

## **Giovanni Barillari - Curriculum Vitae** (aggiornato al 3 febbraio 2022)

### **Informazioni personali**

Nome: BARILLARI, Giovanni

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### **Titoli di studio**

1983: Laurea in Medicina e Chirurgia, Università di Roma "Sapienza", voto 110/110 e lode.

1987: Specializzazione in Patologia Generale, Università di Roma "Sapienza", voto 70/70 e lode.

1989: Corso di Perfezionamento in Metodologia del DNA Ricombinante, Foundation for Advanced Education in Sciences (FAES), National Institutes of Health (NIH), Bethesda (MD), USA.

1989: Corso di Perfezionamento in Biologia Cellulare, FAES, USA.

1990: Corso di Perfezionamento in Metodi di Ricerca sul DNA, FAES, USA.

1991: Corso di Perfezionamento in Tecnologia di Amplificazione ed Ibridazione Molecolare, FAES, USA.

### **Cronologia d'impiego**

2006-data odierna: Professore Ordinario di Patologia Clinica, Facoltà di Medicina e Chirurgia, Università degli Studi di Roma "Tor Vergata".

2000-2006: Professore Associato di Patologia Generale, Facoltà di Medicina e Chirurgia, Università degli Studi di Roma "Tor Vergata".

1993-2000: Ricercatore Universitario presso il Dipartimento di Medicina Sperimentale, Università degli Studi di Roma "Tor Vergata".

1988-1993: ricercatore ospite del Laboratorio di Biologia della Cellula Tumorale, National Cancer Institute, NIH, Bethesda (MD), USA.

1987-1988: borsista presso il Dipartimento di Medicina Sperimentale, Facoltà di Medicina e Chirurgia, Università degli Studi di Roma "Tor Vergata".

1983-1987: borsista presso l'Istituto di Patologia Generale, Facoltà di Medicina e Chirurgia, Università degli Studi di Roma "Sapienza".

### **Attività didattica corrente** (anno accademico 2021-2022)

#### Università degli Studi di Roma "Tor Vergata", Facoltà di Medicina e Chirurgia

*Corsi di Laurea Magistrale.* Titolare dell'insegnamento "Patologia Clinica" ed affidatario dell'insegnamento "Patologia Generale" presso il Corso di Laurea in Odontoiatria e Protesi Dentaria.

*Corsi di Laurea Sanitaria Triennale.* Titolare dell'insegnamento "Patologia Clinica" presso il Corso di Laurea in Igienista Dentale e presso il Corso di Laurea in Tecniche di Fisiopatologia Cardiocircolatoria e Perfusionazione Cardiovascolare.

*Scuole di Specializzazione.* Docente presso la Scuole di Specializzazione in "Patologia e Biochimica Clinica", "Medicina Interna", "Oncologia" e "Endocrinologia e Malattie del Metabolismo".

*Scuole di Dottorato.* Docente presso il Dottorato in Medicina Sperimentale e dei Sistemi.

Catholic University "Zoja e Këshillit të Mirë", School of Medicine, Tirane, Albany. Insegnamento "Patologia Clinica" e "Patologia Generale" presso il Corso di Laurea in Odontoiatria e Protesi Dentaria.

International University of Health and Medical Sciences "UniCamillus", Rome, Italy.

Insegnamento "Patologia Clinica" presso il Corso di Laurea in Medicina e Chirurgia e presso il Corso di Laurea in Scienze Infermieristiche.

### **Incarichi scientifici**

Revisore di progetti di ricerca scientifica presentati al Ministero della Salute oppure al Ministero dell'Università e della Ricerca. In tale contesto, è iscritto nel registro degli esperti scientifici indipendenti, italiani e stranieri (*Register of Expert Peer Reviewers for Italian Scientific Evaluation, REPRISE*), istituito presso il Ministero dell'Università e della Ricerca.

Revisore di articoli scientifici presso riviste internazionali con ISSN quali, ad esempio, *Cancers, Current Oncology, International Journal of Molecular Sciences* ed altri.

Membro del Comitato Editoriale di *International Journal of Molecular Sciences* (casa editrice MDPI -Multidisciplinary Digital Publishing Institute, Basilea, Svizzera).

Socio Ordinario dell'*Accademia Medica di Roma* (Roma, Italia).

### **Incarichi istituzionali**

2020 – *tempo presente*: componente dell'Osservatorio sulla Didattica, Facoltà di Medicina e Chirurgia, Università "Tor Vergata".

Dicembre 2013-novembre 2019. Prorettore delegato alla Didattica d'Ateneo, Università degli Studi di Roma "Tor Vergata".

2009-2013. Presidente della Commissione Didattica della Facoltà di Medicina e Chirurgia, Università degli Studi di Roma "Tor Vergata".

### **Attività Scientifica**

L'attività di ricerca è concentrata sullo studio: i) della formazione di nuovi vasi sanguigni e linfatici associata alla progressione neoplastica; ii) dei meccanismi alla base dell'invasività neoplastica e della metastatizzazione; iii) degli effetti oncogeni di proteine virali; iv) dei marcatori diagnostici e prognostici di neoplasia; e v) degli effetti antitumorali degli inibitori delle proteasi.

Pubblicazioni "*peer-reviewed*" prodotte su giornali con ISSN = 101; H Index = 34 (*fonte WEB of SCIENCE*); Numero totale di citazioni = 6071 (*fonte WEB of SCIENCE*)

### **Elenco delle pubblicazioni prodotte**

1. Barillari G, Bei R, Manzari V, Modesti A. Infection by High-Risk Human Papillomaviruses, Epithelial-to-Mesenchymal Transition and Squamous Pre-Malignant or Malignant Lesions of the Uterine Cervix: A Series of Chained Events? *Int J Mol Sci* 2021; 22: 13543. doi: 10.3390/ijms222413543. PMID: 34948338; PMCID: PMC8703928 (review, ISSN 14220067, publisher: MDPI).
2. Benvenuto M, Ciuffa S, Focaccetti C, Sbardella D, Fazi S, Scimeca M, Tundo GR, Barillari G, Segni M, Bonanno E, Manzari V, Modesti A, Masuelli L, Coletta M, Bei R. Proteasome inhibition by bortezomib parallels a reduction in head and neck cancer cells growth, and an increase in tumor-infiltrating immune cells. *Sci Rep* 2021; 11: 19051 (article, doi: 10.1038/s41598-021-98450-6. PMID: 34561494; PMCID: PMC8463577).
3. Cafaro A, Barillari G, Moretti S, Palladino C, Tripiciano A, Falchi M, Picconi O, Pavone Cossut MR, Campagna M, Arancio A, Sgadari C, Andreini C, Banci L, Monini P, Ensoli B. HIV-1 Tat Protein Enters Dysfunctional Endothelial Cells via Integrins and Renders Them Permissive to Virus Replication. *Int J Mol Sci* 2021; 22: 317-340. <https://doi.org/10.3390/ijms22010317> (article, ISSN 14220067, publisher: MDPI).

4. Qiu Y, Maione F, Capano S, Meda C, Picconi O, Brundu S, Pisacane A, Sapino A, Palladino C, Barillari G, Monini P, Bussolino F, Ensoli B, Sgadari C, Giraudo E. HIV-protease inhibitors block HPV16-induced murine cervical carcinoma and promote vessel normalization in association with MMP-9 inhibition and TIMP-3 induction. *Mol Cancer Ther* 2020; 19: 2476-2489. doi: 10.1158/1535-7163.MCT-20-0055 (article, ISSN 15357163, publisher: American Association for Cancer Research).
5. Barillari G. The Impact of Matrix Metalloproteinase-9 on the Sequential Steps of the Metastatic Process. *Int J Mol Sci* 2020; 21: 4526. doi: 10.3390/ijms21124526 (review, ISSN 14220067, publisher: MDPI).
6. Barillari G. The Anti-Angiogenic Effects of Anti-Human Immunodeficiency Virus Drugs. *Front Oncol* 2020; 10:806. doi: 10.3389/fonc.2020.00806 (review, ISSN 2234943, publisher: Frontiers Media).
7. Barillari G, Monini P, Sgadari, Ensoli B. The impact of human papilloma viruses, matrix metalloproteinases and HIV protease inhibitors on the onset and progression of uterine cervix epithelial tumors: a review of preclinical and clinical studies. *International Journal of Molecular Sciences* 2018; 19: 1418-1442, doi: 10.3390/ijms19051418 (review, ISSN 14220067, publisher: MDPI).
8. Bacigalupo I, Palladino C, Leone P, Toschi E, Sgadari C, Ensoli B, 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. *Oncology Letters* 13: 2903-2908, 2017. doi: 10.3892/ol.2017.5835 (article, ISSN 1792-1074, publisher: Spandidos Publications).
9. 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 up-regulation of HPV-E6 expression and a decrease in p53 protein levels. *Oncology Letters*, 12: 2389-2394, 2016 (article, ISSN 1792-1074, publisher Spandidos Publications).
10. 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*, 7 (4): 831-8, 2014. doi: 10.1007/s10456-014-9430-9 (article, ISSN 0969 0969-6970, publisher: Springer).
11. Bucchi L, Cortecchia S, Galanti G, Sgadari C, Costa S, De Lillo M, Caparra L, Barillari G, Monini P, Nannini R, and Ensoli B. Follow-up study of patients with cervical intraepithelial neoplasia grade 1 overexpressing p16ink4a. *International Journal of Gynecological Cancer* 23 (9):1663-9, 2013 (article, ISSN 1048-891X, publisher: Lippincott, Williams & Wilkins).
12. Barillari G, Iovane A, Bacigalupo I, Palladino C, Bellino S, Leone P, Monini P, and Ensoli B. Ritonavir or saquinavir impairs the invasion of cervical intraepithelial neoplasia cells via a reduction of MMP expression and activity. *AIDS* 26 (8): 909-919, 2012. doi: 10.1097/QAD.0b013e328351f7a5 (article, ISSN 0269-9370, publisher: Lippincott, Williams & Wilkins).
13. Sgadari C, Bacigalupo I, Barillari G, Ensoli B. Pharmacological management of Kaposi's sarcoma. *Expert Opinion on Pharmacotherapy* 12 (11): 1669-1690, 2011 (review, ISSN 1465-6566, publisher: Informa Healthcare).
14. 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. *International Journal of Vascular Medicine e-PUB* DOI 10.1155/2011/452729, 2011 (article, ISSN 2090-2824, publisher: Hindawi Publication Corporation).
15. 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 proteasome-independent block of angiogenesis and matrix metalloproteinases. *International Journal of Cancer*, 128: 82-93, 2011 (article, ISSN 0020-7136, publisher: Wiley-Liss).
16. Barillari G, Franzese O, Comandini A, Bonmassar E, Ensoli B. Spindle cells from AIDS-associated Kaposi's sarcoma (KS) lesions express telomerase activity that is enhanced by KS progression factors. *Oncology Reports*, 24 (1): 219-223, 2010 (article, ISSN 1021-335X, publisher: Spandidos Publications).
17. Albonici L, Sorge RP, Santeusanio G, Garofano P, Manzari V, Barillari G. Correlation between pathological data and the RNA expression of p53 or p53-targeted genes in primary invasive ductal

- breast carcinomas: a preliminary study. *Oncology Reports*, 23: 1119-1123, 2010 (article, ISSN 1021-335X, publisher: Spandidos Publications).
18. Barillari G, Franzese O, Iovane A and Ensoli B. Spindle cells from Acquired Immune Deficiency Syndrome (AIDS)-associated Kaposi's sarcoma (KS) lesions express telomerase activity directly relating to the RNA levels of fibroblast growth factor (FGF)-2. *International Journal of Cancer*, 127: 2487-2489, 2010 (letter, ISSN 0020-7136, publisher: Wiley-Liss).
  19. Barillari G, Iovane A, Bonuglia M, Albonici L, Garofano P, Di Campi E, Falchi M, Condò I, Manzari V, Ensoli B. Fibroblast growth factor-2 transiently activates the p53 oncosuppressor protein in human primary vascular smooth muscle cells: implications for atherogenesis. *Atherosclerosis*, 210 (2): 400-406, 2010 (article, ISSN 0021-9150, publisher: Elsevier).
  20. Nappi F, Chiozzini C, Bordignon V, Borsetti A, Bellino S, Cippitelli M, Barillari G, Caputo A, Tyagi M, Giacca M, Ensoli B. Immobilized HIV-1 Tat protein promotes gene transfer via a transactivation independent mechanism which requires binding of Tat to viral particles. *Journal of Gene Medicine*, 11 (11): 955-965, 2009 (article, ISSN 1099-498X, publisher: John Wiley & Sons).
  21. Fanales-Belasio E, Moretti S, Fiorelli V, Tripiciano A, Pavone-Cossut MR, Scoglio A, Colacchi B, Nappi F, Macchia I, Bellino S, Francavilla V, Caputo A, Barillari G, Magnani M, Laguardia ME, Cafaro A, Titti F, Monini P, Ensoli F, Ensoli B. HIV-1 Tat addresses dendritic cells to induce a predominant Th1-type adaptive immune response that appears prevalent in the asymptomatic stage of infection. *Journal of Immunology* 182 (5): 2888-2897, 2009 (article, ISSN 0022-1767, publisher: American Association of Immunologists).
  22. Barillari G, Toschi E, Sgadari C, Monini P, Ensoli B. The formation of new blood vessels in Kaposi's sarcoma. In *The Research Signpost (Kaposi's sarcoma: a model of oncogenesis)*; Stebbing J, Pantanowitz L, and Dezube BJ editors, Tufts Medical School, Boston (MA, USA), chapter 6, pp 101-122, 2009 (book chapter, ISBN 978-81-308-0380-7, publisher: Research Signpost, USA).
  23. Monini P, Sgadari C, Grosso MG, Bellino S, Di Biagio A, Toschi E, Bacigalupo I, Sabbatucci M, Cencioni G, Salvi E, Leone P, Ensoli B, Barillari G, Moracci G, Carratelli L, Gatti G, Brambilla L, Brambati M, Ferrucci S, De Pità O, Pilla MA, Di Carlo A, Giuliani M, Cottoni F, Cuccuru MA, Calvieri S, Clerico R, Potenza C, Tirelli U, Simonelli C, Martellotta F, Strumia R, Borghi A, Del Giacco S, Moi L, Piludu G, Sirianni MC, 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* 23 (4): 534-538, 2009 (article, ISSN 0269-9370, publisher: Lippincott, Williams & Wilkins).
  24. 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. *Journal of HIV Therapy*, 11 (3): 53-56, 2006 (review, ISSN 1462-0308, publisher: Mediscript).
  25. Toschi E, Bacigalupo I, Strippoli R, Cereseto A, Falchi M, Chiozzini C, Nappi F, Sgadari C, Barillari G, Maniero F, and Ensoli B. HIV-1 Tat regulates endothelial cell cycle progression via activation of the Ras/ERK MAPK signaling pathway. *Molecular Biology of the Cell*, 17 (4): 1985-1994, 2006 (article, ISSN 1059-1524, publisher: American Society for Cell Biology).
  26. Monini P, Sgadari C, Toschi E, Barillari G and Ensoli B. Antitumour effects of antiretroviral therapy. *Nature Reviews. Cancer*, 4: 861-875, 2004 (review, ISSN 1474-175X, publisher: Nature Publishing Group).
  27. Sgadari C, Monini P, Barillari G and Ensoli B. Use of HIV protease inhibitors to block Kaposi's sarcoma and tumor growth. *Lancet Oncology*, 4: 537-547, 2003 (review, ISSN 1470-2045, publisher: Lancet Publishing Group).
  28. Barillari G, Sgadari C, Toschi E, Monini P and Ensoli B. HIV protease inhibitors as new treatment options for Kaposi's sarcoma. *Drug Resistance Updates*, 6 (4): 173-181, 2003 (review, ISSN 1368-7646, publisher: Churchill Livingstone).
  29. Grosso G, Sgadari C, Barillari G, Toschi E, Bacigalupo I, Carlei D, Palladino C, Baccarini S, Malavasi L, Moracci G, Leone P, Chiozzini C, Monini P, Ensoli B. HIV protease inhibitors for the treatment of Kaposi's sarcoma. *Recenti Progressi in Medicina* 94: 69-74, 2003 (review, ISSN 0034-1193, publisher: Il Pensiero Scientifico editore).
  30. 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. *The Journal of Antimicrobial Chemotherapy* 51 (2): 207-211, 2003 (review, ISSN 0305-7453, publisher: Oxford University Press).

31. Ensoli B, Sgadari C, Barillari G and Monini P. The fibroblast growth factors. The Cytokine Handbook (IV Edition): 747-781. Thomson AW & Lotze MT editors, Elsevier Science Ltd. Publisher, London 2003 (book chapter, ISBN 0-12-689663-I, publisher: Elsevier Science).
32. Toschi E, Monini P, Barillari G, Bacigalupo I, Palladino C, Baccarini S, Carlei D, Grosso G, Sirianni MC and Ensoli B. Treatment of Kaposi's sarcoma: an update. *Anticancer Drugs*, 13: 977-987, 2002 (review, ISSN 0959-4973, publisher: Lippincott, Williams & Wilkins).
33. Barillari G and Ensoli B. Angiogenic effects of extracellular HIV-1 Tat protein and its role in the pathogenesis of AIDS-associated Kaposi's sarcoma. *Clinical Microbiology Reviews*, 15 (2): 310-326, 2002 (review, ISSN 0893-8512, publisher: American Society of Microbiology).
34. Ciafrè SA, Barillari G, Bongiorno Borbone L, Wannenes F, Izquierdo M and Farace MG. A tricistronic retroviral vector expressing natural antiangiogenic factors inhibits angiogenesis in vitro. *Gene Therapy*, 9: 297-302, 2002 (article, ISSN 0969-7128, publisher: Nature Publishing Group).
35. Fanales-Belasio E, Moretti S, Nappi F, Barillari G, Micheletti F, Cafaro A and Ensoli B. Native HIV-1 Tat protein is selectively taken up by monocyte-derived dendritic cells and induces their maturation, Th-1 cytokine production and antigen presenting function. *Journal of Immunology*, 168: 197-206, 2002 (article, ISSN 0022-1767, publisher: American Society of Immunologists).
36. Sgadari C, Carlei D, Barillari G et al. HIV protease inhibitors block angiogenesis and promote regression of Kaposi's sarcoma in the nude mouse model. *Clinical and Experimental Pharmacology and Physiology* 29 (8): 94-95, 2002 (abstract, ISSN: 0305-1870, publisher: Wiley-Blackwell).
37. 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. *Nature Medicine*, 8 (3): 225-232, 2002 (article, ISSN 1078-8956, publisher: Nature Publishing Group).
38. Toschi E, Barillari G, Sgadari S, Bacigalupo I, Cereseto A, Carlei D, Palladino C, Zietz C, Leone P, Sturzl M, Buttò S, Cafaro A, Monini P and Ensoli B. Activation of MMP-2 and MT1-MMP in endothelial cells and induction of vascular permeability in vivo by the HIV-1 Tat protein and basic fibroblast growth factor. *Molecular Biology of the Cell*, 12: 2934-2946, 2001 (article, ISSN 1059-1524, publisher: American Society for Cell Biology).
39. Guenzi E, Cornali E, Topolt K, Martellato C, Zietz C, Kremmer E, Nappi F, Schwemmler M, Hohenadl C, Jorg A, Matzen K, Barillari G, Tschachler E, Monini P, Ensoli B and Sturzl M. The helical domain of GBP-1 mediates the inhibition of endothelial cell proliferation by inflammatory cytokines. *The EMBO Journal*, 20: 5568-5577, 2001 (article, ISSN 0261-4189, publisher: Wiley Blackwell).
40. Ensoli B, Sgadari C, Barillari G, Sirianni MC, Sturzl M, Monini P. Biology of Kaposi's sarcoma. *European Journal of Cancer*, 37: 1251-1269, 2001 (review, ISSN 0959-8049, publisher: Elsevier Science).
41. Bussolino F, Mitola S, Serini G, Barillari G, Ensoli B. Interactions between endothelial cells and HIV-1. *The International Journal of Biochemistry and Cell Biology*, 33: 371-390, 2001 (review, ISSN 1357-2725, publisher: Elsevier).
42. Barillari G, Albonici L, Incerpi S, Bogetto L, Pistritto 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 (article, ISSN 0021-9150, publisher: Elsevier).
43. Sgadari C, Toschi E, Palladino C, Barillari G, Carlei D, Cereseto A, Ciccolella C, Yarchoan R, Monini P, Sturzl M, Ensoli B. Mechanism of paclitaxel activity in Kaposi's sarcoma. *Journal of Immunology*, 165: 509-517, 2000 (article, ISSN 0022-1767, publisher: American Association of Immunologists).

44. Ciafrè SA, Barillari G, Wannenes F, Bongiorno Borbone L, and Farace MG. Multicistronic antiangiogenic retroviral vectors for the gene therapy of malignant brain tumors. *Cancer Gene Therapy*, 7 (10): 1395-1396, 2000 (abstract, ISSN: 0929-1903, publisher: Nature Publishing Group).
45. Barillari G, Sgadari C, Palladino C, Gendelman R, Caputo A, Bohan-Morris C, Nair BC, Markham P, Sturzl M and Ensoli B. Inflammatory cytokines synergize with the HIV-1 Tat protein to promote angiogenesis and Kaposi's sarcoma via induction of bFGF and the  $\alpha\beta 3$  integrin that are required for Tat activity. *Journal of Immunology* 163: 1929-1935, 1999 (article, ISSN 0022-1767, publisher: American Association of Immunologists).
46. Barillari G, Sgadari C, Fiorelli V, Samaniego F, Colombini S, Manzari V, Modesti A, Nair BC, Cafaro A, Sturzl 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  $\alpha\beta 3$  integrins and by mobilizing sequestered basic fibroblast growth factor. *BLOOD* 94: 663-672, 1999 (article, ISSN 0006-4971, publisher: American Society for Haematology).
47. Fiorelli V, Barillari G, Sgadari C, Toschi E, Monini P, Sturzl M and Ensoli B. IFN-gamma induces endothelial cells to proliferate and to invade the extracellular matrix in response to HIV-1 Tat. *Journal of Immunology* 162: 1165-1170, 1999 (article, ISSN 0022-1767, publisher: American Association of Immunologists).
48. Pica F, Volpi A, Barillari G, Frascetti M, Franzese O, Vullo V and Garaci E. Detection of high NGF serum levels in AIDS-related and -unrelated KS patients. *AIDS* 12: 7329-7334, 1998 (article, ISSN 0269-9370, publisher: Lippincott, Williams & Wilkins).
49. Barillari G, Albonici L, Franzese O, Modesti A, Liberati F, Barillari P, Ensoli B, Manzari V and Santeusano G. The basic residues of PlGF-2 retrieve sequestered angiogenic factors into a soluble form. *The American Journal of Pathology*, 152: 1161-1166, 1998 (article, ISSN 0002-9440, publisher: Elsevier).
50. Barillari G, Albonici L, Manzari V, Liberati F, Iafrate E and Santeusano G. Transcription of placenta growth factor type-2 correlates with intratumoral microvessel density in breast carcinomas. *Clinical and Experimental Pathology* 48: 296, 1998 (abstract, ISSN 1292-7953, publisher: Expansion Scientifique).
51. Barillari G, Albonici L, Manzari V. Basic FGF modifies the interactions between endothelial cells and fibronectin: implications for the progression of AIDS-associated Kaposi's sarcoma. *Archives of STD/HIV Research*, 11 (1): 23-37, 1997 (article, ISSN 1071-0906, publisher: Reproductive Health Center).
52. Barillari G, Fiorelli V, Gendelman R. HIV-1 Tat protein enhances angiogenesis and Kaposi's sarcoma development triggered by inflammatory cytokines and bFGF by engaging the  $\alpha\beta 3$  integrin. *AIDS Research and Human Retroviruses*, 14: 68, 1997 (abstract, ISSN 0889-2229, publisher: Mary Ann Liebert).
53. Barillari G, Albonici L and Manzari V. Another mechanism involved in AIDS-KS progression. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* 55, 1996 (abstract, ISSN: 1077-9450, publisher: Lippincott Williams & Wilkins).
54. Franzese O, Minchella I, Pistrutto G, Barillari G, Bonmassar E and D'Onofrio C. PDGF-B as a possible growth factor in AIDS-KS. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* 24, 1996 (abstract, ISSN: 1077-9450, publisher: Lippincott Williams & Wilkins).
55. Albini A, Barillari G, Benelli R, Gallo RC, and Ensoli B. Angiogenic properties of Human Immunodeficiency Virus type 1 Tat protein. *Proceedings of the National Academy of Sciences of the United States of America (PNAS)* 92: 4838-4842, 1995 (article, ISSN 0027-8424, publisher: National Academy of Sciences).
56. Ensoli B, Barillari G, Fiorelli V, Samaniego F, Gendelman R, Chang HC, Colombini S, Watanabe Y, Kao V, Nair BC. HIV-1 Tat protein mimics the effect of extracellular matrix (ECM) protein on vascular cell growth and angiogenesis: implications for AIDS-Kaposi's sarcoma (AIDS-KS) pathogenesis. *AIDS Research and Human Retroviruses* 11 (1): S75, 1995 (abstract, ISSN 0889-2229, publisher: Mary Ann Liebert).

57. Ensoli B, Barillari G, Fiorelli V, Gallo RC. Cooperation of HIV-1 Tat protein, inflammatory cytokines or bFGF in the pathogenesis of AIDS-Kaposi's sarcoma. *AIDS Research and Human Retroviruses*. 10 (1): 53, 1994 (abstract, ISSN 0889-2229, publisher: Mary Ann Liebert).
58. Ensoli B, Markham P, Kao V, Barillari G, Fiorelli V, Gendelman R, Raffeld M, Zon G, and Gallo RC. Block of AIDS-Kaposi's sarcoma (KS) cell growth, angiogenesis and lesion formation in nude mice by antisense oligonucleotides targeting basic fibroblast growth factor. *Journal of Clinical Investigation*, 94: 1736-1746, 1994 (article, ISSN 0021-9738, publisher: American Society for Clinical Investigation).
59. Ensoli B, Barillari G, Fiorelli V, Gallo RC. Cooperation of HIV-1 Tat protein, inflammatory cytokines or bFGF in the pathogenesis of AIDS-Kaposi's sarcoma. *AIDS Research and Human Retroviruses* 10 (1): 53, 1994 (abstract, ISSN 0889-2229, publisher: Mary Ann Liebert).
60. Holmes AM, Barillari G, Gallo RC, Ensoli B. Integrin-mediated uptake of HIV-1 Tat protein by cytokine-activated endothelial cells. *AIDS Research and Human Retroviruses* 10 (1): S53, 1994 (abstract, ISSN 0889-2229, publisher: Mary Ann Liebert).
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