Aaltonen LA. LKB1 somatic mutations in sporadic tumors. **Am J Pathol**, 1999; 154: 677-81.
16. **Hemminki A**. The molecular basis and clinical aspects of the Peutz-Jeghers syndrome. **Cell Mol Life Sci**, 1999; 55: 735-50. Review.
17. **Hemminki A**. Inherited predisposition to gastrointestinal cancer: the molecular backgrounds of Peutz-Jeghers syndrome and hereditary non-polyposis colorectal cancer. **Ann Chir Gynaecol**. 1999; 88: 73-4.
18. Roth S, Sistonen P, Salovaara R, **Hemminki A**, Loukola A, Johansson M, Avizienyte E, Cleary KA, Lynch P, Amos CI, Kristo P, Mecklin J-P, Kellokumpu I, Järvinen H, Aaltonen LA. SMAD Genes In Juvenile Polyposis. **Genes Chromosomes Cancer**, 1999; 26: 54-61.
19. **Hemminki A**, Mecklin J-P, Jarvinen H, Aaltonen L-A, Joensuu H. Microsatellite instability is a favorable prognostic indicator in patients with colorectal cancer receiving chemotherapy. **Gastroenterology**, 2000; 119: 921-8.
20. **Hemminki A**, Joensuu H. Microsatellite Instability as a Molecular Marker for Very Good Survival in Colorectal Cancer Patients Receiving Adjuvant Chemotherapy. **Gastroenterology**, 2001; 120: 1309-10. Letter.
21. Barker SD, Casado E, Gomez-Navarro J, Xiang J, Arafat W, Mahareshti P, Pustilnik TB, **Hemminki A**, Siegal GP, Alvarez RD, Curiel DT. An Immunomagnetic-Based Method for the Purification of Ovarian Cancer Cells from Patient-Derived Ascites. **Gynecol Oncol**, 2001; 82, 57-63.
22. Mahareshti PJ, Gomez-Navarro J, Kataram M, Wang MH, Carey D, Siegal GP, Barnes MN, Nettlebeck DM, Alvarez RD, **Hemminki A**, Curiel DT. Adenovirus-mediated soluble FLT-1 gene therapy for ovarian carcinoma. **Clin Cancer Res**, 2001; 7, 2057-66.
23. Casado E, Gomez-Navarro J, Yamamoto M, Adachi Y, Coolidge CJ, Arafat WO, Barker SD, Wang MH, Mahareshti PJ, **Hemminki A**, Gonzalez-Baron M, Barnes MN, Pustilnik T, Siegal GP, Alvarez RD, Curiel DT. Strategies to accomplish targeted expression of transgenes

- in ovarian cancer for molecular therapeutic applications. *Clin Cancer Res*, 2001; 7: 2496-2504.
24. **Hemminki A**, Dmitriev I, Liu B, Desmond RA, Alemany R, Curiel DT. Targeting oncolytic adenoviral agents to the epidermal growth factor pathway with a secretory fusion molecule. *Cancer Res*, 2001; 61: 6377-81.
 25. Casado E, Nettelbeck DM, Gomez-Navarro J, **Hemminki A**, Gonzalez Baron M, Siegal GP, Barnes MN, Alvarez RD, Curiel DT. Transcriptional Targeting For Ovarian Cancer Gene Therapy. *Gynecol Oncol*, 2001; 82: 229-37. Review.
 26. **Hemminki A**, Belousova N, Zinn KR, Liu B, Wang M, Chaudhuri TR, Rogers BE, Buchsbaum DJ, Siegal GP, Barnes MN, Gomez-Navarro J, Curiel DT, Alvarez RD. An adenovirus with enhanced infectivity mediates molecular chemotherapy of ovarian cancer cells and allows imaging of gene expression. *Mol Ther*, 2001; 4: 223-31.
 27. **Hemminki A**. From molecular changes to customized therapy. *Eur J Cancer*, 2002; 38: 333-8. Review.
 28. Kanerva A, Mikheeva G, Krasnykh VN, Coolidge CJ, Lam JT, Mahasreshti P, Barker SD, Straughn M, Barnes MN, Alvarez RD, **Hemminki A**, Curiel DT. Targeting Adenovirus to the Serotype 3 Receptor Increases Gene Transfer Efficiency to Ovarian Cancer Cells. *Clin Cancer Res*, 2002; 8: 275-80.
 29. Arafat WO, Gómez-Navarro J, Buchsbaum DJ, Xiang J, Wang MH, Casado E, Barker SD, Mahasreshti PJ, Haisma HJ, Barnes MN, Siegal GP, Alvarez RD, **Hemminki A**, Nettelbeck DM, , Curiel DT. Effective single chain antibody (scFv) concentrations in vivo via adenoviral vector mediated expression of secretory scFv. *Gene Ther*, 2002; 9: 256-62.
 30. Bauerschmitz GJ, Nettelbeck DM, Kanerva A, Baker AH, **Hemminki A**, Reynolds PN, Curiel DT. The flt-1 promoter for transcriptional targeting of teratocarcinoma. *Cancer Res*, 2002; 62: 1271-4.
 31. **Hemminki A**, Alvarez RD. Adenoviruses In Oncology: A Viable Option? *BioDrugs*, 2002; 16: 77-87. Review.
 32. Bauerschmitz GJ, Lam JT, Kanerva A, Suzuki K, Nettelbeck DM, Dmitriev I, Krasnykh V, Mikheeva GV, Barnes MN, Alvarez RD, Dall, P, Alemany R, Curiel DT & **Hemminki A**. Treatment of ovarian cancer with a tropism modified oncolytic adenovirus. *Cancer Res*, 2002; 62: 1266-70.
 33. **Hemminki A**, Zinn KR, Liu B, Chaudhuri TR, Desmond RA, Rogers BE, Barnes MN, Alvarez RD, Curiel DT. In vivo molecular chemotherapy and non invasive imaging with an infectivity-enhanced adenovirus. *J Natl Cancer Inst*, 2002; 94: 741-9.
 34. Barnes MN, Coolidge CJ, **Hemminki A**, Alvarez RD, Curiel DT. Conditionally Replicative Adenoviruses for Ovarian Cancer Gene Therapy. *Mol Cancer Ther*, 2002; 1: 435-49. Review.
 35. Kanerva A, Wang M, Bauerschmitz GJ Lam JT, Desmond RA, Bhoola SM, Barnes MN, Alvarez RD, Siegal GP, Curiel DT & **Hemminki A**. Gene transfer to ovarian cancer versus normal tissues with fiber modified adenoviruses. *Mol Ther*, 2002; 5: 695-704.

36. **Hemminki A.** [Gene therapy for targeting chemotherapy for ovarian cancer]. *Duodecim* 2002; 118: 1100-2.
37. Haviv YS, Blackwell JL, Kanerva A, Nagi P, Krasnykh V, Dmitriev I, Wang M, Naito S, Lei X, **Hemminki A**, Carey D, Curiel DT. Adenoviral Gene Therapy for Renal Cancer Requires Retargeting to Alternative Cellular Receptors. *Cancer Res*, 2002; 62: 4273-81.
38. **Hemminki A**, Wang M, Desmond RA, Strong TV, Alvarez RD, Curiel DT. Serum and ascites neutralizing antibodies in ovarian cancer patients treated with intraperitoneal adenoviral gene therapy. *Hum Gene Ther*, 2002; 13: 1505-14.
39. Bauerschmitz GJ, Barker SD & **Hemminki A**. Adenoviral Gene Therapy for Cancer – from Vectors to Targeted and Replication Competent Agents. *Int J Oncol*, 2002, 21: 1161-1174. Review.
40. Hakkarainen T, **Hemminki A**, Pereboev A, Barker S, Asiedu C, Strong T, Kanerva A, Wahlfors J, Curiel DT. CD40 is expressed on ovarian cancer cells and can be utilized for targeting adenovirus vectors. *Clin Cancer Res*, 2003 9: 619-24.
41. **Hemminki A**, Kanerva A, Kremer EJ, Bauerschmitz GJ, Smith BF, Liu B, Wang M, Desmond RA, Keriel A, Barnett B, Baker HJ, Siegal GP, Curiel DT. A canine conditionally replicating adenovirus for evaluating oncolytic virotherapy in a syngeneic animal model. *Mol Ther*, 2003, 7: 163-73.
42. Röder G, Keil O, Prisack HB, Bauerschmitz G, Hanstein B, Nestle-Krämling C, **Hemminki A**, Bender HG, Niederacher D and Dall P. Novel cGMP liposomal vectors mediate efficient gene transfer. *Cancer Gene Ther*, 2003, 10: 312-7.
43. **Hemminki A**, Kanerva A, Liu B, Wang M, Alvarez RD, Siegal GP, Curiel DT. Modulation of Coxsackie-Adenovirus Receptor Expression for Increased Adenoviral Transgene Expression. *Cancer Res*, 2003; 63: 847-53.
44. Barker SD, Coolidge CJ, Kanerva A, Hakkarainen T, Yamamoto M, Liu B, Rivera A, Bhoola S, Barnes MN, Alvarez RD, Curiel DT & **Hemminki A**. The Secretory Leukoprotease Inhibitor (SLPI) Promoter for Ovarian Cancer Gene Therapy. *J Gene Med*, 2003; 5: 300-310.
45. Curiel TJ, Wei S, Dong H, Alvarez X, Cheng P, Mottram P, Krzysiek R, Knutson KL, Daniel B, Zimmermann MC, David O, Burow M, Gordon A, Dhurandhar N, Myers L, Berggren R, **Hemminki A**, Alvarez RD, Emilie D, Curiel DT, Chen L, Zou W. Blockade of B7-H1 improves myeloid dendritic cell-mediated antitumor immunity. *Nat Med*, 2003; 9: 562-7.
46. Lam JT, Bauerschmitz GJ, Kanerva A, Barker SD, Straughn JM, Wang M, Barnes MN, Blackwell JL, Siegal GP, Alvarez RD, Curiel DT & **Hemminki A**. Replication of an integrin targeted conditionally replicating adenovirus on primary ovarian cancer spheroids. *Cancer Gene Ther*, 2003; 10: 377-87.
47. **Hemminki A**, Wang M, Hakkarainen T, Desmond RA, Wahlfors J, Curiel DT. Production of an EGFR targeting molecule from a conditionally replicating adenovirus impairs its oncolytic potential. *Cancer Gene Ther*, 2003; 10: 583-8.
48. Barker SD, Dmitriev I, Nettelbeck D, Liu B, Rivera A, Alvarez RD, Curiel DT & **Hemminki A**. Combined transcriptional and transductional targeting improves the specificity and efficacy of adenoviral gene delivery to ovarian carcinoma. *Gene Ther*, 2003; 10: 1198-204.

49. Kanerva A, Zinn K, Chaudhuri T, Lam JT, Suzuki K, Uil TG, Hakkarainen T, Bauerschmitz GJ, Wang M, Liu B, Cao Z, Alvarez RD, Curiel DT & **Hemminki A**. Enhanced therapeutic efficacy for ovarian cancer with a serotype 3 receptor-targeted oncolytic adenovirus. *Mol Ther*, 2003; 8: 449-58.
50. Glasgow JN, Bauerschmitz GJ, Curiel DT & **Hemminki A**: Transductional and transcriptional targeting of adenovirus for clinical applications. *Curr Gene Ther*, 2004; 4: 1-14. Review.
51. Kanerva A, Bauerschmitz GJ, Yamamoto M, Lam JT, Alvarez RD, Siegal GP, Curiel DT & **Hemminki A**. A Cyclooxygenase-2 Promoter-Based Conditionally Replicating Adenovirus with Enhanced Infectivity for Treatment of Ovarian Adenocarcinoma. *Gene Ther*, 2004; 11: 552-9.
52. Saukkonen K, **Hemminki A**. Tissue specific promoters for cancer gene therapy. *Exp Opin Biol Ther*, 2004; 4: 683-96. Review.
53. Verwijnen SM, Sillevs Smith PA, Hoeben RC, Rabelink MJ, Wiebe L, Curiel DT, **Hemminki A**, Krenning EP, de Jong M. Molecular imaging and treatment of malignant gliomas following adenoviral transfer of the herpes simplex virus-thymidine kinase gene and the somatostatin receptor subtype 2 gene. *Cancer Biother Radiopharm*, 2004; 19: 111-20.
54. Kanerva A, **Hemminki A**. Replication competent viruses for cancer therapy. *Drug Future*, 2004, 28: 359-67. Review.
55. Breidenbach M, Rein DT, Wang M, Nettelbeck DM, **Hemminki A**, Ulasov I, Rivera AR, Everts M, Alvarez RD, Douglas JT and Curiel DT. Genetic replacement of the adenovirus shaft fiber reduces liver tropism in ovarian cancer gene therapy. *Hum Gene Ther*, 2004; 15: 509-18.
56. Kanerva A, **Hemminki A**. Modified adenoviruses for cancer gene therapy. *Int J Cancer*, 2004; 110: 475-80. Review.
57. Glasgow JN, Kremer EJ, **Hemminki A**, Siegal GP, Douglas JT, Curiel DT. An adenovirus vector with a chimeric fiber derived from canine adenovirus type 2 displays novel tropism. *Virology*, 2004; 324: 103-16.
58. Bauerschmitz GJ, Kanerva A, Wang M, Herrmann I, Shaw D, Strong TV, Desmond RA, Rein DT, Dall P, Curiel DT & **Hemminki A**. Evaluation of a selectively oncolytic adenovirus for local and systemic treatment of cervical cancer. *Int J Cancer*, 2004; 111: 303-9.
59. Lamfers ML, **Hemminki A**. Multicellular tumor spheroids in gene therapy and oncolytic virus therapy. *Curr Opin Mol Ther*, 2004; 6: 403-11. Review.
60. Rein DT, Breidenbach M, Nettelbeck DM, Kawakami Y, Siegal GP, Huh WK, Wang M, **Hemminki A**, Bauerschmitz GJ, Yamamoto M, Adachi Y, Takayama K, Dall P and Curiel DT. Evaluation of tissue specific promoters in carcinomas of the cervix uteri. *J Gene Med*, 2004; 6: 1281-89.
61. Lam JT, Kanerva A, Bauerschmitz GJ, Takayama K, Suzuki K, Yamamoto M, Bhoola SM, Liu B, Wang M, Barnew MN, Alvarez RD, Curiel DT & **Hemminki A**. Inter-patient variation

- in efficacy of five oncolytic adenovirus candidates for ovarian cancer therapy. *J Gene Med*, 2004; 6: 1333-42.
62. Bauerschmitz GJ, **Hemminki A**, Curiel DT, Dall P. [Tumour-dependent replicating adenoviruses in the treatment of carcinomas]. *Zentralbl Gynakol*, 2004; 126: 280-1. German.
 63. Kanerva A, Zinn K, Peng K-W, Ranki T, Kangasniemi L, Chaudhuri TR, Desmond RA, Wang M, Takayama K, Hakkarainen T, Alftan H, Stenman U-H, Curiel DT & **Hemminki A**. Noninvasive dual modality in vivo monitoring of the persistence and potency of a tumor targeted conditionally replicating adenovirus. *Gene Ther*, 2005; 12: 87-94.
 64. Wang M, **Hemminki A**, Siegal GP, Barnes MN, Dmitriev I, Krasnykh VN, Liu B, Curiel DT, Alvarez RD. Adenoviruses with an RGD-4C modification of the fiber knob elicit a neutralizing antibody response but continue to allow enhanced gene delivery. *Gynecol Oncol*, 2005; 96: 341-8.
 65. Rein DT, Breidenbach M, Kirby TO, Han T, Siegal GP, Bauerschmitz GJ, Wang M, Nettelbeck DM, Tsuruta Y, Yamamoto M, Dall P, **Hemminki A** and Curiel DT. A fiber-modified, secretory leukoprotease inhibitor promoter-based conditionally replicating adenovirus for treatment of ovarian cancer. *Clin Cancer Res*, 2005; 11: 1327-35.
 66. Alazzouzi H, Alhopuro P, Salovaara R, Sammalkorpi H, Järvinen H, Mecklin J-P, **Hemminki A**, Schwartz S, Aaltonen LA, Arango D. SMAD4 as a prognostic marker in colorectal cancer. *Clin Cancer Res*, 2005; 11: 2606-11.
 67. Hakkarainen T, Wahlfors T, Meriläinen O, Loimas S, **Hemminki A**, Wahlfors J. VP22 does not significantly enhance enzyme prodrug cancer gene therapy as a part of a VP22-HSVTk-GFP triple fusion construct. *J Gene Med*, 2005; 7: 898-907.
 68. Kanerva A, **Hemminki A**. Adenoviruses for treatment of cancer. *Ann Med*, 2005; 37: 33-43. Review.
 69. Raki M, Kanerva A, Ristimäki A, Desmond RA, Chen D-T, Ranki T, Sarkioja M, Kangasniemi L, **Hemminki A**. Combination of gemcitabine and Ad5/3-Δ24, a tropism modified conditionally replicating adenovirus, for the treatment of ovarian cancer. *Gene Ther*, 2005; 12: 1198-205.
 70. Hakkarainen T, **Hemminki A**. Enhancement of cancer gene therapy with modified viral vectors and fusion genes. *Gene Ther Mol Biol*, 2005; 9: 153-168. Free at <http://www.gtmb.org/>.
 71. Arango D, Laiho P, Kokko A, Alhopuro P, Sammalkorpi H, Salovaara R, Nicorici D, Hautaniemi S, Alazzouzi H, Mecklin J-P, Järvinen H, **Hemminki A**, Astola J, Schwartz S Jr, Aaltonen LA. Gene expression profiling predicts recurrence in Dukes' C colorectal cancer. *Gastroenterology*, 2005; 129: 874-84.
 72. Alhopuro P, Alazzouzi H, Sammalkorpi H, Davalos A, Salovaara R, **Hemminki A**, Järvinen H, Mecklin J-P, Schwartz S Jr, Aaltonen LA, Arango D. SMAD4 levels and response to 5-fluorouracil in colorectal cancer. *Clin Cancer Res*, 2005; 11: 6311-6.
 73. Hakkarainen T, Kanerva A, **Hemminki A**. [Adenoviruses in cancer therapy]. *Duodecim*, 2005; 121: 2195–203. Review. Finnish.

74. **Hemminki A**, Kellokumpu-Lehtinen P-L. [What happened to clinical cancer research?] (Editorial in Finnish). *Suomen Lääkärilehti - Finnish Medical Journal*, 2005; 48: 4959-60.
75. Bauerschmitz GJ, Guse K, Kanerva A, Menzel A, Herrmann I, Desmond RA, Yamamoto M, Nettelbeck DM, Hakkarainen T, Dall P, Curiel DT, **Hemminki A**. Triple targeted oncolytic adenoviruses featuring the Cox2 promoter, E1A transcomplementation and serotype chimerism for enhanced selectivity for ovarian cancer cells. *Mol Ther*, 2006; 14:164-74.
76. Shi W, **Hemminki A**, Bartlett JS. Capsid modifications overcome low heterogeneous expression of heparan sulfate proteoglycan that limits AAV2-mediated gene transfer and therapeutic efficacy in human ovarian carcinoma. *Gynecol Oncol*, 2006; 103 :1054-62.
77. Hakkarainen T, **Hemminki A**, Curiel DT, Wahlfors J. A conditionally replicative adenovirus that codes for a TK-GFP fusion protein (Ad5-D24TK-GFP) for evaluation of the potency of oncolytic virotherapy with molecular chemotherapy. *Int J Mol Med* 2006; 18:751-9.
78. Raki M, Rein DT, Kanerva A, **Hemminki A**. Gene Transfer Approaches for Gynecological Diseases. *Mol Ther*, 2006; 14: 154-63. Review.
79. Joensuu H, Kellokumpu-Lehtinen P-L, Bono P, Alanko T, Kataja V, Asola R, Utriainen T, Kokko R, **Hemminki A**, Tarkkanen M, Turpeenniemi-Hujanen T, Jyrkkö S, Flander M, Helle L, Ingalsuo S, Johansson K, Jääskeläinen A-S, Pajunen M, Rauhala M, Kaleva-Kerola J, Salminen T, Leinonen M, Elomaa I, Isola J; FinHer Study Investigators. Adjuvant docetaxel or vinorelbine with or without trastuzumab for breast cancer. *N Eng J Med*, 2006; 354: 809-20.
80. Kangasniemi L, Kiviluoto T, Kanerva A, Raki M, Ranki T, Sarkioja M, Wu H, Marini F, Hockerstedt K, Isoniemi H, Alfthan H, Stenman U-H, Curiel DT, **Hemminki A**. Infectivity-enhanced adenoviruses deliver efficacy in clinical samples and orthotopic models of disseminated gastric cancer *Clin Cancer Res*, 2006; 12: 3137-44.
81. Särkioja M, Kanerva A, Salo J, Kangasniemi L, Eriksson M, Raki M, Ranki T, Hakkarainen T and **Hemminki A**. Noninvasive imaging for evaluation systemic delivery of capsid-modified adenoviruses in an orthotopic model of advanced lung cancer. *Cancer*, 2006; 107:1578-88.
82. **Hemminki A**, Kellokumpu-Lehtinen P-L. Harmful impact of EU clinical trials directive. (Editorial). *BMJ* 2006; 332: 501-2.
83. Ranki T, Kanerva A, Ristimäki A, Hakkarainen T, Särkioja M, Kangasniemi L, Raki M, Laakkonen P, Goodison S and **Hemminki A**. A heparan sulphate targeted conditionally replicative adenovirus, Ad5.pk7-Δ24, for the treatment of advanced breast cancer. *Gene Ther* 2007; 14: 58-67.
84. Kanerva A, Raki R, Ranki T, Särkioja M, Koponen J, Desmond RA, Helin A, Stenman U-H, Isoniemi I, Höckerstedt K, Ristimäki A & **Hemminki A**. Chlorpromazine and apigenin reduce adenovirus replication and decrease replication associated toxicity. *J Gene Med*, 2007; 9: 3-9.
85. Rajeci M, Kanerva A, Stenman U-H, Tenhunen M, Kangasniemi L, Särkioja M, Ala-Opas MY, Alfthan H, Sankila A, Rintala A, Desmond RA, Hakkarainen T & **Hemminki A**. Treatment of prostate cancer with Ad5/3Delta24hCG allows non-invasive detection of the magnitude and persistence of virus replication *in vivo*. *Mol Cancer Ther*, 2007; 6: 742-51.

86. Lam JT, **Hemminki A**, Kanerva A, Lee KB, Blackwell JL, Desmond RA, Siegal GP, Curiel DT. A three-dimensional assay for measurement of viral-induced oncolysis. *Cancer Gene Ther*, 2007; 14: 421-30.
87. Guse K, Dias JD, Bauerschmitz G, Hakkarainen T, Aavik E, Ranki T, Pisto T, Särkioja M, Desmond RA, Kanerva A, **Hemminki A**. Luciferase imaging for evaluation of oncolytic adenovirus replication in vivo. *Gene Ther*, 2007; 14: 902-11.
88. Ranki T, Särkioja M, Hakkarainen T, von Smitten K, Kanerva A, **Hemminki A**. Systemic efficacy of oncolytic adenoviruses in imagable orthotopic models of hormone refractory metastatic breast cancer. *Int J Cancer*, 2007; 121:165-74.
89. Paju A, Hotakainen K, Cao Y, Laurila T, Gadaleanu V, **Hemminki A**, Stenman UH, Bjartell A. Increased expression of tumor-associated trypsin inhibitor, TATI, in prostate cancer and in androgen-independent 22Rv1 cells. *Eur Urol*, 2007; 52:1670-9.
90. Guse K, Ranki T, Ala-Opas M, Bono P, Särkioja M, RajECKI M, Kanerva A, Hakkarainen T, **Hemminki A**. Treatment of metastatic renal cancer with capsid modified oncolytic adenoviruses. *Mol Cancer Ther*, 2007; 6:2728-36.
91. Hakkarainen T, Särkioja M, Lehenkari P, Miettinen S, Ylikomi T, Suuronen R, Desmond RA, Kanerva A and **Hemminki A**. Human mesenchymal stem cells lack tumor tropism but enhance the antitumor activity of oncolytic adenoviruses in orthotopic lung and breast tumors. *Hum Gene Ther* 2007; 18: 627-41.
92. **Hemminki A**, Särkioja M, Salo J. Reply to: Orthotopic models of lung cancer and GFP whole-body imaging of drug efficacy. *Cancer*, 2007; 109: 1214.
93. **Hemminki A**. [National vaccine production and preparedness for a pandemic] (Editorial in Finnish). *Suomen Lääkärilehti - Finnish Medical Journal*, 2007; 62: 386-7.
94. Raki M, Hakkarainen T, Bauerschmitz G, Sarkioja M, Desmond RA, Kanerva A and **Hemminki A**. Utility of TK/GCV in the context of highly effective oncolysis mediated by a serotype 3 receptor targeted oncolytic adenovirus. *Gene Ther* 2007; 14: 1380-8.
95. Kanerva A, Raki M, **Hemminki A**. Gene therapy of gynecological diseases. *Expert Opin Biol Ther* 2007;7:1347-61. Review.
96. Eriksson M, Guse K, Bauerschmitz G, Virkkunen P, Tarkkanen M, Tanner M, Hakkarainen T, Kanerva A, Desmond RA, Pesonen S, **Hemminki A**. Oncolytic adenoviruses kill breast cancer initiating CD44+CD24-/low cells. *Mol Ther*, 2007;15:2088-93.
97. Särkioja M, Hakkarainen T, Eriksson M, Ristimäki A, Desmond RA, Kanerva A, **Hemminki A**. The cyclo-oxygenase 2 promoter is induced in non-target cells following adenovirus infection, but an AU-rich 3' UTR destabilization element can increase specificity. *J Gene Med*, 2008 ;10: 744-53.
98. Kanerva A, **Hemminki A**. [The possibilities of gene therapy in the treatment of ovarian cancer] (Finnish). *Duodecim*, 2008; 124: 167-74.
99. Raki M, Sarkioja M, Desmond RA, Chen D-T, Bützow R, **Hemminki A** and Kanerva A. Oncolytic adenovirus Ad5/3-Δ24 and chemotherapy for treatment of orthotopic ovarian cancer. *Gynecol Oncol*, 2008; 108: 166-72.

100. Kanerva A, Lavilla-Alonso S, Raki M, Kangasniemi L, Bauerschmitz GJ, Takayama K, Ristimäki A, Desmond RA, **Hemminki A**. Systemic therapy for cervical cancer with potentially regulatable oncolytic adenoviruses. *PLOSOne* 2008;3: e2917.
101. Ribacka C and **Hemminki A**. Virotherapy as an approach against cancer stem cells. *Curr Gene Ther* 2008; 8: 88-96. Review.
102. Särkioja M, Pesonen S, Raki M, Hakkarainen T, Salo J, Ahonen MT, Kanerva A & **Hemminki A**. Changing the adenovirus fiber for retaining gene delivery efficacy in the presence of neutralizing antibodies. *Gene Ther*, 2008; 15: 921-9.
103. Bauerschmitz GJ, Ranki T, Kangasniemi L, Ribacka C, Eriksson M, Porten M, Herrmann I, Ristimäki A, Virkkunen P, Tarkkanen M, Hakkarainen T, Kanerva A, Rein D, Pesonen S, **Hemminki A**. Tissue-specific promoters active in CD44+CD24-/low breast cancer cells. *Cancer Res*, 2008;68:5533-9.
104. Kangasniemi L, Koskinen M, Jokinen M, Toriseva M, Ala-Aho R, Kähäri V-M, Jalonen H, Ylä-Herttua S, Moilanen H, Stenman U-H, Diaconu I, Kanerva A, Pesonen S, Hakkarainen T & **Hemminki A**. Extended release of adenovirus from silica implants *in vitro* and *in vivo*. *Gene Ther*, 2009; 16:103-10.
105. RajECKi M, af Hällström TA, Hakkarainen T, Nokisalmi P, Hautaniemi S, Nieminen AI, Tenhunen M, Rantanen V, Desmond RM, Chen DT, Guse K, Stenman U-H, Gargini R, Kapanen M, Klefström J, Kanerva A, Pesonen S, Ahtiainen L & **Hemminki A**. Mre11 inhibition by oncolytic adenovirus associates with autophagy and underlies synergy with ionizing radiation. *Int J Cancer* 2009; 125:2441-9.
106. Ribacka C, Pesonen S and **Hemminki A**. Cancer, stem cells and oncolytic viruses. *Ann Med*, 2008; 40:496-505. Review.
107. Ylösmäki E, Hakkarainen T, **Hemminki A**, Visakorpi T, Andino R & Saksela K. Generation of a conditionally replicating adenovirus based on targeted destruction of E1A mRNA by a cell type-specific microRNA. *J Virol*, 2008; 82:11009-15.
108. Koski A, RajECKi M, Guse K, Kanerva A, Ristimäki A, Pesonen S, Escutenaire S, **Hemminki A**. Systemic adenoviral gene delivery to orthotopic murine breast tumors with ablation of coagulation factors, thrombocytes and Kupffer cells. *J Gene Med*, 2009; 11:966-77.
109. RajECKi M, Joensuu T & **Hemminki A**. [Oncolytic adenoviruses for the treatment of cancer – a clinical perspective] (Finnish). *Suomen Lääkärilehti - Finnish Medical Journal*, 2008 38:3085-3093.
110. Diaconu I, Denby L, Pesonen S, Cerullo V, Bauerschmitz GJ, Guse K, RajECKi M, Dias JD, Taari K, Kanerva A, Baker AH & **Hemminki A**. Serotype chimeric and fiber mutated adenovirus Ad5/19p-HIT for targeting renal cancer and untargeting the liver. *Hum Gene Ther*, 2009;20:611-20.
111. Guse K, **Hemminki A**. Cancer Gene Therapy with Oncolytic Adenoviruses. *J BUON*, 2009, 14: S7-15. Review.
112. Bauerschmitz GJ, Ranki T, Kangasniemi L, Ribacka C, , Eriksson M, Porten M, Herrmann I, Ristimäki A, Virkkunen P, Tarkkanen M, , Hakkarainen T, Kanerva A, Rein D, Pesonen S &

- Hemminki A.** [Adenoviral gene therapy works also on putative breast cancer stem cells] (Finnish). *Duodecim*, 2008; 124: 1767
113. Guse K, Diaconu I, Rajecki M, Sloniecka M, Hakkarainen T, Ristimäki A, Kanerva A, Pesonen S & **Hemminki A.** Ad5/3-9HIF-Delta24-VEGFR-1-Ig, an infectivity enhanced, dual-targeted and antiangiogenic, oncolytic adenovirus for kidney cancer treatment. *Gene Ther* 2009 16:1009-20.
 114. Pesonen S, Helin H, Nokisalmi P, Escutenaire S, Ribacka C, Särkioja M, Cerullo V, Guse K, Bauerschmitz G, Laasonen L, Kantola T, Ristimäki A, Rajecki M, Oksanen M, Haavisto E, Kanerva A, Joensuu T & **Hemminki A.** Oncolytic adenovirus treatment of a patient with refractory neuroblastoma. *Acta Oncol* 2010; 49:117-9.
 115. Hakkarainen T, Rajecki M, Sarparanta M, Tenhunen M, Airaksinen A, Desmond RA, Kairemo K, **Hemminki A.** Targeted radiotherapy for prostate cancer with an oncolytic adenovirus coding for human sodium iodide symporter. *Clin Cancer Res* 2009; 15: 5396-403.
 116. Matthews KS, Noker PE, Tian B, Grimes SD, Fulton R, Schweikart K, Harris R, Aurigemma R, Wang M, Barnes MN, Siegal GP, **Hemminki A,** Zinn K, Curiel DT, Alvarez RD. Identifying the Safety Profile of Ad5.SSTR/TK.RGD, a Novel Infectivity-Enhanced Bicistronic Adenovirus, in Anticipation of a Phase I Clinical Trial in Patients with Recurrent Ovarian Cancer. *Clin Cancer Res*, 2009; 15: 4131-7.
 117. Strauss R, Sova P, Liu Y, Li Z, Tuve S, Pritchard D, Brinkkoetter P, Möller T, Wildner O, Pesonen S, **Hemminki A,** Urban N, Drescher C, Lieber A. Epithelial phenotype confers resistance of ovarian cancer cells to oncolytic adenoviruses. *Cancer Res*, 2009; 69:5115-25.
 118. Bayo-Puxan N, Gimenez-Alejandre M, Lavilla-Alonso S, Gros A, Cascallo M, **Hemminki A,** Alemany R. Replacement of adenovirus type 5 fiber shaft heparan sulfate proteoglycan-binding domain with RGD for improved tumor infectivity and targeting. *Hum Gene Ther*, 2009; 20: 1214-21.
 119. Dias JD, Guse K, Nokisalmi P, Eriksson M, Chen D-T, Diaconu I, Tenhunen M, Liikanen I, Grenman R, Savontaus M, Pesonen S, Cerullo V, **Hemminki A.** Multimodal approach using oncolytic adenovirus, cetuximab, chemotherapy and radiotherapy in HNSCC low passage tumor cell cultures. *Eur J Cancer*, 2010; 46: 625-35.
 120. Piccialli V, Oliviero G, Borbone N, Tuzi A, Centore R, **Hemminki A,** Ugolini M and Cerullo V. Discovery of a new PCC-mediated stereoselective oxidative spiroketalization process. An access to a new type of poly-THF spiroketal compound displaying anticancer activity. *Org Biomol Chem*, 2009; 7: 3036-9.
 121. Rojas JJ, Cascallo M, Guedan S, Gros A, Martinez-Quintanilla J, **Hemminki A,** Alemany R. A modified E2F-1 promoter improves the efficacy to toxicity ratio of oncolytic adenoviruses. *Gene Ther* 2009; 16:1441-51.
 122. Kangasniemi L, Parviainen S, Pisto T, Koskinen M, Jokinen M, Kiviluoto T, Cerullo V, Jalonen H, Koski A, Kangasniemi A, Kanerva A, Pesonen S, **Hemminki A.** Effects of capsid-modified oncolytic adenoviruses and their combinations with gemcitabine or silica gel on pancreatic cancer. *Int J Cancer*, 2012; 131(1):253-63.
 123. Joensuu G*, Joensuu T*, Nokisalmi P, Reddy C, Isola J, Ruutu M, Kouri M, Kupelian PA, Collan J, Pesonen S, **Hemminki A.** A phase I/II trial of gefitinib given concurrently with

radiotherapy in patients with non-metastatic prostate cancer. *Int J Radiat Oncol Biol Phys*, 2010; 78(1):42-9.

124. Tyynismaa H, Carroll CJ, Raimundo N, Ahola-Erkkilä S, Wenz T, Ruhanen H, Guse K, **Hemminki A**, Peltola-Mjøsund KE, Tulkki V, Oresic M, Moraes CT, Pietiläinen K, Hovatta I, Suomalainen A. Mitochondrial myopathy induces a starvation-like response. *Hum Mol Genet*, 2010; 19:3948-58.
125. Joensuu H, Kellokumpu-Lehtinen P-L, Huovinen R, Jukkola-Vuorinen A, Tanner M, Asola R, Kokko R, Ahlgren J, Auvinen P, **Hemminki A**, Pajja O, Helle L, Nuortio L, Villman K, Nilsson G, Lahtela S-L, Lehtiö K, Pajunen M, Poikonen P, Nyandoto P, Kataja V, Bono P, Leinonen M, Lindman H for the FinXX Study Investigators. Adjuvant capecitabine in combination with docetaxel and cyclophosphamide plus epirubicin for breast cancer: an open-label, randomised controlled trial. *Lancet Oncol*, 2009;10:1145-51.
126. Guse K, Sloniecka M, Diaconu I, Ottolino-Perry K, Tang N, Ng C, Le Boeuf F, Bell JC, McCart JA, Ristimäki A, Pesonen S, Cerullo V, **Hemminki A**. Antiangiogenic arming of an oncolytic vaccinia virus enhances antitumor efficacy in renal cell cancer models. *J Virol*, 2010;84:856-66.
127. Wang H, Liu Y, Li Z, Fan X, **Hemminki A**, Lieber A. Recombinant adenovirus type 35 fiber knob protein sensitizes lymphoma cells to rituximab therapy. *Blood*, 2010;115:592-600.
128. Dias JD, Liikanen I, Guse K, Foloppe J, Sloniecka M, Diaconu I, Rantanen V, Eriksson M, Hakkarainen T, Lusky M, Erbs P, Escutenaire S, Kanerva A, Pesonen S, Cerullo V*, **Hemminki A***. Targeted chemotherapy for head and neck cancer with a chimeric oncolytic adenovirus coding for bifunctional suicide protein FCU1. *Clin Cancer Res*, 2010;16:2540-9.
129. Koski A, Kangasniemi L, Escutenaire S, Pesonen S, Cerullo V, Diaconu I, Nokisalmi P, Raki M, Rajecki M, Guse K, Ranki T, Oksanen M, Holm SL, Haavisto E, Karioja-Kallio A, Laasonen L, Partanen K, Ugolini M, Helminen A, Karli E, Hannuksela P, Pesonen S, Joensuu T, Kanerva A, **Hemminki A**. Treatment of Cancer Patients with a Serotype 5/3 Chimeric Oncolytic Adenovirus Expressing Granulocyte-Macrophage Colony Stimulating Factor. *Mol Ther*, 2010;18:1874-84.
130. Liikanen I, Dias JD, Nokisalmi P, Sloniecka M, Kangasniemi L, Rajecki M, Dobner T, Tenhunen M, Kanerva A, Pesonen S, Ahtiainen L, **Hemminki A**. Adenoviral E4orf3 and E4orf6 proteins, but not E1B55K, increase killing of cancer cells by radiotherapy in vivo. *Int J Radiat Oncol Biol Phys*, 2010;78(4):1201-9.
131. Diaconu I, Cerullo V, Escutenaire S, Kanerva A, Bauerschmitz GJ, Hernandez-Alcoceba R, Pesonen S* & **Hemminki A***. Human adenovirus replication in immunocompetent Syrian hamsters can be attenuated with chlorpromazine or cidofovir. *J Gene Med*, 2010;12(5):435-45.
132. Ahtiainen L, Mirantes C, Jahkola T, Escutenaire S, Diaconu I, Osterlund P, Kanerva A, Cerullo V, **Hemminki A**. Defects in innate immunity render breast cancer initiating cells permissive to oncolytic adenovirus. *PLOSOne*, 2010; 5: e13859.
133. Raki M, Sarkioja M, Escutenaire S, Kangasniemi L, Haavisto E, Kanerva A, Cerullo V, Joensuu T, Oksanen M, Pesonen S, **Hemminki A**. Switching the fiber knob of oncolytic adenoviruses to avoid neutralizing antibodies in human cancer patients. *J Gene Med*, 2011; 13: 253-61.

134. Ahonen M, Diaconu I, Pesonen S, Kanerva A, Baumann M, Parviainen ST, Spiller B, Cerullo V, **Hemminki A**. Calcium gluconate in phosphate buffered saline increases gene delivery with adenovirus type 5. *PLoSOne*, 2010; 5: e13103.
135. Hemminki O, Bauerschmitz G, Hemmi S, Lavilla-Alonso S, Diaconu I, Guse K, Desmond RA, Lappalainen M, Kanerva A, Cerullo V, Pesonen S, **Hemminki A**. Oncolytic adenovirus based on serotype 3. *Cancer Gene Ther* 2011; 18: 288-96.
136. Paunio T, Lundin J, Marjamaa A, Myllykangas L, Silander K, Pennanen P, Aarnio M, Oksanen MK, Dias J, Pesonen S, **Hemminki A**. [Foreign doctors, dentists and graduate students in Finland]. *Suomen Lääkärilehti - Finn Med J*, 2010; 41:3309-14.
137. Nokisalmi P, Pesonen S, Escutenaire S, Särkioja M, Raki M, Cerullo V, Laasonen L, Alemany R, Rojas J, Cascallo M, Guse K, RajECKi M, Kangasniemi L, Haavisto E, Karioja-Kallio A, Hannuksela P, Oksanen M, Kanerva A, Joensuu T, Ahtiainen L, **Hemminki A**. Oncolytic Adenovirus ICOVIR-7 in Patients with Advanced and Refractory Solid Tumors. *Clin Cancer Res* 2010; 16: 3035-43.
138. Pesonen S, Nokisalmi P, Escutenaire S, Särkioja M, Raki M, Cerullo V, Kangasniemi L, Laasonen L, Ribacka C, Guse K, Haavisto E, Oksanen M, RajECKi M, Helminen A, Ristimäki A, Karioja-Kallio A, Karli E, Kantola T, Bauerschmitz G, Kanerva A, Joensuu T & **Hemminki A**. Prolonged systemic circulation of chimeric oncolytic adenovirus Ad5/3-Cox2L-D24 in patients with metastatic and refractory solid tumors. *Gene Ther*, 2010; 17: 892-904.
139. Cerullo V, Pesonen S, Diaconu I, Escutenaire S, Arstila PT, Ugolini M, Nokisalmi P, Raki M, Laasonen L, Särkioja M, RajECKi M, Kangasniemi L, Guse K, Helminen A, Ahtiainen L, Ristimäki A, Raisanen-Sokolowski A, Haavisto E, Oksanen M, Karli E, Karioja-Kallio A, Holm S-L, Kouri M, Joensuu T, Kanerva A & **Hemminki A**. Oncolytic adenovirus coding for GMCSF induces anti-tumoral immunity in human cancer patients. *Cancer Res*, 2010; 70(11):4297-309.
140. Kim KH, Ryan MJ, Estep JE, Miniard BM, Rudge TL, Peggins JO, Broadt TL, Wang M, Preuss MA, Siegal GP, **Hemminki A**, Harris RD, Aurigemma R, Curiel DT, Alvarez RD. A new generation of serotype chimeric infectivity-enhanced conditionally replicative adenovirals: the safety profile of ad5/3-Δ24 in advance of a phase I clinical trial in ovarian cancer patients. *Hum Gene Ther* 2011; 22(7):821-8.
141. Lavilla-Alonso S, Bauerschmitz G, Abo-Ramadan U, Halavaara J, Escutenaire S, Diaconu I, Tatlisumak T, Kanerva A, **Hemminki A***, Pesonen S*. Adenoviruses with an αvβ integrin targeting moiety in the fiber shaft or the HI-loop increase tumor specificity without compromising antitumor efficacy in magnetic resonance imaging of colorectal cancer metastases. *J Transl Med*, 2010; 8:80.
142. Escutenaire S, Cerullo V, Diaconu I, Ahtiainen L, Hannuksela P, Oksanen M, Haavisto E, Karioja-Kallio A, Holm S-L, Kangasniemi L, Ribacka C, Kauppinen S, Joensuu T, Arstila P, Pesonen S, Kanerva A* and **Hemminki A***. In vivo and in vitro distribution of type 5 and fiber-modified oncolytic adenoviruses in human blood compartments. *Ann Med*, 2011; 43(2):151-63.
143. Cerullo V, Pesonen S, Diaconu I, Escutenaire S, Arstila PT, Ugolini M, Nokisalmi P, Raki M, Laasonen L, Särkioja M, RajECKi M, Kangasniemi L, Guse K, Helminen A, Ahtiainen L,

- Ristimäki A, Raisanen-Sokolowski A, Haavisto E, Oksanen M, Karli E, Karioja-Kallio A, Holm S-L, Kouri M, Joensuu T, Kanerva A & **Hemminki A**. [Oncolytic adenoviruses can induce anti-tumor immunity in cancer patients] (Finnish). *Duodecim*, 2010;126:1429.
144. Tong AW, Senzer N, Cerullo V, Templeton NS, **Hemminki A** and Nemunaitis J. Oncolytic viruses for induction of anti-tumor immunity. *Curr Pharm Biotech*, 2012; 13(9):1750-60. Review.
145. Lavilla-Alonso S, Abo-Ramadan U, Halavaara J, Escutenaire S, Tatlisumak T, Saksela K, Kanerva A, **Hemminki A***, Pesonen S*. Optimized mouse model for the imaging of tumor metastasis upon experimental therapy. *PLOS One*, 2011; 6(11): e26810.
146. Pesonen S, Diaconu I, Cerullo V, Escutenaire S, Raki M, Kangasniemi L, Nokisalmi P, Dotti G, Guse K, Laasonen L, Partanen K, Karli E, Haavisto E, Oksanen M, Karioja-Kallio A, Hannuksela P, Holm SL, Kauppinen S, Joensuu T, Kanerva A, **Hemminki A**. Integrin targeted oncolytic adenoviruses Ad5-D24-RGD and Ad5-RGD-D24-GMCSF for treatment of patients with advanced chemotherapy refractory solid tumors. *Int J Cancer*, 2012; 130(8):1937-47.
147. RajECKi M, Raki M, Escutenaire S, Pesonen S, Cerullo V, Helminen A, Hannuksela P, Partanen K, Laasonen L, Joensuu T, Kangasniemi L, Haavisto E, Kanerva A, Ahtiainen L, **Hemminki A**. Safety of Glucocorticoids in Cancer Patients Treated with Oncolytic Adenoviruses. *Mol Pharm*, 2011; 8(1):93-103.
148. Kangasniemi L & **Hemminki A**. Oncolytic adenovirus research and applications. *Future Virol* 2010; 5(6):745-761.
149. Guse K, Cerullo V, Hemminki A. Oncolytic Vaccinia Virus for the Treatment of Cancer. *Expert Opin Biol Ther*, 2011; 11(5):595-608. Review.
150. Kangasniemi L & **Hemminki A**. [Adenovirus] (Finnish). *Solubiologi*, 2010; 1(28): 44-54.
151. Piccialli V, Zaccaria S, Borbone N, Oliviero G, D'Errico S, **Hemminki A**, Cerullo V, Romano V, Tuzi A, Centore R. Discovery of a novel one-step RuO₄-catalysed tandem oxidative polycyclization/double spiroketalization process. Access to a new type of polyether bis-spiroketal compound displaying antitumor activity. *Tetrahedron*, 2010; 66:9370-8.
152. Ranki T & **Hemminki A**. Serotype chimeric human adenoviruses for cancer gene therapy. *Viruses*, 2010; 2:2196-2212. Review.
153. Wang H, Li ZY, Liu Y, Persson J, Beyer I, Möller T, Koyuncu D, Drescher MR, Strauss R, Zhang XB, Wahl JK 3rd, Urban N, Drescher C, **Hemminki A**, Fender P, Lieber A. Desmoglein 2 is a receptor for adenovirus serotypes 3, 7, 11 and 14. *Nature Med*, 2011; 17(1):96-104.
154. RajECKi M, Kangasmäki A, Laasonen L, Escutenaire S, Hakkarainen T, Haukka J, Ristimäki A, Kairemo K, Kangasniemi L, Kiljunen T, Joensuu T, Pesonen S, **Hemminki A**. Sodium iodide -symporter SPECT imaging of a patient treated with oncolytic adenovirus Ad5/3-D24-hNIS. Letter to the Editor. *Mol Ther*, 2011; 19(4):629-31.
155. Strauss R, Li ZY, Liu Y, Beyer I, Persson J, Sova P, Möller T, Pesonen S, **Hemminki A**, Hamerlik P, Drescher C, Urban N, Bartek J, Lieber A. Analysis of epithelial and mesenchymal

- markers in ovarian cancer reveals phenotypic heterogeneity and plasticity. *PLOS One*, 2011; 6(1):e16186.
156. Liikanen I, Monsurrò V, Ahtiainen L, Raki M, Hakkarainen T, Diaconu I, Escutenaire S, Hemminki O, Dias JD, Cerullo V, Kanerva A, Pesonen S, Marzioni D, Colombatti M, **Hemminki A**. Induction of interferon pathways mediates in vivo resistance to oncolytic adenovirus. *Mol Ther*, 2011; 19(10): 1858-66.
 157. Pesonen S, Kangasniemi L, **Hemminki A**. Oncolytic adenoviruses for the treatment of human cancer: focus on translational and clinical data. *Mol Pharm*. 2011 7; 8(1): 12-28. Review.
 158. RajECKi M*, Sarparanta M*, Hakkarainen T, Tenhunen M, Diaconu I, Kuhmonen V, Kairemo K, Kanerva A, Airaksinen AJ, **Hemminki A**. SPECT/CT imaging of hNIS-expression after intravenous delivery of an oncolytic adenovirus and 131I. *PLOS One* 2012; 7(3):e32871.
 159. Joensuu G*, Joensuu T*, Nupponen N, Ruutu M, Collan J, Pesonen S, **Hemminki A**. A phase II trial of gefitinib in patients with rising PSA following radical prostatectomy or radiotherapy. *Acta Oncol*, 2012; 51(1):130-3.
 160. Cerullo V, Diaconu I, Kangasniemi L, RajECKi M, Escutenaire S, Koski A, Romano V, Rouvinen N, Tuuminen T, Laasonen L, Partanen K, Kauppinen S, Joensuu T, Oksanen M, Holm SL, Haavisto E, Karioja-Kallio A, Kanerva A, Pesonen S, Arstila PT, **Hemminki A**. Immunological Effects of Low-dose Cyclophosphamide in Cancer Patients Treated With Oncolytic Adenovirus. *Mol Ther*, 2011; 19(9):1737-46.
 161. Hemminki K, Liu H, **Hemminki A**, Sundquist J. Power and limits of modern cancer diagnostics: cancer of unknown primary. *Ann Oncol*. 2012; 23(3):760-4. Erratum in *Ann Oncol*. 2017 Mar 27 [Epub ahead of print]
 162. Lavilla-Alonso A, Bauer M, Abo-Ramadan U, Ristimäki A, Halavaara J, Desmond RA, Wang D, Escutenaire S, Ahtiainen L, Saksela K, Tatlisumak T, **Hemminki A***, Pesonen S*. Macrophage Metalloelastase (MME) as adjuvant for intratumoral injection of oncolytic adenovirus and its influence on metastases development. *Cancer Gene Ther*, 2012; 19(2):126-34.
 163. Hemminki K, Bevier M, Hemminki A, Sundquist J. Survival in cancer of unknown primary site: population-based analysis by site and histology. *Ann Oncol*, 2012; 23(7):1854-63.
 164. Wang H, Li ZY, Yumul R, Lara S, **Hemminki A**, Fender P, Lieber A. Multimerization of adenovirus serotype 3 fiber knob domains is required for efficient binding of virus to desmoglein 2 and subsequent opening of epithelial junctions. *J Virol*, 2011; 85(13):6390-402.
 165. Hervonen P, Joensuu H, Joensuu T, Ginman C, McDermott R, Harmenberg U, Nyandoto P, Luukkaala T, **Hemminki A**, Zaitsev I, Heikkinen M, Nilsson S, Luukkaa M, Lehtinen I, Kellokumpu-Lehtinen PL. Biweekly docetaxel is better tolerated than conventional three-weekly dosing for advanced hormone-refractory prostate cancer. *Anticancer Res*, 2012; 32(3):953-6. Erratum in: *Anticancer Res*. 2012; 32(9):4169. Multiple author names corrected.
 166. Nokisalmi P, RajECKi M, Pesonen S, Escutenaire S, Soliymani R, Tenhunen M, Ahtiainen L, **Hemminki A**. Radiation induced up-regulation of gene expression from adenoviral vectors is mediated by DNA damage repair and regulation. *Int J Rad Oncol Biol Phys*, 2012; 83(1):376-84.

167. Hemminki K, Bevier M, Sundquist J, **Hemminki A**. Cancer of unknown primary (CUP): does cause of death and family history implicate hidden phenotypically changed primaries? *Ann Oncol*, 2012; 23(10):2720-4.
168. Puurand M, Peet N, Piirsoo A, Peetsalu M, Soplepmann J, Sirotkina M, Peetsalu A, **Hemminki A**, Seppet E. Deficiency of the complex I of the mitochondrial respiratory chain but improved adenylate control over succinate-dependent respiration are human gastric cancer-specific phenomena. *Mol Cell Biochem* 2012; 370(1-2):69-78.
169. Koski A, Raki M, Nokisalmi P, Liikanen I, Kangasniemi L, Joensuu T, Kanerva A, Pesonen S, Alemany R, **Hemminki A**. Verapamil results in increased blood levels of oncolytic adenovirus in treatment of patients with advanced cancer. *Mol Ther*, 2012; 20(1):221-9.
170. Cerullo V, Diaconu I, Romano V, Hirvinen M, Ugolini M, Escutenaire S, Holm SL, Pesonen S, Kipar A, Kanerva A, **Hemminki A**. An oncolytic adenovirus enhanced for Toll-like receptor 9 stimulation increases anti-tumor immune responses and tumor clearance. *Mol Ther* 2012; 20(11): 2076-86.
171. Dias JD*, Hemminki O*, Diaconu I, Hirvinen M, Bonetti A, Guse K, Escutenaire S, Kanerva A, Pesonen S, Löskog A, Cerullo V* & **Hemminki A***. Targeted Cancer Immunotherapy with Oncolytic Adenovirus Coding for a Fully Human Monoclonal Antibody Specific for CTLA-4. *Gene Ther* 2012; 19(10):988-98.
172. Diaconu I, Cerullo V, Hirvinen ML, Escutenaire S, Ugolini M, Pesonen SK, Bramante S, Parviainen S, Kanerva A, Löskog ASI, Eliopoulos AG, Pesonen S*, **Hemminki A***. Immune response is an important aspect of the antitumor effect produced by a CD40L-encoding oncolytic adenovirus. *Cancer Res* 2012; 72(9): 2327-38.
173. Pesonen S, Diaconu I, Kangasniemi L, Ranki T, Kanerva A, Pesonen SK, Gerdemann U, Leen AM, Kairemo K, Oksanen M, Haavisto E, Holm SL, Karioja-Kallio A, Kauppinen S, Partanen KP, Laasonen L, Joensuu T, Alanko T, Cerullo V, **Hemminki A**. Oncolytic immunotherapy of advanced solid tumors with a CD40L-expressing replicating adenovirus: assessment of safety and immunologic responses in patients. *Cancer Res* 2012; 72(7):1621-31.
174. Guse K, Suzuki M, Sule G, Bertin TK, Tyynismaa H, Ahola-Erkkilä S, Palmer D, Suomalainen A, Ng P, Cerullo V, Hemminki A, Lee B. Capsid Modified Adenoviral Vectors for Improved Muscle Directed Gene Therapy. *Hum Gene Ther*, 2012; 23(10):1065-70.
175. Hemminki K, Bevier M, Sundquist J, **Hemminki A**. Site-specific cancer deaths in cancer of unknown primary diagnosed with lymph node metastasis may reveal hidden primaries. *Int J Cancer* 2013; 132(4):944-50.
176. Wang H*, Beyer I*, Persson J*, Song H, Li Z, Richter M, Cao H, van Rensburg R, Yao X, Hudkins K, Yumul R, Zhang XB, Yu M, Fender P, **Hemminki A**, Lieber A. A new human DSG2-transgenic mouse model for studying the tropism and pathology of human adenoviruses. *J Virol* 2012; 86(11): 6286-302.
177. Westberg S, Sadeghi A, Svensson E, Segall T, Dimopoulou M, Korsgren O, **Hemminki A**, Löskog ASI, Tötterman TH, von Euler H. Treatment efficacy and immune stimulation by AdCD40L gene therapy of spontaneous canine malignant melanoma. *J Immunother* 2013; 36(6):350-8.
178. Cerullo V, Koski A, Vähä-Koskela M, **Hemminki A**. Oncolytic adenoviruses for cancer

- immunotherapy: data from mice, hamsters and humans. *Adv Cancer Res*, 2012; 115:265-318. Review.
179. Hemminki O, Diaconu I, Cerullo V, Pesonen SK, Kanerva A, Joensuu T, Kairemo K, Laasonen L, Partanen K, Kangasniemi L, Lieber A, Pesonen S, **Hemminki A**. Ad3-hTERT-E1A, a fully serotype 3 oncolytic adenovirus, in patients with chemotherapy refractory cancer. *Mol Ther*, 2012; 20(9):1821-30.
 180. **Hemminki A**. Portrait of a leader in immunotherapeutics: oncolytic viruses for treatment of cancer. Oncolytic viruses for treatment of cancer. Portrait-series, *Hum Vacc Immunother*, 2012; 8(8):1018-21.
 181. Kellokumpu-Lehtinen PL, Harmenberg U, Joensuu T, McDermott R, Hervonen P, Ginman C, Luukkaa M, Nyandoto P, **Hemminki A**, Nilsson S, McCaffrey J, Asola R, Turpeenniemi-Hujanen T, Laestadius F, Tasmuth T, Sandberg K, Keane M, Lehtinen I, Luukkaala T, Joensuu H; for the PROSTY study group. 2-Weekly versus 3-weekly docetaxel to treat castration-resistant advanced prostate cancer: a randomised, phase 3 trial. *Lancet Oncol*, 2013; 14(2):117-24.
 182. Cerullo V, Vähä-Koskela M, **Hemminki A**. Oncolytic adenoviruses: a potent form of tumor immunovirotherapy. *OncImmunology*, 2012; 1(6):979-981. Author's View.
 183. Riihimäki M, Thomsen H, **Hemminki A**, Sundquist K and Hemminki K. Comparison of survival of patients with metastases from known versus unknown primaries: survival in metastatic cancer. *BMC Cancer*. 2013; 13:36.
 184. **Hemminki A**. Treatment of Chemotherapy Refractory Cancer in the Advanced Therapy Access Program. Letter to the Editor. *Mol Ther*, 2012;20(9):1654-5.
 185. Hemminki K, Riihimäki M, Sundquist K and **Hemminki A**. Site-specific survival rates for cancer of unknown primary according to location of metastases. *Int J Cancer*. 2013; 133(1):182-9.
 186. Vähä-Koskela M*, LeBoeuf F*, Lemay C, De Silva N, Diallo J-S, Cox J, Becker M, Choi Y, Ananth A, Sellers C, Breton S, Roy D, Falls T, Brun J, **Hemminki A**, Hinkkanen A and Bell JC. Resistance to two heterologous neurotropic oncolytic viruses, Semliki Forest virus and vaccinia virus, in experimental glioma. *J Virol* 2013; 87(4):2363-6.
 187. Riihimäki M, **Hemminki A**, Sundquist K and Hemminki K. Time trends in survival from cancer of unknown primary: small steps forward. *Eur J Cancer* 2013; 49(10):2403-10.
 188. Ylösmäki E, Lavilla-Alonso S, Jäämaa S, Vähä-Koskela M, af Hällström T, **Hemminki A**, Arola J, Mäkisalo H, Saksela K. MicroRNA-mediated suppression of oncolytic adenovirus replication in human liver. *PLOS One* 2013; 8(1):e54506.
 189. D'Errico S, Oliviero G, Amato J, Borbone N, Cerullo V, **Hemminki A**, Piccialli V, Zaccaria S, Mayol L and Piccialli G. Synthesis and biological evaluation of unprecedented ring-expanded nucleosides (RENs) containing the imidazo[4,5-d][1,2,6]oxadiazepine ring system. *Chem Commun (Camb)*, 2012; 48(74): 9310-2.
 190. Callegari E, Elamin BK, D'Abundo L, Falzoni S, Donvito G, Moshiri F, Milazzo M, Altavilla G, Giacomelli L, Fornari F, **Hemminki A**, Di Virgilio F, Gramantieri L, Negrini M, Sabbioni S. Anti-tumor activity of a *miR-199*-dependent oncolytic adenovirus. *PLOSOne*,

191. Koski A, Karli E, Kipar A, Escutenaire S, Kanerva A, **Hemminki A**. Mutation of the fiber shaft heparan sulphate binding site of a 5/3 chimeric adenovirus reduces liver tropism. *PLoSOne* 2013; 8(4):e60032.
192. Bramante S, Koski A, Kipar A, Diaconu I, Liikanen I, Hemminki O, Vassilev L, Parviainen S, Cerullo V, Pesonen SK, Oksanen M, Heiskanen R, Rouvinen-Lagerström N, Merisalo-Soikkeli M, Hakonen T, Joensuu T, Kanerva A, Pesonen S, **Hemminki A**. Serotype chimeric oncolytic adenovirus coding for GM-CSF for treatment of sarcoma in rodents and humans. *Int J Cancer* 2014; 135(3):720-30.
193. Hemminki K, Riihimäki M, Sundquist K and **Hemminki A**. The challenges of understanding cancer of unknown primary. Letter to the Editor. *Int J Cancer* 2013; 133(5):1268-9.
194. Liikanen I, Ahtiainen L, Hirvinen ML, Bramante S, Cerullo V, Nokisalmi P, Hemminki O, Diaconu I, Pesonen S, Koski A, Kangasniemi L, Pesonen SK, Oksanen M, Laasonen L, Partanen K, Joensuu T, Zhao F, Kanerva A, **Hemminki A**. Oncolytic Adenovirus With Temozolomide Induces Autophagy and Antitumor Immune Responses in Cancer Patients. *Mol Ther* 2013; 21(6):1212-23.
195. Kanerva A*, Nokisalmi P*, Diaconu I, Koski A, Cerullo V, Liikanen I, Tähtinen S, Oksanen M, Heiskanen R, Pesonen S, Joensuu T, Alanko T, Partanen K, Laasonen L, Kairemo K, Pesonen S, Kangasniemi L, **Hemminki A**. Antiviral and antitumor T-cell immunity in patients treated with GM-CSF-coding oncolytic adenovirus. *Clin Cancer Res* 2013; 19(10):2734-44.
196. **Hemminki A**, Oksanen M, Merisalo-Soikkeli M. Oncolytic Virotherapy Trials—Letter. *Clin Cancer Res* 2013; 19(16):4541-2.
197. Riihimäki M, **Hemminki A**, Sundquist K and Hemminki K. Causes of death in patients with extranodal cancer of unknown primary: searching for the primary site. *BMC Cancer*. 2014; 14:439.
198. Hirvinen M, Heiskanen R, Oksanen M, Pesonen S, Liikanen I, Joensuu T, Kanerva A, Cerullo V* and **Hemminki A***. Fc-gamma receptor polymorphisms as predictive and prognostic factors in patients receiving oncolytic adenovirus treatment. *J Transl Med*, 2013; 11:193.
199. Hemminki O*, Immonen R*, Närväinen J, Kipar A, Paasonen J, Jokivarsi K, Yli-Ollila H, Soininen P, Partanen K, Joensuu T, Parviainen S, Pesonen SK, Koski A, Vähä-Koskela M, Cerullo V, Pesonen S, Gröhn O, **Hemminki A**. In vivo magnetic resonance imaging and spectroscopy identifies oncolytic adenovirus responders. *Int J Cancer*. 2014; 134(12):2878-90
200. Parviainen S, Ahonen MT, Diaconu I, Hirvinen M, Karttunen Å, Vähä-Koskela M, **Hemminki A*** and Cerullo V*. CD40-ligand and tdTomato armed vaccinia virus for induction of anti-tumor immune response and tumor imaging. *Gene Ther*, 2014; 21:195-204.
201. Koski A, Ahtinen H, Liljenback H, Roivainen A, Koskela A, Oksanen M, Partanen K, Laasonen L, Kairemo K, Joensuu T, **Hemminki A**. [(18)F]-fluorodeoxyglucose positron emission tomography and computed tomography in response evaluation of oncolytic adenovirus treatments of patients with advanced cancer. *Hum Gene Ther*. 2013; 24(12):1029-41.

202. **Hemminki A.** Oncolytic immunotherapy: where are we clinically? *Scientifica*. 2014; 2014:862925. Review.
203. Hemminki K, Chen B, Melander O, Manjer J, Hallmans G, **Hemminki A.** Smoking and body mass index as risk factors for subtypes of cancer of unknown primary. *Int J Cancer*. 2015; 136(1):246-7.
204. Parviainen S*, Ahonen M*, Diaconu I, Kipar A, Siurala M, Vähä-Koskela M, Kanerva A, Cerullo V*, **Hemminki A***. GMCSF-armed vaccinia virus induces an antitumor immune response. *Int J Cancer*. 2015; 136(5): 1065-72.
205. Siurala M, Bramante S, Vassilev L, Hirvinen M, Parviainen S, Tähtinen S, Guse K, Cerullo V, Kanerva A, Kipar A, Vähä-Koskela M, **Hemminki A.** Oncolytic adenovirus and doxorubicin-based chemotherapy results in synergistic antitumor activity against soft-tissue sarcoma. *Int J Cancer*. 2015; 136(4): 945-54.
206. Riihimäki M, **Hemminki A,** Fallah M, Thomsen H, Sundquist K, Sundquist J, Hemminki K. Metastatic sites and survival in lung cancer. *Lung Cancer*. 2014; 86(1): 78-84.
207. Hemminki K, Fallah M, **Hemminki A.** Collection and use of family history in oncology clinics. *J Clin Oncol*. 2014; 32(29): 3344-5.
208. Autio K, Knuutila A, Kipar A, Ahonen M, Parviainen S, Diaconu I, Kanerva A, Hakonen T, Vähä-Koskela M, **Hemminki A.** Anti-tumour activity of oncolytic Western Reserve vaccinia viruses in canine tumour cell lines, xenografts, and fresh tumour biopsies. *Vet Comp Oncol*. 2016; 14(4): 395-408.
209. Kanerva A, Koski A, Liikanen I, Oksanen M, Joensuu T, Hemminki O, Palmgren J, Hemminki K, **Hemminki A.** Case-Control Estimation of the Impact of Oncolytic Adenovirus on the Survival of Patients With Refractory Solid Tumors. *Mol Ther*. 2015; 23(2): 321-9.
210. Autio K, Knuutila A, Kipar A, Pesonen S, Guse K, Parviainen S, Rajamäki M, Laitinen-Vapaavuori O, Vähä-Koskela M, Kanerva A, **Hemminki A.** Safety and biodistribution of a double-deleted oncolytic vaccinia virus encoding CD40 ligand in laboratory beagles. *Mol Ther Oncol*, 2014; 1: 14002.
211. Vähä-Koskela M, Tähtinen S, Grönberg-Vähä-Koskela S, Taipale K, Saha D, Merisalo-Soikkeli M, Ahonen M, Rouvinen-Lagerström N, Hirvinen M, Veckman V, Matikainen S, Zhao F, Pakarinen P, Salo J, Kanerva A, Cerullo V, **Hemminki A.** Overcoming tumor resistance by heterologous adeno-poxvirus combination therapy. *Mol Ther Oncol*. 2015; 1: 14006.
212. Farzad L, Cerullo V, Yagyu S, Bertin T, **Hemminki A,** Rooney C, Lee B, and Suzuki M. Combinatorial treatment with Oncolytic Adenovirus and Helper-dependent Adenovirus Augments Adenoviral Cancer Gene Therapy. *Mol Ther Oncol*, 2014; 1: 14008.
213. Hirvinen M, Rajecki M, Kapanen M, Parviainen S, Rouvinen-Lagerström N, Diaconu I, Nokisalmi P, Tenhunen M, **Hemminki A,** Cerullo V. Immunological Effects of a Tumor Necrosis Factor Alpha-Armed Oncolytic Adenovirus. *Hum Gene Ther*. 2015; 26(3):134-44.
214. Taipale K, Liikanen I, Juhila J, Karioja-Kallio A, Oksanen M, Turkki R, Linder N, Lundin J, Ristimäki A, Kanerva A, Koski A, Joensuu T, Vähä-Koskela M, **Hemminki A.** T cell subsets in peripheral blood and tumors of patients treated with oncolytic adenoviruses. *Mol Ther*.

215. Hemminki O, Parviainen S, Juhila J, Turkki R, Linder N, Lundin J, Kankainen M, Ristimäki A, Koski A, Liikanen I, Oksanen M, Nettelbeck DM, Kairemo K, Partanen K, Joensuu T, Kanerva A, **Hemminki A**. Immunological data from cancer patients treated with Ad5/3 E2F Δ 24 GMCSF suggests utility for tumor immunotherapy. *Oncotarget*. 2015; 6(6): 4467-81.
216. Parviainen S, Autio K, Vähä-Koskela M, Guse K, Pesonen S, Rosol TJ, Zhao F, **Hemminki A**. Incomplete but Infectious Vaccinia Virions Are Produced in the Absence of Oncolysis in Feline SCCF1 Cells. *PLoS One*. 2015; 10(3): e0120496.
217. Bramante S, Kaufmann JK, Veckman V, Liikanen I, Nettelbeck DM, Hemminki O, Vassilev L, Cerullo V, Oksanen M, Heiskanen R, Joensuu T, Kanerva A, Pesonen S, Matikainen S, Vähä-Koskela M, Koski A, **Hemminki A**. Treatment of melanoma with a serotype 5/3 chimeric oncolytic adenovirus coding for GM-CSF: Results in vitro, in rodents and in humans. *Int J Cancer*. 2015; 137(7): 1775-83.
218. Ranki T, Joensuu T, Jäger E, Karbach J, Wahle C, Kairemo K, Alanko T, Partanen K, Turkki R, Linder N, Lundin J, Ristimäki A, Kankainen M, **Hemminki A**, Backman C, Dienel K, von Euler M, Haavisto E, Hakonen T, Juhila J, Jaderberg M, Priha P, Vassilev L, Vuolanto A, Pesonen S. Local treatment of pleural mesothelioma tumor with ONCOS-102 induces systemic anti-tumor CD8+ T-cell response, prominent infiltration of CD8+ lymphocytes and Th1 type polarization. *Oncoimmunology*, 2014; 3(10): e958937.
219. Kepp O, Senovilla L, Vitale I, Vacchelli E, Adjemian S, Agostinis P, Apetoh L, Aranda F, Barnaba V, Bloy N, Bracci L, Breckpot K, Brough D, Buqué A, Castro MG, Cirone M, Colombo MI, Cremer I, Demaria S, Dini L, Eliopoulos AG, Faggioni A, Formenti SC, Fučíková J, Gabriele L, Gaipl US, Galon J, Garg A, Ghiringhelli F, Giese NA, Guo ZS, **Hemminki A**, Herrmann M, Hodge JW, Holdenrieder S, Honeychurch J, Hu HM, Huang X, Illidge TM, Kono K, Korbelik M, Krysko DV, Loi S, Lowenstein PR, Lugli E, Ma Y, Madeo F, Manfredi AA, Martins I, Mavilio D, Menger L, Merendino N, Michaud M, Mignot G, Mossman KL, Multhoff G, Oehler R, Palombo F, Panaretakis T, Pol J, Proietti E, Ricci JE, Riganti C, Rovere-Querini P, Rubartelli A, Sistigu A, Smyth MJ, Sonnemann J, Spisek R, Stagg J, Sukkurwala AQ, Tartour E, Thorburn A, Thorne SH, Vandenabeele P, Velotti F, Workenhe ST, Yang H, Zong WX, Zitvogel L, Kroemer G and Galluzzi L. Consensus guidelines for the detection of immunogenic cell death. *Oncoimmunology*, 2014; 3(9): e955691. Review.
220. Liikanen I, Koski A, Merisalo-Soikkeli M, Hemminki O, Oksanen M, Kairemo K, Joensuu T, Kanerva A, **Hemminki A**. Serum HMGB1 is a predictive and prognostic biomarker for oncolytic immunotherapy. *Oncoimmunology* 2015; 4(3): e989771
221. Tähtinen S, Grönberg-Vähä-Koskela S, Lumen D, Merisalo-Soikkeli M, Siurala M, Airaksinen AJ, Vähä-Koskela M and **Hemminki A**. Adenovirus improves the efficacy of adoptive T-cell therapy by recruiting immune cells to and promoting their activity at the tumor. *Cancer Immunol Res*, 2015; 3(8):915-25.
222. Tähtinen S, Kaikkonen S, Merisalo-Soikkeli M, Grönberg-Vähä-Koskela S, Kanerva A, Parviainen S, Vähä-Koskela M, **Hemminki A**. Favorable Alteration of Tumor Microenvironment by Immunomodulatory Cytokines for Efficient T-Cell Therapy in Solid Tumors. *PLoS One*, 2015; 10(6): e0131242.
223. Vassilev L, Ranki T, Joensuu T, Jäger E, Karbach J, Wahle C, Partanen K, Kairemo K,

- Alanko T, Turkki R, Linder N, Lundin J, Ristimäki A, Kankainen M, **Hemminki A**, Backman C, Dienel K, von Euler M, Haavisto E, Hakonen T, Juhila J, Jäderberg M, Priha P, Vuolanto A, Pesonen S. Repeated intratumoral administration of ONCOS-102 leads to systemic antitumor CD8+ T-cell response and robust cellular and transcriptional immune activation at tumor site in a patient with ovarian cancer. *Oncoimmunology*, 2015; 4(7): e1017702.
224. Koski A, Bramante S, Kipar A, Oksanen M, Juhila J, Vassilev L, Joensuu T, Kanerva A, **Hemminki A**. Biodistribution analysis of oncolytic adenoviruses in patient autopsy samples reveals vascular transduction of non-injected tumors and tissues. *Mol Ther*, 2015; 23(10):1641-52.
225. Autio KPM, Ruotsalainen JJ, Anttila M, Niittykoski M, Waris M, **Hemminki A**, Vähä-Koskela MJV, Hinkkanen AE. Attenuated Semliki Forest virus for cancer treatment in dogs: Safety assessment in two laboratory beagles. *BMC Vet Res*, 2015; 11:170.
226. Frank C, Fallah M, **Hemminki A**, Sundquist J. Population Landscape of Familial Cancer. *Sci Rep*, 2015; 5:12891.
227. Taipale K, Liikanen I, Juhila J, Turkki R, Tähtinen S, Kankainen M, Vassilev L, Ristimäki A, Koski A, Kanerva A, Diaconu I, Cerullo V, Vähä-Koskela M, Oksanen M, Linder N, Joensuu T, Lundin J and **Hemminki A**. Chronic activation of innate immunity correlates with poor prognosis in cancer patients treated with oncolytic adenovirus. *Mol Ther*, 2016; 24(1):175-83.
228. Garg AD, Galluzzi L, Apetoh L, Baert T, Birge RB, Bravo-San Pedro JM, Breckpot K, Brough D, Chaurio R, Cirone M, Coosemans A, Coulie PG, De Ruyscher D, Dini L, de Witte P, Dudek-Peric AM, Faggioni A, Fucikova J, Gaip US, Golab J, Gougeon ML, Hamblin MR, **Hemminki A**, Herrmann M, Hodge JW, Kepp O, Kroemer G, Krysko DV, Land WG, Madeo F, Manfredi AA, Mattarollo SR, Maueroder C, Merendino N, Multhoff G, Pabst T, Ricci JE, Riganti C, Romano E, Rufo N, Smyth MJ, Sonnemann J, Spisek R, Stagg J, Vacchelli E, Vandenabeele P, Vandenberk L, Van den Eynde BJ, Van Gool S, Velotti F, Zitvogel L, Agostinis P. Molecular and Translational Classifications of DAMPs in Immunogenic Cell Death. *Front Immunol*. 2015; 6:588.
229. Hemminki K, Sundquist K, Sundquist J, **Hemminki A**, Ji J. Location of metastases in cancer of unknown primary are not random and signal familial clustering. *Sci Rep*. 2016; 6: 22891.
230. Ranki T, Pesonen S, **Hemminki A**, Partanen K, Kairemo K, Alanko T, Lundin J, Linder N, Turkki R, Ristimäki A, Jäger E, Karbach J, Wahle C, Kankainen M, Backman C, von Euler M, Haavisto E, Hakonen T, Heiskanen R, Jäderberg M, Juhila J, Priha P, Suoranta L, Vassilev L, Vuolanto A, Joensuu T. Phase I study with ONCOS-102 for the treatment of solid tumors - an evaluation of clinical response and exploratory analyses of immune markers. *J Immunother Cancer*. 2016; 4: 17.
231. Taipale K, Liikanen I, Koski A, Heiskanen R, Kanerva A, Hemminki O, Oksanen M, Grönberg-Vähä-Koskela S, Hemminki K, Joensuu T, **Hemminki A**. Predictive and Prognostic Clinical Variables in Cancer Patients Treated With Adenoviral Oncolytic Immunotherapy. *Mol Ther*. 2016; 24(7): 1323-32.
232. Hemminki O, **Hemminki A**. A century of oncolysis evolves into oncolytic immunotherapy. *Oncoimmunology*. 2015; 5(2): e1074377. Review.
233. Bramante S, Koski A, Liikanen I, Vassilev L, Oksanen M, Siurala M, Heiskanen R, Hakonen

- T, Joensuu T, Kanerva A, Pesonen S, **Hemminki A**. Oncolytic virotherapy for treatment of breast cancer, including triple-negative breast cancer. *Oncoimmunology*. 2015; 5(2): e1078057.
234. Siurala M, Havunen R, Saha D, Lumen D, Airaksinen AJ, Tähtinen S, Cervera-Carrascon V, Bramante S, Parviainen S, Vähä-Koskela M, Kanerva A, **Hemminki A**. Adenoviral Delivery of Tumor Necrosis Factor- α and Interleukin-2 Enables Successful Adoptive Cell Therapy of Immunosuppressive Melanoma. *Mol Ther*. 2016; 24(8): 1435-43. Corrigendum in *Mol Ther*. 2016; 24(11): 2033.
235. Riihimäki M, **Hemminki A**, Sundquist J, Hemminki K. Patterns of metastasis in colon and rectal cancer. *Sci Rep*. 2016; 6: 29765.
236. Riihimäki M, **Hemminki A**, Sundquist K, Sundquist J, Hemminki K. Metastatic spread in patients with gastric cancer. *Oncotarget*. 2016; 7(32): 52307-52316.
237. Liikanen I, Tähtinen S, Guse K, Gutmann T, Savola P, Oksanen M, Kanerva A, **Hemminki A**. Oncolytic adenovirus expressing monoclonal antibody trastuzumab for treatment of HER2-positive cancer. *Mol Cancer Ther*. 2016; 15(9): 2259-69.
238. Siurala M, Vähä-Koskela M, Havunen R, Tähtinen S, Bramante S, Parviainen S, Mathis JM, Kanerva A, **Hemminki A**. Syngeneic syrian hamster tumors feature tumor-infiltrating lymphocytes allowing adoptive cell therapy enhanced by oncolytic adenovirus in a replication permissive setting. *Oncoimmunology*. 2016; 5: e1136046.
239. Frank C, Sundquist J, **Hemminki A**, Hemminki K. Familial Associations Between Prostate Cancer and Other Cancers. *Eur Urol*. 2017; 71(2): 162-165.
240. Riihimäki M, **Hemminki A**, Sundquist K, Sundquist J, Hemminki K. The epidemiology of metastases in neuroendocrine tumors. *Int J Cancer*. 2016; 139(12): 2679-2686.
241. Hirvinen M, Capasso C, Guse K, Garofalo M, Vitale A, Ahonen M, Kuryk L, Vähä-Koskela M, **Hemminki A**, Fortino V, Greco D, Cerullo V. Expression of DAI by an oncolytic vaccinia virus boosts the immunogenicity of the virus and enhances antitumor immunity. *Mol Ther Oncolytics*. 2016; 3: 16002.
242. Yu H, Frank C, Sundquist J, **Hemminki A**, Hemminki K. Common cancers share familial susceptibility: implications for cancer genetics and counselling. *J Med Genet*. 2017; 54(4): 248-253.
243. Tähtinen S, Blattner C, Vähä-Koskela M, Saha D, Siurala M, Parviainen S, Utikal J, Kanerva A, Umansky V, **Hemminki A**. T-Cell Therapy Enabling Adenoviruses Coding for IL2 and TNF α Induce Systemic Immunomodulation in Mice With Spontaneous Melanoma. *J Immunother*. 2016; 39(9): 343-354.
244. Joensuu T, Joensuu G, Kairemo K, Kiljunen T, Riener M, Aaltonen A, Ala-Opas M, Kangasmäki A, Alanko T, Taipale L, Hervonen P, Bützow A, Virgolini I, **Hemminki A**. Multimodal Primary Treatment of Metastatic Prostate Cancer with Androgen Deprivation and Radiation. *Anticancer Res*. 2016; 36(12): 6439-6447.
245. Frank C, Sundquist J, Yu H, **Hemminki A**, Hemminki K. Concordant and discordant familial cancer: familial risks, proportions and population impact. *Int J Cancer*. 2017; 140(7): 1510-1516

246. Hekim C, Ilander M, Yan J, Michaud E, Smykla R, Vähä-Koskela M, Savola P, Tähtinen S, Saikko L, **Hemminki A**, Kovanen PE, Porkka K, Lee FY, Mustjoki S. Dasatinib Changes Immune Cell Profiles Concomitant with Reduced Tumor Growth in Several Murine Solid Tumor Models. *Cancer Immunol Res.* 2017; 5(2): 157-169
247. Frank C, Sundquist J, **Hemminki A**, Hemminki K. Risk of other Cancers in Families with Melanoma: Novel Familial Links. *Sci Rep.* 2017; 7: 42601.
248. Zafar S, Parviainen S, Siurala M, Hemminki O, Havunen R, Tähtinen S, Bramante S, Vassilev L, Wang H, Lieber A, Hemmi S, de Gruijl T, Kanerva A, **Hemminki A**. Intravenously usable fully serotype 3 oncolytic adenovirus coding for CD40L as an enabler of dendritic cell therapy. *Oncoimmunology.* 2016; 6(2): e1265717.
249. Havunen R, Siurala M, Sorsa S, Grönberg-Vähä-Koskela S, Behr M, Tähtinen S, Santos JM, Karell P, Rusanen J, Nettelbeck DM, Ehrhardt A, Kanerva A, **Hemminki A**. Oncolytic Adenoviruses Armed with Tumor Necrosis Factor Alpha and Interleukin-2 Enable Successful Adoptive Cell Therapy. *Mol Ther Oncolytics.* 2016; 4: 77-86.
250. **Hemminki A**. TILT Biotherapeutics. *Hum Vaccin Immunother.* 2017; 13(5): 970-971.
251. Cerullo V, Capasso C, Vähä-Koskela M, Hemminki O, **Hemminki A**. Cancer-targeted oncolytic adenoviruses for modulation of the immune system. *Curr Cancer Drug Targets.* 2017 May 2. [Epub ahead of print]
252. Hemminki K, **Hemminki A**, Försti A, Sundquist K, Li X. Genetics of gallbladder cancer. *Lancet Oncol.* 2017; 18(6): e296.
253. Santos JM, Havunen R, Siurala M, Cervera-Carrascon V, Tähtinen S, Sorsa S, Anttila M, Karell P, Kanerva A, **Hemminki A**. Adenoviral production of interleukin-2 at the tumor site removes the need for systemic postconditioning in adoptive cell therapy. *Int J Cancer.* 2017; 141(7): 1458-1468.
254. Yu H, Frank C, **Hemminki A**, Sundquist K, Hemminki K. Other cancers in lung cancer families are overwhelmingly smoking-related cancers. *ERJ Open Res.* 2017; 3(2).
255. Yu H, **Hemminki A**, Sundquist K, Hemminki K. Familial Associations of Colorectal Cancer with Other Cancers. *Sci Rep.* 2017 Jul 12;7(1):5243.
256. Kuryk L, Vassilev L, Ranki T, **Hemminki A**, Karioja-Kallio A, Levälampi O, Vuolanto A, Cerullo V, Pesonen S. Toxicological and bio-distribution profile of a GM-CSF-expressing, double-targeted, chimeric oncolytic adenovirus ONCOS-102 - Support for clinical studies on advanced cancer treatment. *PLoS One.* 2017; 12(8): e0182715.
257. Zheng G, Yu H, **Hemminki A**, Försti A, Sundquist K, Hemminki K. Familial associations of female breast cancer with other cancers. *Int J Cancer.* 2017; 141(11): 2253-2259.
258. Zheng G, Yu H, **Hemminki A**, Försti A, Sundquist K, Hemminki K. Familial associations of male breast cancer with other cancers. *Breast Cancer Res Treat.* 2017; 166(3): 897-902.

Patents (status updated 16 Aug 2016):

1. Viral vector [virusvektori]. Finnish patent office application no. 20050964. Filing 2005-09-28.
 - a. Patent application withdrawn due to lack of a sponsor.
2. Adenoviral vectors and methods and uses related thereto.
 - Finland [adenovirusvektoreita ja niihin liittyviä menetelmiä ja käyttöjä]: FI121508 (B). Status: Granted 2010-12-15.
 - European Patent Office: EP2379586. Status: Grant of patent is intended 2016-05-25.
 - Australia: AU2009332883 (B2). Status: Granted 2015-05-21.
 - Singapore: SG2011046109. Status: Patent in force 2014-01-30.
 - Russia [adenoviral vectors and related methods and applications]: RU2011130511 (A). Status: Publication date 2013-01-27. RU2520823 (C2). Status: Publication date 2014-06-27.
 - Korea: KR20110096579 (A). Status: Publication date 2011-08-30.
 - Japan: JP2012513209 (A). Status: Publication date 2012-06-14. JP2016019530 (A). Status: Publication date 2016-02-04.
 - China: CN102264760 (A). Status: Publication date 2011-11-30.
 - Canada: CA2748180 (A1). Status: Examination requested 2014-10-30.
 - USA: US9345787 (B2). Status: Granted 2016-05-24.
3. Non-Ad5 adenoviral vectors and methods and uses related thereto.
 - a. FI121574 (B). Status: Granted 2011-01-14
 - b. Patent lapsed globally because owner discontinued payments.
4. Adenoviral vectors and methods and uses / Oncolytic adenoviral vectors coding for cd40l.
 - Finland [Adenovirusvektoreita ja niihin liittyviä menetelmiä ja käyttöjä]: FI124926. Status: Granted 2015-03-31.
 - USA [oncolytic adenoviral vectors and methos and uses related thereto]: US20130323205 (A1). Status: Publication date 2013-12-05.
 - Singapore: Status: Pending. Application for amendment before grant received 2016-07-05.
 - Russia: RU2013118724 (A). Status: Publication date 2014-10-27.
 - Korea: KR20130138245 (A). Status: Publication date 2013-12-18.
 - Japan: JP2013541945 (A). Status: Publication date 2013-11-21.
 - China: CN103221423 (B). Status: Granted 2015-09-30.
 - Canada: CA2812096 (A1) Status: Publication date 2012-03-29.
 - Australia: AU2011306846 (B2). Status: Granted 2015-05-14.
5. Adenoviral vectors and methods and uses related thereto / Oncolytic adenoviral vectors coding for monoclonal anti-ctla-4 antibodies
 - Finland [Adenovirusvektoreita ja niihin liittyviä menetelmiä ja käyttöjä]: FI124927 (B). Status: Granted 2015-03-31.
 - Australia: AU2011306845 (B2). Status: Granted 2015-05-21.
 - Patent lapsed globally because owner discontinued payments.
6. Modified oncolytic vaccinia virus
 - a. Finland: FI20115914 (A)
 - b. Patent lapsed globally because owner discontinued payments.

7. Oncolytic adenovirus / Recombinant serotype 5 (ad5) adenoviral vectors
 - Finland [Onkolyttinen adenovirus]: FI 123955 (B). Status: Granted 2014- 01-15.
 - USA: US20150232811 (A1). Status: Publication date 2015-08-20. US2016082100 (A1). Status: Publication date 2016-03-24.
 - European Patent Office: EP3006566 (A1). Status: Publication date 2016-04-13. EP2783005 (A1). Status: Examination is in progress 2016-07-29.
8. Enhanced adoptive cell therapy.
 - Finland: Application number 20135387
 - European Patent Office: EP2986311 (A1). Status: Request for examination was made 2016-02-24.
 - USA: US2015232880 (A1). Status: Publication date 2015-08-20.
 - Korea: KR20160002971. Status: Publication date 2016-01-08.
 - Kiina: CN105307671 (A). Status: Publication date 2016-02-03.
 - Kanada: CA2909432 (A1). Publication date 2014-10-23.
 - Australia: AU2014255733 (A1). Status: Filing date 2014-04-16.
 - Singapore: SG11201508585P (A). Status: Pending. Request for an examination report received and Application for amendment before grant received 2016-04-18.
 - South Africa: approved Jan 2017
9. T-cell therapy with oncolytic adenovirus coding for bi-specific antibodies. Patent application submitted 2015.
10. Application 2016

Scientific books and chapters:

1. **Hemminki A.** Inherited predisposition to gastrointestinal cancer: the molecular backgrounds of Peutz-Jeghers syndrome and hereditary non-polyposis colorectal cancer. *Thesis from the University of Helsinki*. Hakapaino, Helsinki 1998. 88 pages.
2. **Hemminki A.** Systemic strategies for tumor targeting, pp. 136-144 in: *Perspectives in Oncology, 54. Kongress der Deutschen Gesellschaft für Gynäkologie und Geburtshilfe*. Springer-Verlag, Heidelberg, Germany, 2003. 604 pages.
3. Reynolds PN, **Hemminki A**, Curiel DT. Chapter 40: Gene Therapy. Part VI: Genetics. Editors: Lee Goldman, Dennis Ausiello. *Cecil Textbook of Medicine*, 22nd Ed. W.B. Saunders, 2004. 2656 pages.
4. **Hemminki A**, Hemminki K. The Genetic Basis of Cancer, in: *Cancer Gene Therapy*. Editors: David T. Curiel, Joanne Douglas. Humana Press, Totowa, NJ. 2004. 504 pages.
5. **Hemminki A**, Glasgow JN, Curiel DT. Modified Adenoviral Vectors for Gene Therapy, in: *Cell and Gene Therapy: Therapeutic Mechanisms and Strategies*, 2nd edition. Editor: Nancy Templeton. Marcel Dekker, New York, NY. 2004. 1140 pages.
6. **Hemminki A.** Oncolytic viruses. *ESGCT educational book* 2007.

7. Raki M, Rajcecki M, Kirn D, **Hemminki A**. Oncolytic viruses for treatment of cancer, in: *Cell and Gene Therapy: Therapeutic Mechanisms and Strategies*, 3rd edition. Editor: Nancy Templeton. Marcel Dekker, New York, NY, 2008.
8. Glasgow JN, **Hemminki A** and Curiel DT. Modified adenoviruses for gene therapy, in: *Cell and Gene Therapy: Therapeutic Mechanisms and Strategies*, 3rd edition. Editor: Nancy Templeton. Marcel Dekker, New York, NY, 2008.
9. Hukkanen V, **Hemminki A**, Ylä-Herttua S. [Gene therapy and other application of molecular virology]. Chapter in [Microbiology], Duodecim, in press 2008.
10. **Hemminki A**. [Gene therapy], in [All about evolution], Gaudeamus – Helsinki University Press, 2009.
11. Cerullo V, Guse K, Vähä-Koskela M, **Hemminki A**. Translational Cancer Research: Gene Therapy by Viral and Non-viral Vectors. Editors: Brenner and Hung. Wiley publishers, 2013.
12. Hemminki O, **Hemminki A**. Gene Therapy of Cancer: Oncolytic adenoviruses in the treatment of cancer in humans. Editors: Gerson and Lattime. Elsevier Press 2013.
13. **Hemminki A**, Vähä-Koskela M, Cerullo V. Oncolytic viruses for treatment of cancer, in: *Cell and Gene Therapy: Therapeutic Mechanisms and Strategies*, 4th edition. Editor: Nancy Smyth Templeton. CRC Press, 2015.
14. **Hemminki A**. Crossing the Valley of Death with Advanced Cancer Therapy. Nomerta Publishing, Turku, Finland, 2015. ISBN: 978-952-7018-05-7. 230 pp. Paperback. ISBN 978-952-7018-06-4 (epub). Available at <http://www.nomerta.net/english.php> and <http://www.elibris.fi/>.
15. **Hemminki A**. Kuoleman Laakso [Valley of Death] (Finnish). Nomerta Kustannus, Turku, Finland, 2015. ISBN 978-952-7018-07-1. (print), epub tulossa toukokuussa 2016. Available at <http://www.nomerta.net/kirjat.php>.
16. Hukkanen V, **Hemminki A**, Ylä-Herttua S. [Viral vectors in gene therapy]. Chapter in [Microbiology], Duodecim 2018.

Publication in lay journals without peer review:

1. **Hemminki A**. [What causes cancer?] (Finnish). *Syöpä – Cancer* (Journal of the Finnish Cancer Organizations), 2005; 4: 10-12.
2. **Hemminki A**. [The EU clinical trials directive caused a crisis in European research] (invited “Vieraskynä” editorial in Finnish). *Helsingin Sanomat*, 27 Oct 2005.
3. **Hemminki A**. Gene therapy for treatment of cancer and other human diseases. American chamber of commerce in Finland newsletter. Nov 2006.
4. **Hemminki A**. [Gene technology can help to prepare for a pandemic] (invited “Vieraskynä” editorial in Finnish) *Helsingin Sanomat*, 1 Feb 2007.
5. **Hemminki A**. [Reply: Oncolytic virus treatments]. Medi uutiset 23 Nov 2007.

6. **Hemminki A.** [Gene therapy and oncolytic viruses for treatment of prostate cancer]. Propo 1/08.
7. **Hemminki A.** [Treatment of breast cancer with oncolytic viruses]. Rintasyöpäpotilaiden potilasyhdistyslehti 4/08.
8. Ranki T, **Hemminki A.** [Oncolytic viruses in the treatment of breast cancer]. Rinnakkain 2010.
9. Simula P, **Hemminki A,** Vuolanto A. [Oncolytic viruses for experimental cancer therapy]. Sic! [FIMEA journal] 3/2011.
10. Nokisalmi P, **Hemminki A.** [Experiences from treatment of solid tumors with oncolytic adenovirus CGTG-102]. BestPracticeOncology 1/2012.
11. **Hemminki A.** [Many patients lack access to the newest therapies] (invited “Vieraskynä” editorial in Finnish) Helsingin Sanomat, 11 Jun 2016.
12. **Hemminki A.** [Who would I like to sit next to at dinner?]. Suomen Kuvalehti 2016

Published meeting abstracts: >290 (not listed)

Professional appearances on TV, radio or video:

1. Interview and introduction to our work for Finnish science program “Prisma”, YLE TV1, 10.3.2004.
2. [There’s heartbeat in the work of a physician]; Lääkäriin työssä on sykettä (Finnish). Promotional video for the Finnish Medical Association, 2004.
3. Interview about human cloning on “45 min”, a news show, MTV3, 7 Sep 2005.
4. [Is it acceptable to be the best]; Lupa olla paras (Finnish), a talk show about Finnish society, talent, and the acceptance of success. MTV3, 19 Oct 2005
5. Personal portrait, interview and documentary for “Läpimurto” [Breakthrough], a 10-part series on promising Finnish athletes, artists and scientists, MTV3, 6 Nov 2005.
6. Interview about cancer gene therapy and clinical trials for Finnish Public Radio (YLE). 20.4.06
7. Akuutti. TV2, 26 Oct 2006.
8. Interview on difficulties with cancer research clinical trials. YLE1, 24 and 28 Jan 2007
9. [A close-up picture: Akseli Hemminki]; Lähikuvassa Akseli Hemminki (Finnish). YLE Teema. 7 Sep 2007.
10. MOT [who protects patients’ rights to evidence based treatments]. TV1, 1 Oct 2007
11. Interview on cancer gene therapy and Ad-p53 in China. Danish TV, 28 Oct 2007.
12. Akuutti. TV2, 15 Jan 2008.
13. Program on oncolytic virus treatments, A-Studio, 18 June 2008
14. Program on cancer gene therapy in Finland and China. Ajankohtainen kakkonen, TV2, 22 July 2008
15. Akuutti. TV2, 4 Nov 2008.
16. Oncolytic viruses for treatment of cancer. Various radio channels, 3 Mar 2009.
17. Can cancer be cured? YLE TV1 morning show, 25 Jan 2010.
18. Gene doping and gene therapy, Radio Aalto 15 Nov 2011.
19. Video interview for University of Helsinki web pages 16 Apr 2015.
20. Fireside chat at SLUSH 2015. <https://www.youtube.com/watch?v=5bQKUwioaz4>
21. YLE Perjantai: [Cancer] 7 Apr 2017. <http://areena.yle.fi/1-3823494>

Interviews for scientific and lay journals (incomplete list)

1. Hyvä Terveys 1999
2. Yliopistolehti 2004
3. Aamulehti 2005
4. Suomen Kuvalehti 2005
5. Lääkärilehti (Finnish Medical Journal) 2005
6. Yliopisto 2006
7. Husari 2006
8. Suomen Kuvalehti 2006
9. Veikkaus X, 2006
10. Journal of the National Cancer Institute 2006
11. Helsingin Sanomat 2006
12. Lääkärilehti (Finnish Medical Journal) 2006
13. Mediuutiset 2006
14. Suomen Kuvalehti 2006
15. Kauppalehti Optio 2006
16. Apu 2006
17. Tiede-lehti 2007
18. Nature Medicine 2007
19. Iltalehti 2007
20. STT (a news agency) 2007
21. Lounais-Suomen Syövän torjunta Sanomat 2007
22. Ylioppilaslehti 2007
23. Mediuutiset 2007 (3 times)
24. Alma-media 2007
25. Mediuutiset 2008
26. Focus (Finnish Cancer Organizations) 2008
27. Tiede-lehti 2008
28. Aamulehti 2008
29. Eur J Cancer 2008
30. Apu 2008
31. Helsingin Sanomat 2008
32. Taloussanomat 2008
33. Hyvä Terveys 2008
34. Lääkärilehti 2008
35. City-lehti 2008
36. Kaleva 2009
37. Lapin Kansa 2009
38. Syöpä-Cancer 2009
39. HUB (Helsinki University international newspaper) 2009
40. Kemia 2009
41. Yliopistolehti 2009
42. High Tech Finland 2010
43. Projects 2010
44. Tiede 2010
45. Talouselämä 2010
46. Rinnakkain 2010
47. Kapital 2010
48. Kaleva 2010
49. Nature Clinical Practice Oncology 2010
50. Tiede 2011
51. Dagens Medicin 2010

52. Kuopion kaupunkilehti 2011
53. Lapin Kansa 2011
54. Mediuutiset 2011
55. SciBX/Nature 2011
56. Pohjolan Sanomat 2011
57. Hyvä Terveys 2012
58. Helsingin Sanomat 2011
59. Focus (Finnish Cancer Organizations) 2012
60. Talouselämä 2012
61. Helsingin Sanomat / Mediaplanet 2012
62. Aamulehti 2012
63. Helsingin Sanomat 2012
64. Tiede 2012
65. Ilta Sanomat 2012
66. Tekniikan Maailma 2013
67. Seura 2013
68. Yliopistolainen 2013
69. Chemind Chemical Industry web pages interview 2013
70. Iltalehti 2013
71. Talouselämä 2013
72. Kauneus ja Terveys 2015
73. Interview for University of Helsinki web pages 2015
74. Apteekkari 2015
75. European Biotechnology 2016
76. Mediuutiset 2016
77. MyLab 2016
78. Me Naiset 2016
79. Iltalehti 2016
80. Apu 2016
81. Helsingin Sanomat 2016
82. University of Helsinki Science book project 2016
83. Nature Biopharma Dealmakers 2017
84. Human Vaccines and Immunotherapy 2017
85. Tekniikan Maailma 2017
86. Suomen Kuvalehti 2017

Blogs (<http://akselihemminki.blogspot.fi>)

1. Kuoleman Laakso. Voiko syöpää hoitaa kokeellisilla menetelmillä? 21.4.2016
2. Crossing the Valley of Death with Advanced Therapy. Is there hope for patients with advanced cancer? 15.5.2016
3. Syövän immunoterapian läpimurto. 1.9.2016
4. Will checkpoint inhibitors cure cancer? 3.2.2017
5. Miksei syövän yksilöllinen hoito toteudu? 16.6.2017
6. Hot and Cold Tumors. 9.11.2017