

PERSONAL INFORMATION

Giancarlo Maria Liumbruno



- 📍 Italian National Blood Centre, National Institute of Health, Via Giano della Bella, 27 - 00162 Rome, Italy
- ☎ +39 06 49904971 (office) 📠 +39 366 6000270
- ✉ giancarlo.liumbruno@iss.it
- 🌐 www.centronazionalesangue.it

Sex Male | Date of birth 16/04/1961 | Nationality Italian

WORK EXPERIENCE

<b>August 1, 2015 – present</b>	<p>Director General, Italian National Blood Centre</p> <ul style="list-style-type: none"> <li>• National coordination and technical and scientific control of the Italian blood banking and transfusion medicine activities pursuant to national and EU regulations.</li> <li>• National coordination of the Italian Cord Blood Network (ITCBN).</li> <li>• National blood and blood components competent authority on behalf of the Ministry of Health.</li> <li>• President of the Steering Committee of the Italian National Blood Centre.</li> <li>• Member of the National Blood Technical Board at the Ministry of Health.</li> <li>• Italian Representative at:               <ul style="list-style-type: none"> <li>❖ Directorate General Health and Consumers Affairs (DG Sanco), European Commission: Blood and Blood Components Competent Authorities Committee;</li> <li>❖ European Directorate for the Quality of Medicines and Healthcare (EDQM), Council of Europe: European Steering Committee on Blood Transfusion (CD-P-TS), Working Group on Quality Assurance in Blood Transfusion Services (GTS) and Working Group on Plasma Supply Management (TS093).</li> <li>❖ European Blood Alliance.</li> <li>❖ International Haemovigilance network.</li> </ul> </li> <li>• Coordination of the national Working Group on the definition of structural, technological and organisational requirements for blood services and blood collection units.</li> <li>• Scientific director of several national educational initiatives on quality management in blood establishments, blood safety and blood system management.</li> <li>• Responsible for the training of inspectors of the national Blood System and for the management of the national blood inspector list.</li> <li>• Coordination of the national external quality assessment scheme for blood testing.</li> <li>• Regulatory advisor in the EDQM - Council of Europe - proficiency testing study for blood testing.</li> <li>• Coordination of VISTART-JA (Vigilance and Inspection for the Safety of Transfusion Assisted Reproduction and Transplantation) and co-leader with the Italian National Transplant Centre of Work Package 5 of ARTHIQS (Assisted Reproductive Technologies and Haematopoietic stem cells Improvements for Quality and Safety throughout Europe) Joint Action – co-funded by the European Commission.</li> </ul>
<b>November 17, 2014 – July 31, 2015</b>	<p>Full-time member of the medical staff of the Italian National Blood Centre, National Institute of Health (Rome, Italy).</p> <ul style="list-style-type: none"> <li>❖ Scientific and regulatory area.</li> </ul>
<b>October 2008 – November 16, 2014</b>	<p>Head of Immunohaematology &amp; Transfusion Medicine and Clinical Pathology Units, “San Giovanni Calibita” Fatebenefratelli Hospital (Rome, Italy).</p>

	<ul style="list-style-type: none"> <li>❖ Direction of blood establishment and clinical pathology laboratory.</li> <li>❖ Member of the national working group, coordinated by the Italian National Blood Centre, on the implementation of Patient Blood Management in Italian Hospitals.</li> </ul>
<b>October 2013 – November 16, 2014</b>	<p>Part-time member of the medical staff of the Italian National Blood Centre, National Institute of Health (Rome, Italy).</p> <ul style="list-style-type: none"> <li>❖ Scientific and regulatory advisor.</li> </ul>
<b>2006 – present</b>	<p>Contract Professor of Transfusion Medicine in the postgraduate Master of Transfusion Medicine, Specialty School of Haematology, University of Florence, Italy.</p> <ul style="list-style-type: none"> <li>❖ Lecturer in transfusion medicine.</li> </ul>
<b>September 2007 – December 2009</b>	<p>Member of the medical staff of the Italian National Blood Centre, National Institute of Health (Rome, Italy).</p> <ul style="list-style-type: none"> <li>❖ Scientific advisor.</li> </ul>
<b>March 1998 –September 2008</b>	<p>Senior Assistant, Immunohaematology and Transfusion Medicine Unit, Livorno, Italy.</p> <ul style="list-style-type: none"> <li>❖ Therapeutic apheresis and transfusion medicine, anticoagulation clinic, blood and blood component collection, blood donor care, immunohaematology, blood testing. Head of Outpatient Transfusion Medicine Unit.</li> </ul>
<b>December 1994 – March 1998</b>	<p>Senior Assistant, Immunohaematology and Transfusion Medicine Unit, Pistoia, Italy.</p> <ul style="list-style-type: none"> <li>❖ Blood and blood component collection, blood donor care, immunohaematology, therapeutic apheresis, transfusion medicine, anticoagulation clinic, blood testing.</li> </ul>
<b>December 1993 – December 1994</b>	<p>Assistant, Immunohaematology and Transfusion Medicine Unit, Gorizia, Italy.</p> <ul style="list-style-type: none"> <li>❖ Blood and blood component collection, blood donor care, immunohaematology, therapeutic apheresis, transfusion medicine, anticoagulation clinic, blood testing.</li> </ul>
<b>December 1985 – December 1993</b>	<p>Italian Navy Medical Officer (Capt.).</p> <ul style="list-style-type: none"> <li>❖ Head of health service on board a military ship (1985-1987) and Venice Navy Detachment (1988-1993).</li> </ul>
<b>EDUCATION AND TRAINING</b>	
<b>2014</b>	National Scientific Qualification as Associate University Professor of Technical Sciences of Laboratory Medicine (MED/46).
<b>2009</b>	CERMET (Certification and Research for Quality), Qualification as auditor of healthcare services (Rome, Italy).
<b>2000</b>	Master in Healthcare management: principles, tools, methods (University of Florence, Italy).
<b>1995</b>	Certificat d'Université d'Enseignement Européen de Transfusion Sanguine (Louis Pasteur University, Strasbourg, France).
<b>1993</b>	Specialisation in Clinical Pathology - Immunohaematology (University of Pisa, Italy).
<b>1985</b>	MD degree (University of Pisa, Italy).
<b>PERSONAL SKILLS</b>	

<b>Mother tongue</b>	Italian				
<b>Other language(s)</b>	<b>UNDERSTANDING</b>		<b>SPEAKING</b>		<b>WRITING</b>
	Listening	Reading	Spoken interaction	Spoken production	
	<b>C2</b>	<b>C2</b>	<b>C1</b>	<b>C1</b>	<b>C1</b>
	<b>English</b>				
	<small>Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user - Common European Framework of Reference for Languages</small>				
<b>Communication skills</b>	Effective communication skills gained through my experience as Navy Officer and numerous group and team settings during my professional experience as transfusion medicine specialist as well as through my experience of contemporary direction of two Hospital Units.				
<b>Organisational/managerial skills</b> <b>Job-related skills</b>	Direction of the national blood authority on behalf of the Ministry of Health. Specific academic qualification and longstanding professional experience in transfusion medicine and blood banking. Two-year experience in national blood service network organisation, management and control. Full competence in all regulatory issues ruled by national and European legislation on blood, blood components, cord blood, stem cells and congenital bleeding disorders. Solid competence in quality system management and auditing in blood banking and transfusion medicine. Positive attitude and good experience in teaching, medical education and training. Long-standing experience in editorial management of indexed scientific journals. Solid disposition to leadership and management. Ability to work in a team as well as individually.				
<b>Computer skills</b>	Very good command of Microsoft Office™ tools.				
<b>Driving licence</b>	B				
<b>ADDITIONAL INFORMATION</b>					
<b>Memberships</b>	<p><b>Scientific Society and Journal Activities</b></p> <ul style="list-style-type: none"> <li>❖ Member of the Italian Society of Transfusion Medicine and Immunohaematology (SIMTI) (since 1994) and member of the board of SIMTI (from 2013 to 2016).</li> <li>❖ Member of the American Association of Blood Banks (AABB) (since 1994).</li> <li>❖ Member of the International Society of Blood Transfusion (ISBT) (since 2013).</li> <li>❖ Associate Editor of "Blood Transfusion", the official journal of SIMTI (from 2005 to 2014).</li> <li>❖ Associate Editor of "Journal of Blood Transfusion" (since 2012).</li> <li>❖ Editor-in-Chief of "Blood Transfusion", the official journal of SIMTI (since 2015).</li> </ul>				
<b>Honours and awards</b>	<ul style="list-style-type: none"> <li>❖ On October 6, 2006, during the 37<sup>th</sup> National Congress of the Italian Society of Transfusion Medicine and Immunohaematology (SIMTI), I was awarded the "Scientific SIMTI Recognition" for the best paper presented on topics related to "Nurse training in Transfusion Medicine in the light of R18 CE (2004)".</li> <li>❖ On September 26, 2008, during the 38<sup>th</sup> National Congress of SIMTI, I was awarded the "Scientific SIMTI Recognition" for the best paper presented on topics related to "Massive transfusion".</li> <li>❖ On September 3, 2010, during the "Intercongress Meeting of the European Society of Pathology", held in Krakow (Poland), I was awarded the "Best</li> </ul>				

	Poster Award" for the abstract "Role of HPV-mRNA detection in HPV infections".
<b>Conferences and seminars</b>	Since 1994 I have participated in more than 150 courses and national and international conferences on transfusion medicine/apheresis, haematology/oncology, haemostasis, and laboratory medicine giving more than 50 oral presentations/lectures.
<b>Referees</b>	Available upon request.
<b>SCIENTIFIC PUBLICATIONS</b>	Co-author of four textbooks ["Recommendations on the Correct Use of Blood Components and Plasma Derivatives" (2008); "Recommendations on Perioperative Blood Transfusion" (2010); "Handbook for the process validation of Transfusion Services and blood and blood component collection Units" (2014); "Recommendations for the implementation of a Patient Blood Management programme. Application to elective major orthopaedic surgery in adults" (2015)]. I collaborated on the Italian translation, adaptation and revision of the 15 <sup>th</sup> edition of the American Association of Blood Banks (AABB) Technical Manual. Author/co-author of more than 150 abstracts.
<b>Official H INDEX</b>	19 - <b>Source:</b> Web of Science

### Scientific publications in indexed Journals (98)

- Muñoz M, Acheson AG, Auerbach M, Besser M, Habler O, Kehlet H, **Liumbruno GM**, Lasocki S, Meybohm P, Rao Baikady R, Richards T, Shander A, So-Osman C, Spahn DR, Klein AA. International consensus statement on the peri-operative management of anaemia and iron deficiency. *Anaesthesia* 2016; doi: 10.1111/anae.13773.
- Lieshout-Krikke RW, Domanovic D, De Kort W, Mayr W, **Liumbruno GM**, Pupella S, Kurz J, Knutson F, MacLennan S, Folléa G. Selection strategies for newly registered blood donors in European countries. *Blood Transfus* 2016; doi: 10.2450/2016.0107-16.
- Vuk T, Magnussen K, De Kort W, Folléa G, **Liumbruno GM**, Schennach H, Vandewalle G, Compennolle V, Masharova N, Karakatsiani G, Argyrou I, Reháček V, Khanirzajeva G, Castrén J, Danic B, Djoudi R, Woimant G, Mueller MM, Politis C, Vaglio S, Daugavvanaga A, Vilutyte E, Faber JC, Borg-Aquilina D, Van Den Burg P, Bokhorst A, Poglód R, Antoniewicz-Papis J, Muon M, Burta OL, Rosochová J, Mali P, Vesga MA, Schneider K, Norda R, Anderson N. International forum: an investigation of iron status in blood donors. *Blood Transfus* 2016; doi:10.2450/2016.0101-16.
- Liumbruno GM**, Biancofiore G, Marano G, Mengoli C, Franchini M. Liberal transfusion strategy improves survival in perioperative but not in critically ill patients. *Br J Anaesth* 2016; 117: 401.
- Bruun MT, Pendry K, Georgsen J, Manzini P, Lorenzi M, Wikman A, Borg-Aquilina D, van Pampus E, van Kraaij M, Fischer D, Meybohm P, Zacharowski K, Geisen C, Seifried E, **Liumbruno GM**, Folléa G, Grant-Casey J, Babra P, Murphy MF. Patient Blood Management in Europe: surveys on top indications for red blood cell use and Patient Blood Management organization and activities in seven European university hospitals. *Vox Sang* 2016; 111: 391-8.
- Cicchetti A, Berrino A, Casini M, Codella P, Facco G, Fiore A, Marano G, Marchetti M, Midolo E, Minacori R, Refolo P, Romano F, Ruggeri M, Sacchini D, Spagnolo AG, Urbina I, Vaglio S, Grazzini G, **Liumbruno GM**. Health Technology Assessment of pathogen reduction technologies applied to plasma for clinical use. *Blood Transfus* 2016; 14: 287-386.
- Pisani G, Cristiano K, Pupella S, **Liumbruno GM**. West Nile Virus in Europe and Safety of Blood Transfusion. *Transfus Med Hemother* 2016; 43: 158-67.
- Biancofiore G, Vaglio S, **Liumbruno GM**. Hydroxyethyl-starch use and PBM: a necessary update to the Italian national guidelines. *Blood Transfus* 2016; 14: 195-6.
- Marano G, Vaglio S, Pupella S, **Liumbruno GM**, Franchini M. How we treat bleeding associated with direct oral anticoagulants. *Blood Transfus* 2016; 14: 465-73.
- Liumbruno GM**, Vaglio S, Biancofiore G, Marano G, Mengoli C, Franchini M. Transfusion thresholds and beyond. *Blood Transfus* 2016; 14: 123-5.
- Caraceni P, Angeli P, Prati D, Bernardi M; Italian Association for the Study of the Liver (AISF); **Liumbruno GM**, Bennardello F, Piccoli P, Velati C; Italian Society of Transfusion Medicine and Immunohaematology (SIMTI). AISF-SIMTI Position Paper: The appropriate use of albumin in patients with liver cirrhosis. *Dig Liver Dis* 2016; 48: 4-15.
- Caraceni P, Angeli P, Prati D, Bernardi M; Italian Association for the Study of the Liver (AISF); **Liumbruno GM**, Bennardello F, Piccoli P, Velati C; Italian Society of Transfusion Medicine and Immunohaematology (SIMTI). AISF-SIMTI Position Paper: The appropriate use of albumin in patients with liver cirrhosis. *Blood Transfus* 2016; 14: 8-22.
- Mörtzell Henriksson M, Newman E, Witt V, Derfler K, Leitner G, Eloit S, Dhondt A, Deeren D, Rock G, Ptak J, Blaha M, Lanska M, Gasova Z, Hrdlickova R, Ramlow W, Prophet H, **Liumbruno G**, Mori E, Griskevicius A, Audzijiuniene J, Vrieling H, Rombout S, Aandahl A, Sikole A, Tomaz J, Lalic K, Mazic S, Strineholm V, Brink B, Berlin G, Dykes J, Toss F, Axelsson CG, Stegmayr B, Nilsson T, Norda R, Knutson F, Ramsauer B, Wahlström A. Adverse events in apheresis: An update of the WAA registry data. *Transfus Apher Sci* 2016; 54: 2-15.
- Vaglio S, Prisco D, Biancofiore G, Rafanelli D, Antonioli P, Lisanti M, Andreani L, Basso L, Velati C, Grazzini G, **Liumbruno GM**. Recommendations for the implementation of a Patient Blood Management programme. Application to elective major orthopaedic surgery in adults. *Blood Transfus* 2016; 14: 23-65.
- Bianchi M, Vaglio S, Pupella S, Marano G, Facco G, **Liumbruno GM**, Grazzini G. Leucoreduction of blood components: an effective way to increase blood safety? *Blood Transfus* 2016; 14: 214-27.
- Franchini M, Liumbruno GM, Bonfanti C, Lippi G. The evolution of anticoagulant therapy. *Blood Transfus* 2016; 14: 175-84.
- Franchini M, Capuzzo E, **Liumbruno GM**. Lipoprotein apheresis for the treatment of elevated circulating levels of lipoprotein(a): a critical

- literature review. *Blood Transfus* 2016; 14: 413-8.
18. Guerra R, Velati C, **Liembruno GM**, Grazzini G. Patient Blood Management in Italy. *Blood Transfus* 2016; 14: 1-2.
  19. Franchini M, Liembruno GM. ABO blood group and neurodegenerative disorders: more than a casual association. *Blood Transfus* 2016; 14: 158-9.
  20. Franchini M, **Liembruno GM**, Lippi G. The prognostic value of ABO blood group in cancer patients. *Blood Transfus* 2016; 14: 434-40.
  21. Marano G, Pupella S, Vaglio S, **Liembruno GM**, Grazzini G. Zika virus and the never-ending story of emerging pathogens and transfusion medicine. *Blood Transfus* 2016; 14: 95-100.
  22. Marano G, Vaglio S, Pupella S, Facco G, Catalano L, **Liembruno GM**, Grazzini G. Convalescent plasma: new evidence for an old therapeutic tool? *Blood Transfus* 2016; 14: 152-7.
  23. Marano G, Vaglio S, Pupella S, Facco G, Catalano L, Piccinini V, **Liembruno GM**, Grazzini G. Human T-lymphotropic virus and transfusion safety: does one size fit all? *Transfusion* 2016; 56: 249-60.
  24. Muñoz M, Gómez-Ramírez S, Campos A, Ruiz J, **Liembruno GM**. Pre-operative anaemia: prevalence, consequences and approaches to management. *Blood Transfus* 2015; 13: 370-9.
  25. Auerbach M, Adamson J, Bircher A, Breyman C, Fishbane S, Gafer-Gvili A, Gasche C, Gilreath J, Grazzini G, Henry D, **Liembruno G**, Locatelli F, Macdougall I, Munoz M, Rampton D, Rodgers G, Shander A. On the safety of intravenous iron, evidence trumps conjecture. *Haematologica* 2015; 100: e214-5.
  26. Marano G, Vaglio S, Pupella S, Facco G, Calizzani G, Candura F, **Liembruno GM**, Grazzini G. Human Parvovirus B19 and blood product safety: a tale of twenty years of improvements. *Blood Transfus* 2015; 13: 184-96.
  27. **Liembruno GM**, Marano G, Grazzini G, Capuzzo E, Franchini M. Solvent/detergent-treated plasma: a tale of 30 years of experience. *Expert Rev Hematol* 2015; 8: 367-74.
  28. **Liembruno GM**, Franchini M. Solvent/detergent plasma: pharmaceutical characteristics and clinical experience. *J Thromb Thrombolysis* 2015; 39: 118-28.
  29. **Liembruno GM**, Vaglio S, Capuzzo E, Franchini M. Fibrinogen concentrate as haemostatic therapy in acquired bleeding disorders: not only a question of dosing strategies and thresholds. *Blood Transfus* 2014; 13: 159-60.
  30. Marano G, Vaglio S, Pupella S, Facco G, Bianchi M, Calizzani G, Candura F, Catalano L, Farina B, Lanzoni M, Piccinini V, **Liembruno GM**, Grazzini G. Hepatitis E: an *old* infection with *new* implications. *Blood Transfus* 2015; 13: 6-20.
  31. **Liembruno GM**, Vaglio S, Grazzini G, Spahn D, Biancofiore G. Patient blood management: a fresh look at a new approach to blood transfusion. *Minerva Anestesiol* 2015; 81: 1127-37.
  32. Catalano L, Campolongo A, Caponera M, Berzuini A, Bontadini A, Furlò G, Pasqualetti P, **Liembruno GM**. Indications and organisational methods for autologous blood transfusion procedures in Italy: results of a national survey. *Blood Transfus* 2014; 12: 497-508;
  33. Muñoz M, Gómez-Ramírez S, **Liembruno GM**, Grazzini G. Intravenous iron and safety: is the end of the debate on the horizon? *Blood Transfus* 2014; 12: 287-9.
  34. Iorio A, Polimanti R, Piacentini S, **Liembruno GM**, Manfredotto D, Fuciarelli M. Deletion polymorphism of GSTT1 gene as protective marker for allergic rhinitis. *Clin Respir J* 2014; doi: 10.1111/crj.12170.
  35. Calizzani G, Candura F, Menichini I, Arcieri R, Castaman G, Lamanna A, Tamburrini MR, Fortino A, Lanzoni M, Profili S, Pupella S, **Liembruno GM**, Grazzini G. The Italian institutional accreditation model for Haemophilia Centres. *Blood Transfus* 2014; 12 Suppl 3: S510-4.
  36. Calizzani G, Menichini I, Candura F, Lanzoni M, Profili S, Tamburrini MR, Fortino A, Vaglio S, Marano G, Facco G, Olivocchietto E, Franchini M, Coppola A, Arcieri R, Bon C, Saia M, Nuti S, Morfini M, **Liembruno GM**, Di Minno G, Grazzini G. Definition of an organisational model for the prevention and reduction of health and social impacts of inherited bleeding disorders. *Blood Transfus* 2014; 12 Suppl 3: s582-8.
  37. **Liembruno GM**, Vaglio S, Facco G, Biancofiore G, Calizzani G, Pupella S, Grazzini G. Transfusion-related acute lung injury incidence in Italy two years after the adoption of a national proactive exclusion policy: under-diagnosing and underreporting. *Minerva Anestesiol* 2014; 80: 1063-4.
  38. Vaglio S, Calizzani G, Grazzini G, Lanzoni M, **Liembruno GM**. Italian albumin usage (or misuse?). *Eur J Intern Med* 2014; 25: e31-2.
  39. Piacentini S, Polimanti R, Iorio A, Cortesi M, Papa F, Rongioletti M, **Liembruno GM**, Manfredotto D, Fuciarelli M. GSTA1\*69C/T and GSTO2\*N142D as asthma- and allergy-related risk factors in Italian adult patients. *Clin Exp Pharmacol Physiol* 2014; 41: 180-4.
  40. **Liembruno GM**, Grazzini G. Double bull's eye for post-operative intravenous iron in patient blood management: better outcome and cost-effective. *Blood Transfus* 2014; 12: 7-9.
  41. **Liembruno GM**, Franchini M. Hemostasis, cancer, and ABO blood group: the most recent evidence of association. *J Thromb Thrombolysis* 2014; 38: 160-6.
  42. Franchini M, **Liembruno GM**, Lanzoni M, Candura F, Vaglio S, Profili S, Facco G, Calizzani G, Grazzini G. Clinical use and the Italian demand for prothrombin complex concentrates. *Blood Transfus* 2013; 11 Suppl 4: s94-100.
  43. **Liembruno GM**, Franchini M, Lanzoni M, Candura F, Vaglio S, Profili S, Catalano L, Facco G, Pupella S, Calizzani G, Grazzini G. Clinical use and the Italian demand for antithrombin. *Blood Transfus* 2013; 11 Suppl 4: s86-93.
  44. Calizzani G, Profili S, Candura F, Lanzoni M, Vaglio S, Cannata L, **Liembruno GM**, Franchini M, Mannucci PM, Grazzini G. The demand for factor VIII and for factor IX and the toll fractionation product surplus management. *Blood Transfus* 2013; 11 Suppl 4: s64-76.
  45. Candura F, Lanzoni M, Calizzani G, Profili S, Vaglio S, Pupella S, **Liembruno GM**, Grazzini G. The demand for polyvalent immunoglobulins in Italy. *Blood Transfus* 2013; 11 Suppl 4: s45-54.
  46. Vaglio S, Calizzani G, Lanzoni M, Candura F, Profili S, Catalano L, Cannata L, **Liembruno GM**, Grazzini G. The demand for human albumin in Italy. *Blood Transfus* 2013; 11 Suppl 4: s26-32.
  47. Calizzani G, Profili S, Candura F, Lanzoni M, Vaglio S, Cannata L, Catalano L, Chianese R, **Liembruno GM**, Grazzini G. Plasma and plasma-derived medicinal product self-sufficiency: the Italian case. *Blood Transfus* 2013; 11 Suppl 4: s118-31.
  48. **Liembruno GM**, Velati C. The 2013 update of the "Seville Document": a Spanish multidisciplinary alliance for patient blood management. *Blood Transfus* 2013; 11: 481-3.
  49. **Liembruno GM**, Franchini M. Beyond immunohaematology: the role of the ABO blood group in human diseases. *Blood Transfus* 2013; 11: 491-9.
  50. Stegmayr B, Ptak J, Nilsson T, Berlin G, Mirea V, Axelsson CG, Griskevicius A, Centoni P, **Liembruno G**, Audzijoniene J, Mokvist K, Lassen E, Knutson F, Norda R, Mörtzell M, Prophet H, Ramlow W, Blaha M, Witt V, Efvergren M, Tomaz J, Newman E, Eloit S, Dhondt A, Lalic K, Sikole A, Derfler K, Hrdlickova R, Tomsova H, Gasova Z, Bhuiyan-Ludvikova Z, Ramsauer B, Vrieliink H. Panorama of adverse events during cytopheresis. *Transfus Apher Sci* 2013; 48: 155-6.
  51. Franchini M, **Liembruno GM**. ABO blood group: old dogma, new perspectives. *Clin Chem Lab Med* 2013; 51: 1545-53.
  52. **Liembruno GM**, Franchini M. Proteomic analysis of venous thromboembolism: an update. *Expert Rev Proteomics* 2013; 10: 179-88.
  53. **Liembruno GM**, Grazzini G, Rafanelli D. Post-operative blood salvage in patient blood management: is it really cost-effective and safe? *Blood Transfus* 2013; 11: 175-7.
  54. **Liembruno GM**, Velati C, Pasqualetti P, Franchini M. How to write a scientific manuscript for publication. *Blood Transfus* 2013; 11: 217-26.
  55. Papa F, Rongioletti M, Majolini MB, Collegiani V, Vaccarella C, Notamuzi ML, Cortesi M, Pasqualetti P, Cicchese M, Agostino R, **Liembruno GM**. Fast bedside measurement of blood count and C-reactive protein in newborns compared with conventional methods. *Clin Lab* 2012; 58: 951-7.
  56. Sacchini D, **Liembruno GM**, Bruno G, Liembruno C, Rafanelli D, Minacori R, Refolo P, Spagnolo AG. Ethical and deontological issues in Transfusion



- Medicine. *Blood Transfus* 2013; 11: 14-25.
57. **Liumbruno GM**, Petrini C. Ethical issues and concerns about the use of biosimilar granulocyte colony-stimulating factors for the mobilisation of stem cells in normal donors. *Blood Transfus* 2012; 10: 550-2.
  58. **Liumbruno GM**, Rafanelli D. Iron therapy: a piece in the puzzle of allogeneic blood saving strategies with a relevant role in patients' blood management. *Blood Transfus* 2012; 10: 5-7.
  59. **Liumbruno GM**, Liumbruno C, Rafanelli D. Autologous blood in obstetrics: where are we going now? *Blood Transfus* 2012; 10: 125-47.
  60. **Liumbruno GM**, Rafanelli D. Appropriateness of blood transfusion and physicians' education: a continuous challenge for Hospital Transfusion Committees? *Blood Transfus* 2012; 10: 1-3.
  61. Mörtzell M, Berlin G, Nilsson T, Axelsson CG, Efvargren M, Audzijoni J, Griskevicius A, Ptak J, Blaha M, Tomsova H, **Liumbruno GM**, Centoni P, Newman E, Eloit S, Dhondt A, Tomaz J, Witt V, Rock G, Stegmayr B. Analyses of data of patients with Thrombotic Microangiopathy in the WAA registry. *Transfus Apher Sci* 2011; 45: 125-31.
  62. Mörtzell M, Berlin G, Nilsson T, Axelsson CG, Efvargren M, Audzijoni J, Griskevicius A, Ptak J, Blaha M, Tomsova H, **Liumbruno GM**, Centoni P, Newman E, Eloit S, Dhondt A, Tomaz J, Witt V, Rock G, Stegmayr B. Thrombotic microangiopathy. *Transfus Apher Sci* 2011; 45: 119-23.
  63. **Liumbruno GM**, Panetta V, Bonini R, Chianese R, Fiorin F, Lupi MA, Tomasini I, Grazzini G. Institutional authorisation and accreditation of Transfusion Services and Blood Donation Sites: results of a national survey. *Blood Transfus* 2011; 9: 436-54.
  64. Papa F, Rongioletti M, Ventura MD, Di Turi F, Cortesi M, Pasqualetti P, Majolini MB, Collegiani V, Cicchese M, Notarmuzi ML, Agostino R, **Liumbruno GM**. Blood cell counting in neonates: a comparison between a low volume micromethod and the standard laboratory method. *Blood Transfus* 2011; 9: 400-6.
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