

CURRICULUM VITAE

BARBARA ENSOLI, MD. PH.D

Name: Ensoli Barbara

Date and Place of Birth: January 23, 1960; Latina, Italy

Position title: Director of the National HIV/AIDS Research Center - Istituto Superiore di Sanità, Rome, Italy (<https://www.iss.it/web/iss-en/hiv/aids-research>)

Education and Training:

- 1984 University of Rome "La Sapienza", Medical School, Rome, Italy : MD in Medicine and Surgery.
- 1986 National Institute of Health (NIH), Bethesda, Maryland, USA: Authorised User for Radioactive Compounds, Radiation safety branch.
- 1987 University of Rome "La Sapienza", Rome, Italy: Residency in Allergy and Immunology.
- 1988 Biotrac, Foundation for Advanced Education in the Science, NIH, Bethesda, Maryland, USA: Molecular Biology course "Special topics in recombinant DNA technology".
- 1989 Biotrac, Foundation for Advanced Education in the Science, NIH, Bethesda, Maryland, USA: Biochemistry's course "Separation techniques".
- 1990 Laboratory of Tumor Cell Biology, National Cancer Institute, NIH, Bethesda, Maryland, USA: Postdoctoral in Virology, Immunology, Molecular Biology.
- 1991 University of Bari, Bari, Italy: Ph.D. in Immunology.
- 1993 National Safety Branch (Nuclear Regulatory Committee), NIH, Bethesda, Maryland, USA: Responsible Supervisor for Radioactive compounds.

Experiences related to HIV/AIDS

Dr. Ensoli has been involved into two main fields of research:

- a) Studies on the pathogenesis of HIV infection, aimed at developing a vaccine against HIV/AIDS, able to either protect from the disease (in HIV-uninfected individuals; preventative vaccine), or to control disease progression (in HIV-infected individuals; therapeutic vaccine);
- b) Studies on pathogenesis of AIDS-associated tumours, in particular of Kaposi's sarcoma and of intra-epithelial neoplasm of uterine cervix.

Studies for the development of a vaccine able to prevent from HIV/AIDS disease in uninfected individuals and/or to control disease progression in seropositive patients have been based on new concepts of vaccinology, that have lead to identify the Tat protein of HIV-1 as the target for immunisation strategies. This protein has, in fact, a key role in the very early phases of HIV infection since it is essential for virus replication and spreading of infection.

The significant results obtained from the basic research and, later on, the preclinical studies on non-human primates, have confirmed that the Tat-based vaccine is safe, induces humoral and cell-mediated immune responses and is able to block or significantly reduce HIV replication and transmission in vaccinated monkeys. Based on these results, phase I clinical vaccine trials with a vaccine based on the Tat protein on uninfected (ISS P-001) and on HIV-infected volunteers (ISS T-001) have begun in 2003 and completed in 2006. These studies have involved 4 clinical Italian centres and have demonstrated that the Tat vaccine candidate is safe and immunogenic when used in both HIV-negative and -positive individuals. Results from these studies have been published on international scientific journals.

Based on the promising results obtained in phase I clinical trials, a phase 2 clinical trial (ISS T-002) was conducted in Italy with the aim of evaluating immunogenicity and efficacy induced by vaccination with the Tat protein in HIV-positive, HAART-treated, individuals. The study, conducted in 11 clinical Centers, has produced important results on therapeutic immunisation with the Tat protein, confirming that the vaccine is safe, immunogenic and indicating that it is capable of restoring the immune system and of attaching the virus reservoir. A further phase II trial has been completed in South Africa, and has confirmed the data in a different population of subjects (different genetic background) infected with a different virus clade (c).

In parallel with these activities, a bilateral cooperation programme between Italy and South Africa has been conducted, aimed at developing local health programmes to fight HIV/AIDS. The programme started with preliminary clinical observational studies, and has been followed by the phase II clinical trial sponsored by the National AIDS Center of the Istituto Superiore di Sanità in collaboration with the Italian Ministry of Foreign Affairs and the South African Government.

Beside the advanced clinical testing of the Tat-based vaccine, second generation vaccines have been developed for preventative use, in the frame of European research Programmes (An European Programme for the development of a vaccine against HIV/AIDS; AVIP). In particular, a new vaccine candidate, based on the association of the Tat protein with a modified form of the Env protein (an Env protein deleted of its V2 region, Δ V2-Env) has been developed in collaboration with Novartis Vaccines&Diagnostics, that is able to elicit a broader immune response. This vaccine candidate, that has produced promising results in non human primates, has been tested in a phase I clinical trial on healthy volunteers with behaviours at high risk of HIV infection (preventative vaccination).

Her research in the field of HIV pathogenesis and AIDS-related tumours has led to the discovery that HIV protease inhibitors (HIV-PI) have anti-tumour effects. Studies started from observation that incidence of HIV-associated tumours, including Kaposi's sarcoma (KS), non-Hodkin lymphoma and the intra-epithelial neoplasm of uterine cervix (CIN) went reducing since the introduction of new combined anti-retroviral therapies (HAART), containing protease inhibitors. Results from these researchs have demonstrated that PI are molecules with strong anti-angiogenic effects, able to block the development of new blood vessels that are essential to tumour growth in numerous experimental neoplastic models, including KS and CIN, thus suggesting a possible use of these drugs in the anti-tumour therapy, for both HIV infected patients and patients with HIV unrelated tumours.

Based on these results, a phase II clinical trial has been conducted in Italy in order to evaluate anti-tumour effects of Indinavir, one of the most common HIV-PIs, in HIV-uninfected patients with classic KS. Results from these studies have confirmed that the drug is able to control the progression of the tumour, in particular if given in the early stages of the disease. Due to these promising results, a new "proof-of-concept" clinical study has been conducted, aimed at evaluating the efficacy of this class of drugs in the therapeutic treatment of patients with advanced, HIV unrelated KS, in association with conventional chemotherapy.

The development and the conduct of these programmes in both the oncologic and infectious diseases fields, is an important example of "translational" research, from basic research to clinical advanced testing that assures that a product rapidly reaches the community.

Positions and Employment:

1982-1986	University of Rome "La Sapienza," Italy: Internship, Department of Allergy and Clinical Immunology, Laboratory of Immunology.
1986	National Cancer Institute (NCI), NIH, Bethesda, Maryland, USA: Fellowship, Italian Cancer Society, Laboratory of Tumor Cell Biology (LTCB).
1986-1990	NCI, NIH, Bethesda, Maryland, USA: Visiting Fellow, LTCB.
1990-1993	NCI, NIH, Bethesda, Maryland, USA: Visiting Associate, LTCB.
1993-1994	NCI, NIH, Bethesda, Maryland, USA: Visiting Scientist, LTCB.

1994-1996	NCI, NIH, Bethesda, Maryland, USA: Visiting Scientist (Tenure Track), Head of the Vascular Biology and AIDS-associated Malignancies Unit, LTCB.
1996-1999	Istituto Superiore di Sanità, Rome, Italy: Director of Research, Laboratory of Virology.
2000-2004	Istituto Superiore di Sanità, Rome, Italy: Director, Retrovirus Division, Laboratory of Virology.
2004-2005	Istituto Superiore di Sanità, Rome, Italy: Director, AIDS Division, Department of Infectious, Parasitic and Immune-mediated Diseases.
2005-Date	Istituto Superiore di Sanità, Rome, Italy: Director, National HIV/AIDS Research Center (CNAIDS)

Reviewer for Journals:

AIDS
 AIDS Care
 AIDS Research and Human Retroviruses
 American Journal of Pathology
 Archives of Oral Biology
 Archives of Virology
 Blood
 British Journal of Medicine and Medical Research
 Cancer
 Cancer Letters
 Cancer Research
 Cell Death and Differentiation
 Clinical Cancer Research
 Clinical Experimental Immunology
 Contemporary Clinical Trials
 EMBO Journal
 European Journal of Immunology
 Expert Opinion on Investigational Drugs
 Expert Review of Vaccines
 FEBS Letters
 Future Virology
 Gene Therapy
 Human Gene Therapy
 Human Vaccines
 Immunopharmacology and Immunotoxicology
 Immunological Investigations
 Infectious Agents and Cancer
 International Journal of Cancer
 International Journal of Environmental Research and Public Health
 International Journal of Peptides
 Journal of Acquired Immunodeficiency Syndrome
 Journal of AIDS and Clinical Research (OMICS Publishing Group)
 Journal of Clinical Investigation
 Journal of General Virology
 Journal of Immune-Based Therapies and Vaccines
 Journal of Immunological Methods
 Journal of Immunology
 Journal of Infectious Diseases
 Journal of Neuroscience
 Journal of Virology
 Journal of Virological Methods
 Laboratory Investigation
 Lancet
 Lancet Oncology

Life Science
Microvascular Research
Nature
Nature Medicine
New England Journal of Medicine
Oncogene
PLoS ONE
Proceedings of the National Academy of Sciences, USA
Reviews on Recent Clinical Trials
The American Journal of Pathology
The Lancet Infectious Disease
The Open AIDS Journal
Trends in Biotechnology
Vaccine
Virulence
Virology

Reviewer of Grants for:

- Louisiana Education Quality Support Fund, Research and Development Program NIH Grants, USA
- NIH Grants, Ohio State University Comprehensive Cancer, The Ohio State University, USA
- Center National Health Research and Development Program, Canada
- Wellcome Trust registered Charity, London, UK
- Extramural AIDS grants, Ministry of Health, Italy
- European Molecular Organization (EMBO), Germany
- European Research Council (ERC), Belgium
- Ministry of Education, University and Research (MIUR), Italy
- Gilead Fellowship Program
- Université Libre de Bruxelles, Belgium
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Teaching:

- Georgetown University, Washington, USA; Tulane University School of Medicine, New Orleans, USA; NIH, Bethesda, Maryland, USA; Columbia University, New York, USA.
- External Examiner: MSc in Medical Sciences (Medical Virology), Candidate Mr. TS Scriba (12721255-1997), University Office Tygerberg Campus, Africa (2002).
- University teacher on "Novelty in oncohaematology", Legnano Hospital, Italy (2002).
- Member of Teaching Scientific Committee of the International PhD courses, University of Ferrara, Stockholm and German Research Center For Biotechnology, Germany.
- Courses to Medical Doctors on AIDS pathogenesis, AIDS-associated tumors, angiogenesis, HIV/AIDS vaccine development at the University of Ferrara, Ferrara, Italy.
- Appointed Professor, Medical School, University of Ferrara, Ferrara, Italy (1999/2000-2007/2008).
- Advisory of the Teaching Scientific Committee of the PhD courses in Experimental Oncology, University of Ferrara, Ferrara, Italy (2004).
- Member of the Microbiology and Virology Post-Graduate School Committee and University teacher for the integrative course "Innovative vaccines", Microbiology and Virology School, Faculty of Medicine, University of Brescia, Italy (2003-2004, 2004-2005).
- Teacher for Medical School, on "HIV infection and AIDS pathogenesis", title of the lecture: "immune-prevention and vaccination and HIV vaccination - new prevention and therapy routes", University of Padua, Padua (2005-2006).
- Teacher for and academic lecture: "anti-Tat HIV-1 vaccine: from basic science to clinical trials" at Biomedical Science Dept., General Pathology Section, University of Modena and Reggio Emilia.

- Member of Teaching Scientific Committee of the International PhD courses in Medical Immunemicrobiology, University of Rome "Tor Vergata", Rome, Italy.
- Warrant (designated by "Centro Nazionale Ricerche") for the disciplinary aggregation of expertise, with the task of proposing the nominees of the members of the boards of examiners recruiting personnel (investigators and technicians) and for personnel promotions (2005).
- External teacher for the Bachelor on Biotechnologies, University of Catania, Catania, Italy (2008).
- Teacher for an academic lecture "HIV-1 Tat therapeutic vaccine: from basic science to clinical trials" PhD Programme in Translational Medicine, Harvey Medical School Department of Molecular Medicine, University of Pavia, Pavia, Italy (April 11, 2019).
- Teacher for an academic lecture "HIV-1 Tat therapeutic vaccine: from basic science to clinical trials" PhD in Medical Biotechnology and Translational Medicine - Department of Biomedicine and Prevention, University of Rome "Tor Vergata", Rome, Italy (June 14, 2019).

Member of Committees:

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| 1991 | VII International AIDS Conference Program Committee (Florence, Italy). |
| 1999 | Member of the Scientific Committee for the Project: "Epidemiologia e modelli di ricerca assistenziale", National AIDS Program, Ministry of Health (Italy). |
| 1999 | Member of the Scientific Committee for the program coordination in fighting and preventing from HIV infection and correlated diseases, National AIDS Program, Ministry of Health (Italy). |
| 1999 | Member of the Scientific Committee for the Project: "Patologia Clinica e Terapia dell'AIDS", National AIDS Program, Ministry of Health (Italy). |
| 1999 | Committee for patent activity, Istituto Superiore di Sanità, Ministry of Health, Italy. |
| 1999 | National Committee for AIDS, Ministry of Health (Italy). |
| 1999 | Organizing Committee, 3 rd International Conference on Human Herpesvirus 6, 7 and 8 (Tampa, Florida). |
| 2000 | Responsible for the Scientific Committee "Italy-USA for the development of vaccines against HIV/AIDS", National AIDS Program, Ministry of Health (Italy). |
| 2000 | Responsible for the Scientific Committee "Vaccine AIDS Project". National Intramural AIDS Program, Ministry of Health (Italy). |
| 2000 | Responsible for the Scientific Committee "Italy-USA for the development of vaccines against HIV/AIDS", Intervention and Surveillance Program, National AIDS Program, Ministry of Health (Italy). |
| 2000 | European Molecular Biology Organization (EMBO). |
| 2001 | Member of the Scientific Committee for the Project: "Patologia Clinica e Terapia dell'AIDS", National AIDS Program, Ministry of Health (Italy). |
| 2001 | UNESCO delegate for Italy, Vice-President of the Natural Sciences Committee. |
| 2001 | United Nations General Assembly for HIV/AIDS, member of the delegation representing Italy (New York, USA). |
| 2002 | Workgroup on Infrastructures and on excellent European networks in the field of biosafety and biotechnology instituted by the National Committee for Biosafety and Biotechnology, Presidenza del Consiglio dei Ministri (Rome, Italy). |
| 2002 | Conference Organization, XIV International AIDS Conference (Barcelona, Spain). |
| 2003-2004 | Scientific Responsible of the Concerted Action on HIV/AIDS vaccine development (ICAV), National AIDS Program, Ministry of Health (Italy). |
| 2004 | Scientific Responsible, Project: "Eziopatogenesi e studi immunologici e virologici dell'HIV/AIDS", National AIDS Program, Ministry of Health (Italy). |
| 2004-2005 | Member of the WHO-UNAIDS HIV Vaccine Advisory Committee (VAC). |
| 2005 | Member of Guarantee Committee, Consiglio Nazionale delle Ricerche (CNR) (Rome, Italy). |
| 2006 | Member of Scientific Program Committee, AIDS Vaccine Conference (Amsterdam, Netherlands). |

2006	Member of Scientific Committee “Giuseppina Mai Foundation” to promote public and private research and interaction among universities, public institutes and industries for technology transfer activities.
2006	International Committee, 8 th European Conference on Experimental AIDS Research (ECEAR) (Naples, Italy).
2006-2008	Vice-President, National Committee for AIDS, Ministry of Health (Italy).
2007	Member of ISS expert panel on Prevention from Infectious and Transmittable Diseases.
2008	Member of the Scientific Program Committee (SPC) for the “National Conference on HIV/AIDS”, SIMIT.
2008	Member of the Committee of the “Associazione Nazionale per la lotta contro l’AIDS” (Anlaids Onlus).
2009-2014	Co-Vice President and Member of the Presidential Committee of the AIDS National Commission, Ministry of Health (Italy).
2012-2014	Member of the Editorial Board of the Health Status Report 2011 (RSSP), Ministry of Health (Italy).
2013-2016	Member of the Scientific Council of The European Research Council, ERC.
2013-2014	Member of the EMBO “AcademiaNet-Expert Database for Outstanding Female Scientists and Scholars”
2015-2016	Member of the HIRO (Heads of International Research Organizations) representing ERC.
2016	Member of the "100 women against stereotypes", a database of female excellence (Pavia Media Research Observatory)
2016	Member of “Top Italian Women Scientist 2016” – ONDA (Osservatorio Nazionale sulla Salute della Donna)
2019-2020	Workgroup on “Rules for the management of the Conflict of Interest”, Istituto Superiore di Sanità
2020	Working group on Translational Research COVID-19, Istituto Superiore di Sanità

Member of Editorial Board:

Lancet Oncology
The Open AIDS Journals
Tumor Viruses
Vaccine: Development and Therapy
Journal of Clinical & Cellular Immunology
PLoS ONE
Advances in Tumor Virology
PeerJ
Scientific Reports
Bentham Science

Honors and Other Special Scientific Recognition:

1984	Summa cum laude (M.D. Thesis).
1987	Summa cum laude (Residency).
1990	"Italian Society for AIDS Research" award for the most significant publication in the field of AIDS research for 1989, "AIDS-Kaposi's sarcoma-derived cells express cytokines with autocrine and paracrine growth effects." <i>Science</i> 243: 223-226, 1989.
1991	Summa cum laude (Ph.D. Thesis).
1991	Proposed for Tenure and Head of the Unit of Vascular Biology and AIDS-associated Malignancies by Site Visit Review Board, NCI, NIH, USA.
1992	Award from the NIH for contribution to technology transfer from the LTCB to the private sector.

- 1993 Award from the NIH for contribution to technology transfer from the LTCB to the private sector.
- 1994 Award from the NIH for contribution to technology transfer from the LTCB to the private sector.
- 1994 Grandfathered into Tenure Track Program, NIH, USA.
- 1999 "Italian Society for AIDS Research" award for the most significant publication in the field of AIDS research for 1999, "Control of SHIV-89.6P-infection of cynomolgus monkeys by HIV-1 Tat protein vaccine". *Nature Medicine* 5: 643-650, 1999.
- 1999 "San Valentino d'Oro" International Award for professional activity against AIDS.
- 1999 "Marisa Bellisario" International Award for professional activities.
- 1999 "Inner Weel" International Award for professional merits.
- 2000 "Fiore di Roccia" Award for scientific achievements.
- 2000 Honor for scientific achievements, conferred by the President of the Italian Republic Mr. A. Ciampi.
- 2000 "Eleonora Benvenuti Turziani" Award for the year 2000, Perugia, for scientific and professional merits.
- 2000 "Universum" International Award for the year 2000, Potenza, for scientific and professional merits.
- 2000 "Woman of the year 1999" Award, conferred by the magazine "Grazia" (Mondadori Ed.) for scientific and professional merits.
- 2000 Honorary Member of Medical Women's International Association (M.W.I.A).
- 2001 Honor (Cavaliere dell'Ordine al Merito della Repubblica Italiana), conferred by the President of the Italian Republic Mr. A. Ciampi.
- 2001 "Domenico Marotta" Award for year 2000, conferred from professional merits by the National Academy of Sciences (also known as "National Academy of XL") at the Royal Museum of Mineralogy, Naples.
- 2001 "Graziella Fumagalli" Award for year 2001, conferred from professional merits by the Confartigianato Donna Impresa, Padova.
- 2002 "Santa Caterina" Award for year 2002, conferred from professional merits by "S. Caterina d'Oro" and "Cateriniani nel Mondo", Siena.
- 2002 "Graziella Fumagalli" Award for year 2002, conferred from professional merits by the Confartigianato Donna Impresa, Padova.
- 2002 "Altipiani d'Arcinazzo" Award for year 2002, conferred from scientific and professional merits.
- 2002 "R.O.S.A." Award for year 2002, conferred from professional merits by the Canova Club.
- 2003 "Minerva" Award for the year 2003, conferred for scientific and professional merits.
- 2003 "Italiani nel Mondo" Award for year 2003 (III Edition), conferred for professional merits by the Ministero per gli Italiani nel Mondo (Marzio Tremaglia Foundation), supported by President of the Italian Republic.
- 2004 Honor (Ufficiale), conferred by the President of the Italian Republic Mr. A. Ciampi, 2004
- 2004 "Ordres des femmes de la jarretiere" Award for the year 2004 for scientific and professional merits.
- 2004 "Paul Harris Fellow" International Award, conferred by the Rotary Foundation for professional activities.
- 2004 "Vittorio Bachelet" Award, conferred for her Vaccine against AIDS.
- 2004 "Gentile da Fabriano" National Award, conferred for scientific and professional merits.
- 2004 "Stella" National Award for the year 2004, conferred by the Associazione Italiana Ospedalità Privata (A.I.O.P.) for professional activities.
- 2005 "Donna Emerita" National Award, conferred by the Federazione Italiana "Donne, Arti, Professioni ed Affari", Padova, for scientific and professional merits.
- 2005 "Premio Internazionale alle Libertà", conferred by the Associazione di Cultura Liberale "Società Libera", Milano, for scientific and professional merits.
- 2005 "Eminent Scientist of the Year 2005" International Award for Europe, conferred by the International Research Promotion Council – World Scientist Forum International Award – Science and Medicine, for scientific and professional merits.

2006	“Simpatia” National Award for the year 2006 (Sala della Protomoteca, Campidoglio, Rome), conferred for scientific and professional merits.
2006	“Provincia Capitale” Award (Palazzo Valentini, Rome), conferred by On. Gasbarra, President of the Province, for scientific and professional merits.
2006	“Foyer des Artistes” Award (Teatro Capranica, Rome), conferred by the “Centro Nazionale Arte, Cultura e Scienza”, for scientific and professional merits.
2007	“Personalità Europea 2007” Award (Campidoglio, Rome), conferred by the “Centro Europeo per il Turismo, Sport e Spettacolo”, for scientific and professional merits.
2008	“Rana d’oro” Award, conferred by the “Centro Culturale Sociale Sansano”, for scientific and professional merits.
2008	“Melvin Jones” Award, conferred by the “Lion’s Club”, for scientific and professional merits.
2009	“Sebetia-Ter” International Award 2009, conferred for scientific and professional merits on the Biomedical Sciences by the Centro di Arti e Cultura “Sebetia-Ter”.
2011	“Porto Venere Donna” Award 2011, for scientific and professional merits.
2014	Co- recipient of “The Abraham White Distinguished Science Award”, conferred by the Fourth International Symposium on Thymosins in Health and Disease along with The George Washington University School of Medicine and Health Sciences, and the University of Rome “Tor Vergata”.
2015	“Rocca d’oro” International Award Professionalism 2015.
2016	“Top Italian Women Scientist 2016” award conferred by Onda (Osservatorio nazionale sulla salute della donna)
2019	“Premio Ondina” award recognition for the Tat therapeutic vaccine experimentation conferred by Fondazione Carnevale di Viareggio
2019	“Il poggio 2019” award conferred by “Educandato Statale SS Annunziata – Villa del Poggio Imperiale” for scientific and professional merits.
2019	“Angelo che Sorride” award conferred by Fondazione Brusutti Onlus for professional merits.
2019	Acqua & Sapone Award recognition to figures who have distinguished themselves in favor of the well-being of humanity
2019	"VI Memorial' Salvo D'acquisto 'award conferred by Ancislink (no profit cultural Association)
2020	Top Italian Women Scientists 2020 recognition for the commitment and high citation number in scientific research conferred by the ONDA Foundation (National Observatory on Women's Health) and TIWS clubs

Research Support

- IMIBIC Fellowship Programme for Personalised and Precision Medicine (EC H2020 MSCA) Coordinated by IMIBIC - Maimonides Biomedical Research Institute of Cordoba, (2019-2024). Partner.

Completed Research Support (last 10 years)

- ITALY-USA inter-institute (Istituto Superiore di Sanità and NIH) cooperation on “HIV/AIDS vaccine development”. Program Coordinator.
- ICAV (Concerted Action on HIV/AIDS vaccine development), National AIDS Program, Ministry of Health, Italy (2003, 2004). Program Coordinator.
- Concerted Action on “The use of HIV protease inhibitors in AIDS-associated Kaposi’s sarcoma”, National AIDS Program, Ministry of Health, Italy. Program Coordinator.
- AVIP (AIDS Vaccine Integrated Program), FP6- EU Commission (2004-2010). Program Coordinator.
- MUVAPRED (Mucosal Vaccines for Poverty Diseases), FP6- EU Commission (2004-2010). Principal Investigator.

- NATIONAL AIDS PROGRAM, Ministry of Health, Italy (2006). Program Coordinator.
- EUROPRISE (European Vaccines and Microbicides Enterprise), FP6-EU Commission (2008-2012). Principal Investigator.
- VIAV (Very Innovative AIDS Vaccine), FP6-EU Commission (2005-2008).
- Italy-USA Joint program for the development of vaccine against HIV/AIDS, MOH (2006-2011). Principal Investigator.
- "Determination of indicators for prevention of HIV infection, as defined by the ECDC and General Assembly UNGASS, in Institutes of Detention in Italian Regions", MOH (2011-2013). Principal Investigator.
- "ARTEMIS", MOH-EU (2011-2012). Program Coordinator.
- "Italy in Europe: national study based on the ECDC indicators", MOH (2010-2011). Program Coordinator.
- "HIV infection and drugs use: determination of ECDC indicators", MOH (2011-2012). Principal Investigator.
- "ECDC indicators for the prevention of HIV infection in the migrant population", MOH (2010-2011). Program Coordinator.
- Model of intervention for the prevention of HIV infection in a young target according to the "good practice" indicated by the European Centre for Disease Control (ECDC), MOH (2013-2015). Principal Investigator.
- MEET Project - Meeting the health literacy needs of immigrant populations. (Funded by the European Commission), MOH (2014-2015) Program Coordinator
- Special Project for the "Development of a vaccine against HIV/AIDS based on the recombinant biologically active HIV-1 Tat protein", Ministry of Health (MOH) (2007-2016). Program Coordinator.
- Phase II Trial for the Treatment of Advanced Classical Kaposi's Sarcoma with the HIV Protease Inhibitor Indinavir in Combination with Chemotherapy, Italian Medicine Agency (2006-2016). Coordinator.
- Program to "Support the MOH of South Africa in the implementation of a national program of global response to HIV & AIDS", Italian Ministry of Foreign Affairs (2008-2017). Program Coordinator.
- Molecular epidemiological monitoring of HIV subtypes and circulating recombinant forms as an intervention for HIV prevention" indicated by the European Centre for Disease Control (ECDC), MOH (2015-2016). Principal Investigator.
- "Structure and biology of the Tat/Env complex and role of anti-Tat/Env antibodies in HIV infection: implication for HIV/AIDS preventative vaccine development". MOH (2015-2017). Co-investigator

Completed Cooperation with Industries

- "Therapy of AIDS-associated Kaposi's sarcoma and other AIDS-associated malignancies by using phosphorothioate oligonucleotides and other analogues directed against basic fibroblast growth factor, other cytokines and the HIV-1 Tat protein". Lynx Therapeutics, Inc., Hayward, California, USA (1993-1995). Principal investigator.
- "Joint Program ISS/Chiron (Novartis Vaccines&Diagnostics) for the development of a combined vaccine against HIV/AIDS". Chiron Corporation (Novartis Vaccines&Diagnostics), Emeryville, California, USA (2002-2005). Principal Investigator.
- Master Clinical Study Agreement for the use of the HIV protease inhibitor Indinavir in the treatment of tumors. Merck & Co., New Jersey, USA (2004). Principal Investigator.

Patents

- **Ensoli B.**, Gallo, R.C.: Method for treating Kaposi's sarcoma with antisense oligonucleotides, (priority date June 4, 1993; PCT/US94/05467, Publication N. WO94/29444).

- **Ensoli B.** HIV-1 Tat, or derivatives thereof, alone or in combination, for prophylactic and therapeutic vaccination. (priority date December 1, 1997; PCT/EP98/07721, Publication N. WO99/27958).
- **Ensoli, B.** Use of biologically active HIV-1 Tat, fragments or derivatives thereof, to target and/or to activate antigen-presenting cells, and/or to deliver cargo molecules for preventive or therapeutic vaccination and/or to treat infectious diseases, inflammatory and angiogenic diseases, and tumors. (priority date June 26, 2001; PCT/EP02/08377, Publication N. WO03/009867).
- **Ensoli B.** Novel Tat complexes, and vaccines comprising them (priority date March 11, 2004; PCT/EP2005/003043, Publication N. WO2005/090391).
- **Ensoli B.**, Peng B., Voltan R., Robert-Guroff M. Improved replication-competent adenoviral vectors (priority date November 17, 2005; N. US20050282319).
- **Ensoli B.**, Magnani M. Process for the production of vaccine components (priority date February 6, 2008; PCT/EP2009/001198, Publication N. WO2009/098094).
- **Ensoli B.** Immune therapy (priority date March 19, 2010; PCT/EP2011/001606, Publication N. WO2011/113618).

Publications:

1. Paganelli R., Capobianchi M.R., Le Moli S., Facchini J., Matricardi P.M., Bonomo G., **Ensoli B.**, Aiuti F., and Dianzani F. Gamma-interferon production *in vitro*: A marker for immunoregulatory defects in immunodeficiencies. In Griscelli G. and Vossen J. (Eds.): Progress in Immunodeficiency Research and Therapy I. Elsevier, 1984, pp. 267-269.
2. Aiuti F., **Ensoli B.**, Scarpati B., Carbonari M., Scano G., Papetti C., Sirianni M.C., and Rossi P. Nuovi aspetti eziologici, epidemiologici ed immunologici della sindrome da immunodeficienza acquisita (AIDS) e delle sindromi ad essa correlate in Italia. Med. Riv. EMI (Italian) 4: 383-390, 1984.
3. Aiuti F., D'Amelio R., Paganelli R., Cherchi M., **Ensoli B.**, and Scano G. Intestinal pathology in immunodeficiencies and autoimmune diseases. In Vierucci, A. (Ed.): Immunity and Infections in the Intestinal Tract and Liver in Children. Florence, Masson Italia, 1984, pp. 5-59.
4. Paganelli R., Le Moli S., **Ensoli B.**, Seminara R., Cabello A., Gaetano G., Cherchi M., Venuta S., and Aiuti F. Production of interleukin-2 and receptor expression in primary and acquired immunodeficiencies. In 8th Conference of the Italian Society of Immunology and Immunopathology (Italian). Milan, O.I.C. Medical Press, 1984, pp. 73-77.
5. Aiuti F., Papetti C., **Ensoli B.**, Cabello A., and Paganelli R. Immunodeficiency and allergy. In Proceedings of the XXXIV National Conference progress in tradition (Italian). Bologna, 1984, pp. 505-509.
6. Aiuti F., Paganelli R., **Ensoli B.**, Cabello A., Cherchi M., Venuta S., Capobianchi M.R., and Dianzani F. Abnormalities of T cell subsets and lymphokines (IL-2 and gamma IFN) in immunodeficiencies. In Aiuti, F., Rosen, F., and Cooper, M.D. (Eds.): Recent Advances in Primary and Acquired Immunodeficiencies. New York, Raven Press, 1984, pp. 155-164.
7. Crescenzi M., Carbonari M., Bonomo R., **Ensoli B.**, Soddu S., and Cafaro A. Clinical use with gamma globulin IV (endobulin) Quaderni di Medicina e Chirurgia (Italian) 8: 151-153, 1984.
8. Fiorilli M., Quinti I., Russi G., Seminara R., **Ensoli B.**, and Aiuti F. Thymopentin treatment for selective IgA deficiency. Karger's Surv. Immunol. Res. 4 (Suppl. 1): 129-134, 1985.

9. **Ensoli B.**, Cabello A., Cherchi M., Venuta S., Capobianchi M.R., and Paganelli R.: Produzione di interleuchina-2, gamma-interferon ed espressione del recettore Tac in sei casi di sindrome linfadenopatica (LAS). In Clot and Hematologic Malignancies, Vol. 2, 1985, pp. 108-112.
10. Aiuti F., Capobianchi M.R., Paganelli R., **Ensoli B.**, Cabello A., Sirianni M.C., Facchini J., and Dianzani F. Further studies on interferon-gamma production in patients with primary immunodeficiency. In The Interferon System. New York, Raven Press, 1985, pp. 397-403.
11. Fiorilli F., Carbonari M., Crescenzi M., **Ensoli B.**, Gaetano C., and Russo G. *In vitro* functional analysis of T lymphocytic subpopulations. In Proceeding of the 17th Conference on Allergology and Immunology. Florence, Masson Italia, 1985, pp. 107-111.
12. Pandolfi F., De Rossi G., Mariani G., Carbonari M., **Ensoli B.**, Napolitano M., Lopez M., Mandelli F., and Aiuti F. Impairment of cellular immunity and OKT4 lymphocytes in symptom-free hemophiliacs with antibodies to human T leukemia virus III (HTLV III). Diagnostic Immunol. 3: 155-159, 1985.
13. Aiuti F., Scarpati B., Scano G., Carbonari M., Mannella E., Gaetano C., Mezzaroma I., and **Ensoli B.** Further studies on HTLV-III infection in Italy. In AIDS and Blood transfusion, proceedings of the Int. Symposium, Turin, June 13-15, 1985, pp. 9-13.
14. Biagiotti R., Alessi A., Mazzetti M., Almerigogna F., Giudizi M.G., Del Prete F., Longo G., Morfini M., Romagnani S., **Ensoli B.**, and Napolitano M. Anomalie della produzione *in vitro* di immunoglobuline da parte dei linfociti di sangue periferico di pazienti emofilici. Rapporti con le alterazioni delle popolazioni linfocitarie T e con la presenza nel siero di anticorpi anti-HTLV III. Immunologia Clinica e Sperimentale IV: 101-107, 1985.
15. Ferrante E., Lorenzini F., Bonamico N., **Ensoli B.**, Rossi F., Manuelli A. and Signorotti A. Sindrome da immunodeficienza acquisita (AIDS) in una bambina di 11 mesi, figlia di tossicodipendenti. In XLIV Congresso Nazionale della Società Italiana di Pediatria (Messina), 28-31 ottobre, 1985.
16. Luzi G., **Ensoli B.**, Turbessi G., Scarpati B., and Aiuti F. Transmission of HTLV-III infection by heterosexual contact. Lancet ii: 1018, 1985.
17. Rossi P., Carbonari M., Bonomo R., Galli M., Manconi P.E., Scarpati B., Scano G., Gaetano C., **Ensoli B.**, and Aiuti F. Epidemiological aspects of HTLV-III infection in Italy. Eur. J. Epidemiol. I: 288-293, 1985.
18. Paganelli R., **Ensoli B.**, Cabello A., and Sirianni M.C. Expression of IL-2 receptor and production of IL-2 in individuals with LAS. Clot and Hematologic Malignancies (Italian). II: 20-21, 1985.
19. Businco L., Rubaltelli F.F., Paganelli R., Galli E., **Ensoli B.**, Betti P., and Aiuti F. Results in two infants with Digeorge syndrome-Effects of long-term TP5. Clin. Immunol. Immunopathol. 39: 222-230, 1986.
20. Fontana L., Sirianni M.C., De Sanctis G., Carbonari M., **Ensoli B.**, and Aiuti F. Deficiency of natural killer activity, but not of natural killer binding, in patients with lymphadenopathy syndrome positive for antibodies to HTLV-III. Immunobiology. 171: 425-435, 1986.
21. Luzi G., **Ensoli B.**, Carbonari M., Scano G., Mezzaroma I., Aiuti F., Turbessi G., Lanzalone C., Lacava V. L'infezione da virus HTLV- III e la patologia correlata. Stampa Medica (Italian). 30: 60-85, 1986.
22. Aiuti F. and **Ensoli B.** Criteri per la Diagnosi di sindrome da immunodeficienza acquisita e sindromi correlate in età pediatrica. Bulletin of National Epidemiology (Italian). March 16, pp. 1-7, 1986.

23. Aiuti F., Paganelli R., **Ensoli B.**, Crescenci M., Carbonari M., and Fiorilli M. T-cell development and function: Relationship to immunodeficiencies. In Burgio, Hanson, and Ugazio. (Eds.): Immunology of the Neonate. Berlin, Springer-Verlag, 1987, pp. 94-99.
24. Businco L., Di Fazio A., Ziruolo M.G., Boner A.L., Valletta E.A., Ruco L.P., Vitolo D., **Ensoli B.**, and Paganelli R. Clinical and immunological findings in four infants with "Omenn's syndrome": A form of severe combined immunodeficiency with phenotypically normal T cells, elevated IgE, and eosinophilia. Clin. Immunol. Immunopathol. 44: 123-133, 1987.
25. Paganelli R., D'Offizi G.P., Cherchi M., Mezzaroma I., **Ensoli B.**, Cafaro A., Capobianchi M.R., Facchini J., and Aiuti F. Difetti di interleuchina 2 (Il 2), recettore per IL-2 e gamma interferone in pazienti con AIDS e sindromi correlate. Immunol. Clin. Sper. (Italian) VI: 111-117, 1987.
26. **Ensoli B.**, Sirianni M.C., Raise E., Gritti F., Cherchi M., Bonomo R., Palmisano L., and Fiorilli M. Pilot study of thymostimulin in the treatment of AIDS-related complex. In Immunoregulation by Characterized Polypeptides. New York, Alan R. Liss, 1987, pp. 273-281.
27. Aiuti F. and **Ensoli B.** Criteria for the diagnosis of acquired immunodeficiency syndrome and related syndromes in pediatric cases. Pediatria Oggi (Italian). VIII: 131-134, 1987.
28. Sirianni M.C., Luzi G., Mezzaroma I., Scano G., Ragona G., Soddu S., **Ensoli B.**, and Aiuti F. A critical immunological and serological evaluation of patients with HTLV-III/LAV-related disorders. Antibiot. Chemother. 38: 141-150, 1987.
29. Aiuti F., Scarpati B., Scano G., Carbonari M., Mannella E., Gaetano C., Mezzaroma I., and **Ensoli B.** Further studies on HTLV-III infection in Italy (epidemiological and immunological aspects). AIDS and Blood Transfusion. 69: 9-13, 1987.
30. Fisher A., **Ensoli B.**, Ivanoff L., Chamberlain M., Petteway S., Ratner L., Gallo R.C., and Wong-Staal F. The *src* gene of HIV-1 is required for efficient virus transmission *in vitro*. Science. 237: 888-893, 1987.
31. Arya S.K., Beaver B., Jagodzinski L., **Ensoli B.**, Kanki P.J., Albert J., Fenyol E.M., Biberfeld G., Zagury J.F., Laure F., Essex M., Norrby E., Wong-Staal F., and Gallo R.C. New human and simian HIV related retroviruses possess functional transactivator (*tat*) gene. Nature. 328: 548-550, 1987.
32. Paganelli R., Capobianchi M.R., **Ensoli B.**, D'Offizi G.P., Facchini J., Dianzani F., and Aiuti F. Evidence that defective gamma interferon production in patients with primary immunodeficiencies is due to intrinsic incompetence of lymphocytes. Clin. Exp. Immunol. 72: 124-129, 1988.
33. Fisher A.G., **Ensoli B.**, Looney D., Rose A., Gallo R.C., Saag M.S., Shaw G.M., Hahn B.H., and Wong-Staal F. Biologically diverse molecular variants within a single HIV-1 isolate. Nature. 334: 444-447, 1988.
34. Nakamura S., Salahuddin S.Z., Biberfeld P., **Ensoli B.**, Markham P.D., Wong-Staal F., and Gallo R.C. Kaposi's sarcoma cells: Long-term culture with growth factor from retrovirus-infected CD4⁺ T cells. Science. 242: 426-430, 1988.
35. **Ensoli B.**, Nakamura S., Salahuddin S.Z., Biberfeld P., Larsson L., Beaver B., Wong-Staal F., and Gallo R.C. AIDS-Kaposi's sarcoma-derived cells express cytokines with autocrine and paracrine growth effects. Science. 243: 223-226, 1989.
36. Lusso P., **Ensoli B.**, Markham P.D., Ablashi D.V., Salahuddin S.Z., Tschachler E., Wong-Staal F., and Gallo R.C. Productive dual infection of human CD4⁺ T lymphocytes by HIV-1 and HHV-6. Nature. 337:370-373, 1989.

37. **Ensoli B.**, Lusso P., Schachter F., Josephs S.F., Rappaport J., Negro F., Gallo R.C., and Wong-Staal F. Human herpes virus-6 increases HIV-1 expression in co-infected T cells via nuclear factors binding to the HIV-1 enhancer. EMBO J. 8:3019-3027, 1989.
38. **Ensoli B.**, Salahuddin S.Z., and Gallo R.C. AIDS-associated Kaposi's sarcoma: A molecular model for its pathogenesis. Cancer Cells. 1:93-96, 1989.
39. Lusso P., Di Marzo Veronese F., **Ensoli B.**, Franchini G., Jemma C., DeRocco S.E., Kalyanaraman V.S., and Gallo R.C. Expanded HIV-1 cellular tropism by phenotypic mixing with murine endogenous retroviruses. Science. 247:848-852, 1990.
40. **Ensoli B.**, Barillari G., Salahuddin S.Z., Gallo R.C., and Wong-Staal F. Tat protein of HIV-1 stimulates growth of cells derived from Kaposi's sarcoma lesions of AIDS patients. Nature. 344:84-86, 1990
41. **Ensoli B.** and Gallo R.C. Kaposi's sarcoma and AIDS. Nature 346:801-802, 1990.
42. Lusso P., Di Marzo Veronese F., **Ensoli B.**, Franchini G., Jemma C., DeRocco S.E., Kalyanaraman V.S., and Gallo R.C. Pseudotypes in HIV-1 infected mice. Science 250: 1152-1154, 1990.
43. Biberfeld P., Nakamura S., **Ensoli B.**, Salahuddin Z.S., Barillari G., Parravicini C., Gendelman R., Kaaya E., and Gallo R.C. Autocrine and paracrine mechanisms in the evolution of Kaposi's sarcoma (KS). Proc. Nordisk Insulin Symp. No. 4. Copenhagen, Elsevier Science Publishers B.V. (Biomedical Division), Westermarck, Betsholtz and Hökfelt (Eds), 1990, pp. 227-280.
44. **Ensoli B.**, Barillari G., and Gallo R.C. Pathogenesis of AIDS-associated Kaposi's sarcoma. Hematol. Oncol. Clin. North Am. 5: 281-295, 1991.
45. **Ensoli B.**, Barillari G., Buonaguro L., and Gallo R.C. Molecular mechanisms in the pathogenesis of AIDS-associated Kaposi's sarcoma. In Atassi, M.Z. (Ed.): Immunobiology of Proteins and Peptides VI. New York, Plenum Press, 1991, pp. 27-38.
46. Mezzaroma I, Avella A, Paganelli R, **Ensoli B.**, d'Offizi G, Sirianni MC, Luzi G, Valdarchi C, Aiuti F Recombinant alpha-2a interferon treatment in patients with acquired immunodeficiency syndrome (AIDS) and AIDS-related complex (ARC): clinical and immunological evaluation. Allergol Immunopathol (Madr). 1991 Sep-Oct;19(5):201-7.
47. Barillari G., Buonaguro L., Fiorelli V., Hoffman J., Michaels F., Gallo R.C., and **Ensoli B.** Effects of cytokines from activated immune cells on vascular cell growth and HIV-1 gene expression. Implications for AIDS-Kaposi's sarcoma pathogenesis. J. Immunol. 149: 3727-3734, 1992.
48. Buonaguro L., Barillari G., Chang H.K., Bohan C.A., Kao V., Morgan R., Gallo R.C., and **Ensoli B.** Effects of the human immunodeficiency virus type 1 Tat protein on the expression of inflammatory cytokines. J. Virol. 66: 7159-7167, 1992.
49. **Ensoli B.** and Gallo R.C. Growth factors in AIDS-associated Kaposi's sarcoma: Cytokines and HIV-1 Tat protein. In DeVita V.T., Hellman S., and Rosenberg S.A. (Eds.): AIDS Updates, Vol. 5, n. 2, J.B. Lippincott Company, Philadelphia, 1992, pp. 1-7.
50. **Ensoli B.**, Barillari G., and Gallo R.C. Cytokines and growth factors in the pathogenesis of AIDS-associated Kaposi's sarcoma. In: Immunol. Rev., Möller G. (Eds.), Stockholm, 127:147-155, 1992.
51. Bohan C.A., Kashanchi F., **Ensoli B.**, Buonaguro L., Boris-Lawrie K.A. and Brady J. Analysis of Tat transactivation of human immunodeficiency virus transcription in vitro. Gene Expr. 2: 391-407, 1992.

52. **Ensoli B.**, Buonaguro L., Barillari G., Fiorelli V., Gendelman R., Morgan R.A., Wingfield P., and Gallo R.C. Release, uptake, and effects of extracellular Human Immunodeficiency Virus type 1 Tat protein on cell growth and viral transactivation. J. Virol. 67: 277-287, 1993.
53. Barillari G., Gendelman R., Gallo R.C., and **Ensoli B.** The Tat protein of human immunodeficiency virus type 1, a growth factor for AIDS Kaposi sarcoma and cytokine-activated vascular cells, induces adhesion of the same cell types by using integrin receptors recognizing the RGD amino acid sequence. Proc. Natl. Acad. Sci. USA 90: 7941-7945, 1993.
54. Fiorelli V., Barillari G., Gallo R.C., and **Ensoli B.** Biological properties of human immunodeficiency virus type-1 Tat protein: Angiogenic effects and adhesive interactions of extracellular Tat. In: Biology of Vitronectins and Their Receptors, Excerpta Medica Amsterdam, Elsevier Science Publishers; B.V.; Preissner K.T., Rosenblatt S., Kost C., Wegerhoff J., and Mosher D.F. (Eds.), 1993, pp. 351-360.
55. **Ensoli B.** and Gallo R.C. Growth factors in AIDS-associated Kaposi's sarcoma: Cytokines and HIV-1 Tat protein. In DeVita V.T. Jr., Hellman, S., and Rosenberg, S.A. (Eds.): AIDS Updates, Vol. 7, n. 1, J.B. Lippincott Company, Philadelphia, 1994, pp. 1-12.
56. Buonaguro L., Buonaguro F.M., Giraldo G., and **Ensoli B.** The human immunodeficiency virus type 1 Tat protein transactivates tumor necrosis factor beta gene expression through a TAR-like structure. J. Virol. 68: 2677-2682, 1994.
57. Buonaguro L, Buonaguro FM, Tornesello ML, Beth-Giraldo E, Del Gaudio E, **Ensoli B**, Giraldo G. Role of HIV-1 Tat in the pathogenesis of AIDS-associated Kaposi's sarcoma. Antibiot Chemother (1971). 1994;46:62-72.
58. Ensoli F., **Ensoli B.**, and Thiele C.J. HIV-1 gene expression and replication in neuronal and glial cell lines with immature phenotype: effects of nerve growth factor. Virology 200: 668-676, 1994.
59. Chang H.K., Gendelman R., Lisziewicz J., Gallo R.C., and **Ensoli B.** Block of HIV-1 infection by a combination of antisense *tat* RNA and TAR decoys: A strategy for control of HIV-1. Gene Therapy 1: 208-216, 1994.
60. **Ensoli B.** Kaposi's sarcoma, vascular permeability and scientific integrity. JAMA (Letters) 272: 918-919, 1994.
61. **Ensoli B.**, Gendelman R., Markham P., Fiorelli V., Colombini S., Raffeld M., Cafaro A., Chang H.K., Brady J.N., and Gallo R.C. Synergy between basic fibroblast growth factor and HIV-1 Tat protein in induction of Kaposi's sarcoma. Nature 371: 674-680, 1994.
62. Browning P.J., Sechler J.M.G., Kaplan M., Washington R.H., Gendelman R., Yarchoan R., **Ensoli B.**, and Gallo R.C. Identification and culture of Kaposi's sarcoma-like spindle cells from the peripheral blood of Human Immunodeficiency Virus-1-infected individuals and normal controls. Blood 84: 2711-2720, 1994.
63. **Ensoli B.**, Markham P., Kao V., Barillari G., Fiorelli V., Gendelman R., Raffeld M., Zon G., and Gallo R.C. Block of AIDS-Kaposi's sarcoma (KS) cell growth, angiogenesis, and lesion formation in nude mice by antisense oligonucleotide targeting basic fibroblast growth factor. J. Clin. Invest. 94: 1736-1746, 1994.
64. Chuah M.K.L., Vandendriessche T., Chang H.K., **Ensoli B.**, and Morgan R.A. Inhibition of Human Immunodeficiency Virus Type-1 by retroviral vectors expressing antisense-TAR. Hum. Gene Ther. 5: 1467-1475, 1994.

65. Benelli R., Adatia R., **Ensoli B.**, Stetler-Stevenson W.G., Santi L., and Albini A. Inhibition of AIDS-Kaposi's sarcoma cell induced endothelial cell invasion by TIMP-2 and a synthetic peptide from the metalloproteinase propeptide: Implications for an anti-angiogenic therapy. Oncology Res. 6: 251-257, 1994.
66. Lisziewicz J., Sun D., Trapnell B., Thomson M., Chang H.K., **Ensoli B.**, and Peng B. An autoregulated dual-function *antitat* gene for human immunodeficiency virus type 1 gene therapy. J. Virol. 69: 206-212, 1995.
67. Samaniego F., Markham P.D., Gallo R.C., and **Ensoli B.** Inflammatory cytokines induce AIDS-Kaposi's sarcoma-derived spindle cells to produce and release basic fibroblast growth factor and enhance Kaposi's sarcoma-like lesion formation in nude mice. J. Immunol. 154:3582-3592, 1995.
68. Fiorelli V., Gendelman R., Samaniego F., Markham P.D., and **Ensoli B.** Cytokines from activated T cells induce normal endothelial cells to acquire the phenotypic and functional features of AIDS-Kaposi's sarcoma spindle cells. J. Clin. Invest. 95: 1723-1734, 1995.
69. Albini A., Barillari G., Benelli R., Gallo R.C., and **Ensoli B.** Angiogenic properties of human immunodeficiency virus type 1 Tat protein. Proc. Natl. Acad. Sci. USA 92: 4838-4842, 1995.
70. Vandendriessche T., Chuah M.K.L., Chiang L., Chang H.K., **Ensoli B.**, and Morgan R.A. Inhibition of clinical human immunodeficiency virus (HIV) type 1 isolates in primary CD4⁺ T lymphocytes by retroviral vectors expressing anti-HIV genes. J. Virol. 69: 4045-4052, 1995.
71. Ensoli F., Cafaro A., Fiorelli V., Vannelli B., **Ensoli B.**, and Thiele C.J. HIV-1 infection of primary neuroblasts. Virology 210: 221-225, 1995.
72. **Ensoli B.** and Gallo R.C. AIDS-associated Kaposi's sarcoma: A new perspective of its pathogenesis and treatment. Proc. Assoc. Am. Physicians 107: 8-18, 1995.
73. Chang H.K., Gallo R.C., and **Ensoli B.** Regulation of cellular gene expression and function by the human immunodeficiency virus type 1 Tat protein. J. Biomed. Sci. 2:189-202, 1995.
74. Bohan Morris C., Gendelman R., Marrogi A.J., Lu M., Lockyer J.M., Alperin-Lea W., and **Ensoli B.** Immunohistochemical detection of bcl-2 in AIDS-associated and classical Kaposi's sarcoma. Am. J. Pathol. 148: 1055-1063, 1996.
75. **Ensoli B.**, Gallo R.C., and Fiorelli V. New developments: a look to the future. Oncology 10: 34-36, 1996.
76. Gallo R.C., Franchini G., **Ensoli B.**, and Colombini-Hatch S. HTLV- and HIV-associated malignancies. In Bertino, J.R. (Ed.): Encyclopedia of Cancer, Vol. II, San Diego, Academic Press, 1996, pp. 866-887.
77. Otsuki T., Kumar S., **Ensoli B.**, Kingma D.W., Yano T., Stetler-Stevenson M., Jaffe E.S., and Raffeld M. Detection of HHV-8/KSHV DNA sequences in AIDS-associated extranodal lymphoid malignancies. Leukemia 10:1358-1362, 1996
78. Brother M.B., Chang H.K., Lisziewicz J., Su D., Murty L.C., and **Ensoli B.** Block of Tat-mediated transactivation of tumor necrosis factor β gene expression by polymeric-TAR decoys. Virology 222:252-256, 1996.
79. Lisziewicz J., Sun D., Gallo R.C., **Ensoli B.**, and Lori F. Efficacy of antitat gene therapy in the presence of high multiplicity infection of inflammatory cytokines. Human Gene Therapy 7:2209-2216, 1996.

80. Faris M., **Ensoli B.**, Stahl N., Yancopoulos G., Nguyen A., Wang S., and Nel A.E. Differential activation of the extracellular signal-regulated kinase, Jun Kinase and Janus Kinase-Stat pathways by oncostatin M and basic fibroblast growth factor in AIDS-derived Kaposi's sarcoma cells. AIDS 10:369-378, 1996.
81. **Ensoli B.**, and Cafaro A. HIV-1 and Kaposi's sarcoma. Eur. J. Cancer Prev. 5:410-412, 1996.
82. Cafaro A., St. Louis D.C., Levine B., Lewis M., June C.H., Di Fabio S., Titti F., Verani P., and **Ensoli B.** Anti-CD3/28-mediated activation of T cells in monkeys: evaluation of proliferation, SIV replication and susceptibility to virus infection. J. AIDS and Hum. Retrov. (Lippincott-Raven Publishers), Abstracts of the 1996 Annual Meeting of the Institute of Human Virology, Baltimore, September 7-13, 1996, Vol. 14:65.
83. **Ensoli B.** AIDS-associated Kaposi's sarcoma pathogenesis. Role of inflammatory and angiogenic cytokines and HIV-1 Tat protein. Proceedings of "HIV and Cytokines", Reims, Guenounou M. (Ed.), Chapter 44, pp. 341-348, 1996.
84. Sirianni M.C., Uccini S., Angeloni A., Faggioni A., Cottoni F., and **Ensoli B.** Circulating spindle cells: correlation with human herpesvirus-8 (HHV-8) infection and Kaposi's sarcoma. The Lancet 349:255, 1997.
85. Samaniego F., Markham P.D., Gendelman R., Gallo R.C., and **Ensoli B.** Inflammatory cytokines induce endothelial cells to produce and release basic fibroblast growth factor and to promote Kaposi's sarcoma-like lesions in nude mice. J. Immunol. 158:1887-1894, 1997.
86. Chang H.C., Samaniego F., Nair B.C., Buonaguro L., and **Ensoli B.** HIV-1 Tat protein exits from cells via a leaderless secretory pathway and binds to extracellular matrix-associated heparan sulfate proteoglycans through its basic region. AIDS 11:1421-1431, 1997.
87. Blasig C., Zietz C., Haar B., Neipel F., Esser S., Brockmeyer N.H., Tschachler E., Colombini S., **Ensoli B.**, Stürzl M. Monocytes in Kaposi's sarcoma lesions are productively infected by human herpesvirus 8. J. Virol. 71:7963-7968, 1997.
88. Stürzl M., Blasig C., Opalenik S.R., **Ensoli B.**, and Browning P.J. Expression of the human herpesvirus 8 encoded viral macrophage inflammatory protein-1 gene in Kaposi's sarcoma lesions. AIDS 12:1105-1106, 1998.
89. Sirianni M.C., Vincenzi L., Fiorelli V., Topino S., Scala E., Uccini S., Angeloni A., Faggioni A., Cerimele D., Cottoni F., Aiuti F., and **Ensoli B.** γ -interferon production in peripheral blood mononuclear cells and tumor infiltrating lymphocytes from Kaposi's sarcoma patients: correlation with the presence of human herpesvirus-8 in peripheral blood mononuclear cells and lesional macrophages. Blood 91:968-976, 1998.
90. Fiorelli V., Gendelman R., Sirianni M.C., Chang H.K., Colombini S., Markham P.D., Monini P., Sonnabend J., Pintus A., Gallo R.C., and **Ensoli B.** γ -interferon produced by CD8+ T cells infiltrating Kaposi's sarcoma induces spindle cells with angiogenic phenotype and synergy with Human Immunodeficiency Virus-1 Tat protein: an immune response to Human Herpes Virus-8 infection? Blood 91:956-967, 1998.
91. **Ensoli B.**, and Monini P. Patogenesi del sarcoma di Kaposi. In "AIDS 1998. Il contributo italiano", eds. PICCIN, pp. 385-394, 1998.
92. **Ensoli B.**, and Stürzl M. Kaposi's sarcoma: a result of the interplay among inflammatory cytokines, angiogenic factors and viral agents. (Eds. M. Sporn and J.T. Vilcek) Cytokine and Growth Factor Reviews 9:63-83, 1998.

93. Samaniego F., Markham P.D., Gendelman R., Watanabe Y., Kao V., Kowalski K., Sonnabend J.A., Pintus A., Gallo R.C., and **Ensoli B.** Vascular endothelial growth factor and basic fibroblast growth factor present in Kaposi's sarcoma (KS) are induced by inflammatory cytokines and synergize to promote vascular permeability and KS lesion development. Am. J. Pathol 152:1433-1443, 1998.
94. Barillari G., Albonici L., Franzese O., Modesti A., Liberati F., Barillari P., **Ensoli B.**, Manzari V., and Santeusano G. The basic residues of placenta growth factor type 2 retrieve sequestered angiogenic factors into a soluble form. Am. J. Pathol. 152:1161-1166, 1998.
95. Faris M., **Ensoli B.**, Kokot N., and Nel A.E. Inflammatory cytokines induce the expression of fibroblast growth factor (bFGF) isoforms required for the growth of Kaposi's sarcoma and endothelial cells through the activation of AP-1 response elements in the bFGF promoter. AIDS 12:19-27, 1998.
96. Ensoli F., Fiorelli V., Vannelli B., Barni T., De Cristofaro M., **Ensoli B.**, and Thiele C. Basic fibroblast growth factor (bFGF) supports human olfactory neurogenesis by autocrine/paracrine mechanisms. Neuroscience 86:881-893, 1998.
97. Biberfeld P., **Ensoli B.**, Stürzl M., and Schulz T.F. Kaposi sarcoma-associated herpesvirus/human herpesvirus 8, cytokines, growth factors and HIV in pathogenesis of Kaposi's sarcoma. Current Opinion in Infectious Diseases 11:97-105, 1998.
98. Rezza G., Lennette E.T., Giuliani M., Pezzotti P., Caprilli F., Monini P., Buttò S., Lodi G., Di Carlo A., Levy J.A., and **Ensoli B.** Prevalence and determinants of anti-lytic and anti-latent antibodies to human herpesvirus-8 among Italian individuals at risk of sexually and parenterally transmitted infections. Int. J. Cancer 77:361-365, 1998.
99. Kelly G.D., **Ensoli B.**, Gunthel C. J., and Offermann M.K. Purified Tat induces inflammatory response genes in Kaposi's sarcoma cells. AIDS 12:1753-1761, 1998.
100. **Ensoli B.** Kaposi's sarcoma pathogenesis: role for cytokines, HIV-1 Tat protein and HHV-8 infection. (XIII Congress of the Italian Society of Immunopharmacology, September 9-11, 1998, Pavia, Italy) Haematologica (Meeting Supplement, Supplement n. 9) 83:1-5, 1998.
101. **Ensoli B.**, Monini P., Colombini S., Goletti D., Cafaro A., Buttò S., Sgadari C., Leone P., Franco M., Leone P., Stürzl M., and Verani P. Role of HHV-8 in the pathogenesis of Kaposi's Sarcoma. (Paper presented at the Workshop of the Italian Society for Experimental Hematology, SIES, July 3rd, 1997, Florence, Italy) Haematologica 83: 467-468, 1998.
102. Sirianni M.C., Vincenzi L., Topino S., and **Ensoli B.** Production of human cytokines and β chemokines in AIDS-Kaposi's sarcoma patients. In Monduzzi Eds., International Proceedings Division 12th World AIDS Conference, Geneva (Switzerland), June 28 – July 3, 1998, pp. 99-103.
103. **Ensoli B.**, and Sirianni M.C. Kaposi's sarcoma pathogenesis: a link between immunology and tumor biology. Critical Reviews in Oncogenesis 9:107-124, 1998.
104. Rizzardini G., Trabattoni D., Saresella M., Piconi S., Lukwiya M., Declich S., Fabiani M., Ferrante P., Clerici M. for the Italian-Ugandan AIDS cooperation program. (Buttò S, Zanchetta N., Blé C., Zagliani A., Biasin M., Milazzo F., Greco D., **Ensoli B.**, and Corti P.). Immune activation in HIV-infected African individuals. AIDS 12:2387-2396, 1998.
105. **Ensoli B.** KS pathogenesis: role of cytokines, HIV-1 Tat protein and HHV-8 infection. Euro-Shaks, European Study on HIV associated Kaposi's sarcoma (Workshop), Barcelona, June 4-5, 1998, pp. 51-66.

106. Fiorelli V., Barillari G., Toschi E., Sgadari C., Monini P., Stürzl M., and **Ensoli B.** IFN- γ induces endothelial cells to proliferate and to invade the extracellular matrix in response to the HIV-1 Tat protein: implications for AIDS-Kaposi's sarcoma pathogenesis. J. Immunol. 162:1165-1170, 1999.
107. Stürzl M., and **Ensoli B.** Big but weak: how many pathogenic genes does human herpesvirus-8 need to cause Kaposi's sarcoma? Int. J. Oncol. 14:287-289, 1999.
108. **Ensoli B.**, Monini P., and Sgadari C. Pathogenesis and cell biology of Kaposi's sarcoma. HIV and the New Viruses Second Edition. Eds. Prof. A. Dalgleish and Prof. R. Weiss, Chapter 19, 385-413, 1999.
109. Sirianni M.C., Vincenzi L., Topino S., Mezzaroma I., Pinter E., Barbone B., Monini P., and **Ensoli B.** Type 1 and type 2 cytokine profile in AIDS-Kaposi's sarcoma patients after highly active antiretroviral therapy. In Monduzzi Eds., Fourth European Conference on Experimental AIDS Research (ECEAR), Tampere, Finland, June 18-21, 1999.
110. Ascherl G., Hohenadl C., Schatz O., Shumay E., Bogner J., Eckhart L., Tschachler E., Monini P., **Ensoli B.**, and Stürzl M. Infection with Human Immunodeficiency Virus-1 increases expression of vascular endothelial cell growth factor in T cells: implications for acquired immunodeficiency syndrome-associated vasculopathy. Blood 93:4232-4241, 1999.
111. Andreoni M., El-Sawaf G., Rezza G., **Ensoli B.**, Nicastrì E., Ventura L., Ercoli L., Sarmati L., and Rocchi G. High seroprevalence of antibodies to Human Herpesvirus-8 in Egyptian children: evidence of nonsexual transmission. J. Natl. Cancer Inst. 91:465-469, 1999.
112. Monini P., Carlini F., Stürzl M., Rimessi P., Superti F., Franco M., Melucci-Vigo G., Cafaro A., Goletti D., Sgadari C., Buttò S., Leone P., Leone P., Chiozzini C., Barresi C., Tinari A., Bonaccorsi A., Capobianchi M.R., Giuliani M., Di Carlo A., Andreoni M., Rezza G., and **Ensoli B.** Alpha interferon inhibits Human Herpesvirus 8 (HHV-8) reactivation in primary effusion lymphoma cells and reduces HHV-8 load in cultured peripheral blood mononuclear cells. J. Virol. 73:4029-4041, 1999.
113. Caselli E., Betti M., Grossi M.P., Balboni P.G., Rossi C., Boarini C., Cafaro A., Barbanti-Brodano G., **Ensoli B.**, and Caputo A. DNA Immunization with HIV-1 *tat* Mutated in the *trans* Activation Domain Induces Humoral and Cellular Immune Responses Against Wild-Type Tat. J. Immunol. 162:5631-5638, 1999.
114. Cafaro A., Caputo A., Fracasso C., Maggiorella M.T., Goletti D., Baroncelli S., Pace M., Sernicola L., Koanga-Mogtomo M.L., Betti M., Borsetti A., Belli R., Åkerblom L., Corrias F., Buttò S., Heeney J., Verani P., Titti F., and **Ensoli B.** Control of SHIV89.6P-infection of cynomolgus monkeys by HIV-1 Tat protein vaccine. Nat. Med. 5:643-650, 1999.
115. Monini P., Colombini S., Stürzl M., Goletti D., Cafaro A., Sgadari C., Buttò S., Franco M., Leone P., Fais S., Leone P., Melucci-Vigo G., Chiozzini C., Carlini F., Ascherl G., Cornali E., Ziezt C., Ramazzotti E., Ensoli F., Andreoni M., Pezzotti P., Rezza G., Yarchoan R., Gallo R.C., and **Ensoli B.** Reactivation and Persistence of Human Herpesvirus-8 Infection in B Cells and Monocytes by Th-1 Cytokines Increased in Kaposi's Sarcoma. Blood 93:4044-4058, 1999.
116. **Ensoli B.**, and Stürzl M. HHV-8 and multistep tumorigenesis. Trends in Microbiology (Letters), 7:310-311, 1999.
117. Barillari G., Sgadari C., Palladino C., Gendelman R., Caputo A., Bohan Morris C., Nair B.C., Markham P., Nel A., Stürzl M., and **Ensoli B.** Inflammatory cytokines synergize with the HIV-1 Tat protein to promote angiogenesis and Kaposi's sarcoma via induction of basic fibroblast growth factor and $\alpha_v\beta_3$ integrin. J. Immunol. 163:1929-1935, 1999.

118. Barillari G., Sgadari C., Fiorelli V., Samaniego F., Colombini S., Manzari V., Modesti A., Nair B.C., Cafaro A., Stürzl M., and **Ensoli B.** The Tat protein of human immunodeficiency virus type-1 promotes vascular cell growth and locomotion by engaging the $\alpha 5\beta 1$ and $\alpha v\beta 3$ integrins by mobilizing sequestered basic fibroblast growth factor. Blood 94:663-672, 1999.
119. Ascherl G., Hohenadl C., Monini P., Zietz C., Browning P.J., **Ensoli B.**, and Stürzl M. Expression of human herpesvirus-8 (HHV-8) encoded pathogenic genes in Kaposi's sarcoma (KS) primary lesions. Advances in Enzyme Regulation 39:331-339, 1999.
120. Rezza G., Andreoni M., Dorrucchi M., Pezzotti P., Monini P., Zerboni R., Salassa B., Colangeli V., Sarmati L., Nicastrì E., Barbanera M., Pristera R., Aiuti F., Ortona L., and **Ensoli B.** Human herpesvirus 8 seropositivity and risk of Kaposi's sarcoma and other acquired immunodeficiency syndrome-related diseases. J. Natl. Cancer Inst. 91:1468-1474., 1999.
121. Stürzl M., Wunderlich A., Ascherl G., Hohenadl C., Monini P., Zietz C., Browning P.J., Neipel F., Biberfeld P., and **Ensoli B.** Human herpesvirus-8 (HHV-8) gene expression in Kaposi's sarcoma (KS) primary lesions: an *in situ* hybridization study. Leukemia 13:S110-S112, 1999.
122. Mihalcea A.M., Smith D.L., Monini P., Sgadari C., **Ensoli B.**, and Gill P.S. Treatment update for AIDS-related Kaposi's sarcoma. AIDS 13:S215-S225, 1999.
123. Stürzl M., Hohenadl C., Zietz C., Castanos-Velez E., Wunderlich A., Ascherl G., Biberfeld P., Monini P., Browning P.J., and **Ensoli B.** Expression of the K13/v-FLIP gene of human herpesvirus 8 and apoptosis in Kaposi's sarcoma spindle cells. J. Natl. Cancer Inst. 91:1725-1733, 1999.
124. Cook P.M., Whitby D., Calabro M.L., Luppi M., Kakoola D.N., Hjalgrim H., Ariyoshi K., **Ensoli B.**, Davison A.J., Schulz T.F. and the International Collaborative Group (Burdyga G., Barozzi P., Mbidde E.K., Kellam P., Giannoudis A., Khoo S., Melbye M., Whittle H., Monini P., Buttò S., Hatzakis A., Newton R., Hadarson S., Dalberg J., Dictor M., Christofferson P., McGeoch D., and Weiss R.A.). Variability and evolution of Kaposi's sarcoma-associated herpesvirus in Europe and Africa. AIDS 13:1165-1176, 1999.
125. Monini P., Carlini F., Franco M., and **Ensoli B.** Retrovirus ed herpesvirus nella patogenesi del sarcoma di Kaposi. GIMMOC, Vol. 3, N. 2, pp.135-150, 1999.
126. Sirianni M.C., Vincenzi L., Topino S., and **Ensoli B.** Human beta chemokines and Kaposi's sarcoma. The FASEB Journal, 13. N. 5, 1999.
127. Goletti D., Macchia I., Pace M., Leone P., Sernicola L., Maggiorella M.T., Cafaro A., Baroncelli S., Verani P., **Ensoli B.** and Titti F. Inhibition of SHIV replication by CD8⁺ T lymphocytes from macaques immunized with live attenuated SIV. In Monduzzi Eds. International Proceedings Division Fourth European Conference on Experimental AIDS Research, Tampere (Finland), June 18-21, 1999, pp. 85-89.
128. Stürzl M., Ascherl G., Di Bartolo C., Tschachler E., Monini P., **Ensoli B.**, and Hohenadl C. Angiogene Wachstumsfaktoren und humanes Herpesvirus-8: Schlüsselregulatoren der AIDS-assoziierten Vaskulopathie. In: HIV-Infekt. Brockmeyer, Brodt, Hoffman, Reimann, Stücker, Altmeyer (Eds.) Springer Verlag Berlin, Heidelberg, New York, pp. 88-94, 1999.
129. Rezza G., Dorrucchi M., Andreoni M., Arpino C., De Luca A., Monini P., Nicastrì E., Alliegro M.B., Pezzotti P., and **Ensoli B.** for the Italian HIV-Seroconversion Study (Sinicco A., Angarano G., Tarantini G., Lazzarin A., Salassa B., Pristerà R., Tirelli U., Mazzarello G., Colangeli V., Castelli F., Alberici F., Ursitti M.A., Barbanera M., Zaccarelli M., Ortona L., and Aiuti F.). Does HHV-8 have a protective role on the development of HIV encephalopathy?. Neurology 53:2032-2036, 1999.

130. **Ensoli B.** Control of viral replication and disease onset in cynomolgus monkeys by HIV-1 Tat vaccine. Cent Gardes Book, Douzième Colloques de Cent Gardes, Editions Elsevier, pp 77-82, 1999.
131. **Ensoli B.** Control of SHIV-89.6P Infection of Cynomolgus Monkeys by an HIV-1 Tat Vaccine. AIDS Res. Hum. Retrov., Conference Summary: "Targeting HIV Reservoirs and Reconstituting the Immune System", Washington, April 18-19, 1999, pp. 1615-1616.
132. **Ensoli B.**, and Cafaro A. Control of viral replication and disease onset in cynomolgus monkeys by HIV-1 TAT vaccine. J. Biol. Regul. and Homeost. Agents 14:22-26, 2000.
133. Annunziato F., Galli G., Nappi F., Cosmi L., Manetti R., Maggi E., **Ensoli B.**, and Romagnani S. Limited expression of R5-tropic HIV-1 in CCR-5 positive type 1-polarized T cells explained by their ability to reproduce RANTES, MIP-1 α and MIP-1 β . Blood 95:1167-1174, 2000.
134. Rezza G., Befeuka Tchangmena O., Andreoni M., Bugarini R., Toma L., Kaou Bakary D., Glikoutou M., Sarmati L., Monini P., Pezzotti P., and **Ensoli B.** Prevalence and risk factors for Human Herpesvirus 8 infection in Northern Cameroon. Sexually Transmitted Diseases 27:159-164, 2000.
135. Rezza G., Dorrucci M., Serraino D., Andreoni M., Giuliani M., Zerboni R., Sarmati L., Colangeli V., Salassa B., Monini P., **Ensoli B.**, and Pezzotti P. for the Italian Seroconversion Study. Incidence of Kaposi's sarcoma and HHV-8 seroprevalence among homosexual men with known dates of HIV seroconversion. AIDS 14:1647-1653, 2000.
136. Sgadari C., Toschi E., Palladino C., Barillari G., Carlei D., Cereseto A., Ciccolella C., Yarchoan R., Monini P., Stürzl M., and **Ensoli B.** Mechanism of Paclitaxel activity in Kaposi's sarcoma. J. Immunol. 165:509-517, 2000.
137. Borsetti A., Parolin C., Ridolfi B., Sernicola L., Geraci A., **Ensoli B.**, and Titti F. CD4-independent infection of two CD4/CCR5/CXCR4⁺ pre-T-cell lines by human and simian immunodeficiency viruses. J. Virol. 74:6689-6894, 2000.
138. Clerici M., Buttò S., Lukwiya M., Saresella M., Declich S., Trabattoni D., Pastori C., Piconi S., Fracasso C., Fabiani M., Ferrante P., Rizzardini G., and Lopalco L. for the Italian-Ugandan AIDS Project (Accorsi S., Amet O.A., Arienti D., Awil P.O., Barassi C., Benon B., Biasin M., Cogliati M., Colombo F., Corti P., Cristofaro A., **Ensoli B.**, Fossati S., Fusi M.L., Greco D., Jacob O., Milazzo F., Ranghiasi A., Rosolen T., Villa M.L., Tancredi P., Zagliani A.). Immune activation in Africa is environmentally-driven and is associated with upregulation of CCR5. AIDS 14:2083-2092, 2000.
139. **Ensoli B.**, and Buttò S. The development of a vaccine against AIDS based on the HIV-1 Tat protein. South African Journal of Science 96:324-327, 2000.
140. Cafaro A., Caputo A., Maggiorella M.T., Baroncelli S., Fracasso C., Pace M., Borsetti A., Sernicola L., Negri D.R.M., Ten Haaf P., Betti M., Michelini Z., Macchia I., Fanales-Belasio E., Belli R., Corrias F., Buttò S., Verani P., Titti F., and **Ensoli B.** SHIV89.6P pathogenicity in cynomolgus monkeys and control of viral replication and disease onset by human immunodeficiency virus type 1 Tat vaccine. J. Med. Primatol 29: 193-208, 2000.
141. Ridolfi B., Parolin C., Sernicola L., Fulgenzi D., Geraci A., **Ensoli B.**, Titti F., and Borsetti A. Susceptibility of two CD4⁺ T cell lines to HIV and SIV infection. The Fifth European Conference on Experimental AIDS Research (ECEAR), Madrid (Spain), June 16-19, pp. 113-119, 2000.
142. Tinari A., Monini P., Marchetti M., Ammendolia M.G., Leone P., **Ensoli B.**, and Superti F. Lytic growth of human herpesvirus 8: morphological aspects. Ultrastructural Pathology 24:301-310, 2000.

143. **Ensoli B.**, Nappi F., and Buttò S. Meccanismo di infezione dei virus dell'immunodeficienza acquisita (HIV-1, HIV-2, SIV). Enciclopedia Medica Italiana "Retrovirus", Aggiornamento II, Tomo III, pp. 5085-5089, 2000.
144. **Ensoli B.**, Stürzl M., and Monini P. Cytochine-mediated growth promotion of Kaposi's sarcoma and primary effusion lymphoma. Sem. Cancer Biol., 10:367-381, 2000.
145. **Ensoli B.**, Monini P., and Sgadari C. Pathogenesis of Kaposi's sarcoma (KS): new insights in KS treatment. In: Anlaidi Notizie (Speciale), Anno 10, Supplemento al n. 6, Dicembre 2000, pp. 28-38.
146. **Ensoli B.**, and Cafaro A. Novel strategies toward the development of an effective vaccine to prevent Human Immunodeficiency Virus infection or Acquired Immunodeficiency Virus. In: AIDS Clinical Review 2000/2001, Volberding and Jacobson Eds., pp. 23-61.
147. Barillari G., Albonici L., Incerpi F., Bogetto L., Pistrutto G., Volpi A., **Ensoli B.**, and Manzari V. Inflammatory cytokines stimulate vascular smooth muscle cells locomotion and growth by enhancing $\alpha 5\beta 1$ integrin expression and function. Atherosclerosis, 154:377-385, 2001.
148. Cafaro A., Titti F., Fracasso C., Maggiorella M.T., Baroncelli S., Caputo A., Goletti D., Borsetti A., Pace M., Fanales-Belasio E., Ridolfi B., Negri D.R.M., Sernicola L., Belli R., Corrias F., Macchia I., Leone P., Michelini Z., ten Haaf P., Buttò S., Verani P., and **Ensoli B.** Vaccination with DNA containing *tat* coding sequences and unmethylated CpG motifs protects cynomolgus monkeys upon infection with simian/human immunodeficiency virus (SHIV89.6P). Vaccine, 19:2862-2877, 2001.
149. Bussolino F., Mitola S., Serini G., Barillari G., and **Ensoli B.** Interactions between endothelial cells and HIV-1. Int. J. Biochem. Cell Biol., 33:371-390, 2001.
150. Betti M., Voltan R., Marchisio M., Mantovani I., Boarini C., Nappi F., **Ensoli B.**, and Caputo A. Characterization of HIV-1 Tat proteins mutated in the transactivation domain for prophylactic and therapeutic application. Vaccine, 19:3408-3419, 2001.
151. Laus M., Sparnacci K., **Ensoli B.**, Buttò S., Caputo A., Mantovani I., Zuccheri G., Samori B., and Tondelli L. Complex associates of plasmid DNA and a novel class of block Copolymers with PEG and cationic segments as new vectors for gene delivery. J. Biomater. Sci. Polym. Ed., 12:209-228, 2001.
152. **Ensoli B.**, Stürzl M., and Monini P. Reactivation and role of HHV-8 in Kaposi's sarcoma initiation. Adv. Cancer Res., 81:161-200, 2001.
153. **Ensoli B.**, Sgadari C., Barillari G., Sirianni M.C., Stürzl M., and Monini P. Biology of Kaposi's Sarcoma. Eur. J. Cancer, 37:1251-1269, 2001.
154. Stürzl M., Zietz C., Monini P., and **Ensoli B.** Human herpesvirus-8 and Kaposi's sarcoma: relationship with the multi-step concept of tumorigenesis. Adv. Cancer Res, 81:125-159, 2001.
155. Rimessi P., Bonaccorsi A., Stürzl M., Fabris M., Brocca-Cofano E., Caputo A., Melucci-Vigo G., Falchi M., Cafaro A., Cassai E., **Ensoli B.**, and Monini P. Transcription pattern of human herpesvirus 8 open reading frame K3 in primary effusion lymphoma and Kaposi's sarcoma. J. Virol., 75:7161-7174, 2001.
156. Accorsi S., Fabiani M., Lukwija M., Onok P.A., Di Mattei P., Declich S. for the Italian-Ugandan AIDS Cooperation Program (Greco D., Dente M.G., Tancredi P., Ranghiasi A., Corti P., Corrado B., Onyut A., Ouma J., Hasman A., Biryahwabo B., Rosolen T., **Ensoli B.**, Buttò S., Clerici M., Zagliani A., Rizzardini G., Milazzo F., Piconi S., Ferrante P., Saresella M., Aloï A., Cosulich A.). The increasing

burden of infectious diseases on hospital services at St. Mary's Hospital Lacor, Gulu, Uganda. Am. J. Trop. Med. Hyg., 64:154-158, 2001.

157. Ascherl G., Sgadari C., Bugarini R., Bogner J., Schatz O., **Ensoli B.**, and Stürzl M. Serum concentrations of fibroblast growth factor-2 are increased in HIV type 1-infected patients and inversely related with survival probability. AIDS Res. Hum. Retrov., 17:1035-1039, 2001.
158. Schatz O., Monini P., Bugarini R., Neipel F., Schulz T.F., Andreoni M., Erb P., Eggers M., Haas J., Buttò S., Lukwiya M., Bogner J.R., Yaguboglu S., Sheldon J., Sarmati L., Goebel F. D., Hintermaier R., Enders G., Regamey N., Wernli M., Stürzl M., Rezza G., and **Ensoli B.** Kaposi's sarcoma-associated herpesvirus serology in Europe and Uganda: multicentre study with multiple and novel assays. J. Med. Virol. 65:123-132, 2001.
159. Ten Haaft P., Almond N., Biberfeld G., Cafaro A., Cranage M., **Ensoli B.**, Hunsmann G., Polyanskaya N., Stahl-Hennig C., Thortensson R., Titti F., Heeney J. Comparison of early plasma RNA loads in different macaque species and the impact of different routes of exposure on SIV/SHIV infection. J. Med. Primatol. 30:207-214, 2001.
160. Sirianni M.C., Libi F., Scaramuzzi D., Topino S., Campagna M., Colbacchi B., Novi A., De Cristofaro M.R., Fiorelli V., Ensoli F., and **Ensoli B.** Modulation of the natural killer cell activity of peripheral blood mononuclear cells by the HIV Tat protein. Proceedings of the 6th European Conference on Experimental AIDS Research (ECEAR 2001), Edinburgh (Scotland), June 23-26, 2001, pp.81-85.
161. Toschi E., Barillari G., Sgadari C., Bacigalupo I., Cereseto A., Carlei D., Palladino C., Zietz C., Leone P., Stürzl M., Buttò S., Cafaro A., Monini P., and **Ensoli B.** Activation of Matrix-Metalloproteinase-2 and Membrane-Type-1-Matrix-Metalloproteinase in Endothelial Cells and Induction of Vascular Permeability in vivo by the Human Immunodeficiency Virus-1 Tat protein and Basic Fibroblast Growth Factor. Mol. Biol. Cell, 12:2934-2946, 2001.
162. Guenzi E., Töpolt K., Cornali E., Lubeseder-Martellato C., Zietz C., Kremmer E., Nappi F., Schwemmler M., Hohenadl C., Jörg A., Matzen K., Barillari G., Tschachler E., Monini P., **Ensoli B.**, and Stürzl M. The helical domain of GBP-1 mediates the inhibition of endothelial cell proliferation by inflammatory cytokines. EMBO J., 20:5568-5577, 2001.
163. Monini P., Sirianni M.C., Franco M., Vincenzi L., Topino S., Goletti D., Leone P., Leone P., Chiozzini C., Nicastrì E., Andreoni M., Borduagni O., Sgadari C., Rezza G., Stürzl M., and **Ensoli B.** Clearance of human herpesvirus 8 from blood and regression of leukopenia-associated aggressive classic Kaposi's sarcoma during interferon-alpha therapy: a case report. Clin. Infect. Dis., 33:1782-1785, 2001.
164. De Maria A., Biassoni R., Fogli M., Rizzi M., Cantoni C., Costa P., Conte R., Mavilio D., **Ensoli B.**, Cafaro A., Moretta A., Moretta L. Identification, molecular cloning and functional characterization of NKp46 and NKp30 natural cytotoxicity receptors in *Macaca Fascicularis* NK cells. Eur. J. Immunol., 31:3546-3556, 2001.
165. Rezza G., Danaya R.T., Wagner T.M., Sarmati L., Owen I.L., Monini P., Andreoni M., Suligoi B.S., **Ensoli B.**, and Pozio E. Human Herpesvirus-8 and Other Viral Infections, Papua New Guinea. Emerg. Infect. Dis. 7:893-895, 2001.
166. Andreoni M., Goletti D., Pezzotti P., Pozzetto A., Monini P., Sarmati L., Farchi F., Tisone G., Piazza A., Pisani F., Angelico M., Leone P., Citterio F., **Ensoli B.**, Rezza G. Prevalence, incidence and correlates of HHV-8/KSHV infection and Kaposi's Sarcoma in renal and liver transplant recipients. J. Infect. 43:195-199, 2001.
167. Serraino D., Toma L., Andreoni M., Buttò S., Tchangmena O., Sarmati L., Monini P., Franceschi S., **Ensoli B.**, and Rezza G. A seroprevalence study of human herpesvirus type 8 (HHV8) in

- eastern and Central Africa and in the Mediterranean area. Eur. J. Epidemiol. 17:871-876, 2001.
168. Fanales-Belasio E., Moretti S., Nappi F., Barillari G., Micheletti F., Cafaro A., and **Ensoli B.** Native HIV-1 Tat protein targets monocyte-derived dendritic cells and enhances their maturation, function and antigen-specific T cell responses. J. Immunol., 168:197-206, 2002.
 169. Battistini A., Marsili G., Sgarbanti M., **Ensoli B.**, and Hiscott J. Review: IRF Regulation of HIV-1 Long Terminal Repeat Activity. J. Interferon Cytokine Res. 22:27-37, 2002.
 170. Sgadari C., Barillari G., Toschi E., Carlei D., Bacigalupo I., Baccarini S., Palladino C., Leone P., Bugarini R., Malavasi L., Cafaro A., Falchi M., Valdembri D., Rezza G., Bussolino F., Monini P., and **Ensoli B.** HIV protease inhibitors are potent anti-angiogenic molecules and promote regression of Kaposi's sarcoma. Nat. Med., 8:225-232, 2002.
 171. **Ensoli B.**, and Cafaro A. HIV-1 Tat vaccines. Virus Res., 82(1-2):91-101, 2002.
 172. Barillari G., and **Ensoli B.** Angiogenic Effects of Extracellular Human Immunodeficiency virus type 1 Tat Protein and its role in the pathogenesis of AIDS-associated Kaposi's Sarcoma. Clin. Microbiol. Rev., 15:310-32, 2002.
 173. **Ensoli B.** HIV protease inhibitors have specific anti-cancer effects. Biomed. & Pharmacother., Vol. 56, No. 8, 2002.
 174. Caputo A., Betti M., Altavilla G., Bonaccorsi A., Boarini C., Marchisio M., Buttò S., Sparnacci K., Laus M., Tondelli L., and **Ensoli B.** Micellar-type complexes of tailor-made synthetic block copolymers containing the HIV-1 *tat* DNA for vaccine application. Vaccine, 20:2303-2317, 2002.
 175. Sgarbanti M., Borsetti A., Moscufo N., Bellocchi M.C., Ridolfi B., Nappi F., Marsili G., Marziali G., Coccia E.M., **Ensoli B.**, and Battistini A. Modulation of HIV-1 Replication by Interferon Regulatory Factors. J. Exp. Med., 195:1359-1370, 2002.
 176. Almond N., Anzala O., Bektimirov T., Berman P., Birx D., Carneiro J., Chongprasert S., Cichutek K., Darbyshire J., Duarte C., **Ensoli B.**, Fenyo E.M., Girard M., Goldenthal K., Golding H., Holmes H., Johnston M., Mallet L., Mawle A., Mugerwa R., Pitisuttithum P., Rees H., Robertson J., Rowland-Jones S., Sang G., Schild G., Shao Y., Sheets R., Takemori T., Tramont E., Vandepapeliere P., van der Groen G., Weiner D., and Widdus R. Scientific considerations for the regulation and clinical evaluation of HIV/AIDS preventive vaccines. (Collective views of an international group of experts, Report from a WHO-UNAIDS Consultation, Geneva, Switzerland, March 13-15, 2001); AIDS, 16:W15-W25, 2002.
 177. Micheletti F., Monini P., Fortini C., Rimessi P., Bazzaro M., Andreoni M., Giuliani M., Traniello S., **Ensoli B.**, and Gavioli R. Identification of cytotoxic T lymphocyte epitopes of human herpes virus 8. Immunology, 106:395-403, 2002.
 178. Sirianni M.C., Libi F., Scaramuzzi D., Campagna M., Monini P., and **Ensoli B.** NK cell activity, HHV-8 infection and HAART. In Monduzzi Eds., International Proceedings Division, XIV International AIDS Conference, Barcelona (Spain), July 7 – July 12, 2002, pp. 39-41.
 179. Cara A., Cafaro A., Baroncelli S., Maggiorella M.T., Negri D.R.M., Fanales-Belasio E., Moretti S., Michelini Z., Fiorelli V., Buttò S., Tripiciano A., Sernicola L., Scoglio A., Borsetti A., Ridolfi B., Macchia I., Mancini M.G., Belli R., Farcomeni S., Nappi F., Vardas E., Colvin M., Laguardia E., Caputo A., Magnani M., Titti F., and **Ensoli B.** Development of HIV/AIDS vaccine based on Tat: preclinical and clinical studies. In Monduzzi Eds., International Proceedings Division, XIV International AIDS Conference, Barcelona (Spain), July 7 – July 12, 2002, pp. 251-256.
 180. Fanales-Belasio E., Cafaro A., Cara A., Negri D.R.M., Fiorelli V., Buttò S., Sonia Moretti,¹ Moretti

- S., Maggiorella M.T., Baroncelli S., Michelini Z., Tripiciano A., Sernicola L., Scoglio A., Borsetti A., Ridolfi B., Bona R., ten Haaf P., Macchia I., Leone P., Pavone-Cossut M. R., Nappi F., Vardas E., Magnani M., Laguardia E., Caputo A., Titti F., and **Ensoli B.** HIV-1 Tat-Based Vaccines: from Basic Science to Clinical Trials. DNA and Cell Biol., 21:599-610, 2002.
181. Sirianni M.C., Vincenti L., Topino S., Giovanetti A., Mazzetta F., Libi F., Scaramuzzi D., Andreoni M., Pinter E., Baccharini S., Rezza R., Monini P., and **Ensoli B.** NK cell activity controls human herpesvirus 8 latent infection and is restored upon HAART in AIDS patients with regressing Kaposi's sarcoma. Eur. J. Immunol., 32:2711-2720, 2002.
 182. Rharbaoui F., Drabner B., Borsutzky S., Winckler U., Morr M., **Ensoli B.**, Mühlradt P.F., and Guzman C.A. The Mycoplasma-derived lipopeptide MALP-2 is a potent mucosal adjuvant. Eur. J. Immunol., 32:2857-2865, 2002.
 183. **Ensoli B.** Gli inibitori delle proteasi di HIV hanno una potente azione anti-angiogenica ed anti-tumorale indipendente dalla loro attività anti-retrovirale. In: Indinavir nella strategia terapeutica della malattia da HIV, Edizioni Internazionali srl, Divisione EDIMES-Edizioni Medico-Scientifiche 2002, pp.59-78.
 184. Lubeseder-Martellato C., Guenzi E., Jörg A., Töpolt K., Naschberger E., Kremmer E., Zietz C., Tschachler E., Hutzler P., Schwemmler M., Matzen K., Grimm T., **Ensoli B.**, and Stürzl M. Guanylate-binding protein-1 expression is selectively induced by inflammatory cytokines and is an activation marker of endothelial cells during inflammatory diseases. Am. J. Pathol. 161:1749-1759, 2002.
 185. Toschi E., Sgadari C., Monini P., Barillari G., Bacigalupo I., Palladino C., Baccharini S., Carlei D., Grosso G., Sirianni M.C. and **Ensoli B.** Treatment of Kaposi's Sarcoma, an update. Anti-Cancer Drugs, 13:977-987, 2002.
 186. Monini P., Sirianni M.C., and **Ensoli B.** Concomitant clearance of human herpesvirus 8 from blood and regression of leukopenia-associated aggressive classic Kaposi's sarcoma upon α -interferon therapy. Oncol. Rev. J., issue 4, pp.18-20, 2002.
 187. Broccolo F., Locatelli G., Sarmati L., Piergiovanni S., Veglia F., Andreoni M., Buttò S., **Ensoli B.**, Lusso P., Malnati M.S. Calibrated Real-Time PCR Assay for Quantitation of Human Herpesvirus 8 DNA in Biological Fluids. J. Clin. Microbiol. 40:4652-4658, 2002.
 188. Sgadari C., Monini P., Toschi E., Baccharini S., Grosso M.G., Moracci G., Malavasi L., and **Ensoli B.** HIV Protease Inhibitors inhibit Kaposi's sarcoma by blocking angiogenesis and tumour cell invasion. Haematologica, (Meeting Supplement 1 to n. 11) 87:37-41, 2002.
 189. Grosso G., Sgadari C., Barillari G., Toschi E., Bacigalupo I., Carlei D., Palladino C., Baccharini S., Malavasi L., Moracci G., Leone P., Chiozzini C., Monini P., and **Ensoli B.** Trattamento del Sarcoma di Kaposi mediante gli inibitori della proteasi di HIV. Recenti Progressi in Medicina (Italian), Vol. 94, n. 2, pp.69-74, 2003.
 190. Caputo A., Gavioli R., Altavilla G., Brocca Cofano E., Boarini C., Betti M., Castaldello A., Lorenzini F., Micheletti F., Cafaro A., Sparnacci K., Laus M., Tondelli L., and **Ensoli B.** Immunization with low doses of HIV-1 *tat* DNA delivered by novel cationic block copolymers induces CTL responses against Tat. Vaccine, 21: 1103-1111, 2003.
 191. Monini P., Sgadari C., Barillari G. and **Ensoli B.** The HIV protease inhibitors: anti-retroviral agents with anti-inflammatory, anti-angiogenic and anti-tumor activity. J. Antimicrobial Chemother., 51:207-211, 2003.
 192. Dominici S., Laguardia M.E., Serafini G., Chiarantini L., Fortini C., Tripiciano A., Brocca-Cofano

E., Scoglio A., Caputo A., Fiorelli V., Gavioli R., Cafaro A., **Ensoli B.**, and Magnani M. Red blood cell-mediated delivery of recombinant HIV-1 Tat protein in mice induces anti-Tat neutralizing antibodies and CTL. Vaccine, 21:2082-2090, 2003.

193. **Ensoli B.**, Sgadari C., Barillari G. and Monini P. The Fibroblast Growth Factors. In: The Cytokine Handbook (IV Edition, Chapter 31, Thomson A. and Lotze M. Eds.), Vol. II, pp.747-781, 2003.
194. Borsutzky S., Fiorelli V., Ebensen T., Tripiciano A., Rharbaoui F., Scoglio A., Link C., Nappi F., Morr M., Buttò S., Cafaro A., Mühlradt P.F., **Ensoli B.**, and Guzman CA. Efficient mucosal delivery of the HIV-1 Tat protein using the synthetic lipopeptide MALP-2 as adjuvant. Eur. J. Immunol., 33:1548-1556, 2003.
195. Marinaro M., Riccomi A., Rappuoli R., Pizza M., Fiorelli V., Tripiciano A., Cafaro A., **Ensoli B.**, and De Magistris M.T. Mucosal delivery of the human immunodeficiency virus-1 Tat protein in mice elicits systemic neutralizing antibodies, cytotoxic T lymphocytes and mucosal IgA. Vaccine, 21(25-26)-3503-4094, 2003.
196. Barillari G., Sgadari C., Toschi E., Monini P., and **Ensoli B.** HIV protease inhibitors as new treatment options for Kaposi's sarcoma. Drug Res. Update, 6:173-181, 2003.
197. Sgadari C., Monini P., Barillari G. and **Ensoli B.** Use of HIV protease inhibitors to block Kaposi's sarcoma and tumour growth. Lancet Oncol., 4:537-547, 2003.
198. Buttò S., Fiorelli V., Tripiciano A., Ruiz-Alvarez M.J., Scoglio A., Ensoli F., Ciccozzi M., Collacchi B., Sabbatucci M., Cafaro A., Guzmán C.A., Borsetti A., Caputo A., Vardas E., Colvin M., Lukwya M., Rezza G., **Ensoli B.**, and the Tat Multicentric Study Group. Sequence conservation and antibody cross-recognition of the clade B human immunodeficiency virus (HIV) type 1 Tat Protein in HIV-1-Infected Italian, Ugandan and South Africans. J. Infect. Dis., 188:1171-1180, 2003.
199. Marsili G., Borsetti A., Sgarbanti M., Remoli A.L., Ridolfi B., Stellacci E., **Ensoli B.**, and Battistini A. On the role of interferon regulatory factors in HIV-1 replication. Ann. NY Acad. Sci., 1010:29-42, 2003.
200. Alessandri G., Fiorentini S., Licenziati S., Bonafede M., Monini P., **Ensoli B.**, and Caruso A. CD8(+)CD28(-) T lymphocytes from HIV-1-infected patients secrete factors that induce endothelial cell proliferation and acquisition of Kaposi's sarcoma cell features. J. Interferon Cytokine Res., 23:523-531, 2003.
201. Savarino A., Bensi T., Chiochetti A., Bottarel F., Mesturini R., Ferrero E., Colosso L., Deraglio S., Ortolan E., Buttò S., Cafaro A., Katada T., **Ensoli B.**, Malavasi F., and Dianzani U. Human CD38 interferes with HIV-1 fusion through a sequence homologous to the V3 loop of the viral envelope glycoprotein gp120. FASEB J., 17:461-463, 2003.
202. Mooij P., Nieuwenhuis I.G., Knoop C.J., Doms R.W., Bogers W.M.J.M., Ten Haaf P.J.F., Niphuis H., Koornstra W., Bieler K., Koestler J., Morein B., Cafaro A., **Ensoli B.**, Wagner R., and Heeney J.L. Qualitative T-Helper Responses to Multiple Viral Antigens Correlate with Vaccine-Induced Immunity to Simian/Human Immunodeficiency Virus Infection. J. Virol., 78:3333-3342, 2004.
203. Franzese O., Comandini A., Adamo R., Sgadari C., **Ensoli B.**, Bonmassar E. HIV-Tat down-regulates telomerase activity in the nucleus of human CD4+ T cells. Cell Death Differ., 11:782-784, 2004.
204. Cara A., Maggiorella M.T., Bona R., Sernicola L., Baroncelli S., Negri D.R.M., Leone P., Fagrouch Z., Heeney J., Titti F., Cafaro A., and **Ensoli B.** Circular viral DNA detection and junction sequence analysis from PBMC of SHIV-infected cynomolgus monkeys with undetectable virus plasma RNA. Virology, 324:531-9, 2004.

205. Caputo A., Brocca-Cofano E., Castaldello A., Altavilla G., De Michele R., Marchisio M., Gavioli R., Rolen U., Chiarantini L., Cerasi A., Dominici S., Magnani M., Cafaro A., Sparnacci K., Laus M., Tondelli L., and **Ensoli B.** Novel biocompatible anionic polymeric microspheres for the delivery of the HIV-1 Tat protein for vaccine application. *Vaccine*, 22:2910-24, 2004.
206. Negri D.R.M., Buffa V., Leone P., Bona R., Borghi M., Carlini F., De Angelis F., Indraccolo S., **Ensoli B.**, Cara A. Use of retroviral vectors for the analysis of SIV/HIV-specific CD8 T cell responses. *J. Immunol. Methods*, 291:153-163, 2004.
207. Maggiorella M.T., Baroncelli S., Michelini Z., Fanales-Belasio E., Moretti S., Sernicola L., Cara A., Negri D.R.M., Buttò S., Fiorelli V., Tripiciano A., Scoglio A., Caputo A., Borsetti A., Ridolfi B., Bona R., ten Haaf P., Macchia I., Leone P., Pavone-Cossut M.R., Nappi F., Ciccozzi M., Heeney J., Titti F., Cafaro A., and **Ensoli B.** Long-term protection against SHIV89.6P replication in HIV-1 Tat vaccinated cynomolgus monkeys. *Vaccine*, 22:3258-3269, 2004.
208. Ridolfi B., Titti F., Fulgenzi D., Maggiorella M.T., Tinari A., Superti F., Parolin C., **Ensoli B.**, and Borsetti A. Infection of a Simian B Cell Line by Human and Simian Immunodeficiency Viruses. *AIDS Res. Hum. Retrov.*, 20:723-732, 2004.
209. Gavioli R., Gallerani E., Fortini C., Fabris M., Bottoni A., Canella A., Bonaccorsi A., Marastoni M., Micheletti F., Cafaro A., Rimessi P., Caputo A. and **Ensoli B.** HIV-1 Tat protein modulates the generation of cytotoxic T cell epitopes by modifying proteasome composition and enzymatic activity. *J. Immunol.*, 173:3838-3843, 2004.
210. Sirianni M.C., Libi F., Campagna M., Scaramuzzi D., Monini P., and **Ensoli B.** Role of killer inhibitory receptors in human herpesvirus type 8 infection and KS development. In Monduzzi Eds., *International Proceedings Division, 12th International Congress of Immunology and 4th Annual Conference of FOCIS*, Montreal (Canada), July 18 – July 23, 2004, pp. 257-259.
211. Caputo A., Gavioli R. and **Ensoli B.** Recent advances in the development of HIV-1 Tat-based vaccines. *Curr. HIV Res.*, 2:357-376, 2004.
212. Monini P., Sgadari C., Toschi E., Barillari G., and **Ensoli B.** Antitumor effects of antiretroviral therapy. *Nat. Cancer Rev.*, 4:861-875, 2004.
213. Ferrantelli F., Cafaro A., and **Ensoli B.** Nonstructural HIV proteins as targets for prophylactic or therapeutic vaccines. *Curr. Opin. Biotech.*, 15:543-56, 2004.
214. Sgarbanti M., Marsili G., Remoli A.L., Ridolfi B., Stellacci E., Borsetti A., **Ensoli B.**, Battistini A. Analysis of the signal transduction pathway leading to human immunodeficiency virus-1-induced interferon regulatory factor-1 upregulation. *Ann. NY Acad. Sci.*, 1030:187-195, 2004.
215. **Ensoli B.** AIDS Vaccine Integrated Project (AVIP). *BIOforum Europe* (01/2005), pp 38-40, 2005.
216. **Ensoli B.**, Buttò S., and Fiorelli V. Il vaccino contro l'HIV e l'AIDS. *Notiziario dell'Istituto Superiore di Sanità*, 18:9-13, 2005.
217. Rezza G., Fiorelli V., Dorrucchi M., Ciccozzi M., Tripiciano A. Scoglio A. 1, Collacchi B., Ruiz-Alvarez M., Giannetto C., Caputo A., Tomasoni L., Castelli F., Sciandra M., Sinicco A., Ensoli F., Buttò S., and **Ensoli B.** The Presence of Anti-Tat Antibodies Is Predictive of Long-Term Non-Progression to AIDS or Severe Immunodeficiency: Findings from a Cohort of HIV Seroconverters. *J. Infect. Dis.*, 191:1321-1324, 2005.
218. Biassoni R., Fogli M., Cantoni C., Costa P., Conte R., Koopman G., Cafaro A., **Ensoli B.**, Moretta

- A., Moretta L., De Maria A. Molecular and functional characterization of NKG2D, NKp80, and NKG2C triggering NK cell receptors in rhesus and cynomolgus macaques: monitoring of NK cell function during simian HIV infection. *J. Immunol.* 1:174:5695-5705, 2005.
219. Sirianni M.C., Libi F., Campagna M., Rossi D., Capello D., Sciaranghella G., Carbone A., Simonelli C., Monini P., Gaidano G., and **Ensoli B.** Down-regulation of the major histocompatibility complex class I molecules by human herpesvirus type 8 and impaired natural killer cell activity in primary effusion lymphoma development. *Br. J. Haematol.*, 130:92-95, 2005.
 220. Zhao J., Voltan R., Peng B., Davis-Warren A., Kalyanaraman V.S., Alvord W.G., Aldrich K., Bernasconi D., Buttò S., Cafaro A., **Ensoli B.**, and Robert-Guroff M. Enhanced cellular immunity to SIV Gag following co-administration of Adenoviruses encoding wild-type or mutant HIV Tat and SIV Gag. *Virology*, 342:1-12, 2005.
 221. Sparnacci K., Laus M., Tondelli L., Bernardi C., Magnani L., Corticelli F., Marchisio M., **Ensoli B.**, Castaldello A., and Caputo A. Core-shell microspheres by dispersion polymerization as promising delivery systems for proteins. *J. Biomater. Sci. Polymer. Edn*, 16:1557-1574, 2005.
 222. **Ensoli B.** Introduction: rational vaccine strategies against AIDS. *Microbes Infect.*, 7:1385, 2005.
 223. **Ensoli B.** Rational vaccine strategies against AIDS: background and rationale. *Microbes Infect.*, 7:1445-1452, 2005.
 224. **Ensoli B.** Criteria for selection of HIV vaccine candidates-general principles. *Microbes Infect.*, 7:1433-1435, 2005.
 225. **Ensoli B.**, Cafaro A., Caputo A., Fiorelli V., Ensoli F., Gavioli R., Ferrantelli F., Cara A., Titti F., and Magnani M. Vaccines based on the native HIV Tat protein and on the combination of Tat and the structural HIV protein variant DeltaV2 Env. *Microbes Infect.*, 7:1392-1399, 2005.
 226. Ensoli F., Fiorelli V., Buttò S., Gavioli R., Caputo A., Monini P., Ferrantelli F., Titti F., Cafaro A., and **Ensoli B.** HIV/AIDS vaccine based on the native Tat protein: from basic science to clinical trials. *Giornale Italiano di Malattie Infettive (Italian)*, Vol.11(4):151-155, 2005.
 227. Borsutzky S., Ebensen T., Link C., Daniel Becker P., Fiorelli V., Cafaro A., **Ensoli B.**, and Guzmán C.A. Efficient systemic and mucosal responses against the HIV-1 Tat protein by Prime/Boost vaccination using the lipopeptide MALP-2 as adjuvant. *Vaccine*, 24:2049-2056, 2006.
 228. Garrafa E., Alessandri G., Benetti A., Turetta D., Corradi A., Cantoni A.M., Cervi E., Bonardelli S., Parati E., Giulini S.M., **Ensoli B.**, and Caruso A. Isolation and characterization of lymphatic microvascular endothelial cells from human tonsils *J. Cell. Physiol.*, 207:107-113, 2006.
 229. Toschi E., Bacigalupo I., Strippoli R., Cereseto A., Falchi M., Chiozzini C., Nappi F., Sgadari C., Barillari G., Mainiero F., and **Ensoli B.** HIV-1 Tat regulates endothelial cell cycle progression via activation of the Ras/ERK MAPK signaling pathway. *Mol. Biol. Cell*, 17:1985-1994, 2006.
 230. Remoli A.L., Marsili G., Pernotti E., Gallerani E., Ilari R., Nappi F., Cafaro A., **Ensoli B.**, Gavioli R., and Battistini A. Intracellular HIV-1 tat protein represses constitutive LMP2 transcription increasing proteasome activity by interfering with the binding of IRF-1 to STAT1. *Biochem. J.*, 396:371-380, 2006.
 231. Buffa V., Negri D.R.M., Leone P., Bona R., Borghi M., Bacigalupo I., Carlei D., Sgadari C., **Ensoli B.**, and Cara A. A single administration of lentiviral vectors expressing either full-length human immunodeficiency virus 1 (HIV-1)HXB2 Rev/Env or codon-optimized HIV-1JR-FL gp120 generates durable immune responses in mice. *J. Gen. Virol.* 87:1625-1634, 2006.

232. Castaldello A., Brocca-Cofano E., Voltan R., Triulzi C., Altavilla G., Laus M., Sparnacci K., Balestri M., Tondelli L., Fortini C., Gavioli R., **Ensoli B.**, and Caputo A. DNA prime and protein boost immunization with innovative polymeric cationic core-shell nanoparticles elicits broad immune responses and strongly enhance cellular responses of HIV-1 tat DNA vaccination. *Vaccine*, 24:5655-5669, 2006.
233. Pardini M., Giannoni F., Palma C., Iona E., Cafaro A., Brunori L., Rinaldi Monica, Fazio Vito, Laguardia M., Carbonella C., Magnani M., **Ensoli B.**, Fattorini L., and Cassone A. Immune response and protection by DNA vaccines expressing antigen 85B of Mycobacterium tuberculosis. *FEMS Microbiol. Lett.*, 262:210-215, 2006.
234. Sgadari C., Toschi E., Bacigalupo I., Sabbatucci M., Palladino C., Carlei D., Barillari G., and **Ensoli B.** Patogenesi del Sarcoma di Kaposi. In: *Tumori ed Infezioni da HIV. Patogenesi e studi clinici del GICAT (Italian)*. Milano: Biomedica, pp. 15-26, 2006.
235. **Ensoli B.**, Fiorelli V., Longo O., Bellino S., Ensoli F., Tripiciano A., Scoglio A., Ruiz M., Collacchi B., Francavilla V., Lazzarin A., Tambussi G., Visintini R., Narciso P., D'Offizi G., Giulianelli M., Carta M., Di Carlo A., Palamara G., and Giuliani M. Prophylactic and therapeutic Phase I trials with the active Tat protein vaccine: results of the interim analysis. In: *Antiviral Ther.* 11 (Suppl. 2), International Medical Press, pag. 79, 2006 – from the: “AIDS Vaccine 2006 Conference”, Amsterdam, The Netherlands (August 29- September 1, 2006).
236. Titti F., Maggiorella M.T., Sernicola L., Crostarosa F., Belli R., Pavone-Cossut M.R., Macchia I., Farcomeni S., Tenner-Racz P.K., Racz P., and **Ensoli B.** Protective efficacy of multiprotein genetic vaccine in the SIV-macaca animal model. In: *Antiviral Ther.* 11 (Suppl. 2), International Medical Press, pag. 188, 2006 – from the: “AIDS Vaccine 2006 Conference”, Amsterdam, The Netherlands (August 29- September 1, 2006).
237. Titti F., Borsetti A., Baroncelli S., Maggiorella M.T., Moretti S., Sernicola L., Belli R., Ridolfi B., Catone S., Farcomeni S., Negri D.R.M., Cafaro A., and **Ensoli B.** Viral outcome of Simian-Human Immunodeficiency Virus SHIV-89.6P adapted in cynomolgus monkeys (SHIV-89.6 Pcy₂₄₃). In: *Antiviral Ther.* 11 (Suppl. 2), International Medical Press, pag. 189, 2006 – from the: “AIDS Vaccine 2006 Conference”, Amsterdam, The Netherlands (August 29- September 1, 2006).
238. Cafaro A., Fanales-Belasio E., Moretti S., Fiorelli V., Pavone-Cossut M.R., Tripiciano A., Ferrantelli F., Olivieri E., Nappi F., Macchia I., Monini P., and **Ensoli B.** Native Tat preferentially enters dendritic cells inducine tumor necrosis factor- α mediated Th1-polarized maturation and immune responses in monkeys and humans. In: *Antiviral Ther.* 11 (Suppl. 2), International Medical Press, pag. 83, 2006 – from the: “AIDS Vaccine 2006 Conference”, Amsterdam, The Netherlands (August 29- September 1, 2006).
239. Titti F., Ferrantelli F., Olivieri E., Farcomeni S., Leone P., Macchia I., Maggiorella T., Borsetti A., Cafaro A., Srivastava I., Monini P., Barnett S., and **Ensoli B.** A novel HIV/AIDS vaccine based on the combination of HIV Tat and $\Delta V2$ -Env proteins: preclinical studies. In: *Antiviral Ther.* 11 (Suppl. 2), International Medical Press, pag. 139, 2006 – from the: “AIDS Vaccine 2006 Conference”, Amsterdam, The Netherlands (August 29- September 1, 2006).
240. Ensoli F., Fiorelli V., Tripiciano A., Scoglio A., Collacchi B., Ruiz-Alvarez M., Fazio A., Panicci G., Arancio A., Stivali F., Francavilla V., Longo O., Buttò S., Poli G., and **Ensoli B.** Anti-Tat humoral and cellular immunity in HIV-1 infected patients, including asymptomatic individuals and LTNP, aimed at identifying immune correlates of protection which are key to vaccine development. In: *Antiviral Ther.* 11 (Suppl. 2), International Medical Press, pag. 140, 2006 – from the: “AIDS Vaccine 2006 Conference”, Amsterdam, The Netherlands (August 29- September 1, 2006).

241. **Ensoli B.**, Wahren B., Le Grand R., Gavioli R., Guzman C.A., Magnani M., Stanescu I., Erfle V., Barnett S., Gotch F., Vardas E., Glashoff R., Clerici M., Poli G., Holmes H., and Caputo A. AIDS Vaccine Integrated Project (AVIP): a consortium funded by the FP-6 EU program. In: Antiviral Ther. 11 (Suppl. 2), International Medical Press, pag. 157, 2006 – from the: “AIDS Vaccine 2006 Conference”, Amsterdam, The Netherlands (August 29- September 1, 2006).
242. Simonelli C., Talamini R., Bearz A., Berretta M., Spazzapan S., Monini P., Sgadari C., Sartor I., **Ensoli B.**, and Tirelli U. Interleukin-2 continuous infusion and angiogenesis surrogate markers in metastatic renal cell carcinoma. Ann. Oncol., 17:1335-1336, 2006.
243. Goletti D., Macchia I., Leone P., Pace M., Sernicola L., Pavone-Cossut M.R., Maggiorella M.T., Cafaro A., **Ensoli B.**, and Titti F. Innate anti-viral immunity is associated with the protection elicited by the Simian Immunodeficiency Virus (SIV) live attenuated virus vaccine in cynomolgus monkeys. Med. Sci. Monit., 12:BR330-340, 2006.
244. Ferrantelli F., Buttò S., Cafaro A., Wahren B., and **Ensoli B.** Building Collaborative Networks for HIV/AIDS Vaccine Development: the AVIP experience. Springer Semin. Immunopathol., 28:289-301, 2006.
245. **Ensoli B.**, Fiorelli V., Ensoli F., Cafaro A., Titti F., Buttò S., Monini P., Magnani M., Caputo A., and Garaci E. Candidate HIV-1 Tat vaccine development: from basic science to clinical trials. AIDS, 20:2245–2261, 2006.
246. Bozac A., Berto E., Vasquez F., Grandi P., Caputo A., Manservigi R., **Ensoli B.**, and Marconi P. Expression of human immunodeficiency virus type 1 tat from a replication-deficient herpes simplex type 1 vector induces antigen-specific T cell responses. Vaccine, 24:7148-7158, 2006.
247. Monini P., Toschi E., Sgadari C., Bacigalupo I., Palladino C., Carlei D., Barillari G. and **Ensoli B.** The use of HAART for biological tumour therapy. J. HIV Ther., 11:53-56, 2006.
248. Buffa V., Negri D.R., Leone P., Borghi M., Bona R., Michelini Z., Compagnoni D., Sgadari C., **Ensoli B.**, and Cara A. Evaluation of a self-inactivating lentiviral vector expressing simian immunodeficiency virus gag for induction of specific immune responses in vitro and in vivo. Viral Immunol., 19:690-701, 2006.
249. Demberg T., Florese R.H., Gomez-Roman V.R., Larsen K., Van Rompay K.K., Marthas M.L., Venzon D., Kalyanaraman V., Pal R., Barnett S.W., Cafaro A., **Ensoli B.**, and Robert-Guroff M. Non-neutralizing antibodies and vaccine-induced protection. Retrovirology, 3(Suppl 1):S26, 2006.
250. Titti F., Cafaro A., Ferrantelli F., Tripiciano A., Moretti S., Caputo A., Gavioli R., Ensoli F., Robert-Guroff M., Barnett S., and **Ensoli B.** Problems and emerging approaches in HIV/AIDS vaccine development. Exp. Opin. Emerg. Drugs, 12:23-48, 2007.
251. Demberg T., Florese R.H., Heath M.J., Larsen K., Kalisz I., Kalyanaraman V.S., Lee E.M., Pal R., Venzon D., Grant R., Patterson L.J., Koriath-Schmitz B., Buzby A., Dombagoda D., Montefiori D.C., Letvin N.L., Cafaro A., **Ensoli B.**, and Robert-Guroff M. A replication-competent Ad-HIVtat and –HIVenv priming/1 Tat and Envelope protein boosting regimen elicits enhanced protective efficacy against SHIV89.6P challenge in rhesus macaques. J. Virol., 81:3414-3427, 2007.
252. Sirianni M.C., Campagna M., Scaramuzzi D., Carbonari M., Toschi E., Bacigalupo I., Monini P., and **Ensoli B.** Control of human herpes virus type 8-associated diseases by NK cells. Ann. N.Y. Acad. Sci. 1096:37-43, 2007.
253. Maggiorella M.T., Sernicola L., Crostarosa F., Belli R., Pavone-Cossut M.R., Macchia I., Tenner-Racz K., Racz P., **Ensoli B.**, and Titti F. Multiprotein Genetic Vaccine in the SIV-Macaca animal

model: a promising approach to generate sterilising immunity to HIV infection. J. Med. Primatol., 36:180-194, 2007.

254. Bråve A., Hinkula J., Cafaro A., Eriksson L.E., Srivastava I.K., Magnani M., **Ensoli B.**, Barnett S.W., Wahren B., Rollman E. Candidate HIV-1 gp140 Δ V2, Gag and Tat vaccines protect against experimental HIV-1/MuLV challenge. Vaccine, 25:6882-6890, 2007.
255. Voltan R., Castaldello A., Brocca-Cofano E., Altavilla G., Caputo A., Laus M., Sparnacci K., **Ensoli B.**, Spaccasassi S., Ballestri M., and Tondelli L. Preparation and characterization of innovative protein-coated poly(methylmethacrylate) core-shell nanoparticles for vaccine purposes. Pharm. Res., 24:1870-1882, 2007.
256. **Ensoli B.** AIDS Vaccine Integrated project (AVIP): a Consortium funded by the FP-6 EU Program. In: The Parliament Magazine, Issue 257 (November 26, 2007).
257. Titti F., Cafaro A., Fanales-Belasio E., Maggiorella M.T., Caputo A., and **Ensoli B.** Biocompatible anionic polymeric microparticles as promising delivery system for HIV/AIDS vaccine antigens. 25th Annual Symposium on Nonhuman Primate Models for AIDS, September 10-13, 2007, Monterey CA (Abs No. 92, page 159).
258. Hammer D., Maggiorella M.T., Federico M., Titti F. and **Ensoli B.** Implications of HIV-1 Tat and Nef in B cell functions and disfunctions in a preclinical model of HIV-1 infection. Società Italiana di Virologia (SIV), 7th National Congress of the Italian Society of Virology, June 24-26, 2007, Orvieto (Abs No. 29, page 63).
259. Titti F., Ferrantelli F., Cafaro A., Maggiorella M.T., Sernicola L., Schiavoni I., Olivieri E., Farcomeni S., Pavone-Cossut M.R., Srivastava I., Barnett S., Monini P., **Ensoli B.** Parenteral and mucosal immunization with Tat and Δ V2 Env combined followed by mucosal SHIV challenge. Mucosal Immunity and HIV/AIDS Vaccines Conference, October 28-30, 2007, Veyrier-du-Lac, France (page 91).
260. Gavioli R., Cellini S., Castaldello A., Voltan R., Gallerani E., Gagliardoni F., Fortini C., Brocca-Cofano E., Triulzi C., Cafaro A., Srivastava I., Barnett S., Caputo A., and **Ensoli B.** The Tat protein broadens T cell responses directed to the HIV-1 antigens Gag and Env: Implications for the design of new vaccination strategies against AIDS. Vaccine, 26:727-737, 2008.
261. Caputo A., Brocca-Cofano E., Castaldello A., Voltan R., Gavioli R., Srivastava I.K., Barnett S.W., Cafaro A., and **Ensoli B.** Characterization of immune responses elicited in mice by intranasal co-immunization with HIV-1 Tat, gp140 Δ V2Env and/or SIV Gag proteins and the nontoxicogenic heat-labile Escherichia coli enterotoxin. Vaccine, 26:1214-1227, 2008.
262. Dehò L., Walwema R., Cappelletti A., Sukati H., Nsibandze D., Almaviva M., Buttò S., **Ensoli B.**, Galli M., and Balotta C. Characterization of human immunodeficiency virus type 1 from antiretroviral drug-naïve population in Swaziland. AIDS Res. Hum. Retrovir., 24:323-325, 2008.
263. Ridolfi B., Genovese D., Argentini C., Maggiorella M.T., Sernicola L., Buttò S., Titti F., Borsetti A., and **Ensoli B.** Tat protein vaccination of cynomolgus macaques influences SHIV-89.6P_{cy243} epitope variability. Virus Genes, 36:105-115, 2008.
264. Borsetti A., Baroncelli S., Maggiorella M.T., Bellino S., Moretti S., Sernicola L., Belli R., Ridolfi B., Farcomeni S., Negri D.R.M., Cafaro A., **Ensoli B.**, and Titti F. Viral outcome of simian-human immunodeficiency virus SHIV-89.6P adapted to cynomolgus monkeys. Arch. Virol., 153:463-472, 2008.
265. Sgarbanti M., Remoli A.L., Marsili G., Ridolfi B., Borsetti A., Perrotti E., Orsetti R., Ilari R., Sernicola R., Stellacci E., **Ensoli B.**, Battistini A. IRF-1 is required for full NF- κ B transcriptional

activity at the HIV-1 LTR enhancer. *J. Virol.*, 82:3632-3641, 2008.

266. Florese R.H., Wiseman R.W., Venzon D., Karl J.A., Demberg T., Larsen K., Flanary L., Kalyanaraman V.S., Pal R., Titti F., Patterson L.J., Heath M.J., O'Connor D.H., Cafaro A., **Ensoli B.**, and Robert-Guroff M. Comparative study of Tat vaccine regimens in Mauritian cynomolgus and Indian rhesus macaques: influence of Maritian MHC haplotypes on susceptibility/resistance to SHIV896P infection. *Vaccine*, 26:3312-3321, 2008.
267. **Ensoli B.**, Fiorelli V., Ensoli F., Lazzarin A., Visintini R., Narciso P., Di Carlo A., Monini P., Magnani M., and Garaci E. The therapeutic phase I trial of the recombinant native HIV-1 Tat protein. *AIDS*, 22:2207-2209, 2008.
268. Caputo A., Sparnacci K., **Ensoli B.**, and Tondelli L. Functional polymeric nano/microparticles for surface adsorption and delivery of protein and DNA vaccines. *Curr. Drug Delivery*, 5:229-242, 2008.
269. Gudmundsdotter L., Bernasconi D., Hejdeman B., Sandstrom E., Alaeus A., Lidman K., **Ensoli B.**, Wahren B., and Butto' S. Cross clade immune responses to gag p24 in patients infected with different HIV-1 subtypes and correlation with HLA class I and II alleles. *Vaccine*, 26:5182-5187, 2008.
270. **Ensoli B.**, Nappi F., Ferrantelli F. and Buttò S. Meccanismo di infezione dei virus dell'immunodeficienza acquisita (HIV-1, HIV-2, SIV). *Enciclopedia Medica Italiana* (Third Update, II Edition), UTET-Scienze Mediche Eds, Milan, Italy, pp. 3556-3561, 2008.
271. Tinari A., Superti F., Ammendolia G., Chiozzini C., Hohenadl C., Leone P., Nappi F., Nicoletti M., Borsetti A., Marchetti M., **Ensoli B.**, and Monini P. Primary effusion lymphoma cells undergoing human herpes virus type 8 (HHV8) productive infection produce C-type retroviral particles. *Int. J. Immunopathol. Pharmacol.*, 21:999-1006, 2008.
272. Fanales-Belasio E., Moretti S., Fiorelli V., Tripiciano A, Pavone-Cossut M.R., Scoglio A., Collacchi B., Nappi F., Macchia I., Bellino S., Francavilla V., Caputo A., Barillari G., Magnani M., Laguardia M.E., Cafaro A., Titti F., Monini P., Ensoli F., and **Ensoli B.** HIV-1 Tat addresses dendritic cells to induce a predominant Th1-type adaptive immune response which appears prevalent in the asymptomatic stage of infection. *J. Immunol.* 182:2888-2897, 2009.
273. Monini P., Sgadari C., Grosso M.G., Bellino S., Di Biagio A., Toschi E., Bacigalupo I., Sabbatucci M., Cencioni G., Salvi E., Leone P., and **Ensoli B.** for the Concerted Action on Kaposi's Sarcoma (Barillari G., Moracci G., Carratelli L., Gatti G., Brambilla L., Brambati M., Ferrucci S., De Pità O., Pilla M.A., Di Carlo A., Giuliani M., Cottoni F., Cuccuru M.A., Calvieri S., Clerico R., Potenza C., Tirelli U., Simonelli C., Martellotta F., Borghi A., Del Giacco S., Moi L., Piludu G., Sirianni M.C., Campagna M., Sarmati L., Andreoni M., Bianchini G., Sheldon J., Milzer J., Schulz T.). Clinical course of classic Kaposi's sarcoma in HIV-negative patients treated with the HIV protease inhibitor Indinavir. *AIDS J.* 23:534-538, 2009.
274. Florese R.H., Demberg T., Xiao P., Kuller L., Larsen K., Summers E.L., Venzon D., Cafaro A., **Ensoli B.**, and Robert-Guroff M. Contribution of non-neutralizing vaccine-elicited antibody activities to improved protective efficacy in rhesus macaques immunized with Tat/Env compared to multigenic vaccines. *J. Immunol.* 182:3718-27, 2009.
275. Borsetti A., Baroncelli S., Maggiorella M.T., Moretti S., Fanales Belasio E., Sernicola L., Tripiciano A., Macchia I., Michelini Z., Belli R., Farcomeni S., Pavone-Cossut M.R., Negri D., Caputo A., Bellino S., Butto' S., Titti F., Cafaro A., and **Ensoli B.** Containment of infection in Tat vaccinated monkeys after rechallenge with a higher dose of SHIV89.6P_{cy243}. *Viral Immunol.* 22:117-24, 2009.

276. Longo O., Tripiciano A., Fiorelli V., Bellino S., Scoglio A., Collacchi B., Ruiz Alvarez M.J., Francavilla V., Arancio A., Paniccia G., Lazzarin A., Tambussi G., Tassan Din C., Visintini R., Narciso P., Antinori A., D'Offizi G., Giulianelli M., Carta M., Di Carlo A., Palamara G., Giuliani M., Laguardia M.E., Monini P., Magnani M., Ensoli F., and **Ensoli B.** Phase I therapeutic trial of the HIV-1 Tat protein and long term follow-up. *Vaccine*. 27:3306-3312, 2009.
277. Caputo A., Castaldello A., Brocca-Cofano E., Voltan R., Bortolazzi F., Altavilla G., Sparnacci K., Laus M., Tondelli L., Gavioli R., and **Ensoli B.** Induction of humoral and enhanced cellular immune responses by novel core-shell nanosphere- and microsphere-based vaccine formulations following systemic and mucosal administration. *Vaccine*, 27:3605-3615. 2009.
278. Voltan R., Castaldello A., Brocca-Cofano E., De Michele R., Triulzi C., Altavilla G., Tondelli L., Laus M., Reali E., Gavioli R., **Ensoli B.**, Caputo A. Priming with a very low dose of DNA complete with cationic block copolymers followed by protein boosts elicits broad and long-lasting antigen-specific humoral and cellular responses in mice. *Vaccine*, 27:4498-4507. 2009.
279. De Maria A., Ugolotti E., Rutjens E., Mazza S., Radic L., Faravelli A., Koopman G., Di Marco E., Costa P., **Ensoli B.**, Cafaro A., Mingari M.C., Moretta L., Heeney J., Biassoni R. NKp44 expression, phylogenesis and function in non-human primate NK cells. *Int. Immunology*. 21:245-255, 2009.
280. Cafaro A., Macchia I., Maggiorella M.T., Titti F., and **Ensoli B.** Innovative approaches to develop prophylactic and therapeutic vaccines against HIV/AIDS. *In: Pharmaceutical Biotechnology* (Guzman C.A. and Fuerstein G. Eds.), Chapter No. 14, pp. 189-242, Publisher: Landes Bioscience/Eurekah, USA, 2009.
281. Caputo A., Gavioli R., Bellino S., Longo O., Tripiciano A., Francavilla V., Sgadari C., Paniccia G., Titti F., Cafaro A., Ferrantelli F., Monini P., Ensoli F., and **Ensoli B.** HIV-1 Tat-based vaccines: an overview and perspectives in the field of HIV/AIDS vaccine development. *Int. Reviews Immunol.* 28:285–334, 2009.
282. Nappi F., Chiozzini C., Bordignon V., Borsetti A., Bellino S., Cippitelli M., Barillari G., Caputo A., Tyagi M., Giacca M., and **Ensoli B.** Immobilized HIV-1 Tat protein promotes gene transfer via a transactivation-independent mechanism which require binding of Tat to viral particles. *J. Gene Med.* 11: 955–965, 2009.
283. **Ensoli B.**, Fiorelli V., Ensoli F., Lazzarin A., Visintini R., Narciso P., Di Carlo A., Tripiciano A., Longo O., Bellino S., Francavilla V., Paniccia G., Arancio A., Scoglio A., Collacchi B., Ruiz Alvarez M.J., Tambussi G., Tassan Din C., Palamara G., Latini A., Antinori A., D'Offizi G., Giuliani M., Giulianelli M., Carta M., Monini P., Magnani M., and Garaci E. The preventive phase I trial with the HIV-1 Tat based vaccine. *Vaccine*. 28:371–378, 2009.
284. Bellino S., Francavilla V., Longo O., Tripiciano A., Paniccia G., Arancio A., Fiorelli V., Scoglio A., Collacchi B., Campagna M., Lazzarin A., Tambussi G., Tassan Din C., Visintini R., Narciso P., Antinori A., D'Offizi G., Giulianelli M., Carta M., Di Carlo A., Palamara G., Giuliani M., Laguardia M.E., Monini P., Magnani M., Ensoli F., and **Ensoli B.** Parallel conduction of the phase I preventive and therapeutic trials based on the Tat vaccine candidate. *Recent Rev. Clin. Trials*. 4:195-204, 2009.
285. Barillari G., Franzese O., Comandini A., Bonmassar E., and **Ensoli B.** Spindle cells from AIDS-associated Kaposi's sarcoma (KS) lesions express telomerase activity that is enhanced by KS progression factors. *Oncol Rep.* 24:219-223, 2010.
286. Barillari G., Iovane A., Bonuglia M., Albonici L., Garofano P., Di Campli E., Falchi M., Condò I., Manzari V., and **Ensoli B.** Fibroblast growth factor-2 transiently activates the p53 oncosuppressor protein in human primary vascular smooth muscle cells: implications for

atherogenesis. Atherosclerosis. 210:400-406, 2010.

287. Bernasconi D., Tivoschi L., Regine V., Raimondo M., Gama D., Sulgencio L., Almaviva M., Galli C., **Ensoli B.**, Suligo B., Sukati H. and Buttò S. Identification of recent HIV infections and of factors associated with virus acquisition among pregnant women in 2004 and 2006 in Swaziland. Journal of Clinical Virology. 48: 180-183, 2010.
288. Cafaro A., Bellino S., Titti F., Maggiorella M.T., Sernicola L., Wiseman W. R., Venson D., Karl A. J., O'Connor D., Monini P., Robert-Guroff M., **Ensoli B.** Impact of Viral Dose and Major Histocompatibility Complex Class IB Haplotype on Viral Outcome in Tat-vaccinated Mauritian Cynomolgus Monkeys upon Challenge with SHIV89.6P J Virol. 84: :8953-8, 2010.
289. Papathanasopoulos M.A., Vardas E., Wallis C., Glashoff R., Buttò S., Poli G., Malnati M., **Ensoli B.** Characterization of HIV Type 1 Genetic Diversity Among South African Participants Enrolled in the AIDS Vaccine Integrated Project (AVIP) Study. AIDS Research and Human Retroviruses. 26: 705-709, 2010.
290. Barillari G., Franzese O., Iovane A., and **Ensoli B.** Spindle cells from acquired immune deficiency syndrome-associated Kaposi's sarcoma lesions express telomerase activity directly relating to the RNA levels of fibroblast growth factor-2. Int J Cancer. 127:2487-2489, 2010.
291. Pierleoni R, Menotta M., Antonelli A, Sfara C., Serafini G., Dominici S., Laguardia M.E., Salis A., Damonte G., Banci L., Porcu M., Monini P., **Ensoli B.**, Magnani M. Effect of the redox state on HIV-1 tat protein multimerization and cell internalization and trafficking. Mol Cell Biochem. 345:105-18, 2010.
292. Buttò S., **Ensoli B.** AIDS: novità e speranze. XXI Secolo. Istituto della Enciclopedia Italiana, XIX, 429-440, 2010.
293. **Ensoli B.**, Bellino S, Tripiciano A, Longo O, Francavilla V, Marcotullio S, Cafaro A, Picconi O, Paniccia G, Scoglio A, Arancio A, Ariola C, Ruiz Alvarez MJ, Campagna M, Scaramuzzi D, Iori C, Esposito R, Mussini C, Ghinelli F, Sighinolfi L, Palamara G, Latini A, Angarano G, Ladisa N, Soscia F, Mercurio V S, Lazzarin A, Tambussi G, Visintini R, Mazzotta F, Di Pietro M, Galli M, Rusconi S, Carosi G, Torti C, Di Perri G, Bonora S, Ensoli F, Garaci E. Therapeutic Immunization with HIV-1 Tat Reduces Immune Activation and Loss of Regulatory T-Cells and Improves Immune Function in Subjects on HAART. PLoS ONE. 5:e13540, 2010.
294. Toschi E., Sgadari C., Malavasi L., Bacigalupo I., Chiozzini C., Carlei D., Compagnoni D., Bellino S., Bugarini R., Falchi M., Palladino C., Leone P., Barillari G., Monini P., **Ensoli B.** Human immunodeficiency virus protease inhibitors reduce the growth of human tumors via a proteasome-independent block of angiogenesis and matrix metalloproteinases. Int J Cancer. 128: 82–93, 2011.
295. Luzi A.M., Gallo P., Colucci A, Marcotullio S., Bellino S., Longo O., **Ensoli B.** Communication, recruitment and enrolment in the preventative and therapeutic phase I clinical trial against HIV/AIDS based on the recombinant HIV-1 Tat protein. Aids Care 9: 1-8, 2011.
296. Ferrantelli F., Maggiorella M.T., Schiavoni I., Sernicola L., Olivieri E., Farcomeni S., Pavone-Cossut M.R., Moretti S., Belli R., Collacchi B., Srivastava I.K., Titti F., Cafaro A., Barnett S.W., **Ensoli B.** A combination HIV vaccine based on Tat and Env proteins was immunogenic and protected macaques from mucosal SHIV challenge in a pilot study. Vaccine, 29: 2918–2932, 2011.
297. Hemelaar J, Gouws E, Ghys PD, Osmanov S; WHO-UNAIDS Network for HIV Isolation and Characterisation. Collaborators: Agwale S, Allain JP, Fischetti L, Archibald C, Brooks J, Ofner M, Belabbes E, Brandful J, Bruckova M, Linka M, Buonaguro F, Buonaguro L, Carr J, Cooper D,

- Kelleher T, Carrera A, Cunningham P, Dwyer D, Raikanikoda F, **Ensoli B**, Butto S, Essex M, Novitsky V, Fleury H, Gao F, Gershby-Damet GM, Grossman Z, Maayan S, He X, Ho D, Zhang L, Hoelscher M, Hosseinipour M, van Oosterhout J, Kaleebu P, Goodall R, Kalish M, Kanki P, Karamov E, Kombate-Noudjo D, Dagnra A, Leitner T, Lorenzana de Rivera I, McCutchan F, Mhalu F, Urassa W, Mosha F, Mloka D, Morgado M, Mullins J, Campbell M, Rousseau C, Herbeck J, Rolland M, Najera J, Thomson M, Nyambi P, Papa A, Pape J, Nolte C, Peeters M, Reynes JM, Salminen M, Salomon H, Carillo M, Schroeder B, Segondy M, Montes B, Servais J, Pelletier A, Kayitenkore K, Karasi JC, Shankarappa R, Shao Y, He X, Xu J, Smolskaya T, Soares M, Tanuri A, Songok E, Sutthent R, Takebe Y, Ushijima H, Quang T, Van de Perre P, Méda, van Sighem A, Vandamme AM, Vercauteren J, Williamson C, Bredell H, Stewart D, Wolday D, Xu J, Yang C, Yirrell D, Zhang L, Zhang R, Chen Z. Global trends in molecular epidemiology of HIV-1 during 2000-2007. AIDS. 13;25:679-89, 2011.
298. Antinori A., Marcotullio S., Ammassari A., Andreoni M., Angarano G., Carosi G., Cinque P., d'Arminio Monforte A., Di Perri G., **Ensoli B.**, Ferrazzi E., Galli M., Mastroianni C., Matteelli A., Mazzotta F., Moroni M., Palù G., Puoti M., Puro V., Rizzardini G., Sagnelli E., Suter F., Vella S., Lazzarin A., for the Italian HIV Guidelines Working Group. Italian Guidelines for the Use of Antiretroviral Agents and the Diagnostic- Clinical Management of HIV-1 Infected Persons. New Microbiologica, 34:109-146, 2011
299. Sgadari C., Bacigalupo I., Barillari G., **Ensoli B.** Pharmacological management of Kaposi's sarcoma. Expert Opinion on Pharmacotherapy, 12:1669-90, 2011.
300. Sgadari C, Barillari G, Palladino C, Bellino S, Taddeo B, Toschi E, **Ensoli B.** Fibroblast growth factor-2 and the HIV-1 Tat protein synergize in promoting Bcl-2 expression and preventing endothelial cell apoptosis: implications for the pathogenesis of AIDS-associated Kaposi's sarcoma. Int J Vasc Med., 2011:452729, 2011
301. Fraternali A, Paoletti MF, Dominici S, Buondelmonte C, Caputo A, Castaldello A, Tripiciano A, Cafaro A, Palamara AT, Sgarbanti R, Garaci E, **Ensoli B**, Magnani M. Modulation of Th1/Th2 immune responses to HIV-1 Tat by new pro-GSH molecule. Vaccine, 29:6823-6829. 2011.
302. Malnati MS, Heltai S, Cosma A, Reitmeir P, Allgayer S, Glashoff RH, Liebrich W, Vardas E, Imami N, Westrop S, Nozza S, Tambussi G, Buttò S, Fanales-Belasio E, **Ensoli B**, Ensoli F, Tripiciano A, Fortis C, Lusso P, Poli G, Erfle V, Holmes H. A New Antigen Scanning Strategy for Monitoring HIV-1 Specific T-cell Immune Responses. Journal of Immunological Methods, 375:46-56. 2012.
303. Barillari G, Iovane A, Bacigalupo I, Palladino C, Bellino S, Leone P, Monini P, **Ensoli B.** Ritonavir or saquinavir impairs the invasion of cervical intraepithelial neoplasia cells via a reduction of MMP expression and activity. AIDS, 15;26:909-19. 2012.
304. Borsetti A, Maggiorella MT, Sernicola L, Bellino S, Ferrantelli F, Belli R, Fulgenzi D, Mee ET, Rose NJ, Cafaro A, **Ensoli B**, Titti F. Influence of MHC class I and II haplotypes on the experimental infection of Mauritian cynomolgus macaques with SHIV(SF162P4cy). Tissue Antigens, 80:36-45. 2012.
305. Antinori A, Marcotullio S, Ammassari A, Andreoni M, Angarano G, Armignacco O, Carosi G, Cinque P, D'Arminio Monforte A, Di Perri G, **Ensoli B**, Florida M, Galli M, Mastroianni C, Matteelli A, Mazzotta F, Moroni M, Palù G, Puoti M, Puro V, Rizzardini G, Sagnelli E, Vella S, Vullo V, Lazzarin A. Italian Guidelines for the Use of Antiretroviral Agents and the Diagnostic-clinical Management of HIV-1 Infected Persons. Update 2011. New Microbiol., 35:113-159. 2012.
306. Cenci A, Tivoschi L, D'Avenio G, Narino P, Becattini S, Bernasconi D, Chiappi M, La Torre L, Sukati H, Vardas E, Lo Presti A, Celli E, Ciccozzi M, Picconi O, Monini P, **Ensoli B**, Buttò S. Characterization of Variable Regions of the Gp120 Protein from HIV-1 Subtype C Virus Variants

Obtained from Individuals at Different Disease Stages in Sub-Saharan Africa. Journal of AIDS & Clinical Research, S8:006. 2012.

307. Monini P, Cafaro A, Srivastava IK, Moretti S, Sharma VA, Andreini C, Chiozzini C, Ferrantelli F, Cossut MR, Tripiciano A, Nappi F, Longo O, Bellino S, Picconi O, Fanales-Belasio E, Borsetti A, Toschi E, Schiavoni I, Bacigalupo I, Kan E, Sernicola L, Maggiorella MT, Montin K, Porcu M, Leone P, Leone P, Collacchi B, Palladino C, Ridolfi B, Falchi M, Macchia I, Ulmer JB, Buttò S, Sgadari C, Magnani M, Federico MP, Titti F, Banci L, Dallochio F, Rappuoli R, Ensoli F, Barnett SW, Garaci E, **Ensoli B**. HIV-1 Tat promotes integrin-mediated HIV transmission to dendritic cells by binding Env spikes and competes neutralization by anti-HIV antibodies. PLoS ONE, 7:e48781. 2012.
308. Nicoli F, Finessi V, Sicurella M, Rizzotto L, Gallerani E, Destro F, Geldmacher C, Brocker T, Cafaro A, Marconi P, Caputo A, **Ensoli B**, Gavioli R. The HIV-1 Tat protein induces the activation of CD8+ T cells and affects in vivo the magnitude and kinetics of antiviral responses. PLoS ONE, 8:e77746. 2013.
309. Cortecchia S, Galanti G, Sgadari C, Costa S, De Lillo M, Caprara L, Barillari G, Monini P, Nannini R, **Ensoli B**, Bucchi L. Follow-up Study of Patients With Cervical Intraepithelial Neoplasia Grade 1 Overexpressing p16Ink4a. Int J Gynecol Cancer, 23:1663-9. 2013.
310. Van Regenmortel M, Andrieu JM, Dimitrov DS, **Ensoli B**, Hioe CE, Moog C, Ruprecht RM. Paradigm changes and the future of HIV vaccine research. A summary of a workshop held in Baltimore on 20 November 2013. Journal of AIDS & Clinical Research, 3:10000281. 2014.
311. Borsetti A, Ferrantelli F, Maggiorella MT, Sernicola L, Bellino S, Gallinaro A, Farcomeni S, Mee ET, Rose NJ, Cafaro A, Titti F, **Ensoli B**. Effect of MHC Haplotype on Immune Response upon Experimental SHIVSF162P4cy Infection of Mauritian Cynomolgus Macaques. PLoS ONE, 9:e93235. 2014.
312. Cenci A, D'Avenio G, Tamoschi L, Chiappi M, Becattini S, Narino MDP, Picconi O, Bernasconi D, Fanales-Belasio E, Vardas E, Sukati H, Lo Presti A, Ciccozzi M, Monini P, **Ensoli B**, Grigioni M, Buttò S. Molecular characterization of HIV-1 subtype C gp-120 regions potentially involved in virus adaptive mechanisms. PLoS ONE, 9:e95183. 2014.
313. Barillari G, Iovane A, Bacigalupo I, Labbaye C, Chiozzini C, Sernicola L, Quaranta MT, Falchi M, Sgadari C, **Ensoli B**. The HIV protease inhibitor indinavir down-regulates the expression of the pro-angiogenic MT1-MMP by human endothelial cells. Angiogenesis, 17:831-8. 2014
314. Sforza F, Nicoli F, Gallerani E, Finessi V, Reali E, Cafaro A, Caputo A, **Ensoli B**, Gavioli R. HIV-1 Tat affects the programming and functionality of human CD8+ T cells by modulating the expression of T-box transcription factors. AIDS, 28:1729-38. 2014
315. Garulli B, Di Mario G, Stillitano MG, Compagnoni D, Titti F, Cafaro A, **Ensoli B**, Kawaoka Y, Castrucci MR. Induction of antibodies and T-cell responses by a recombinant influenza virus carrying an HIV-1 Tat Δ_{51-59} protein in mice. BioMed Research International 2014: 904038, 2014.
316. Bellino S, Tripiciano A, Picconi O, Francavilla V, Longo O, Sgadari C, Paniccia G, Arancio A, Angarano G, Ladisa N, Lazzarin A, Tambussi G, Nozza S, Torti C, Focà E, Palamara G, Latini A, Sighinolfi L, Mazzotta F, Di Pietro M, Di Perri G, Bonora S, Mercurio VS, Mussini C, Gori A, Galli M, Monini P, Cafaro A, Ensoli F, **Ensoli B**. The presence of anti-Tat antibodies in HIV-infected individuals is associated with containment of CD4+ T-cell decay and viral load, and with delay of disease progression: results of a 3-year cohort study. Retrovirology, 11: 49. 2014.
317. Sicurella M, Nicoli F, Gallerani E, Volpi I, Berto E, Finessi V, Destro F, Manservigi R, Cafaro A, **Ensoli B**, Caputo A, Gavioli R, Marconi PC. An Attenuated Herpes Simplex Virus Type 1 (HSV1)

Encoding the HIV-1 Tat Protein Protects Mice from a Deadly Mucosal HSV1 Challenge. PLoS ONE, 9:e100844. 2014.

318. Chiozzini C, Collacchi B, Nappi F, Bauer T, Arenaccio C, Tripiciano A, Longo O, Ensoli F, Cafaro A, **Ensoli B**, Federico M. Surface-bound Tat inhibits antigen-specific CD8+ T cell activation in an integrin-dependent manner. AIDS, 28:2189-200. 2014.
319. **Ensoli B**, Cafaro A, Monini P, Marcotullio S, Ensoli F. Challenges in HIV vaccine research for treatment and prevention. Frontiers in Immunology, 5:417. 2014.
320. Titti F, Maggiorella MT, Ferrantelli F, Sernicola L, Bellino S, Collacchi B, Fanales Belasio E, Moretti S, Pavone-Cossut MR, Belli R, Olivieri E, Farcomeni S, Compagnoni D, Michelini Z, Sabbatucci M, Sparnacci K, Tondelli L, Laus M, Cafaro A, Caputo A, **Ensoli B**.
Biocompatible anionic polymeric microspheres as priming delivery system for effective HIV/AIDS Tat-based vaccines. PLoS ONE, 9:e111360. 2014.
321. Ensoli F, Cafaro A, Casabianca A, Tripiciano A, Bellino S, Longo O, Francavilla V, Picconi O, Sgadari C, Moretti S, Pavone Cossut MR, Arancio A, Orlandi C, Sernicola L, Maggiorella MT, Paniccchia G, Mussini C, Lazzarin A, Sighinolfi L, Palamara G, Gori A, Angarano G, Di Pietro M, Galli M, Mercurio VS, Castelli F, Di Perri G, Monini P, Magnani M, Garaci E, **Ensoli B**. HIV-1 Tat immunization restores immune homeostasis and attacks the HAART-resistant blood HIV DNA: results of a randomized phase II exploratory clinical trial. Retrovirology, 12:33. 2015.
322. Finessi V, Nicoli F, Gallerani E, Sforza F, Sicurella M, Cafaro A, Caputo A, **Ensoli B**, Gavioli R. Effects of different routes of administration on the immunogenicity of the Tat protein and a Tat-derived peptide. Hum Vaccin Immunother, 11(6):1489-93. 2015.
323. Cafaro A, Tripiciano A, Sgadari C, Bellino S, Picconi O, Longo O, Francavilla V, Buttò S, Titti F, Monini P, Ensoli F, **Ensoli B**. Development of a novel AIDS vaccine: the HIV-1 Tat protein vaccine. Expert Opinion on Biological Therapy, June 22, 2015 2015;15 Suppl 1:S13-29
324. Sanarico N, D'Amato S, Picconi O, **Ensoli B**, Buttò S and the Italian Network for HIV Characterization. Building up a collaborative network for the surveillance of HIV genetic diversity in Italy. A pilot study. Ann Ist Super Sanità, Vol. 51, No.4: 321-326, 2015.
325. D'amato S, Nametak S, Tizzi G, **Ensoli B**. Meet Project – Soddisfare i bisogni di alfabetizzazione sanitaria dei migranti (Istituto Superiore di Sanità, Roma, 20 ottobre 2015). Notiziario dell'Istituto Superiore di Sanità, 29(1):11-12, 2016
326. Gray GE, Laher F, Lazarus E, **Ensoli B**, Corey L. Approaches to preventative and therapeutic HIV vaccines. Curr Opin Virol. 14:104-109, 2016.
327. Nicoli F, Gallerani E, Skarlis C, Sicurella M, Cafaro C, **Ensoli B**, Caputo A, Marconi P, Gavioli R. Systemic immunodominant CD8 responses with an effector-like phenotype are induced by intravaginal immunization with attenuated HSV vectors expressing HIV Tat and mediate protection against HSV infection. Vaccine. 34:2216-2224, 2016.
328. **Ensoli B**, Nchabeleng M, Ensoli F, Tripiciano A, Bellino S, Picconi O, Sgadari C, Longo O, Tavošchi L, Joffe D, Cafaro A, Francavilla V, Moretti S, Pavone Cossut MR, Collacchi B, Arancio A, Paniccchia G, Casabianca A, Magnani M, Buttò S, Levendal E, Ndimande JV, Asia B, Pillay Y, Garaci E, Monini P. HIV-Tat immunization induces cross-clade neutralizing antibodies and CD4+ T-cell increases in antiretroviral-treated South African volunteers: a randomized phase II clinical trial. Retrovirology. 13(1):34, 2016.
329. Barillari G, Palladino C, Bacigalupo I, Leone P, Falchi M, **Ensoli B**. Entrance of the Tat protein of HIV-1 into human uterine cervical carcinoma cells causes upregulation of HPV-E6 expression

and a decrease in p53 protein levels. Oncology letters. Oct;12(4):2389-2394, 2016.

330. Nicoli F, Chachage M, Clowes P, Bauer A, Kowour D, **Ensoli B**, Cafaro A, Maboko L, Hoelscher M, Gavioli R, Saathoff E; Geldmacher C. Association between different anti-Tat antibody isotypes and HIV disease progression: data from an African cohort. BMC Infect Dis. 16:344, 2016
331. Sanarico N, D'amato S, Bruni R, Rovetto C, Salvi E, Di Zeo P, Chionne P, Madonna C, Pisani G, Costantino A, Equestre M, Tosti ME, Cenci A, Maggiorella MT, Sernicola L, Pontali E, Pansera A, Quattrocchi R, Carbonara S, Signorile F, Surace LA, Federzoni G, Garlassi E, Starnini G, Monarca R, Badbudieru S, Rapicetta M, Pompa MG, Caraglia A, **Ensoli B**, Ciccaglione AR, Buttò S. Correlates of onfection and molecular characterization of blood-borne HIV, HCV, and HBV infections in HIV-1 infected inmates in Italy – An observational cross-sectional study. Medicine. 95:44(e5257), 2016.
332. **Ensoli B**, Cafaro A, Amicosante M, Andrieu JM, Boyer JD, Garcia F, Gray G, King MR, Rios A, Sandstrom E and Van Regenmortel MHV. Old and New Concepts and Strategies in HIV Vaccinology: A Report from a Workshop held in Rome on 17 June 2016. J AIDS Clin Res. 7:11, 2016.
333. **Ensoli B**, Cafaro A, Buttò S. L'infezione da HIV: punto sulle strategie vaccinali e di cura. ReAdfiles 9:10, N. 4 dicembre 2016.
334. Bacigalupo I, Palladino C, Leone P, Toschi E, Sgadari C, **Ensoli B** and Barillari G. Inhibition of MMP-9 expression by ritonavir or saquinavir is associated with inactivation of the AKT/Fra-1 pathway in cervical intraepithelial neoplasia cells. Oncol Lett 13: 2903-2908, 2017.
335. Nicoli F, Gallerani E, Sforza F, Finessi V, Chachage M, Geldmacher C, Cafaro A, **Ensoli B**, Caputo A, Gavioli R. The HIV-1 Tat protein affects human CD4+ T cell programming and activation, and favors the differentiation of naïve CD4+ T cells. AIDS Mar 13;32(5):575-581, 2018.
336. Cafaro A, Sgadari C, Picconi O, Tripiciano A, Moretti S, Francavilla V, Pavone Cossut MR, Buttò S, Cozzone G, Ensoli F, Monini P, **Ensoli B**. cART intensification by the HIV-1 Tat B clade vaccine: progress to phase III efficacy studies. Expert Rev Vaccines 17(2):115-126, 2018
337. Barillari G, Monini P, Sgadari C and **Ensoli B**. The impact of HP, MMPs and HIV protease inhibitors on the onset and progression of uterine cervix epithelial tumors: a review of preclinical and clinical studies. Int J Mol Sci 19, 1418, 2018.
338. **Ensoli B**. Servizio Sanitario Nazionale e pandemia da HIV/AIDS: il contributo dell'ISS. In: Ricciardi W, Allewa E, De Castro P, Giuliano F, Salinetti S, ed. 1978-2018: quaranta anni di scienza e sanità pubblica. La voce dell'Istituto Superiore di Sanità Roma: Istituto Superiore di Sanità; 2018. p.193-201.
339. Capone A, Lo Presti A, Sernicola L, Farcomeni S, Ferrantelli F, Maggiorella MT, Mee ET, Rose NJ, Cella E, Ciccozzi M, **Ensoli B**, Borsetti A. Genetic diversity in the env V1-V2 region of proviral quasispecies from long-term controller MHC-typed cynomolgus macaques infected with SHIVSF162P4cy. J Gen Virol Dec;99(12):1717-1728, 2018.
340. Hemelaar J, Elangovan R, Yun J, Dickson-Tetteh L, Fleminger I, Kirtley S, Williams B, Gouws-Williams E, Ghys PD; WHO–UNAIDS Network for HIV Isolation Characterisation. Collaborators: Abimiku AG, Agwale S, Archibald C, Avidor B, Barbás MG, Barre-Sinoussi F, Barugahare B, Belabbes EH, Bertagnolio S, Bix D, Bobkov AF, Brandful J, Bredell H, Brennan CA, Brooks J,

Bruckova M, Buonaguro L, Buonaguro F, Buttò S, Buve A, Campbell M, Carr J, Carrera A, Carrillo MG, Celum C, Chaplin B, Charles M, Chatzidimitriou D, Chen Z, Chijiwa K, Cooper D, Cunningham P, Dagnra A, de Gascun CF, Del Amo J, Delgado E, Dietrich U, Dwyer D, Ellenberger D, **Ensoli B**, Essex M, Gao F, Fleury H, Fonjungo PN, Foulongne V, Gadkari DA, García F, Garsia R, Gershy-Damet GM, Glynn JR, Goodall R, Grossman Z, Lindenmeyer-Guimarães M, Hahn B, Hamers RL, Hamouda O, Handema R, He X, Herbeck J, Ho DD, Holguin A, Hosseinipour M, Hunt G, Ito M, Bel Hadj Kacem MA, Kahle E, Kaleebu PK, Kalish M, Kamarulzaman A, Kang C, Kanki P, Karamov E, Karasi JC, Kayitenkore K, Kelleher T, Kitayaporn D, Kostrikis LG, Kucherer C, Lara C, Leitner T, Liitsola K, Lingappa J, Linka M, Lorenzana de Rivera I, Lukashov V, Maayan S, Mayr L, McCutchan F, Meda N, Menu E, Mhalu F, Mloka D, Mokili JL, Montes B, Mor O, Morgado M, Moshia F, Moussi A, Mullins J, Najera R, Nasr M, Ndembu N, Neilson JR, Nerurkar VR, Neuhann F, Nolte C, Novitsky V, Nyambi P, Ofner M, Paladin FJ, Papa A, Pape J, Parkin N, Parry C, Peeters M, Pelletier A, Pérez-Álvarez L, Pillay D, Pinto A, Quang TD, Rademeyer C, Raikanikoda F, Rayfield MA, Reynes JM, Rinke de Wit T, Robbins KE, Rolland M, Rousseau C, Salazar-Gonzales J, Salem H, Salminen M, Salomon H, Sandstrom P, Santiago ML, Sarr AD, Schroeder B, Segondy M, Selhorst P, Sempala S, Servais J, Shaik A, Shao Y, Slim A, Soares MA, Songok E, Stewart D, Stokes J, Subbarao S, Sutthent R, Takehisa J, Tanuri A, Tee KK, Thapa K, Thomson M, Tran T, Urassa W, Ushijima H, van de Perre P, van der Groen G, van Laethem K, van Oosterhout J, van Sighem A, van Wijngaerden E, Vandamme AM, Vercauteren J, Vidal N, Wallace L, Williamson C, Wolday D, Xu J, Yang C, Zhang L, Zhang R. Global and regional molecular epidemiology of HIV-1, 1990-2015: a systematic review, global survey, and trend analysis. *Lancet Infect Dis.* Feb;19(2):143-155, 2019.

341. Sgadari C, Monini P, Tripiciano A, Picconi O, Casabianca A, Orlandi C, Moretti S, Francavilla V, Arancio A, Paniccia G, Campagna M, Bellino S, Meschiari M, Nozza S, Sighinolfi L, Latini A, Muscatello A, Saracino A, Di Pietro M, Galli M, Cafaro A, Magnani M, Ensoli F and **Ensoli B**. Continued Decay of HIV Proviral DNA Upon Vaccination With HIV-1 Tat of Subjects on Long-Term ART: An 8-Year Follow-Up Study. *Front. Immunol.* 13 February 2019.
342. Cafaro A, Tripiciano A, Picconi O, Sgadari C, Moretti S, Buttò S, Monini P, **Ensoli B**. Anti-Tat Immunity in HIV-1 Infection: Effects of Naturally Occurring and Vaccine-Induced Antibodies Against Tat on the Course of the Disease. *Vaccines (Basel).* Aug 26;7(3), 2019.
343. Moretti S, Cafaro A, Tripiciano A, Picconi O, Buttò S, Ensoli F, Sgadari C, Monini P, **Ensoli B**. HIV therapeutic vaccines aimed at intensifying combination antiretroviral therapy. *Expert Rev Vaccines.* Jan 19:1-14, Epub 2020
344. Maggiorella MT, Sanarico N, Brindicci G, Monno L, Santoro CR, Coppola N, Cuomo N, Azzurri A, Cesario F, Luciani F, El-Hamad I, D'Ettore G, Turriziani O, Mazzuti L, Poggi A, Vichi F, Mariabelli E, Surace L, Berardelli G, Picconi O, Cenci A, Sernicola L, Rovetto C, Fulgenzi D, Belli R, Salvi E, Zeo PD, Borsetti A, Ridolfi B, Losappio R, Zoboli F, Schietroma I, Cella E, Angeletti S, Ciccozzi M, D'Amato S, **Ensoli B**, Buttò S; Italian Network for HIV Characterization. High HIV-1 diversity in immigrants resident in Italy (2008-2017). *Sci Rep.* Feb 24;10(1):3226, 2020.
345. Minghetti L, Bertinato L, Cara A, Capocefalo A, Chiantore MV, Coccia E, Di Bonito P, Ensoli B, Gagliardi MC, Magurano F, Mariotti S, Negri D, Nisini R, Ortona E, Ruggieri A, Scotti L, Sgarbanti M, Vendetti S. Gruppo di lavoro ISS Ricerca traslazionale. Raccomandazioni per la raccolta, il trasporto e la conservazione di campioni biologici COVID-19. Versione del 15 aprile 2020. Roma: Istituto Superiore di Sanità; 2020 (Rapporto ISS COVID-19, n. 13/2020)
346. Minghetti L, Bertinato L, Cara A, Capocefalo A, Chiantore MV, Coccia E, Di Bonito P, **Ensoli B**, Gagliardi MC, Magurano F, Mariotti S, Negri D, Nisini R, Ortona E, Ruggieri A, Scotti L, Sgarbanti M, Vendetti S. ISS COVID-19 Translational Research Working Group.

Recommendations for collection, transport and storage of COVID-19 biological samples.
Version of April 15, 2020, 19 p. Rapporto ISS COVID-19 n. 13/2020 – English version

347. Ruggieri A, Ortona E, Gagliardi MC, Bertinato L, Cara A, Capocefalo A, Chiantore MV, Coccia EM, Di Bonito P, Ensoli B, Magurano F, Mariotti S, Minghetti L, Negri D, Nisini R, Lorenza Scotti L, Sgarbanti M, Vendetti S. Gruppo di lavoro ISS Ricerca traslazionale. Raccomandazioni per la raccolta e analisi dei dati disaggregati per sesso relativi a incidenza, manifestazioni, risposta alle terapie e outcome dei pazienti COVID-19. Versione del 26 aprile 2020. Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 18/2020)
348. Ruggieri A, Ortona E, Gagliardi MC, Bertinato L, Cara A, Capocefalo A, Chiantore MV, Coccia EM, Di Bonito P, **Ensoli B**, Magurano F, Mariotti S, Minghetti L, Negri D, Nisini R, Lorenza Scotti L, Sgarbanti M, Vendetti S. ISS COVID-19 Translational Research Working Group. Recommendations for the collection and analysis of data disaggregated by sex related to incidence, manifestations, response to therapies and outcomes in COVID-19 patients. Version April 26, 2020. 2020, 7 p. Rapporto ISS COVID-19 n. 18/2020 – English version
349. Nicoli F, Gallerani E, Sicurella M, Pacifico S, Cafaro A, **Ensoli B**, Marconi P, Gavioli R. The Tat Protein of HIV-1 Prevents the Loss of HSV-Specific Memory Adaptive Responses and Favors the Control of Viral Reactivation. *Vaccines*, 8, 274, 2020.