

PROF. GIAN CARLO AVANZI CURRICULUM VITAE e PUBBLICAZIONI

Formazione Accademica

omissis	omissis
1973	Diploma di maturità scientifica
1981	Allievo Interno presso Istituto di Medicina Interna, Università di Torino, presso la Cattedra di Patologia Medica. Durata dell'internato due anni circa.
1984	Laurea in Medicina e Chirurgia presso la Università degli Studi di Torino.
1986	Borsa di studio dell' "Associazione Italiana per la Ricerca sul Cancro" con un progetto di ricerca dal titolo "alterazioni cromosomiche e leucemogenesi".
1986	Soggiorno negli Stati Uniti presso il Wistar Institute di Filadelfia.
1986	Visiting scientist presso i laboratori del Dipartimento di Genetica Clinica dell' Università di Lund;
1987	Specializzazione in Ematologia Generale (Clinica e laboratorio) all'Università degli Studi di Modena.
1988	Visiting scientist, presso i laboratori del "Department of Pathology, School of Medicine, Temple University", Filadelfia, USA.
1989	Borsa di studio del "Comitato Gigi Ghirotti".
1990	Visiting scientist, presso i laboratori del "Department of Pathology, School of Medicine, Temple University", Filadelfia, USA.
1994	Ricercatore di Medicina Interna nella II Facoltà di Medicina e Chirurgia della Università degli Studi di Torino, sede di Novara, Convenzionamento con Clinica Medica dell'Ospedale Maggiore della Carità, direttore della Clinica Medica Prof. Massimo Aglietta.
1995-1998	Rappresentante dei ricercatori per il Consiglio di Facoltà di Medicina e Chirurgia.
1996	Rappresentante dei ricercatori nel Comitato di Gestione Autonoma della Facoltà di Medicina e Chirurgia.
1999	Rappresentante dei ricercatori nel Senato Accademico.
2000	Professore Associato di Medicina Interna presso l'Università del Piemonte Orientale "Amedeo Avogadro", Facoltà di Medicina e Chirurgia.
2005-2011	Presidente del Consiglio di Corso di Laurea in Infermieristica.
2006-2015	Presidente del Consiglio di Corso di Laurea Specialistica in Scienze Infermieristiche ed Ostetriche.
2006	Professore Straordinario di Medicina Interna presso la Facoltà di Medicina e Chirurgia dell'Università del Piemonte Orientale.
2007	Direttore del Master di I livello, per Infermieri, di Medicina d'Urgenza ed Area Critica, dell'Università del Piemonte Orientale.
2009	Direttore della Scuola di Specializzazione in Medicina d'Emergenza-Urgenza. Università del Piemonte Orientale.
2009	Professore Ordinario di Medicina Interna presso la Facoltà di Medicina e Chirurgia dell'Università del Piemonte Orientale.
2015-2018	Direttore del Dipartimento di Medicina Traslazionale dell'Università del Piemonte Orientale e Vice Presidente della Scuola di Medicina.
2018-2024	Rettore dell'Università del Piemonte Orientale.

Appartenenza a Società Scientifiche e a Gruppi di Ricerca di Società Ufficiali

2001-	membro della Società Italiana di Medicina Interna (SIMI)
2007-	membro dell' American College of Emergency Physicians (ACEP)
2008-	membro della Società Italiana di Medicina D' Emergenza-Urgenza (SIMEU)

Premi e Onorificenze

2021	Commendatore Ordine al Merito della Repubblica Italiana
-------------	---

ELENCO DEI LAVORI CON IF

1. A. Guerrasio, G.C. Avanzi, L. Pegoraro, X. Estivill, A. Serra, M.C. Giubellino, M.T. Fierro, A. Novarino, R. Foa, G. Saglio: "Rearrangement of c-myc oncogene with the heavy chain immunoglobulin enhancer in the tumor DNA from an acute lymphoblastic leukemia patient."; J. Natl. Cancer Inst., 78: 845-851, 1987.
2. S. Heim, G.C. Avanzi, R. Billtrom, U. Kristofferson, N. Mandhal, AN. Becassy, S. Garwicz, T. Wiebe, L. Pegoraro, M. Falda, L. Resegotti, F. Mitelman: "A new specific chromosomal rearrangement -t(8;16)(p11;p13) -in acute monocytic leukemia." Br. J. Haemat. 66: 323-326, 1987.
3. G.C. Avanzi, B. Giovinozzo, G. Saglio, A. Guerrasio, A. Rosso, M. Berini, L. Resegotti, L. Pegoraro: "Duplication of Ph and of 9q+ Chromosomes during the blastic transformation of a CML case". Cancer Genetic and Cytogenetic, 29: 57-63, 1987.
4. G. Saglio, L. Pegoraro, G.C. Avanzi, B. Giovinozzo, F. Locatelli, M. Falda, A. Tassinari, A. Zaccaria, V. Attadia, G. Rege-Cambrin, A. Guerrasio, A. Serra, F. Gavosto: "Significance of the Philadelphia Chromosome in acute leukemias: variable correlation with rearrangements involving the c-abl and bcr genes." Ann. N.Y. Acad.Sci.74:270-276,1987
5. G. Bellone, R. Foa, M.T. Fierro, G.C. Avanzi, P. Lusso, A. Ramello, P. Lista, R. Ghio, L. Pegoraro: "A human leukemic T cell line (PF-382) inhibits the growth of myeloid and erythroid progenitor cells." Leukemia, vol 1: 603-608, 1987.
6. R. Miniero, E. Madon, G.C. Avanzi, M. Saitta, M. Forni, G. Ghisolfi, R. Coda, P. Lista, L. Cordero di Montezemolo, G. Cattoretti, L. Pegoraro: "Unusual cytogenetic, immunophenotypic and histochemical findings in a case of acute megakaryocytic leukemia." Haematologica, 72: 505-510, 1987
7. G. Saglio, A. Guerrasio, A. Tassinari, C. Ponzetto, A. Zaccaria, P. Testoni, B. Celso, G. Rege-Cambrin, A. Serra, L. Pegoraro, G.C. Avanzi, V. Attadia, M. Falda, F. Gavosto "Variability of the molecular defects corresponding to the presence of a Philadelphia chromosome in human hematologic malignancies.", Blood, 72: 1203-1208, 1988.
8. G.C. Avanzi, P. Lista, B. Giovinozzo, R. Miniero, G. Saglio, G. Benetton, R. Coda, G. Cattoretti, L. Pegoraro: "Selective growth response to IL-3 of a human leukemic cell line with megakaryoblastic features". Br. J. Haemat., 69: 359-366, 1988.
9. G. Bellone, G.C. Avanzi, P. Lista, J. Hibbin, G. Saglio, G. Benetton, R. Foa, L. Pegoraro: "Soluble factor(s) released by the PF-382 cell line enhances the stimulatory effect of monocytes on the BFU-E growth". J. Cellular Physiology, 135: 127-132, 1988.
10. P. Lista, M.F. Brizzi, G.C. Avanzi, F. Veglia, L. Resegotti, L. Pegoraro: "Induction of proliferation of acute myeloblastic leukemia (AML) cells with hemopoietic growth factors". Leukemia Res., 12: 441-447, 1988.
11. P. Lista, P. Porcu, G.C. Avanzi, L. Pegoraro: "Interleukin 3 enhances the cytotoxic activity of 1-d-arabinofuranosylcytosine (ARA-C) on acute myeloblastic leukemia (AML) cells." Brit. J. Haematol., 69: 121-123, 1988.
12. Pegoraro L., Malavasi F., Bellone G., Massaia M., Boccadoro M., Saglio G., Guerrasio A., Benetton G., Lombardi L., Coda R., Avanzi G.C.: "The human myeloma cell line LP-1: a versatile model in which to study early plasma cell differentiation and c-myc activation". Blood, 73: 1020-1027, 1989.
13. Avanzi G.C., Giovinozzo B., Rosso A., Depaoli L., Bertini M., Resegotti L., Pegoraro L.: Trisomy 11 in MDS derived acute myeloblastic leukaemias. Eur. J. Haematol., 43: 173-177, 1989.
14. Avanzi G.C., Cessano A., Brizzi M.F., Clark S.C., Pegoraro L., Matera L. Biological and molecular evidences for the production of IL-6 by human natural killer cells in culture. Life Sci., 45: 2621-2626, 1989.
15. Palumbo A., Boccadoro M, Battaglio S., Corradini P., Giovinozzo B., Avanzi G.C., Ponzio G. Philadelphia-positive thrombocytoma with a complex translocation involving chromosomes 9, 15, and 22. Cancer Gen. Cytogen., 39: 77-80, 1989.
16. Donti E., Montanucci M., Longo L., Mencarelli A., Pandolfi P., Tabilio A., Nanni M., Alimena G., Avanzi G.C., Pegoraro L., Grignani F., Pelicci PG. The myeloperoxidase gene in acute promyelocytic leukemia. Science, 244: 823-825, 1989.
17. Longo L., Donti E., Mecarelli A., Avanzi G.C., Pegoraro L., Alimena G., Tabilio A., Pelicci PG. Mapping of chromosome 17 breakpoint in acute myeloid leukemias. Oncogene 5: 1557-1563, 1990.
18. Longo L., Pandolfi P., Biondi A., Rambaldi A., Mencarelli A., Lo Coco F., Diverio D., Pegoraro L., Avanzi G.C., Tabilio A., Zangrilli D., Acalay M., Donti E., Grignani F., Pelicci P.G. Rearrangement and aberrant expression of the Retinoic acid Receptor-alpha gene in acute promyelocytic leukemias. J. Exp. Med. 172: 1571-1575, 1990.
19. Vineis P., Avanzi G.C., Giovinozzo B., Ponzio G., Rege Cambrin G., Ciccone G. Cytogenetics and occupational exposure to solvents: a pilot study on leukemias and myelodysplastic disorders. Tumori, 76: 350-352, 1990.
20. Avanzi G.C., Brizzi M.F., Giannotti J., Ciarletta A., Yang Y.C., Pegoraro L., Clark S.C., The M-07e human leukemic factor

PROF. GIAN CARLO AVANZI CURRICULUM VITAE e PUBBLICAZIONI

dependent cell line provides a rapid and sensitive bioassay for the human cytokines GM-CSF and IL-3, *J. Cell. Physiol.* 145: 458-464, 1990.

21. Ghigo D., Brizzi M.F., Avanzi G.C., Bussolino F., Garbarino G., Costamagna C., Pegoraro L., Bosia A., Evidence for a Role of the Na/H exchanger in the colony-stimulating-factor-induced ornithine decarboxylase activity and proliferation of the human cell line M-07e. *J. Cell. Physiol.* 145: 147-154, 1990.
22. Brizzi M.F., Avanzi G.C., Veglia F., Clark S.C., Pegoraro L., Expression and modulation of IL-3 and GM-CSF receptors in human growth factor dependent leukaemic cells. *Br. J. Haemat.* 76: 203-209, 1990.
23. C. Ponzetto, A. Guerrasio, C. Rosso, G.C. Avanzi, A. Tassinari, A. Zaccaria, F. Lo Coco, R. Foa, G. Basso, M.L. Abate, P.M. Comoglio, G. Saglio, ABL proteins in Philadelphia-positive acute leukaemias and chronic myelogenous leukaemia blast crises. *Br. J. Haematol.* 76: 39-44, 1990
24. Avanzi G.C., Porcu P., Brizzi M.F., Ghigo D., Bosia A., Pegoraro L., Interleukin 3-dependent proliferation of the human M-07e cell line is supported by discrete activation of late G-1 genes. *Cancer Research* 51: 1741-1743, 1991.
25. Brizzi M.F. Arduino C., Avanzi G.C., Bussolino F., Pegoraro L. GM-CSF and phorbol esters modulate GM-CSF receptor expression by independent mechanisms. *J. Cell. Physiol.* 148: 24-34, 1991
26. Bagnara G.P., Zauli G., Vitale L., Rosito P., Vecchi P., Paolucci G., Avanzi G.C., Ramenghi U., Timeus F., Gabutti V. In vitro growth and regulation of bone marrow enriched CD34+ hematopoietic progenitors in Diamond-Blackfan anemia. *Blood*, 78: 2203-2210, 1991.
27. Bagnara G.P., Strippoli P., Bonsi L., Brizzi M.F., Avanzi G.C., Timeus F., Ramenghi U., Piaggio J., Tong M., Podestà G., Paolucci M., Pegoraro L., Gabutti V., Bacigalupo A. Effect of stem cell factor on colony growth from aquired and constitutional (Fanconi) aplastic anemia. *Blood*, 80: 382-387, 1992.
28. Brizzi M.F., Garbarino G., Rossi P.R., Pagliardi G.L., Arduino C., Avanzi G.C., Pegoraro L. Interleukin 3 stimulates proliferation and triggers endothelial-leukocyte adhesion molecule 1 gene activation of human endothelial cells. *J. Clin. Invest.* 91: 2887-2892, 1993.
29. Brizzi M.F., Pavan M., Zini M.G., Avanzi G.C., Pegoraro L. Regulation of c-kit expression in human myeloid cells. *Stem Cells*, 11: 42-48, 1993.
30. Manfioletti G., Brancolini C., Avanzi G.C., Schneider C. The protein encoded by a growth-arrest specific gene (GAS 6) is a new member of the vitamin-K dependent proteins related to protein-S, a negative coregulator in the blood coagulation cascade. *Mol. Cell. Biol.* 13: 4976-4985, 1993.
31. Brizzi M.F., Rossi P.R., Rosso A., Avanzi G.C., Pegoraro L. Transcriptional and post-transcriptional regulation of granulocyte-macrophage colony-stimulating factor production in human growth factor dependent M-07e cells. *Br. J. Haemat.* 90: 258-265, 1995.
32. Matera L., Bellone G., Le Brun J.J., Kelly P.A., Hooghe-Peterz E.L., Francia-Di Celle P., Foà R., Contarini M., Avanzi G.C., Asnaghi V. Role of prolactin in the in vitro development of IL-2 driven anti tumoral lymphokine-activated killer cells. *Immunology*, 89: 619-626, 1996.
33. Bonsi L, Grossi A, Strippoli P, Tumietto F, Tonelli R, Vannucchi AM, Ronchi A, Ottolenghi S, Visconti G, Avanzi GC, Pegoraro L, Bagnara GP. An erythroid and megakaryocytic common precursor cell line (B1647) expressing both c-mpl and erythropoietin receptor (Epo-R) proliferates and modifies globin chain synthesis in response to megakaryocyte growth and development factor (MGDF) but not to erythropoietin (Epo). *Br J Haematol* 98(3):549-559, 1997.
34. Avanzi GC, Gallicchio M, Cavalloni G., Gammaitoni L., Leone F., Rosina A., Pegoraro L., Aglietta M. GAS6 the ligand of Axl and Rse receptors is expressed in the hemopoietic system but lacks mitogenic activity. *Exp. Hematol.* 25:1219-1226, 1997.
35. Martone T, Airolidi L, Magagnotti C, Coda R, Randone D, Malaveille C, Avanzi G, Merletti F, Hautefeuille A, Vineis P 4-Aminobiphenyl-DNA adducts and p53 mutations in bladder cancer. *Int J Cancer* 9:512-516, 1998.
36. Avanzi GC, Gallicchio M, Bottarel F, Gammaitoni L, Cavalloni G, Buonfiglio D, Bragardo M, Bellomo G, Albano E, Fantozzi R, Garbarino G, Varnum B, Aglietta M, Saglio G, Dianzani U, Dianzani C GAS6 inhibits granulocyte adhesion to endothelial cells. *Blood* 91(7):2334-2340, 1998.
37. Gaidano GC, Vivenza D, Forconi F, Capello D, Gloghini A, Bhatia K, Gutierrez M, Gallicchio M, Avanzi GC, Fassone L, Ariatti C, Cingolani A, Saglio G, Tirelli U, Larocca LM, Dalla-Favera R, Carbone A. Uncommon mutation of BAX in AIDS-related non Hodgkin Lymphomas. *Genes, Chromosom and Cancer*, 27 (2):177-82 2000.
38. Capello D, Gaidano G, Gallicchio M, Gloghini A, Medico E, Vivenza D, Buonaiuto D, Fassone L, Avanzi GC, Saglio G, Prat m, Carbone A. The tyrosine kinase receptor met and its ligand HGF are co-expressed and functionally active in HHV-8 positive primary effusion lymphoma. *Leukemia*, 14 (2):285-291, 2000

PROF. GIAN CARLO AVANZI CURRICULUM VITAE e PUBBLICAZIONI

39. Gaidano G, Capello D, Fassone L, Gloghini A, Cilia Am, Ariatti C, Buonaiuto D, Vivenza D, Gallicchio M, Avanzi GC, Prat M, Carbone A. Molecular characterization of hhv-8 positive primary effusion lymphoma reveals pathogenetic and histogenetic features of the disease. *J Clin Virol.*;16(3):215---24, 2000
40. Polosa R, Cacciola RR, Avanzi GC, Di Maria GU. Making, disseminating and using clinical guidelines. *Monaldi Arch Chest Dis.* Feb;57(1):44---7, 2002
41. Pagano L, Pulsoni A, Vignetti M, Mele L, Fianchi L, Petti MC, Mirto S, Falcucci P, Fazi P, Broccia G, Specchia G, Di Raimondo F, Pacilli L, Leoni P, Ladogana S, Gallo E, Venditti A, Avanzi G, Camera A, Liso V, Leone G, Mandelli F. Acute megakaryoblastic leukemia: experience of GIMEMA trials. *Leukemia.*;16:1622---6, 2002
42. Fra GP, Avanzi GC, Bartoli E. Remission of refractory lupus nephritis with a protocol including rituximab. *Lupus* 2003;12: 783---787.
43. F.Guidetti, S. Grazioli, F. Capelli, C. Marini, M. Gallicchio, D. De Micheli, L. Castello, P.P. Sainaghi, G. P. Fra, G. Saglio, G. C. Avanzi, Primitive hemopoietic stem cells show a polyclonal pattern in myelodysplastic syndromes, *Haematologica.* 2004; 89: 21---28.
44. Margherita Gallicchio, Stefania Mitola, Donatella Valdembri, Roberto Fantozzi, BrianVarnum, Gian Carlo Avanzi, Federico Bussolino Inhibition of Vascular Endothelial Growth Factor Receptor 2 --- mediated endothelial cell activation by Axl Tyrosine Kinase Receptor1 *Blood* 2005; 105:1970---19766
45. Pier Paolo Sainaghi, Luigi Castello, Luca Bergamasco, Margherita Galletti, Paola Bellosta, Gian Carlo Avanzi. GAS6 induces proliferation in prostate carcinoma cell lines expressing the axl receptor *J. Cell. Physiol.* 2005; 204:36---44
46. Grossini E, Avanzi G, Gallicchio M, Molinari C, Vacca G, Bellomo G. Regulation of Ca(2+) movements by cyclovirobuxine D in ECV304 endothelial cells. *Pharmacol Res.* 2005; 52:154--- 161.
47. Avanzi GC, Castello L, Sainaghi PP, Bergamasco L, Boldorini R, Bartoli E. A malignant fibroleiomyoma of the testis. *Clin Lymphoma Myeloma.* 2006; 6 (5): 414---416.
48. Alciato F, Sainaghi PP, Castello L, Bergamasco L, Carnieletto S, Avanzi GC. Development and validation of an ELISA method for detection of growth arrest specific 6 (GAS6) protein in human plasma. *J Immunoassay Immunochem.* 2008;29(2):167---80.
49. Sainaghi PP, Collimedaglia L, Alciato F, Leone MA, Puta E, Naldi P, Castello L, Monaco F, Avanzi GC. Elevation of Gas6 protein concentration in cerebrospinal fluid of patients with chronic inflammatory demyelinating polyneuropathy (CIDP). *J Neurol Sci.* 2008 Jun 15;269:138---142.
Epub 2008 Feb 14
50. Sainaghi PP, Alciato F, Carnieletto S, Castello L, Bongo S, Sola D, Bergamasco L, Inglese E and Avanzi GC. GAS6 protein evaluation for differential diagnosis in patients with acute dyspnea and suspected pulmonary embolism *Respir Med.* 2009 Apr;103(4):589---94.
51. Federica Alciato, Pier Paolo Sainaghi, Daniele Sola, Luigi Castello, Gian Carlo Avanzi TNF---alpha, IL---6 and IL---1 expression is inhibited by GAS6 in monocytes/macrophages. *Journal of Leukocyte Biology*, 2010, in press.
52. Sainaghi PP, Collimedaglia L, Alciato F, Leone MA, Naldi P, Molinari R, Monaco F, Avanzi GC The expression pattern of inflammatory mediators in cerebrospinal fluid differentiates Guillain--- Barré syndrome from chronic inflammatory demyelinating polyneuropathy. *Cytokine* 2010;51(2):138---43.
53. Sensi M, Catani M, Castellano G, Nicolini G, Alciato F, Tragni G, De Santis G, Bersani I, Avanzi G, Tomassetti A, Canevari S, Anichini A. Human cutaneous melanomas lacking MITF and melanocyte differentiation antigens express a functional Axl receptor kinase. *J Invest Dermatol.* 2011 Dec;131(12):2448---57
54. Sainaghi PP, Bellan M, Carda S, Cerutti C, Sola D, Nerviani A, Molinari R, Cisari C, Avanzi GC. Hypovitaminosis D and response to cholecalciferol supplementation in patients with autoimmune and non---autoimmune rheumatic diseases. *Rheumatol Int.* 2011 Nov 2.
55. Palma A, Sainaghi PP, Amoroso A, Fresu LG, Avanzi G, Pirisi M, Brunelleschi S. Peroxisome proliferator---activated receptor---gamma expression in monocytes/macrophages from rheumatoid arthritis patients: relation to disease activity and therapy efficacy---a pilot study. *Rheumatology (Oxford).* 2012 Jul 23.
56. Brambilla R, Vigna---Taglianti F, Avanzi G, Faggiano F, Leone M. [Gamma---hydroxybutyrate (GHB) for mid/long term treatment of alcohol dependence: a systematic review]. *Riv Psichiatr.* 2012 Jul---Aug;47(4):269---80. doi: 10.1708/1139.12554. Review. Italian. PubMed PMID: 23023077.
57. Castello LM, Negro S, Santi F, Zanotti I, Vidali M, Bagnati M, Bellomo G, Avanzi GC. Accidental digitoxin intoxication: an interplay between laboratory and clinical medicine. *Biochem Med (Zagreb).* 2012;22(3):380---4. PubMed PMID: 23092069; PubMed Central PMCID: PMC3900044.
58. Di Somma S, Magrini L, Travaglino F, Lalle I, Fiotti N, Cervellin G, Avanzi GC, Lupia E, Maisel A, Hein F, Wagner F, Lippi G. Opinion paper on innovative approach of biomarkers for infectious diseases and sepsis management in the emergency department. *Clin Chem Lab Med.* 2013 Jun;51(6):1167---75. doi: 10.1515/cclm---2012---0795. PubMed PMID:

23392907.

59. Sainaghi PP, Collimediaglia L, Alciato F, Molinari R, Sola D, Ranza E, Naldi P, Monaco F, Leone M, Pirisi M, Avanzi GC. Growth arrest specific gene 6 protein concentration in cerebrospinal fluid correlates with relapse severity in multiple sclerosis. *Mediators Inflamm.* 2013;2013:406483. doi: 10.1155/2013/406483. Epub 2013 May 27. PubMed PMID: 23781120; PubMed Central PMCID: PMC3678413.
60. Malerba M, Clini E, Malagola M, Avanzi GC. Platelet activation as a novel mechanism of atherothrombotic risk in chronic obstructive pulmonary disease. *Expert Rev Hematol.* 2013 Aug;6(4):475--83. doi: 10.1586/17474086.2013.814835. Review. PubMed PMID: 23991933.
61. Di Somma S, Lalle I, Magrini L, Russo V, Navarin S, Castello L, Avanzi GC, Di Stasio E, Maisel A. Additive diagnostic and prognostic value of bioelectrical impedance vector analysis (BIVA) to brain natriuretic peptide 'grey-zone' in patients with acute heart failure in the emergency department. *Eur Heart J Acute Cardiovasc Care.* 2014 Jun;3(2):167--75. doi: 10.1177/2048872614521756. Epub 2014 Jan 29. PubMed PMID: 24477201.
62. Vetrone F, Santarelli S, Russo V, Lalle I, De Berardinis B, Magrini L, Di Stasio E, Salerno G, Cardelli P, Piccoli A, Codognotto M, Mion MM, Plebani M, Vettore G, Castello LM, Avanzi GC, Di Somma S. Copeptin decrease from admission to discharge has favorable prognostic value for 90-day events in patients admitted with dyspnea. *Clin Chem Lab Med.* 2014 Oct;52(10):1457--64. doi: 10.1515/ccm---2014---0207. PubMed PMID: 24803610.
63. Zeppego P, Gramaglia C, Castello LM, Bert F, Gualano MR, Ressico F, Coppola I, (if 56--), Siliquini R, Torre E. Suicide attempts and emergency room psychiatric consultation. *BMC Psychiatry.* 2015 Feb 5;15:13. doi: 10.1186/s12888---015---0392---2. PubMed PMID: 25652192; PubMed Central PMCID: PMC4327969.
64. Harjola VP, Lassus J, Sionis A, Køber L, Tarvasmäki T, Spinar J, Parissis J, Banaszewski M, Silva---Cardoso J, Carubelli V, Di Somma S, Tolppanen H, Zeymer U, Thiele H, Nieminen MS, Mebazaa A; CardShock study investigators; GREAT network. Clinical picture and risk prediction of short-term mortality in cardiogenic shock. *Eur J Heart Fail.* 2015 May;17(5):501--9. doi: 10.1002/ejhf.260. Epub 2015 Mar 28. PubMed PMID: 25820680.
65. Rea K, Pinciroli P, Sensi M, Alciato F, Bisaro B, Lozaneanu L, Raspagliesi F, Centritto F, Cabodi S, Defilippi P, Avanzi GC, Canevari S, Tomassetti A. Novel Axl-driven signaling pathway and molecular signature characterize high-grade ovarian cancer patients with poor clinical outcome. *Oncotarget.* 2015 Sep 4. [Epub ahead of print] PubMed PMID: 26356564.
66. Vidali M, Verzotti E, Cabraz N, Santi F, Puma A, Bellomo G, Lupi A, Lippi G, Avanzi GC. "Real life use" of troponin in the emergency department: a survey of over 3000 cases. *Biochem Med (Zagreb).* 2015 Oct 15;25(3):421-9. doi: 10.11613/BM.2015.043. PubMed PMID: 26527485; PubMed Central PMCID: PMC4622198.
67. Santarelli S, Russo V, Lalle I, De Berardinis B, Vetrone F, Magrini L, Di Stasio E, Piccoli A, Codognotto M, Mion MM, Castello LM, Avanzi GC, Di Somma S; GREAT network.. Prognostic value of decreased peripheral congestion detected by Bioelectrical Impedance Vector Analysis (BIVA) in patients hospitalized for acute heart failure: BIVA prognostic value in acute heart failure. *Eur Heart J Acute Cardiovasc Care.* 2016 Apr 12. pii: 2048872616641281. [Epub ahead of print] PubMed PMID: 27073131.
68. Bellan M, Molinari R, Castello L, Sola D, Gibbin A, Guaschino G, Pedrazzoli R, Puma A, Pirisi M, Avanzi GC, Sainaghi PP. Profiling the patients visiting the emergency room for musculoskeletal complaints: characteristics and outcomes. *Clin Rheumatol.* 2016 Nov;35(11):2835-2839. PubMed PMID: 27315242.
69. Castello LM, Baldrighi M, Panizza A, Bartoli E, Avanzi GC. Efficacy and safety of two different tolvaptan doses in the treatment of hyponatremia in the Emergency Department. *Intern Emerg Med.* 2016 Jul 21. [Epub ahead of print] PubMed PMID: 27444946.
70. Bellan M, Pogliani G, Marconi C, Minisini R, Franzosi L, Alciato F, Magri A, Avanzi GC, Pirisi M, Sainaghi PP. Gas6 as a putative noninvasive biomarker of hepatic fibrosis. *Biomark Med.* 2016 Dec;10(12):1241-1249. PubMed PMID: 27924629.
71. Santarelli S, Russo V, Lalle I, De Berardinis B, Navarin S, Magrini L, Piccoli A, Codognotto M, Castello LM, Avanzi GC, Villacorta H, Precht BL, de Araújo Porto PB, Villacorta AS, Di Somma S; Great Network.. Usefulness of combining admission brain natriuretic peptide (BNP) plus hospital discharge bioelectrical impedance vector analysis (BIVA) in predicting 90 days cardiovascular mortality in patients with acute heart failure. *Intern Emerg Med.* 2016 Dec 16. doi: 10.1007/s11739-016-1581-9. [Epub ahead of print] Erratum in: *Intern Emerg Med.* 2017 Feb 8;:. PubMed PMID: 27987064.
72. Leigh M1, Sabbatini M, Baldrighi M, Hasenboehler EA, Briacca L, Grassi F, Cannas M, Avanzi G, Castello LM. Prospective analysis of pain and pain management in an emergency department. *Acta Biomed.* 2017 Oct 18;88(4 - S):19-30. doi: 10.23750/abm.v 88i4 -S.6790.
73. Bellan M, Sainaghi PP, Minh MT, Minisini R, Molinari L, Baldrighi M, Salmi L, Barbaglia MN, Castello LM, Ravanini P, Avanzi GC, Pirisi M. Gas6 as a predictor of esophageal varices in patients affected by hepatitis C virus related-chronic liver disease. *Biomark Med.* 2018 Jan;12(1):27-34.

74. Castello LM Salmi L, Zanotti I, Gardino CA, Baldrighi M, Settanni F, Avanzi GC. The increase in copeptin levels in mild head trauma does not predict the severity and the outcome of brain damage. *Biomark Med.* 2018 Jun;12(6):555-563. doi: 10.2217/bmm-2018-0041. Epub 2018 Apr.
75. Mearelli F, Fiotti N, Giansante C, Casarsa C, Orso D, De Helmersen M, Altamura N, Ruscio M, Castello LM, Colonetti E, Marino R, Barbati G, Bregnocchi A, Ronco C, Lupia E, Montrucchio G, Muiesan ML, Di Somma S, Avanzi GC, Biolo G. Derivation and Validation of a Biomarker-Based Clinical Algorithm to Rule Out Sepsis From Noninfectious Systemic Inflammatory Response Syndrome at Emergency Department Admission: A Multicenter Prospective Study. *Crit Care Med.* 2018 May 7. doi: 10.1097/CCM.0000000000003206.
76. Patrucco F, Gavelli F, Avanzi GC, Stainer A, Bodini BD, Castello LM, Balbo PE. Early or delayed bronchoscopy in patients admitted to the Emergency Department for mild-to-moderate haemoptysis? *Panminerva Med.* 2018 Jun 1. doi: 10.23736/S0031-0808.18.03478-X. [Epub ahead of print]
77. Bellan M, Sainaghi PP, Minh MT, Minisini R, Molinari L, Baldrighi M, Salmi L, Barbaglia MN, Castello LM, Ravanini P, Avanzi GC, Pirisi M. Gas6 as a predictor of esophageal varices in patients affected by hepatitis C virus related-chronic liver disease. *Biomark Med.* 2018 Jan;12(1):27-34. doi: 10.2217/bmm-2017-0171. Epub 2017 Dec 15. PMID: 29243516.
78. Leigh M, Sabbatini M, Baldrighi M, Hasenboehler EA, Briacca L, Grassi F, Cannas M, Avanzi G, Castello LM. Prospective analysis of pain and pain management in an emergency department. *Acta Biomed.* 2017 Oct 18;88(4S):19-30. doi: 10.23750/abm.v88i4-S.6790. PMID: 29083349; PMCID: PMC6357652.
79. Bellan M, Sainaghi PP, Gavelli F, Patrucco F, Avanzi GC, Pirisi M, Castello LM. Lessons from the Italian COVID-19 frontline. *Minerva Med.* 2020 Aug;111(4):303-305. doi: 10.23736/S0026-4806.20.06664-1. PMID: 33032392.
80. Abate MG, Moretto L, Licari I, Esposito T, Capuano L, Olivieri C, Benech A, Brucoli M, Avanzi GC, Cammarota G, Dianzani U, Clemente N, Panzarasa G, Citerio G, Carfagna F, Cappellano G, Della Corte F, Vaschetto R. Osteopontin in the Cerebrospinal Fluid of Patients with Severe Aneurysmal Subarachnoid Hemorrhage. *Cells.* 2019 Jul 10;8(7):695. doi: 10.3390/cells8070695. PMID: 31295895; PMCID: PMC6678172.
81. Castello LM, Baldrighi M, Gavelli F, Avanzi GC. Comment on "Excessive Sodium Bicarbonate Infusion May Result in Osmotic Demyelination Syndrome During Treatment of Diabetic Ketoacidosis: A Case Report" by Hsieh et al. *Diabetes Ther.* 2019 Aug;10(4):1549-1550. doi: 10.1007/s13300-019-0659-6. Epub 2019 Jul 1. PMID: 31264095; PMCID: PMC6612338.
82. Malerba M, Clini E, Malagola M, Avanzi GC. Platelet activation as a novel mechanism of atherothrombotic risk in chronic obstructive pulmonary disease. *Expert Rev Hematol.* 2013 Aug;6(4):475-83. doi: 10.1586/17474086.2013.814835. PMID: 23991933.
83. Castello LM, Salmi L, Zanotti I, Gardino CA, Baldrighi M, Settanni F, Avanzi GC. The increase in copeptin levels in mild head trauma does not predict the severity and the outcome of brain damage. *Biomark Med.* 2018 Jun;12(6):555-563. doi: 10.2217/bmm-2018-0041. Epub 2018 Apr 5. PMID: 29620422.
84. Gramaglia C, Gambaro E, Delicato C, Di Marco S, Di Tullio E, Vecchi C, Bert F, Castello LM, Siliquini R, Avanzi G, Zeppegnò P. Pathways to and Results of Psychiatric Consultation for Patients Referred from the Emergency Department. Are there Differences between Migrant and Native Patients? *Transcult Psychiatry.* 2019 Feb;56(1):167-186. doi: 10.1177/1363461518798844. Epub 2018 Sep 10. PMID: 30198829.
85. Bellan M, Avanzi GC, Pirisi M. Comment on "Evaluation of serum interleukin-6 levels in hepatocellular carcinoma patients: a systematic review and meta-analysis". *Clin Exp Hepatol.* 2019 May;5(2):169. doi: 10.5114/ceh.2019.85075. Epub 2019 May 13. PMID: 31501794; PMCID: PMC6728867.
86. Patrucco F, Gavelli F, Avanzi GC, Stainer A, Bodini BD, Castello LM, Balbo PE. Early or delayed bronchoscopy in patients admitted to the emergency department for mild-to-moderate hemoptysis? *Panminerva Med.* 2018 Dec;60(4):139-144. doi: 10.23736/S0031-0808.18.03478-X. Epub 2018 Jun 1. PMID: 29856184.
87. Bellan M, Gavelli F, Hayden E, Patrucco F, Soddu D, Pedrinelli AR, Cittone MG, Rizzi E, Casciaro GF, Vassia V, Landi R, Menegatti M, Gastaldello ML, Beltrame M, Labella E, Tonello S, Avanzi GC, Pirisi M, Castello LM, Sainaghi PP. Pattern of emergency department referral during the Covid-19 outbreak in Italy. *Panminerva Med.* 2020 Jun 16. doi: 10.23736/S0031-0808.20.04000-8. Epub ahead of print. PMID: 32549532.
88. Pagani S, Bellan M, Mauro D, Castello LM, Avanzi GC, Lewis MJ, Sainaghi PP, Pitzalis C, Nerviani A. New Insights into the Role of Tyro3, Axl, and Mer Receptors in Rheumatoid Arthritis. *Dis Markers.* 2020 Jan 19;2020:1614627. doi: 10.1155/2020/1614627. PMID: 32051695; PMCID: PMC6995487.
89. Bellan M, Puta E, Croce A, Sacchetti GM, Orsini F, Zecca E, Soddu D, Gavelli F, Avanzi GC, Castello L, Pedrazzoli R, Sola D, Pirisi M, Sainaghi PP. Role of positron emission tomography in the assessment of disease burden and risk of relapse in patients affected by giant cell arteritis. *Clin Rheumatol.* 2020 Apr;39(4):1277-1281. doi: 10.1007/s10067-019-04808-7. Epub 2019 Nov 12. PMID: 31713732.

PROF. GIAN CARLO AVANZI CURRICULUM VITAE e PUBBLICAZIONI

90. Castello LM, Baldrihi M, Molinari L, Salmi L, Cantaluppi V, Vaschetto R, Zunino G, Quaglia M, Bellan M, Gavelli F, Navalesi P, Avanzi GC, Chiochetti A. The Role of Osteopontin as a Diagnostic and Prognostic Biomarker in Sepsis and Septic Shock. *Cells*. 2019 Feb 18;8(2):174. doi: 10.3390/cells8020174. PMID: 30781721; PMCID: PMC6407102.
91. Guglielmetti G, Quaglia M, Sainaghi PP, Castello LM, Vaschetto R, Pirisi M, Corte FD, Avanzi GC, Stratta P, Cantaluppi V. "War to the knife" against thromboinflammation to protect endothelial function of COVID-19 patients. *Crit Care*. 2020 Jun 19;24(1):365. doi: 10.1186/s13054-020-03060-9. PMID: 32560665; PMCID: PMC7303575.
92. Cammarota G, Sguazzotti I, Zanoni M, Messina A, Colombo D, Vignazia GL, Vetrugno L, Garofalo E, Bruni A, Navalesi P, Avanzi GC, Della Corte F, Volpicelli G, Vaschetto R. Diaphragmatic Ultrasound Assessment in Subjects With Acute Hypercapnic Respiratory Failure Admitted to the Emergency Department. *Respir Care*. 2019 Dec;64(12):1469-1477. doi: 10.4187/respcare.06803. Epub 2019 Aug 27. PMID: 31455684.
93. Metra M, Teerlink JR, Cotter G, Davison BA, Felker GM, Filippatos G, Greenberg BH, Pang PS, Ponikowski P, Voors AA, Adams KF, Anker SD, Arias-Mendoza A, Avendaño P, Bacal F, Böhm M, Bortman G, Cleland JGF, Cohen-Solal A, Crespo-Leiro MG, Dorobantu M, Echeverría LE, Ferrari R, Golland S, Gonçalvesová E, Goudev A, Køber L, Lema-Osores J, Levy PD, McDonald K, Manga P, Merkely B, Mueller C, Pieske B, Silva-Cardoso J, Špinar J, Squire I, Stępińska J, Van Mieghem W, von Lewinski D, Wikström G, Yilmaz MB, Hagner N, Holbro T, Hua TA, Sabarwal SV, Severin T, Szecsködy P, Gimpelewicz C; RELAX-AHF-2 Committees Investigators. Effects of Serelaxin in Patients with Acute Heart Failure. *N Engl J Med*. 2019 Aug 22;381(8):716-726. doi: 10.1056/NEJMoa1801291. PMID: 31433919.
94. Bellan M, Andreoli L, Nerviani A, Piantoni S, Avanzi GC, Soddu D, Hayden E, Pirisi M, Sainaghi PP. Is cholecalciferol a potential disease-modifying anti- rheumatic drug for the management of rheumatoid arthritis? *Clin Exp Rheumatol*. 2020 Mar-Apr;38(2):343-349. Epub 2019 Sep 17. PMID: 31573472.
95. Smirne C, Rigamonti C, De Benedittis C, Sainaghi PP, Bellan M, Burlone ME, Castello LM, Avanzi GC. Gas6/TAM Signaling Components as Novel Biomarkers of Liver Fibrosis. *Dis Markers*. 2019 Sep 8;2019:2304931. doi: 10.1155/2019/2304931. PMID: 31583026; PMCID: PMC6754881.
96. Salmi L, Gavelli F, Patrucco F, Caputo M, Avanzi GC, Castello LM. Gas6/TAM Axis in Sepsis: Time to Consider Its Potential Role as a Therapeutic Target. *Dis Markers*. 2019 Aug 14;2019:6156493. doi: 10.1155/2019/6156493. PMID: 31485279; PMCID: PMC6710761.
97. Mearelli F, Fiotti N, Giansante C, Casarsa C, Orso D, De Helmersen M, Altamura N, Ruscio M, Castello LM, Colonetti E, Marino R, Barbati G, Bregnocchi A, Ronco C, Lupia E, Montrucchio G, Muiesan ML, Di Somma S, Avanzi GC, Biolo G. Derivation and Validation of a Biomarker-Based Clinical Algorithm to Rule Out Sepsis From Noninfectious Systemic Inflammatory Response Syndrome at Emergency Department Admission: A Multicenter Prospective Study. *Crit Care Med*. 2018 Sep;46(9):1421-1429. doi: 10.1097/CCM.0000000000003206. PMID: 29742588.
98. Mearelli F, Barbati G, Casarsa C, Giansante C, Breglia A, Spica A, Moras C, Olivieri G, Occhipinti AA, De Nardo M, Spagnol F, Fiotti N, Di Girolamo FG, Ruscio M, Castello LM, Colonetti E, Marino R, Ronco C, Zanetti M, Lupia E, Muiesan ML, Di Somma S, Avanzi GC, Biolo G. The Integration of qSOFA with Clinical Variables and Serum Biomarkers Improves the Prognostic Value of qSOFA Alone in Patients with Suspected or Confirmed Sepsis at ED Admission. *J Clin Med*. 2020 Apr 22;9(4):1205. doi: 10.3390/jcm9041205. PMID: 32331426; PMCID: PMC7230329.
99. Ballarino P, Cervellin G, Trucchi C, Altomonte F, Bertini A, Bonfanti L, Bressan MA, Carpinteri G, Noto P, Gavelli F, Molinari L, Patrucco F, Sainaghi PP, Caristia S, Cavazza M, Gallitelli M, Longo S, Cremonesi P, Orsi A, Ansaldi F, Marino R, Di Somma S, Castello LM, Moscatelli P, Avanzi GC; Great Network Italy. An Italian registry of chest pain patients in the emergency department: clinical predictors of acute coronary syndrome. *Minerva Med*. 2020 Apr;111(2):120-132. doi: 10.23736/S0026-4806.20.06472-1. PMID: 32338841.
100. Gavelli F, Castello LM, Patrucco F, Bellan M, Sainaghi PP, Avanzi GC. Insights from Italy: the Novara-COVID Score for rapid destination of COVID-19 patients at Emergency Department presentation. *Minerva Med*. 2020 Aug;111(4):300-302. doi: 10.23736/S0026-4806.20.06609-4. Epub 2020 May 14. PMID: 32407048.
101. Pinato DJ, Lee AJX, Biello F, Seguí E, Aguilar-Company J, Carbó A, Bruna R, Bower M, Rizzo G, Benafif S, Carmona C, Chopra N, Cruz CA, D'Avanzo F, Evans JS, Galazi M, Garcia-Fructuoso I, Dalla Pria A, Newsom-Davis T, Ottaviani D, Patriarca A, Reyes R, Sharkey R, Sng CCT, Wong YNS, Ferrante D, Scotti L, Avanzi GC, Bellan M, Castello LM, Marco-Hernández J, Mollà M, Pirisi M, Ruiz-Camps I, Sainaghi PP, Gaidano G, Brunet J, Tabernero J, Prat A, Gennari A. Presenting Features and Early Mortality from SARS-CoV-2 Infection in Cancer Patients during the Initial Stage of the COVID-19 Pandemic in Europe. *Cancers (Basel)*. 2020 Jul 8;12(7):1841. doi: 10.3390/cancers12071841. PMID: 32650523; PMCID: PMC7408670.
102. Gavelli F, Teboul JL, Azzolina D, Beurton A, Taccheri T, Adda I, Lai C, Avanzi GC, Monnet X. Transpulmonary thermodilution detects rapid and reversible increases in lung water induced by positive end-expiratory pressure in acute respiratory distress syndrome. *Ann Intensive Care*. 2020 Mar 2;10(1):28. doi: 10.1186/s13613-020-0644-2. PMID: 32124129; PMCID: PMC7052093.

103. Bellan M, Patti G, Hayden E, Azzolina D, Pirisi M, Acquaviva A, Aimaretti G, Aluffi Valletti P, Angilletta R, Arioli R, Avanzi GC, Avino G, Balbo PE, Baldon G, Baorda F, Barbero E, Baricich A, Barini M, Barone-Adesi F, Battistini S, Beltrame M, Bertoli M, Bertolin S, Bertolotti M, Betti M, Bobbio F, Boffano P, Boglione L, Borrè S, Brucoli M, Calzaducca E, Cammarata E, Cantaluppi V, Cantello R, Capponi A, Carriero A, Casciaro FG, Castello LM, Ceruti F, Chichino G, Chirico E, Cisari C, Cittone MG, Colombo C, Comi C, Croce E, Daffara T, Danna P, Della Corte F, De Vecchi S, Dianzani U, Di Benedetto D, Esposto E, Faggiano F, Falaschi Z, Ferrante D, Ferrero A, Gagliardi I, Gaidano G, Galbiati A, Gallo S, Garavelli PL, Gardino CA, Garzaro M, Gastaldello ML, Gavelli F, Gennari A, Giacomini GM, Giaccone I, Giai Via V, Giolitti F, Gironi LC, Gramaglia C, Grisafi L, Inserra I, Invernizzi M, Krengli M, Labella E, Landi IC, Landi R, Leone I, Lio V, Lorenzini L, Maconi A, Malerba M, Manfredi GF, Martelli M, Marzari L, Marzullo P, Mennuni M, Montabone C, Morosini U, Mussa M, Nerici I, Nuzzo A, Olivieri C, Padelli SA, Panella M, Parisini A, Paschè A, Pau A, Pedrinelli AR, Percivale I, Re R, Rigamonti C, Rizzi E, Rognoni A, Roveta A, Salamina L, Santagostino M, Saraceno M, Savoia P, Sciarra M, Schimmenti A, Scotti L, Spinoni E, Smirne C, Tarantino V, Tillio PA, Vaschetto R, Vassia V, Zagaria D, Zavattaro E, Zeppego P, Zottarelli F, Sainaghi PP. Fatality rate and predictors of mortality in an Italian cohort of hospitalized COVID-19 patients. *Sci Rep.* 2020 Nov 26;10(1):20731. doi: 10.1038/s41598-020-77698-4. PMID: 33244144; PMCID:PMC7692524.
104. Bellan M, Soddu D, Zecca E, Croce A, Bonometti R, Pedrazzoli R, Sola D, Rigamonti C, Castello LM, Avanzi GC, Pirisi M, Sainaghi PP. Association between red cell distribution width and response to methotrexate in rheumatoid arthritis. *Reumatismo.* 2020 Apr 10;72(1):16-20. doi:10.4081/reumatismo.2020.1243. PMID: 32292017.
105. Gavelli F, Castello LM, Bellan M, Azzolina D, Hayden E, Beltrame M, Galbiati A, Gardino CA, Gastaldello ML, Giolitti F, Labella E, Patrucco F, Sainaghi PP, Avanzi GC. Clinical stability and in-hospital mortality prediction in COVID-19 patients presenting to the Emergency Department. *Minerva Med.* 2021 Feb;112(1):118-123. doi: 10.23736/S0026-4806.20.07074-3. Epub 2020 Oct 26. PMID:33104301.
106. Bellan M, Avanzi GC, Pirisi M. Comment on "Evaluation of serum interleukin-6 levels in hepatocellular carcinoma patients: a systematic review and meta-analysis". *Clin Exp Hepatol.* 2019 May;5(2):169. doi: 10.5114/ceh.2019.85075. Epub 2019 May 13. PMID: 31501794; PMCID: PMC6728867.
107. Bellan M, Dimagli A, Piccinino C, Giubertoni A, Ianniello A, Grimaldi F, Sguazzotti M, Nerviani A, Barini M, Carriero A, Smirne C, Burlone ME, Rigamonti C, Minisini R, Salmi L, Barbaglia MN, Castello LM, Sola D, Marino P, Avanzi GC, Pirisi M, Sainaghi PP. Role of Gas6 and TAM Receptors in the Identification of Cardiopulmonary Involvement in Systemic Sclerosis and Scleroderma Spectrum Disorders. *Dis Markers.* 2020 May 12;2020:2696173. doi: 10.1155/2020/2696173. PMID: 32454903; PMCID: PMC7240795.
108. Castello LM, Gavelli F, Baldrighi M, Salmi L, Mearelli F, Fiotti N, Patrucco F, Bellan M, Sainaghi PP, Ronzoni G, Di Somma S, Lupia E, Muesan ML, Biolo G, Avanzi GC. Hypernatremia and moderate-to-severe hyponatremia are independent predictors of mortality in septic patients at emergency department presentation: A sub-group analysis of the need-speed trial. *Eur J Intern Med.* 2021 Jan;83:21-27. doi: 10.1016/j.ejim.2020.10.003. Epub 2020 Nov 5. PMID: 33160790.
109. Bellan M, Quaglia M, Nerviani A, Mauro D, Lewis M, Goegan F, Gibbin A, Pagani S, Salmi L, Molinari L, Castello LM, Avanzi GC, Cantaluppi V, Pirisi M, Sainaghi PP, Pitzalis C. Increased plasma levels of Gas6 and its soluble tyrosine kinase receptors Mer and Axl are associated with immunological activity and severity of lupus nephritis. *Clin Exp Rheumatol.* 2021 Jan-Feb;39(1):132-138. Epub 2020 Jun PMID: 32573415.
110. Gavelli F, Castello LM, Avanzi GC. Management of sepsis and septic shock in the emergency department. *Intern Emerg Med.* 2021 Apr 22. doi: 10.1007/s11739-021-02735-7. Epub ahead of print. PMID: 33890208.
111. Garlisi C, Licandro D, Siani A, Rodolfi S, Pansini S, Garcia Navarro LI, Carriero A, Avanzi GC, Castello LM. Impact of the COVID-19 pandemic on the activity of the Radiological Emergency Department: the experience of the Maggiore della Carità Hospital in Novara. *Emerg Radiol.* 2021 Apr 4:1–7. doi: 10.1007/s10140-021-01928-z. Epub ahead of print. PMID: 33813649; PMCID: PMC8019476.
112. Bellan M, Azzolina D, Hayden E, Gaidano G, Pirisi M, Acquaviva A, Aimaretti G, Aluffi Valletti P, Angilletta R, Arioli R, Avanzi GC, Avino G, Balbo PE, Baldon G, Baorda F, Barbero E, Baricich A, Barini M, Barone-Adesi F, Battistini S, Beltrame M, Bertoli M, Bertolin S, Bertolotti M, Betti M, Bobbio F, Boffano P, Boglione L, Borrè S, Brucoli M, Calzaducca E, Cammarata E, Cantaluppi V, Cantello R, Capponi A, Carriero A, Casciaro GF, Castello LM, Ceruti F, Chichino G, Chirico E, Cisari C, Cittone MG, Colombo C, Comi C, Croce E, Daffara T, Danna P, Della Corte F, De Vecchi S, Dianzani U, Di Benedetto D, Esposto E, Faggiano F, Falaschi Z, Ferrante D, Ferrero A, Gagliardi I, Galbiati A, Gallo S, Garavelli PL, Gardino CA, Garzaro M, Gastaldello ML, Gavelli F, Gennari A, Giacomini GM, Giaccone I, Giai Via V, Giolitti F, Gironi LC, Gramaglia C, Grisafi L, Inserra I, Invernizzi M, Krengli M, Labella E, Landi IC, Landi R, Leone I, Lio V, Lorenzini L, Maconi A, Malerba M, Manfredi GF, Martelli M, Marzari L, Marzullo P, Mennuni M, Montabone C, Morosini U, Mussa M, Nerici I, Nuzzo A, Olivieri C, Padelli SA, Panella M, Parisini A, Paschè A, Patrucco F, Patti G, Pau A, Pedrinelli AR, Percivale I, Ragazzoni L, Re R, Rigamonti C, Rizzi E, Rognoni A, Roveta A, Salamina L, Santagostino M, Saraceno M, Savoia P, Sciarra M, Schimmenti A, Scotti L, Spinoni E, Smirne C, Tarantino V, Tillio PA, Tonello S,

PROF. GIAN CARLO AVANZI CURRICULUM VITAE e PUBBLICAZIONI

- Vaschetto R, Vassia V, Zagaria D, Zavattaro E, Zeppego P, Zottarelli F, Sainaghi PP. Simple Parameters from Complete Blood Count Predict In-Hospital Mortality in COVID-19. *Dis Markers*. 2021 May 13;2021:8863053. doi:10.1155/2021/8863053. PMID: 34055104; PMCID: PMC8123088.
113. Mennuni MG, Renda G, Grisafi L, Rognoni A, Colombo C, Lio V, Foglietta M, Petrilli I, Pirisi M, Spinoni E, Azzolina D, Hayden E, Aimaretti G, Avanzi GC, Bellan M, Cantaluppi V, Capponi A, Castello LM, D'Ardes D, Corte FD, Gallina S, Krengli M, Malerba M, Pierdomenico SD, Savoia P, Zeppego P, Sainaghi PP, Cipollone F, Patti G; COVID-UPO Clinical Team. Clinical outcome with different doses of low-molecular-weight heparin in patients hospitalized for COVID-19. *J Thromb Thrombolysis*. 2021 Mar 1:1–9. doi: 10.1007/s11239-021-02401-x. Epub ahead of print. PMID: 33649979; PMCID: PMC7919624.
 114. Bellan M, Soddu D, Balbo PE, Baricich A, Zeppego P, Avanzi GC, Baldon G, Bartolomei G, Battaglia M, Battistini S, Binda V, Borg M, Cantaluppi V, Castello LM, Clivati E, Cisari C, Costanzo M, Croce A, Cuneo D, De Benedittis C, De Vecchi S, Feggi A, Gai M, Gambaro E, Gattoni E, Gramaglia C, Grisafi L, Guerriero C, Hayden E, Jona A, Invernizzi M, Lorenzini L, Loreti L, Martelli M, Marzullo P, Martino E, Panero A, Parachini E, Patrucco F, Patti G, Pirovano A, Prosperini P, Quaglino R, Rigamonti C, Sainaghi PP, Vecchi C, Zecca E, Pirisi M. Respiratory and Psychophysical Sequelae Among Patients With COVID-19 Four Months After Hospital Discharge. *JAMA Netw Open*. 2021 Jan 4;4(1):e2036142. doi: 10.1001/jamanetworkopen.2020.36142. PMID: 33502487; PMCID: PMC7841464.
 115. Salmi L, Gavelli F, Patrucco F, Bellan M, Sainaghi PP, Avanzi GC, Castello LM. Growth Arrest-Specific Gene 6 Administration Ameliorates Sepsis-Induced Organ Damage in Mice and Reduces ROS Formation In Vitro. *Cells*. 2021 Mar 9;10(3):602. doi: 10.3390/cells10030602. PMID: 33803290; PMCID: PMC7998241.
 116. Mennuni MG, Rolla R, Grisafi L, Spinoni EG, Rognoni A, Lio V, Castello LM, Sainaghi PP, Pirisi M, Avanzi GC, Krengli M, Bellan M, Ferrante D, Aimaretti G, Dianzani U, Patti G. Interaction between thrombin potential and age on early clinical outcome in patients hospitalized for COVID-19. *J Thromb Thrombolysis*. 2021 Jun 10:1–8. doi: 10.1007/s11239-021-02497-1. Epub ahead of print. PMID: 34110529; PMCID: PMC8190736.
 117. Castello LM, Airolidi C, Baldrighi M, Bortoluzzi S, Cammarata LM, Franchetti Pardo L, Gardino CA, Payedimarri AB, Giorchino M, Pistone G, Stampini V, Avanzi GC, Faggiano F. Effectiveness and feasibility of smoking counselling: a randomized controlled trial in an Italian emergency department. *Eur J Public Health*. 2021 Jul 12:ckab114. doi: 10.1093/eurpub/ckab114. Epub ahead of print. PMID: 34252178.
 118. Spinoni EG, Mennuni M, Rognoni A, Grisafi L, Colombo C, Lio V, Renda G, Foglietta M, Petrilli I, D'Ardes D, Sainaghi PP, Aimaretti G, Bellan M, Castello L, Avanzi GC, Corte FD, Krengli M, Pirisi M, Malerba M, Capponi A, Gallina S, Pierdomenico SD, Cipollone F, Patti G; COVID-UPO Clinical Team†. Contribution of Atrial Fibrillation to In-Hospital Mortality in Patients With COVID-19. *Circ Arrhythm Electrophysiol*. 2021 Feb;14(2):e009375. doi: 10.1161/CIRCEP.120.009375. Epub 2021 Feb 16. PMID: 33591815; PMCID: PMC7892203.
 119. Baricich A, Borg MB, Cuneo D, Cadario E, Azzolina D, Balbo PE, Bellan M, Zeppego P, Pirisi M, Cisari C; No-more Covid Group. Midterm functional sequelae and implications in rehabilitation after COVID-19: a cross-sectional study. *Eur J Phys Rehabil Med*. 2021 Apr;57(2):199-207. doi: 10.23736/S1973-9087.21.06699-5. Epub 2021 Feb 10. PMID: 33565741.
 120. Gramaglia C, Gambaro E, Bellan M, Balbo PE, Baricich A, Sainaghi PP, Pirisi M, Baldon G, Battistini S, Binda V, Feggi A, Gai M, Gattoni E, Jona A, Lorenzini L, Marangon D, Martelli M, Prosperini P, Zeppego P; NO-MORE COVID Group. Mid-term Psychiatric Outcomes of Patients Recovered From COVID-19 From an Italian Cohort of Hospitalized Patients. *Front Psychiatry*. 2021 Jun 10;12:667385. doi: 10.3389/fpsy.2021.667385. PMID: 34177656; PMCID: PMC8222628.
 121. Bellan M, Gavelli F, Hayden E, Patrucco F, Soddu D, Pedrinelli AR, Cittone MG, Rizzi E, Casciaro GF, Vassia V, Landi R, Menegatti M, Gastaldello ML, Beltrame M, Labella E, Tonello S, Avanzi GC, Pirisi M, Castello LM, Sainaghi PP. Pattern of Emergency Department referral during the COVID-19 outbreak in Italy. *Panminerva Med*. 2021 Dec;63(4):478-481. doi: 10.23736/S0031-0808.20.04000-8. Epub 2020 Jun 16. PMID: 32549532
 122. Bellan M, Baricich A, Patrucco F, Zeppego P, Gramaglia C, Balbo PE, Carriero A, Amico CS, Avanzi GC, Barini M, Battaglia M, Bor S, Cantaluppi V, Cappellano G, Ceruti F, Chiocchetti A, Clivati E, Giordano M, Cuneo D, Gambaro E, Gattoni E, Loro A, Manfredi M, Morosini U, Murano F, Paracchini E, Patti G, Pinato DJ, Raineri D, Rolla R, Sainaghi PP, Tricca S, Pirisi M. Long-term sequelae are highly prevalent one year after hospitalization for severe COVID-19. *Sci Rep*. 2021 Nov 22;11(1):22666. doi: 10.1038/s41598-021-01215-4. PMID: 34811387
 123. Varrasi C, Fleetwood T, De Marchi F, Vecchio D, Virgilio E, Castello LM, Avanzi GC, Sainaghi PP, Mazzini L, Cantello R. Neurological emergency at the COVID-19 pandemic: report from a referral hospital in Eastern Piedmont, Italy. *Neurol Sci*. 2022 Jan 18:1-7. doi: 10.1007/s10072-022-05895-2. Online ahead of print. PMID: 35039990
 124. Castello LM, Airolidi C, Baldrighi M, Bortoluzzi S, Cammarata LM, Franchetti Pardo L, Gardino CA, Payedimarri AB, Giorchino M, Pistone G, Stampini V, Avanzi GC, Faggiano F Effectiveness and feasibility of smoking counselling: a

PROF. GIAN CARLO AVANZI CURRICULUM VITAE e PUBBLICAZIONI

- randomized controlled trial in an Italian emergency department. *Eur J Public Health*. 2022 Feb 1;32(1):119-125. doi: 10.1093/eurpub/ckab114. PMID: 34252178
125. Nuzzo A, Brignoli A, C Ponziani M, Zavattaro M, Prodam F, Castello LM, Avanzi GC, Marzullo P, Aimaretti G Aging and comorbidities influence the risk of hospitalization and mortality in diabetic patients experiencing severe hypoglycemia. *Nutr Metab Cardiovasc Dis*. 2022 Jan;32(1):160-166. doi: 10.1016/j.numecd.2021.09.016. Epub 2021 Sep 23. PMID: 34802847
 126. Gavelli F, Molinari L, Baldrighi M, Salmi L, Mearelli F, Fiotti N, Patrucco F, Airoidi C, Bellan M, Sainaghi PP, Di Somma S, Lupia E, Colonetti E, Muiesan ML, Biolo G, Avanzi GC, Castello LM. Are Baseline Levels of Gas6 and Soluble Mer Predictors of Mortality and Organ Damage in Patients with Sepsis? The Need-Speed Trial Database. *Biomedicines* 2022 Jan 18;10(2):198. doi: 10.3390/biomedicines10020198.
 127. Fiotti N, Mearelli F, Di Girolamo FG, Castello LM, Nunnari A, Di Somma S, Lupia E, Colonetti E, Muiesan ML, Montrucchio G, Giansante C, Avanzi GC, Biolo G. Genetic Variants of Matrix Metalloproteinase and Sepsis: The Need Speed Study. *Biomolecules* 2022 Feb 9;12(2):279. doi: 10.3390/biom12020279.
 128. Mearelli F, Barbati G, Spagnol F, Nunnari A, Castello LM, Lupia E, Muiesan ML, Di Somma S, Avanzi GC, Biolo G. The Role of Mid-Regional Proadrenomedullin in the Differential Diagnosis between Culture-Negative and Culture-Positive Sepsis at Emergency Department Admission. *Biomedicines*. 2022 Feb 1;10(2):357. doi: 10.3390/biomedicines10020357.
 129. Rizzi M, Costanzo M, Tonello S, Martino E, Casciaro FG, Croce A, Rizzi E, Zecca E, Pedrinelli A, Vassia V, Landi R, Bellan M, Castello LM, Minisini R, Mallela VR, Avanzi GC, Pirisi M, Lilleri D, Sainaghi PP. Prognostic Markers in Hospitalized COVID-19 Patients: The Role of IP-10 and C-Reactive Protein. *Dis Markers*. 2022 Feb 28;2022:3528312. doi: 10.1155/2022/3528312. eCollection 2022.
 130. Tonello S, Rizzi M, Martino E, Costanzo M, Casciaro GF, Croce A, Rizzi E, Zecca E, Pedrinelli A, Vassia V, Landi R, Bellan M, Castello LM, Minisini R, Mallela VR, D'Onghia D, Avanzi GC, Pirisi M, Lilleri D, Sainaghi PP. Baseline Plasma Gas6 Protein Elevation Predicts Adverse Outcomes in Hospitalized COVID-19 Patients. *Dis Markers*. 2022 Apr 29;2022:1568352. doi: 10.1155/2022/1568352. eCollection 2022.
 131. Rizzi M, Patrucco F, Trevisan M, Faolotto G, Mercandino A, Strola C, Ravanini P, Costanzo M, Tonello S, Martino E, Casciaro GF, Croce A, Rizzi E, Zecca E, Pedrinelli A, Vassia V, Landi R, Bellan M, Castello LM, Minisini R, Mallela VR, Avanzi GC, Pirisi M, Lilleri D, Solidoro P, Gavelli F, Sainaghi PP. Baseline plasma SARS-CoV-2 RNA detection predicts an adverse COVID-19 evolution in moderate to severe hospitalized patients. *Panminerva Med*. 2022 Dec;64(4):465-471. doi: 10.23736/S0031-0808.22.04705-X. Epub 2022 Jun 17.
 132. Zecca E, Rizzi M, Tonello S, Martino E, Costanzo M, Rizzi E, Casciaro GF, Manfredi GF, Acquaviva A, Gagliardi I, Calzaducca E, Mallela VR, D'Onghia D, Minisini R, Bellan M, Castello LM, Gavelli F, Avanzi GC, Patrucco F, Chiocchetti A, Pirisi M, Rigamonti C, Lilleri D, Sola D, Sainaghi PP. Ongoing Mycophenolate Treatment Impairs Anti-SARS-CoV-2 Vaccination Response in Patients Affected by Chronic Inflammatory Autoimmune Diseases or Liver Transplantation Recipients: Results of the RIVALSA Prospective Cohort. *Viruses*. 2022 Aug 12;14(8):1766. doi: 10.3390/v14081766.
 133. Rizzi M, Tonello S, Morani F, Rizzi E, Casciaro GF, Martino E, Costanzo M, Zecca E, Croce A, Pedrinelli A, Vassia V, Landi R, Mallela VR, D'Onghia D, Minisini R, Bellan M, Castello LM, Gavelli F, Avanzi GC, Patrucco F, Pirisi M, Colangelo D, Sainaghi PP. CGRP Plasma Levels Correlate with the Clinical Evolution and Prognosis of Hospitalized Acute COVID-19 Patients. *Viruses*. 2022 Sep 26;14(10):2123. doi: 10.3390/v14102123.
 134. Reitano E, Gavelli F, Iannantuoni G, Fattori S, Airoidi C, Matranga S, Cioffi SPB, Ingala S, Viridis F, Rizzo M, Marcomini N, Motta A, Spota A, Maestrone M, Ragozzino R, Altomare M, Castello LM, Della Corte F, Vaschetto R, Avanzi GC, Chiara O, Cimbanassi S. In-Hospital Predictors of Need for Ventilatory Support and Mortality in Chest Trauma: A Multicenter Retrospective Study. *J Clin Med*. 2023 Jan 16;12(2):714. doi: 10.3390/jcm12020714.
 135. Martino, E., Tavella, E., Rizzi, M., Avanzi, G. C., Azzolina, D., Battaglia, A., Becco, P., Bellan, M., Bertinieri, G., Bertoletti, M., Casciaro, G. F., Castello, L. M., Colageo, U., Colangelo, D., Comolli, D., Costanzo, M., Croce, A., D'onghia, D., Della Corte, F., De Mitri, L. et.al. Effect of Lactoferrin on Clinical Outcomes of Hospitalized Patients with COVID-19: The LAC Randomized Clinical Trial. *Nutrients*. 15, 5, 1285, 2023.
 136. Rizzi, M., D'onghia, D., Tonello, S., Minisini, R., Colangelo, D., Bellan, M., Castello, L. M., Gavelli, F., Avanzi, G. C., Pirisi, M. & Sainaghi, P. P. COVID-19 Biomarkers at the Crossroad between Patient Stratification and Targeted Therapy: The Role of Validated and Proposed Parameters. *International Journal of Molecular Sciences*. 24, 8, pag. 7099, 2023.
 137. Tonello S, D'Onghia D, Apostolo D, Martino E, Costanzo M, Casciaro GF, Croce A, Rizzi E, Zecca E, Pedrinelli AR, Vassia V, Ravanini P, Crobu MG, Rizzi M, Landi R, Castello LM, Minisini R, Avanzi GC, Pirisi M, Lilleri D, Bellan M, Colangelo D, Sainaghi PP. Baseline Plasma Osteopontin Protein Elevation Predicts Adverse Outcomes in Hospitalized COVID-19 Patients. *Viruses*. 2023 Feb 25;15(3):630. doi: 10.3390/v15030630.

PROF. GIAN CARLO AVANZI CURRICULUM VITAE e PUBBLICAZIONI

138. Rizzi M, D'Onghia D, Tonello S, Minisini R, Colangelo D, Bellan M, Castello LM, Gavelli F, Avanzi GC, Pirisi M, Sainaghi PP. COVID-19 Biomarkers at the Crossroad between Patient Stratification and Targeted Therapy: The Role of Validated and Proposed Parameters. *Int J Mol Sci* 2023 Apr 12;24(8):7099. doi: 10.3390/ijms24087099.
139. Gavelli F, Patrucco F, DE Vita N, Solidoro P, Avanzi GC. Central venous pressure in critically ill patients: do we still need it? *Panminerva Med.* 2024 Mar;66(1):1-3. doi: 10.23736/S0031-0808.23.05082-6. Epub 2023 Dec 12. PMID: 38088034
140. Gavelli F, Castello LM, Monnet X, Azzolina D, Nerici I, Priora S, Via VG, Bertoli M, Foieni C, Beltrame M, Bellan M, Sainaghi PP, De Vita N, Patrucco F, Teboul JL, Avanzi GC. Decrease of haemoconcentration reliably detects hydrostatic pulmonary oedema in dyspnoeic patients in the emergency department - a machine learning approach *Int J Emerg Medicine*, 2024 Sep 5;17(1):114. doi: 10.1186/s12245-024-00698

MONOGRAFIE INTERNAZIONALI IF

1. L. Pegoraro, G.C. Avanzi e P. Lista : "Growth and differentiation factors in human haematopoiesis." (Review) *Hematologica*, 73:525-543, 1988.
2. Brizzi M.F., Avanzi G.C., Pegoraro L., Hematopoietic growth factor receptors. (Review) *Int. J. Cell Cloning* 9: 274-300, 1991
3. Avanzi GC, Gallicchio M, Saglio G., Hematopoietic growth factor in autologous transplantation (Review). *Biotherapy* 10(4):299-308, 1998
4. FraG, Avanzi GC, heopoietic growth factor in myelodysplastic syndrome. *Expert Opinion in Therapeutical Patents*, (Review) 2006

Autorizzo al trattamento dei dati ai sensi della legge 196/2003.

(omissis), 13 gennaio 2025

Prof. Gian Carlo Avanzi