

Paolo Biban, MD

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SHORT CURRICULUM VITAE

Director, Division of Paediatrics and Pediatric Emergency Care

Director, Neonatal and Paediatric Intensive Care Unit

Major City Hospital, Azienda Ospedaliera Universitaria Integrata di Verona
Verona, Italy

Work Address

Division of Paediatrics

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Personal

Date of birth: [REDACTED]

[REDACTED]

Education

1977-1983	School of Medicine , University of Padova
1984-1988	Residency in Pediatrics and Puericulture, University of Padova
1988-1990	Residency in Pediatrics and Neonatology, University of Padova
1990-1991	Clinical Fellowship in Pediatric Intensive Care, Great Ormond Street Hospital, London (UK)
1998-2002	Residency in Anesthesiology and Intensive Care, University of Verona

Present positions

1997-now	Chief, Neonatal and Paediatric Intensive Care Unit, Major City Hospital, Azienda Ospedaliera Universitaria Integrata di Verona
2004-now	Director, Division of Paediatrics and Pediatric Emergency Care, Director, Neonatal and Paediatric Intensive Care Unit, Major City Hospital, Azienda Ospedaliera Universitaria Integrata di Verona

Ancillary Positions

1997-2001	Member, National Committee Pediatric Advanced Life Support (PALS), Italian Society of Paediatric Emergency and Urgency Medicine (SIMEUP)
2001-2006	Coordinator National Program Pediatric Advanced Life Support (PALS)
2000-2002	Member, Executive Committee of the European Society of Neonatal and Pediatric Intensive Care (ESPNIC)
2002-2004	Secretary General of the European Society of Neonatal and Pediatric Intensive Care (ESPNIC)
2004-2008	Vice-President of the European Society of Neonatal and Pediatric Intensive Care (ESPNIC)

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2008-2010	President of the European Society of Neonatal and Pediatric Intensive Care (ESPNIC)
2000-2010	Coordinator of the working group on Pediatric Resuscitation of ESPNIC
2001-now	Member, Paediatric Working Committee European Resuscitation Council (ERC)
2000-now	Head of the Regional Education Centre for the Pediatric Basic Life Support Course (PBLIS)
1998-2002	Member, National committee of the working group on the Neonatal Resuscitation Program
2003-now	Member, Working group on Neonatal Pulmonology, Italian Society of Neonatology (SIN)
2012-now	Member, Working group on Intensive care of the young infant, Italian Society of Neonatology (SIN)
2003-2006	Treasurer, Italian Society of Medicine of Pediatric Emergency Care (SIMEUP)
2006-2009	Vice-President, Italian Society of Medicine of Pediatric Emergency Care (SIMEUP)
2003-2004	Member, Executive Committee Italian Resuscitation Council (IRC)
2004-2006	Vice-President Italian Resuscitation Council (IRC)
2008-2010	President, Italian Society of Neonatology (SIN) - Veneto section
2011-2013	Member, Executive Committee Italian Resuscitation Council (IRC)
2011-now	Member, Neonatal Life Support - International Course Committee, European Resuscitation Council
2011-now	President, World Federation of Pediatric Intensive and Critical Care Societies (WFPICCS)
2011-2015	President and co-founder, Medical and Nursing Academy of Paediatric Emergency and Intensive Care (AMIETIP, Accademia Medica Infermieristica Emergenza Terapia Intensiva Pediatrica)
2015 - now	Past President Medical and Nursing Academy of Paediatric Emergency and Intensive Care (AMIETIP)

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Main teaching activities

1990-1997	Professor on contract, Residency program in Paediatrics, School of Medicine, University of Padua
1998-now	Professor on contract, Residency program in Paediatrics, School of Medicine, University of Verona
1998-now	PBLS Instructor, Italian Society of Paediatric Emergency and Urgency Medicine (SIMEUP)
1999-now	PALS Instructor, (SIMEUP)
1996-now	Instructor, Neonatal Advanced Life Support Course NALS (Italian Society of Neonatology - SIN)
2001-now	Instructor, European Paediatric Life Support Course (EPLS), European Resuscitation Council (ERC)
2008-now	Instructor, European Paediatric Immediate Life Support Course (EPILS), European Resuscitation Council (ERC)
2008-now	Instructor, European Neonatal Life Support Course (ENLS), European Resuscitation Council (ERC)
2000-2002	Course coordinator for Pediatric education for Pre-hospital Professionals (PEPP) of the American Academy of Pediatrics

Guest Faculty in numerous National and International congresses

Main fields of clinical activity and research

- Neonatal and paediatric resuscitation
- Extracorporeal life support in newborns and children with refractory cardiopulmonary insufficiency
- Inhaled nitric oxide in newborns and children with acute hypoxaemic respiratory failure
- High-frequency ventilation in newborns and children
- Exhaled nitric oxide in newborns and children with respiratory diseases
- Tracheo-bronchial endoscopy in term and preterm newborns
- Tracheo-bronchial endoscopy in children with acute and chronic respiratory disease
- Surfactant replacement therapy in newborn and children with acute respiratory failure

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- Septic shock in newborns and children
- Management of cardiopulmonary insufficiency and cardiac arrest in newborns and children
- Rapid response systems in paediatrics
- Paediatric polytrauma
- Ethics in neonatal and paediatric critically ill patients

List of most current clinical research activity

- 1) Chest compressions technique in newborns and young infants.
- 2) Sustained lung inflation at birth for preterm infants: a randomized clinical trial. (Investigator Initiated, phase II study. Completed)
- 3) Kedrion KB50: specific immunoglobulin therapy for prevention of Hepatitis B in newborns born by positive mothers. (Industry initiated, NA. On-going)
- 4) Acute mastoiditis in children - an epidemiological study. (Investigator Initiated, NA. Completed)
- 5) Evolution of Noninvasive Mechanical Ventilation Use: A Cohort Study Among Italian PICUs. (Investigator Initiated. NA. Completed)
- 6) Lutein and zeaxanthin supplementation in preterm very low-birth-weight neonates in neonatal intensive care units: a multicenter randomized controlled trial. (Investigator Initiated, phase II study. Completed)
- 7) Oral ondansetron versus domperidone for symptomatic treatment of vomiting during acute gastroenteritis in children: multicentre randomized controlled trial. (Investigator Initiated, phase II study. Completed)
- 8) Multicentre Study to Evaluate the Safety, Tolerability, Pharmacokinetics, and Efficacy of Ceftaroline in Neonates and Young Infants with Late-Onset Sepsis. (Industry initiated, phase III study. On-going)

Author or co-author of original papers published in national and international journals

Member of the Editorial Board of *Pediatric Critical Care Medicine* and *Intensive care Medicine*

Reviewer for the following journals:

- 1) Critical Care Medicine
- 2) Pediatric Critical Care Medicine
- 3) Intensive Care Medicine

- 4) Archives of Disease in Childhood
- 5) American Journal of Perinatology
- 6) Acta Paediatrica
- 7) Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine
- 8) BioMed Research International
- 9) Neonatology
- 10) Current Drug Metabolism
- 11) Annals of Thoracic Surgery
- 12) Journal of Neonatal and Perinatal Medicine
- 13) International Journal of Hematology
- 14) BMC Pediatrics
- 15) Journal of Critical Care
- 16) Therapeutic Delivery
- 17) Journal of Pediatric and Neonatal Individualized Medicine
- 18) Respirology
- 19) Italian Journal of Pediatrics
- 20) Medico e Bambino

Textbooks

- 1) Biban P. Requirements and standards for treating children in intensive care units (ICUs). In "Organisation and Management of Intensive Care". Ed. Flaatten H, Moreno RP, Putensen C, Rhodes A. Springer Verlag (2010)
- 2) Biban P, Silvagni D. Early Detection of Neonatal Depression and Asphyxia. In "Neonatology - A Practical Approach to Neonatal Diseases.- Ed. Buonocore G. Bracci R, Weindling M. Springer link (2012)
- 3) Biban P, Silvagni D. Role of vasopressin and terlipressin in newborns and infants with hypotension and shock. In "Perinatal Pharmacology: individualized neonatal therapy". Ed. Aranda J.V., Fanos V., van den Anker J.N. Hygeia Press (2012)

Manuals

- 1) Biban P. Co-authors of the "EPLS - European Paediatric Life Support Course Manual". European Resuscitation Council 2002
- 2) Biban P. Co-authors of the "EPILS - European Paediatric Immediate Life Support Course Manual". European Resuscitation Council 2010
- 3) Biban P. Editorial coordinator of "PALS - Pediatric Advanced Life Support" course manual. Italian Resuscitation Council and Italian Society of Pediatric Emergency Care. Ed Masson, 2004
- 4) Biban P. Co-authors Pediatric Basic Life Support, course manual - Italian Resuscitation Council and Accademia Medica Infermieristica Emergenza e Terapia intensiva Pediatrica

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Summary of main publications

- 1) Biban P. Dear Mommy and Daddy, I Wish to Go Home at the Right Date, Not Too Early But Not Too Late. *Pediatr Crit Care Med.* 2018 Dec;19(12):1175-1176.
- 2) Di Leo V, Biban P., Mercolini F, Martinolli F, Pettenazzo A, Perilongo G, Amigoni A. The quality of life in extracorporeal life support survivors: single-center experience of a long-term follow-up. *Childs Nerv Syst.* 2018 Nov 10. doi: 10.1007/s00381-018-3999-z. [Epub ahead of print]
- 3) Benini F, Castagno E, Barbi E, Congedi S, Urbino A, Biban P., Calistri L, Mancusi RL. Multicentre emergency department study found that paracetamol and ibuprofen were inappropriately used in 83% and 63% of paediatric cases. *Acta Paediatr.* 2018 Oct;107(10):1766-1774
- 4) Maguolo A, Antoniazzi F, Spano A, Fiorini E, Gaudino R, Mauro M, Cantalupo G, Biban P., Maitz S, Cavarzere P. Clinical pitfalls in the diagnosis of segmental overgrowth syndromes: a child with the c.2740G > A mutation in PIK3CA gene. *Ital J Pediatr.* 2018 Sep 19;44(1):110.
- 5) Stefana A, Padovani EM, Biban P., Lavelli M. Fathers' experiences with their preterm babies admitted to neonatal intensive care unit: A multi-method study. *J Adv Nurs.* 2018 May;74(5):1090-1098.
- 6) Benini F, Castagno E, Barbi E, Congedi S, Urbino A, Biban P, Calistri L, Mancusi RL. Multicentre emergency department study found that paracetamol and ibuprofen were inappropriately used in 83% and 63% of paediatric cases. *Acta Paediatr.* 2018 Mar 5.
- 7) Biban P. "Doctor, Is My Child Going to Survive?" Does a New Score to Predict Mortality Following Pediatric In-Hospital Cardiac Arrest "GO-FAR" Enough? *Pediatr Crit Care Med.* 2018 Mar;19(3):264-265.
- 8) Giannini A, Cogo P, Bembi B, Biban P., Bonanomi E, Codazzi D, Concolino D, Giugni C, Messeri A, Parini R, Pettenazzo A, Viafora C, Zaggia C, Langer M. Facing up to limits: a lesson from the Charlie Gard case. *Minerva Anesthesiol.* 2018 Feb;84(2):261-262.
- 9) Mazzaferri F, Cordioli M, Conti M, Storato S, Be G, Biban P., Concia E, Merighi M. Symptomatic congenital Cytomegalovirus deafness: the impact of a six-week course of antiviral treatment on hearing improvement. *Infez Med.* 2017 Dec 1;25(4):347-350.
- 10) Kneyber MCJ, de Luca D, Calderini E, Jarreau PH, Javouhey E, Lopez-Herce J, Hammer J, Macrae D, Markhorst DG, Medina A, Pons-Odena M, Racca F, Wolf G, Biban P., Brierley J, Rimensberger PC; section Respiratory Failure of the European Society for Paediatric and Neonatal Intensive Care. Recommendations for mechanical ventilation of critically ill children from the Paediatric Mechanical Ventilation Consensus Conference (PEMVECC). *Intensive Care Med.* 2017 Dec;43(12):1764-1780.
- 11) Giannini A, Miccinesi G, Prandi E; ODIN Study Group 2. Parental presence in Italian pediatric intensive care units: a reappraisal of current visiting policies. *Intensive Care Med.* 2017 Mar;43(3):458-459.

- 12) Amigoni A, Mondardini MC, Vittadello I, Zaglia F, Rossetti E, Vitale F, Ferrario S, Savron F, Coffaro G, Brugnaro L, Amato R, Wolfler A, Franck LS; Network of Paediatric Intensive Care Unit Study Group (TIPNet). Withdrawal Assessment Tool-1 Monitoring in PICU: A Multicenter Study on Iatrogenic Withdrawal Syndrome. *Pediatr Crit Care Med*. 2017 Feb;18(2):e86-e91. doi: 10.1097/PCC.0000000000001054.
- 13) Marchetti F, Bonati M, Maestro A, Zanon D, Rovere F, Arrighini A, Barbi E, Bertolani P, Biban P, Da Dalt L, Guala A, Mazzoni E, Pazzaglia A, Perri PF, Reale A, Renna S, Urbino AF, Valletta E, Vitale A, Zangardi T, Clavenna A, Ronfani L; SONDO (Study ONdansetron vs DOMperidone) Investigators. Oral Ondansetron versus Domperidone for Acute Gastroenteritis in Pediatric Emergency Departments: Multicenter Double Blind Randomized Controlled Trial. *PLoS One*. 2016 Nov 23;11(11):e0165441.
- 14) Biban P. Pediatric Septic Shock in the Emergency Department: Can We Set the Alarm Clock a Little Forward? *Pediatr Crit Care Med*. 2016 Oct;17(10):1011-1012.
- 15) Rosati A, Ilvento L, L'Erario M, De Masi S, Biggeri A, Fabbro G, Bianchi R, Stoppa F, Fusco L, Pulitanò S, Battaglia D, Pettenazzo A, Sartori S, Biban P, Fontana E, Cesaroni E, Mora D, Costa P, Meleleo R, Vittorini R, Conio A, Wolfler A, Mastrangelo M, Mondardini MC, Franzoni E, McGreevy KS, Di Simone L, Pugi A, Mirabile L, Vigevaro F, Guerrini R. Efficacy of ketamine in refractory convulsive status epilepticus in children: a protocol for a sequential design, multicentre, randomised, controlled, open-label, non-profit trial (KETASER01). *BMJ Open*. 2016 Jun 15;6(6):e011565.
- 16) P Biban, S Spada, D Silvagni, S Perlini, G La Fauci, C Ghizzi. Fever in the first month of life. *Ital J Pediatr*. 2015; 41(Suppl 2): A8.
- 17) Carbajal R, Eriksson M, Courtois E, Boyle E, Avila-Alvarez A, Andersen RD, Sarafidis K, Polkki T, Matos C, Lago P, Papadouri T, Montalto SA, Ilmoja ML, Simons S, Tameliene R, van Overmeire B, Berger A, Dobrzanska A, Schroth M, Bergqvist L, Lagercrantz H, Anand KJ; EUROPAIN Survey Working Group. Sedation and analgesia practices in neonatal intensive care units (EUROPAIN): results from a prospective cohort study. *Lancet Respir Med*. 2015 Oct;3(10):796-812.
- 18) M Zaffanello, E Gasperi, P Biban, L Lubrano, E Fiorini, G Piacentini. Seizures-like symptoms in an African child with life-threatening severe upper respiratory tract obstruction. *Journal of Pediatric and Neonatal Individualized Medicine*. 2015; 4:e040105.
- 19) Wolfler A, Calderini E, Iannella E, Conti G, Biban P, Dolcini A, Pirozzi N, Racca F, Pettenazzo A, Salvo I; Network of Pediatric Intensive Care Unit Study Group. Evolution of Noninvasive Mechanical Ventilation Use: A Cohort Study Among Italian PICUs. *Pediatr Crit Care Med*. 2015 Jun;16(5):418-27.

- 20) Lista G, Boni L, Scopesi F, Mosca F, Trevisanuto D, Messner H, Vento G, Magaldi R, Del Vecchio A, Agosti M, Gizzi C, Sandri F, Biban P, Bellettato M, Gazzolo D, Boldrini A, Dani C; SLI Trial Investigators. Sustained lung inflation at birth for preterm infants: a randomized clinical trial. *Pediatrics*. 2015 Feb;135(2):e457-64. doi: 10.1542/peds.2014-1692.
- 21) P Biban, S Spada, D Silvagni, M Benedetti, C Ghizzi. Management of red codes in the paediatric emergency room. *Italian Journal of Pediatrics*, 2014; 40:A60
- 22) Marchisio P, Bianchini S, Villani A, Verri G, Bernardi F, Porta A, Biban P, Caimmi S, Iughetti L, Krzysztosiak A, Garazzino S, Romanin B, Salvini F, Lancelli L, Landini S, Galeone C, Esposito S, Principi N; SITIP Acute Mastoiditis Registry. Diagnosis and management of acute mastoiditis in a cohort of Italian children. *Expert Rev Anti Infect Ther*. 2014 Dec;12(12):1541-8.
- 23) Baraldi E, Lanari M, Manzoni P, Rossi GA, Vandini S, Rimini A, Romagnoli C, Colonna P, Biondi A, Biban P, Chiamenti G, Bernardini R, Picca M, Cappa M, Magazzù G, Catassi C, Urbino AF, Memo L, Donzelli G, Minetti C, Paravati F, Di Mauro G, Festini F, Esposito S, Corsello G. Inter-society consensus document on treatment and prevention of bronchiolitis in newborns and infants. *Ital J Pediatr*. 2014 Oct 24;40:65. doi: 10.1186/1824-7288-40-65.
- 24) Cavarzere P, Biban P, Gaudino R, Perlini S, Sartore L, Chini L, Silvagni D, Antoniazzi F. Diagnostic pitfalls in the assessment of congenital hypopituitarism. *J Endocrinol Invest*. 2014 Dec;37(12):1201-9.
- 25) Gagliardi L, Rusconi F, Bellù R, Zanini R; Italian Neonatal Network. Association of maternal hypertension and chorioamnionitis with preterm outcomes. *Pediatrics*. 2014 Jul;134(1):e154-61.
- 26) Gaffuri M, Cristofaletti A, Mansoldo C, Biban P. Acute onset of bilateral visual loss during sildenafil therapy in a young infant with congenital heart disease. *BMJ Case Report* 2014. doi:10.1136/bcr-2014-204262
- 27) Argent AC, Biban P. What's new on NIV in the PICU: does everyone in respiratory failure require endotracheal intubation? *Intensive Care Med*. 2014 Jun;40(6):880-4.
- 28) Azzari C, Canessa C, Lippi F, Moriondo M, Indolfi G, Nieddu F, Martini M, de Martino M, Castiglia P, Baldo V, Resti M; Italian Group for the Study of Invasive Bacterial

- Disease. Distribution of invasive meningococcal B disease in Italian pediatric population: implications for vaccination timing. *Vaccine*. 2014 Feb 26;32(10):1187-91.
- 29) Zampieri N, Pietrobelli A, Biban P, Soffiati M, Dall'agnola A, Camoglio FS. *Lactobacillus paracasei* subsp. *paracasei* F19 in Bell's stage 2 of necrotizing enterocolitis. *Minerva Pediatr*. 2013 Aug;65:353-60.
- 30) Biban P, Gaffuri M, Spaggiari S, Silvagni D, Zaglia F, Santuz P. Weaning newborn infants from mechanical ventilation. *Journal of Pediatric and Neonatal Individualized Medicine* 2013;2(2):e020225
- 31) Bellù R, Gagliardi L, Tagliabue P, Corchia C, Vendettuoli V, Mosca F, Zanini R; Italian Neonatal Network. Survey of neonatal respiratory care and surfactant administration in very preterm infants in the Italian Neonatal Network. *Acta Biomed*. 2013;84 Suppl 1:7-11.
- 32) Citti A, Peca D, Petrini S, Cutrera R, Biban P, Haass C, Boldrini R, Danhaive O. Ultrastructural characterization of genetic diffuse lung diseases in infants and children: a cohort study and review. *Ultrastruct Pathol*. 2013 Oct;37:356-65.
- 33) Biban P, Gaffuri M. Premedication for tracheal intubation: any good reason for treating newborn infants differently?. *Pediatr Crit Care Med*. 2013 May;14(4):441-2.
- 34) Dani C, Lista G, Pratesi S, Boni L, Agosti M, Biban P, Del Vecchio A, Gazzolo D, Gizzi C, Magaldi R, Messner H, Mosca F, Sandri F, Scopesi F, Trevisanuto D, Vento G. Sustained lung inflation in the delivery room in preterm infants at high risk of respiratory distress syndrome (SLI STUDY): study protocol for a randomized controlled trial. *Trials*. 2013 Mar 8;14:67.
- 35) Biban P, Gaffuri M. Vasopressin and terlipressin in neonates and children with refractory septic shock. *Curr Drug Metab*. 2013 Feb;14(2):186-92.
- 36) Moro PA, Benedetti M, Biban P, Cassetti F, Milani F, Menniti-Ippolito F, Raschetti R. A Case of Severe Methemoglobinemia in a Baby Fed Homemade Decoction of Silverbeet. *International Journal of Case Reports in Medicine*. 2013; 1-4.
- 37) Dellinger RP, Levy MM, Rhodes A, Annane D, Gerlach H, Opal SM, Sevransky JE, Sprung CL, Douglas IS, Jaeschke R, Osborn TM, Nunnally ME, Townsend SR, Reinhart K, Kleinpell RM, Angus DC, Deutschman CS, Machado FR, Rubenfeld GD, Webb S, Beale RJ, Vincent JL, Moreno R; Surviving Sepsis Campaign Guidelines Committee

- including The Pediatric Subgroup (Hazelzet J A, Randolph AG, Parker MM, Thompson AE, Biban P, Duncan A, Mangia C, Kissoon N, Carcillo JA). Surviving Sepsis Campaign: international guidelines for management of severe sepsis and septic shock, 2012. *Intensive Care Med.* 2013 Feb;39(2):165-228.
- 38) Dellinger RP, Levy MM, Rhodes A, Annane D, Gerlach H, Opal SM, Sevransky JE, Sprung CL, Douglas IS, Jaeschke R, Osborn TM, Nunnally ME, Townsend SR, Reinhart K, Kleinpell RM, Angus DC, Deutschman CS, Machado FR, Rubenfeld GD, Webb SA, Beale RJ, Vincent JL, Moreno R; Surviving Sepsis Campaign Guidelines Committee including the Pediatric Subgroup (Hazelzet J A, Randolph AG, Parker MM, Thompson AE, Biban P, Duncan A, Mangia C, Kissoon N, Carcillo JA). Surviving sepsis campaign: international guidelines for management of severe sepsis and septic shock: 2012. *Crit Care Med.* 2013 Feb;41(2):580-637.
 - 39) van Kaam AH, De Jaegere AP, Rimensberger PC; Neovent Study Group. Incidence of hypo- and hyper-capnia in a cross-sectional European cohort of ventilated newborn infants. *Arch Dis Child Fetal Neonatal Ed.* 2013 Jul;98(4):F323-6.
 - 40) Ajena D, Ferrari S, Romito S, Zaglia F, Biban P, Squintani G. A pediatric case of Miller Fisher syndrome with central involvement. *Neurol Sci.* 2013 Sep;34(9):1689-90.
 - 41) Gagliardi L, Tagliabue P, Bellù R, Corchia C, Mosca F, Zanini R; Network Neonatale Italiano. Survey of neonatal respiratory support use in very preterm infants in Italy. *J Matern Fetal Neonatal Med.* 2012 Oct;25 Suppl 3:1-5.
 - 42) Bosco L, Schena D, Colato C, Biban P, Girolomoni G. Coma Blisters in Children: Case Report and Review of the Literature. *J Child Neurol.* 2013 Dec;28(12):1677-80.
 - 43) Biban P, Chini L, Bonetti P, Sacco F, Zaglia F, Santuz P. Exogenous surfactant replacement: how to deliver it? *Acta Biomed.* 2012;83 Suppl 1:27-32.
 - 44) Manzoni P, Guardione R, Bonetti P, Priolo C, Maestri A, Mansoldo C, Mostert M, Anselmetti G, Sardei D, Bellettato M, Biban P, Farina D. Lutein and zeaxanthin supplementation in preterm very low-birth-weight neonates in neonatal intensive care units: a multicenter randomized controlled trial. *Am J Perinatol.* 2013 Jan;30(1):25-32.
 - 45) Biban P, Gaffuri M, Spaggiari S, Zaglia F, Serra A, Santuz P. Early recognition and management of septic shock in children. *Pediatr Rep.* 2012 Jan 2;4(1):e13.

- 46) Azzari C, Moriondo M, Cortimiglia M, Valleriani C, Canessa C, Indolfi G, Ricci S, Nieddu F, de Martino M, Resti M; Italian group for the study of Invasive Pneumococcal Disease. Potential serotype coverage of three pneumococcal conjugate vaccines against invasive pneumococcal infection in Italian children. *Vaccine*. 2012 Mar 30;30(16):2701-5.
- 47) Biban P. Performing and teaching nonelective tracheal intubation in pediatric intensive care: Finding the right balance between safety and training. *Pediatr Crit Care Med* 2012; 13: 108-109
- 48) Pichini S, Marchei E, Vagnarelli F, Tarani L, Raimondi F, Maffucci R, Sacher B, Bisceglia M, Rapisardi G, Elicio MR, Biban P, Zuccaro P, Pacifici R, Pierantozzi A, Morini L. "Assessment of prenatal exposure to ethanol by meconium analysis: results of an Italian multicentre study". *Alcoholism: Clinical and Experimental Research* 2012; 36: 417-424
- 49) Biban P, Spaggiari S. "Cohabitation" between NICU and PICU. *J Matern Fetal Neonatal Med*. 2011 Oct;24 Suppl 1:91-3.
- 50) Racca F, Bonati M, Del Sorbo L, Berta G, Sequi M, Capello EC, Wolfler A, Salvo I, Bignamini E, Ottonello G, Cutrera R, Biban P, Benini F, Ranieri VM. Invasive and non-invasive long-term mechanical ventilation in Italian children. *Minerva Anesthesiol*. 2011 Sep;77(9):892-901.
- 51) Carnevale FA, Benedetti M, Bonaldi A, Bravi E, Trabucco G, Biban P. Understanding the private worlds of physicians, nurses, and parents: A study of life-sustaining treatment decisions in Italian pediatric critical care. *J Child Health Care*. 2011 Dec;15(4):334-49.
- 52) Biban P. Should critically ill children be managed in paediatric intensive care units only? *Intensive Care Med*. 2011 May;37(5):886.
- 53) Marchetti F, Maestro A, Rovere F, Zanon D, Arrighini A, Bertolani P, Biban P, et al. Oral ondansetron versus domperidone for symptomatic treatment of vomiting during acute gastroenteritis in children: multicentre randomized controlled trial. *BMC Pediatr*. 2011; 10: 11-15.
- 54) Biban P, Filipovic-Grcic B, Biarent D, Manzoni P. New cardiopulmonary resuscitation guidelines 2010: Managing the newly born in delivery room. *Early Hum Dev*. 2011 Mar;87 Suppl 1:S9-11.

- 55) Piastra M, Fognani G, Franceschi A; ICARO Italian Network For Intensive Care In Pediatric Oncology. Pediatric Intensive Care Unit admission criteria for haemato-oncological patients: a basis for clinical guidelines implementation. *Pediatr Rep.* 2011 Jun 16;3(2):e13.
- 56) van Kaam AH, De Jaegere AP, Borensztajn D, Rimensberger PC. Surfactant Replacement Therapy in Preterm Infants: A European Survey. *Neonatology.* 2011 Jan 11;100(1):71-77.
- 57) Biban P, Silvagni D. Rapid response systems for the prevention of in-hospital cardiac arrest in children. *Standardy Medyczne* 2011 (in press)
- 58) Wolfler A, Calderoni E, Ottonello G, Conti G, Baroncini S, Santuz P, Vitale P, Salvo I; SISPE Study Group. Daily practice of mechanical ventilation in Italian pediatric intensive care units: a prospective survey. *Pediatr Crit Care Med.* 2011 Mar;12(2):141-6.
- 59) Zaffanello M, Bassareo PP, Cataldi L, Antonucci R, Biban P, Fanos V. Long-term effects of neonatal drugs on the kidney. *J Matern Fetal Neonatal Med.* 2010 Oct;23 Suppl 3:87-9. Review.
- 60) Zaffanello M, Tardivo S, Cataldi L, Fanos V, Biban P, Malerba G. Genetic susceptibility to renal scar formation after urinary tract infection: a systematic review and meta-analysis of candidate gene polymorphisms. *Pediatr Nephrol.* 2011 Jul;26(7):1017-29.
- 61) Resti M, Moriondo M, Cortimiglia M, Indolfi G, Canessa C, Becciolini L, Bartolini E, Benedictis FM, de Martino M, Azzari C; Italian Group for the Study of Invasive Pneumococcal Disease. Immunity - acquired bacteremic pneumococcal pneumonia in children: diagnosis and serotyping by real - time polymerase chain reaction using blood samples. *Clin Infect Dis.* 2010 Nov 1;51(9):1042-9.
- 62) Santuz P, Bonetti P, Serra A, Biban P. Ultrasound-guided lung recruitment in a young infant with ARDS. *Paediatr Anaesth.* 2010; 20: 895-6
- 63) Biban P, Serra A, Polese G, Soffiati M, Santuz P. Neurally adjusted ventilatory assist: a new approach to mechanically ventilated infants. *J Matern Fetal Neonatal Med.* 2010 Oct;23 Suppl 3:38-40.
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Verona, January 7th, 2019

Paolo Biban, MD

A handwritten signature in black ink, appearing to read 'Paolo Biban', with a stylized flourish at the end.