



Curriculum Vitae

Personal information Mark Turner

Work experience

1. Employer: University of Liverpool
 - Start date: 052005
 - End date:
 - Position: Professor of Neonatology and Research Delivery
 - Activities:
 - Country: United Kingdom
2. Employer: Liverpool Women's Hospital
 - Start date: 052005
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Education and training

1. Subject:
 - Start date:
 - End date: 1991
 - Qualification: MBChB with Honours
 - Organisation:
 - Country: United Kingdom
2. Subject:
 - Start date:
 - End date: 1999
 - Qualification: PhD (Placental Physiology)
 - Organisation:
 - Country: United Kingdom
3. Subject: Royal College of Paediatrics and Child Health
 - Start date:
 - End date:
 - Qualification: FRCPCH
 - Organisation: Paediatrics and Neonatal Medicine
 - Country: United Kingdom

Additional information

Publications

Ward RM, Turner MA, Hansen_Pupp I, Higginson J, Vanya M, Flood E, . . . Sarda S.P (preprint). Development of the PREMature Infant Index (PREMII™), a clinician_reported outcome measure assessing functional status of extremely preterm infants. *The Journal of Maternal_Fetal & Neonatal Medicine*, 1_10. doi:10.1080/14767058.2020.1735338
Assessing patent ductus arteriosus in preterm infants from standard neonatal intensive care monitoring *Eur J Pediatr* 2022 Mar;181(3):1117_1124.doi: 10.1007/s00431_021_04311_9.

Kotidis C, Wertheim D, Weindling M, Rabe H, Turner MA

Preston J, Nafria B, Ohmer A, Gaillard S, Dicks P, West L, Turner MA (2022). Developing a More Tailored Approach to Patient and Public Involvement with Children and Families in Pediatric Clinical Research: Lessons Learned. *THERAPEUTIC INNOVATION & REGULATORY SCIENCE*. doi:10.1007/s43441_022_00382_4 Henry, C. J., Semova, G., Barnes, E., Cotter, I., Devers, T., Rafeae, A., . . . ESPR, E. S. P. R. (2022). Neonatal sepsis: a systematic review of core outcomes from randomised clinical trials. *PEDIATRIC RESEARCH*. doi:10.1038/s41390_021_01883_y

Hill LF, Clements MN, Turner MA, Donà D, Lutsar I, Jacqz_Aigrain E, . . . NeoVanc Consortium. (2022). Optimised versus standard dosing of vancomycin in infants with Gram_positive sepsis (NeoVanc): a multicentre, randomised, open_label, phase 2b, non_inferiority trial.. *The Lancet. Child & adolescent health*, 6(1), 49_59. doi:10.1016/s2352_4642(21)00305_9

Mantha OL, Flamein F, Turner MA, Fernandes RM, Hankard R Network of National Networks Study Group Early Impact of Severe Acute Respiratory Syndrome Coronavirus 2 on Pediatric Clinical Research: A Pan_European and Canadian Snapshot in *Time J Pediatr*. 2021 Dec;239:67_73.e3. doi: 10.1016/j.jpeds.2021.08.028.

Parker EPK, Bronowski C, Sindhu KNC, Babji S, Benny B, Carmona_Vicente N, . . . Iturriza_Gomara M. (2021). Impact of maternal antibodies and microbiota development on the immunogenicity of oral rotavirus vaccine in African, Indian, and European infants. *NATURE COMMUNICATIONS*, 12(1). doi:10.1038/s41467_021_27074_1 Degl J, Discenza D, Jackson Y, Sorrells K, & International Neonatal Consortium. (2021). The culture of research communication in neonatal intensive care units: key stakeholder perspectives.. *Journal of perinatology* 41(12), 2702_2703. doi:10.1038/s41372_021_01221_4 Hayes R, Hartnett J, Semova G, Murray C, Murphy K, Carroll L, . . . Res, E. S. P. (2021). Neonatal sepsis definitions from randomised clinical trials. *PEDIATRIC RESEARCH*. doi:10.1038/s41390_021_01749_3 Salamat_Miller N, Qu W, Chadwick JS, McPherson C, Salinas PA, Turner M, . . . Barton N. (2021). Development of Protein_Specific Analytical Methodologies to Evaluate Compatibility of

Recombinant Human (rh)IGF_1/rhIGFBP_3 with Intravenous Medications Co-Administered to Neonates. *Journal of Pharmaceutical Sciences*. doi:10.1016/j.xphs.2021.10.027 Mundle S, Bracken H, Khedekar V, Mulik J, Faragher B, Easterling T, . . . Weeks, AD (2021). The Induction with Foley OR Misoprostol (INFORM) Study dataset. A dataset of 602 women with hypertensive disease in pregnancy, in India, randomised to either Foley catheter or oral misoprostol for induction of labour. *BMC research notes*, 14(1), 355. doi:10.1186/s13104_021_05772_9 WHO essential medicines for children 2011_2019: age_appropriateness of enteral formulations. Orubu ESF, Duncan J, Tuleu C, Turner MA, Nunn A. *Arch Dis Child*. 2021 Sep 3;archdischild_2021_321831. doi: 10.1136/archdischild_2021_321831. Online ahead of print. Pharmacogenetics to Avoid Loss of Hearing (PALOH) trial: a protocol for a prospective observational implementation trial. McDermott JH, Mahood R, Stoddard D, Mahaveer A, Turner MA, Corry R, Garlick J, Miele G, Ainsworth S, Kemp L, Bruce I, Body R, Ulph F, Macleod R, Harvey K, Booth N, Roberts P, Wilson P, Newman WG. *BMJ Open*. 2021 Jun 16;11(6):e044457. doi: 10.1136/bmjopen_2020_044457. Study protocol: azithromycin therapy for chronic lung disease of prematurity (AZTEC) _ a randomised, placebo_controlled trial of azithromycin for the prevention of chronic lung disease of prematurity in preterm infants. Lowe J, Gillespie D, Hubbard M, Zhang L, Kirby N, Pickles T, Thomas Jones E, Turner MA, Klein N, Marchesi JR, Hood K, Berrington J, Kotecha S. *BMJ Open*. 2020 Oct 6;10(10):e041528. doi: 10.1136/bmjopen_2020_041528. Prospective identification and causality evaluation of suspected adverse drug reactions in neonates. Roberts EK, Hawcutt DB, Turner MA. *Br J Clin Pharmacol*. 2020 Jul 21. doi: 10.1111/bcp.14485. Online ahead of print. Method of Blood Pressure Measurement in Neonates and Infants: A Systematic Review and Analysis. Dionne JM, Bremner SA, Baygani SK, Batton B, Ergenekon E, Bhatt Mehta V, Dempsey E, Kluckow M, PESCO Koplowitz L, Apele_Freimane D, iwami H, Klein A, Turner M, Rabe H; International Neonatal Consortium. *J Pediatr*. 2020 Jun;221:23_31.e5. doi: 10.1016/j.jpeds.2020.02.072. Characterization of Circulating Clostridium difficile Strains, Host Response and Intestinal Microbiome in Hospitalized Children With Diarrhea. Lees EA, Carrol ED, Ellaby NAF, Roberts P, Corless CE, Lenzi L, Darby A, O'Brien SJ, Cunliffe NA, Turner MA, Miyajima F, Pirmohamed M. *Pediatr Infect Dis J*. 2020 Mar;39(3):221_228. doi: 10.1097/INF.0000000000002559. Evaluating preterm care across Europe using the eNewborn European Network database. Haumont D, Modi N, Saugstad OD, Antetere R, NguyenBa C, Turner M, Costeloe K, Aelvoet W. *Pediatr Res*. 2020 Sep;88(3):484_495. doi: 10.1038/s41390_020_0769_x. Survey by TEDDY European Network of Excellence for Paediatric Clinical Research demonstrates potential for Europe_wide trials. Ruggieri L, Bonifazi D, Landi A, Bonifazi F, Bartoloni F, Costello M, Felisi MG, Gasthuys E, Godo A, Martinon Torres F, Nadal D, Nuytincck L, Rocchi F, Turner M, Ceci A. *Acta Paediatr*. 2020 Mar;109(3):607_612 Inequalities and stillbirth in the UK: a meta_narrative review. Kingdon C, Roberts D, Turner MA, Storey C, Crossland N, Finlayson KW, Downe S. *BMJ Open*. 2019 Sep 12;9(9):e029672. doi: 10.1136/bmjopen_2019_029672. An optimised dosing regimen versus a standard dosing regimen of vancomycin for the treatment of late onset sepsis due to Gram_positive microorganisms in neonates and infants aged less than 90 days (NeoVanc): study protocol for a randomised controlled trial. Hill LF, Turner MA, Lutsar I, Heath PT, Hardy P, Linsell L, Jacqz_Aigrain E, Roilides E, Sharland M; NeoVanc Consortium. *Trials*. 2020 Apr 15;21(1):329. doi: 10.1186/s13063_020_4184_8. Ward RM, Turner MA, Hansen_Pupp I, Higginson J, Vanya M, Flood E, Schwartz EJ, Doll HA, Tocoian A, Mangili A, Barton N, Sarda SP Development of the PREmature Infant Index (PREMITM), a clinician_reported outcome measure assessing functional status of extremely preterm infants. *J Matern Fetal Neonatal Med*. 2020 Mar 5:1_10. doi: 10.1080/14767058.2020.1735338. Online ahead of print. Ng SM, Turner MA, Weindling M. Neurodevelopmental outcome at 42 months following thyroxine supplementation in infants below 28 weeks' gestation: a randomised controlled trial. *Thyroid*. 2020 Feb 19. doi: 10.1089/thy.2019.0293. [Epub ahead of print] Lees EA, Carrol ED, Ellaby NAF, Roberts P, Corless CE, Lenzi L, Darby A, O'Brien SJ, Cunliffe NA, Turner MA, Miyajima F, Pirmohamed M. Characterization of Circulating Clostridium difficile Strains, Host Response and Intestinal Microbiome in Hospitalized Children With Diarrhea. *Pediatr Infect Dis J*. 2020 Mar;39(3):221_228. Top research priorities for preterm birth: results of a prioritisation partnership between people affected by preterm birth and healthcare professionals. Oliver S, Uhm S, Duley L, Crowe S, David AL, James CP, Chivers Z, Gyte G, Gale C, Turner M, Chambers B, Dowling I, McNeill J, Alderice F, Shennan A, Deshpande S. *BMC Pregnancy Childbirth*. 2019 Dec 30;19(1):528. doi: 10.1186/s12884_019_2654_3. Mesek I, Nellis G, Lass J, Metsvaht T, Varendi H, Visk H, Turner MA, Nunn AJ, Duncan J, Lutsar I. Medicines prescription patterns in European neonatal units. *Int J Clin Pharm*. 2019 Oct 17. doi: 10.1007/s11096_019_00923_2. [Epub ahead of print] PubMed PMID: 31625122. Gale C, Modi N, Jawad S, Culshaw L, Dorling J, Bowler U, Forster A, King A, McLeish J, Linsell L, Turner MA, Robbarts H, Stanbury K, van Staa T, Juszcak E. The WHEAT pilot trial_Withholding Enteral feeds Around packed red cell Transfusion to prevent necrotising enterocolitis in preterm neonates: a multicentre, electronic patient record (EPR), randomised controlled point_of_care pilot trial. *BMJ Open*. 2019 Sep 20;9(9):e033543. doi: 10.1136/bmjopen_2019_033543. PubMed PMID: 31542771. Salaets T, Turner MA, Short M, Ward RM, Hokuto I, Ariagno RL, Klein A, Beauman S, Wade K, Thomson M, Roberts E, Harrison J, Quinn T, Baer G, Davis J, Illgeaert K; International Neonatal Consortium. Development of a neonatal adverse event severity scale through a Delphi consensus approach. *Arch Dis Child*. 2019 Dec;104(12):1167_1173. Kingdon C, Roberts D, Turner MA, Storey C, Crossland N, Finlayson KW, Downe S. Inequalities and stillbirth in the UK: a meta_narrative review. *BMJ Open*. 2019 Sep 12;9(9):e029672. doi: 10.1136/bmjopen_2019_029672. PubMed PMID: 31515427; PubMed Central PMCID: PMC6747680. Premakumar CM, Turner MA, Morgan C. Relationship between arginine intake in parenteral nutrition and preterm neonatal population plasma arginine concentrations: a systematic review. *Nutr Rev*. 2019 Sep 4. pii: nuz049. doi: 10.1093/nutrit/nuz049. [Epub ahead of print] PubMed PMID: 31504841. Very low_dose dexamethasone to facilitate extubation of preterm babies at risk of bronchopulmonary dysplasia: the MINIDEX feasibility RCT. Yates H, Chiochia V, Linsell L, Orsi N, Juszcak E, Johnson K, Chetcuty P, Illingworth C, Hardy P, Monk V, Newell S, Turner M. Southampton (UK): NIHR Journals Library; 2019 Aug Sharp A, Jackson R, Cornforth C, Harrold J, Turner MA, Kenny L, Baker PN, Johnstone ED, Khalil A, von Dadelszen P, Papageorghiou AT, Alfirevic Z. A prediction model for short_term neonatal outcomes in severe early_onset fetal growth restriction. *Eur J Obstet Gynecol Reprod Biol*. 2019 Oct;241:109_118. doi: 10.1016/j.ejogrb.2019.08.007. Epub 2019 Aug 16. PubMed PMID: 31499415. Khalil A, Sharp A, Cornforth C, Jackson R, Mousa H, Stock S, Harrold J, Turner MA, Kenny LC, Baker PN, Johnstone ED, von Dadelszen P, Magee L, Papageorghiou AT, Alfirevic Z. Effect of sildenafil on maternal hemodynamics in pregnancies complicated by severe early_onset fetal growth restriction: planned subgroup analysis from a multicenter randomized placebo_controlled double_blind trial. *Ultrasound Obstet Gynecol*. 2019 Aug 20. doi: 10.1002/uog.20851. [Epub ahead of print] PubMed PMID: 31432556. Dose_linearity of the pharmacokinetics of an intravenous [14 C]midazolam microdose in children. van Groen BD, Vaes WH, Park BK, Krekels EHJ, van Duijn E, Körgvee LT, Maruszak W, Gryniewicz G, Garner RC, Knibbe CAJ, Tibboel D, de Wildt SN, Turner MA. *Br J Clin Pharmacol*. 2019 Oct;85(10):2332_2340. doi: 10.1111/bcp.14047. Genetic background of high blood pressure is associated with reduced mortality in premature neonates. Göpel W, Müller M, Rabe H, Borgmann J, Rausch TK, Faust K, Kribs A, Dötsch J, Ellinghaus D, Härtel C, Roll C, Szabo M, Nürnberg P, Franke A, König IR, Turner MA, Herting E. *Arch Dis Child Fetal Neonatal Ed*. 2020 Mar;105(2):184_189. doi: 10.1136/archdischild_2019_317131. Ng SM, Ogundiya A, Didi M, Turner MA. Adrenal function of extremely premature infants in the first 5 days after birth. *J Pediatr Endocrinol Metab*. 2019 Apr 24;32(4):363_367. Ley D, Hallberg B, Hansen_Pupp I, Dani C, Ramenghi LA, Marlow N, Beardsall K, Bhatti F, Dunger D, Higginson JD, Mahaveer A, Mezu_Ndubuisi OJ, Reynolds P, Giannantonio C, van Weissenbruch M, Barton N, Tocoian A, Hamdani M, Jochim E, Mangili A, Chung JK, Turner MA, Smith LEH, Hellström A; study team. rhIGF_1/rhIGFBP_3 in Preterm Infants: A Phase 2 Randomized Controlled Trial. *J Pediatr*. 2019 Mar;206:56_65.e8 Ng SM, Pintus D, Turner MA Extreme premature small for gestational age (SGA) infants have appropriate catch_up growth at term equivalence compared with extreme premature appropriate for gestational age infants *J Clin Res Pediatr Endocrinol*. 2018 Aug 29. doi: 10.4274/jcrpe.0162. [Epub ahead of print] Lima EDC, Matos GC, Vieira JML, Gonçalves ICDCR, Cabral LM, Turner MA. Suspected adverse drug reactions reported for Brazilian children: cross_sectional study. *J Pediatr (Rio J)*. 2018 Jul 18. pii: S0021_7557(18)30289_4. doi: 10.1016/j.jpeds.2018.05.019. [Epub ahead of print] Leigh S, Granby P, Mundle S, Bracken H, Khedekar V, Mulik J, Faragher B, Easterling T, Turner MA, Alfirevic Z, Winikoff B, Weeks AD. Foley catheter vs. oral misoprostol to induce labour among hypertensive women in India: a cost_consequence analysis alongside a clinical trial. *BJOG*. 2018 May 21. doi: 10.1111/1471_0528.15285. [Epub ahead of print] PubMed PMID: 29782065. Placental Growth Factor informed management of suspected pre_eclampsia or fetal growth restriction: the MAPPLE cohort study. Sharp A, Chappell LC, Dekker G, Pelletier S, Garnier Y, Zeren O, Hillerer KM, Fischer T, Seed PT, Turner M, Shennan AH, Alfirevic Z. *Pregnancy Hypertens*. 2018 Mar 26. pii: S2210_7789(17)30489_0. L P Ainscough, JL Ford, CW Morecroft, M Peak, MA Turner, AJ Nunn, M Roberts Accuracy of intravenous and enteral

preparations involving small volumes for paediatric use: a review Eur J Hosp Pharm 2018;25:66-71. Lombardi D, Squires L, Sjostedt P, Eichler J, Turner MA, Thompson C. Industry and Patient Perspectives on Child Participation in Clinical Trials: The Pediatric Assent Initiative Survey Report. Ther Innov Regul Sci. 2018 Jan;52(1):29-37. Ng SM, Turner MA, Avula S. Ultrasound Measurements of Thyroid Gland Volume at 36 Weeks' Corrected Gestational Age in Extremely Preterm Infants Born before 28 Weeks' Gestation. Eur Thyroid J. 2018 Jan;7(1):21-26. doi: 10.1159/000481857. Epub 2017 Nov 27. PubMed PMID: 29594050; PubMed Central PMCID: PMC5836252. Maternal sildenafil for severe fetal growth restriction (STRIDER): a multicentre, randomised, placebo-controlled, double-blind trial. Sharp A, Cornforth C, Jackson R, Harrold J, Turner MA, Kenny LC, Baker PN, Johnstone ED, Khalil A, von Dadelszen P, Papageorgiou AT, Alfirevic Z; STRIDER group. Lancet Child Adolesc Health. 2018 Feb;2(2):93-102. Mundle S, Bracken H, Khedikar V, Mulik J, Faragher B, Easterling T, Leigh S, Granby P, Haycox A, Turner MA, Alfirevic Z, Winikoff B, Weeks AD. Foley catheterisation versus oral misoprostol for induction of labour in hypertensive women in India (INFORM): a multicentre, open-label, randomised controlled trial. Lancet. 2017 Aug 12;390(10095):669-680. Longworth H, McCallin K, Narayanan RP, Turner MA, Quenby S, Rycroft D, Charnley M, Abayomi J, Topping J, Weeks AD, Wilding JPH. Screening methods for obstructive sleep apnoea in severely obese pregnant women. Clin Obes. 2017 Aug;7(4):239-244. Ramos_Martin V, Neely MN, Padmore K, Peak M, Beresford MW, Turner MA, Paulus S, López-Herce J, Hope WW. Tools for the Individualized Therapy of Teicoplanin for Neonates and Children. Antimicrob Agents Chemother. 2017 Jul 31. pii: AAC.00707_17. doi: 10.1128/AAC.00707_17. Muniraman H, Gardner D, Skinner J, Paweletz A, Vayalakkad A, Chee YH, Clifford C, Sanka S, Venkatesh V, Curley A, Victor S, Turner MA, Clarke P. Biomarkers of hepatic injury and function in neonatal hypoxic ischemic encephalopathy and with therapeutic hypothermia. Eur J Pediatr. 2017 Jul 24. doi: 10.1007/s00431_017_2956_2. [Epub ahead of print] Sweet DG, Turner MA, Straňák Z, Plavka R, Clarke P, Stenson BJ, Singer D, Goelz R, Fabbri L, Varoli G, Piccinno A, Santoro D, Speer CP. A first-in-human clinical study of a new SP_B and SP_C enriched synthetic surfactant (CHF5633) in preterm babies with respiratory distress syndrome. Arch Dis Child Fetal Neonatal Ed. 2017 May 2. pii: archdischild_2017_312722. doi: 10.1136/archdischild_2017_312722. [Epub ahead of print] Sapuan S, Kortsalioudaki C, Anthony M, Chang J, Embleton ND, Geethanath RM, Gray J, Greenough A, Lal MK, Luck S, Pattnayak S, Reynolds P, Russell AB, Scorrer T, Turner M, Heath PT, Vergnano S. Neonatal listeriosis in the UK 2004-2014. J Infect. 2017 Mar;74(3):236-242 Richey RH, Hughes C, Craig JV, Shah UU, Ford JL, Barker CE, Peak M, Nunn AJ, Turner MA. A systematic review of the use of dosage form manipulation to obtain required doses to inform use of manipulation in paediatric practice. Int J Pharm. 2017 Feb 25;518(1-2):155-166. Bracken LE, Nunn AJ, Kirkham JJ, Peak M, Arnott J, Smyth RL, Pirmohamed M, Turner MA. Development of the Liverpool Adverse Drug Reaction Avoidability Assessment Tool. PLoS One. 2017 Jan 3;12(1):e0169393. doi: 10.1371/journal.pone.0169393. eCollection 2017. PubMed PMID: 28046035; PubMed Central PMCID: PMC5207751. Development of a Pediatric Adverse Events Terminology. Gipson DS, Kirkendall ES, Gumbs-Petty B, Quinn T, Steen A, Hicks A, McMahon A, Nicholas S, Zhao_Wong A, Taylor_Zapata P, Turner M, Herreshoff E, Jones C, Davis JM, Haber M, Hirschfeld S. Pediatrics. 2017 Jan;139(1). pii: e20160985. Hawcutt DB, Russell NJ, Maqsood H, Kouranloo K, Gomberg S, Waitt C, Sharp A, Riordan A, Turner MA. Spontaneous adverse drug reaction reports for neonates and infants in the UK 2001-2010: content and utility analysis. Br J Clin Pharmacol. 2016 Dec;82(6):1601-1612. Ramos_Martin V, Neely MN, McGowan P, Siner S, Padmore K, Peak M, Beresford MW, Turner MA, Paulus S, Hope WW. Population pharmacokinetics and pharmacodynamics of teicoplanin in neonates: making better use of C-reactive protein to deliver individualized therapy. J Antimicrob Chemother. 2016 Nov;71(11):3168-3178. Folgori L, Bielicki J, Ruiz B, Turner MA, Bradley JS, Benjamin DK Jr, Zaoutis TE, Lutsar I, Giaquinto C, Rossi P, Sharland M. Harmonisation in study design and outcomes in paediatric antibiotic clinical trials: a systematic review. Lancet Infect Dis. 2016 Sep;16(9):e178-89. Germovsek E, Kent A, Metsvaht T, Lutsar I, Klein N, Turner MA, Sharland M, Nielsen EI, Heath PT, Standing JF. Development and Evaluation of a Gentamicin Pharmacokinetic Model That Facilitates Opportunistic Gentamicin Therapeutic Drug Monitoring in Neonates and Infants. Antimicrob Agents Chemother. 2016 Jul 22;60(8):4869-77. Yakkundi S, Mulla H, Pandya H, Turner MA, McElnay J. Quantitative analysis of methyl and propyl parabens in neonatal DBS using LC-MS/MS. Bioanalysis. 2016 Jun;8(11):1173-82. doi: 10.4155/bio_2016_0029. Epub 2016 May 23. PubMed PMID: 27212021. Pandya HC, Mulla H, Hubbard M, Cordell RL, Monks PS, Yakkundi S, McElnay JC, Nunn AJ, Turner MA; ESNEE consortium. Essential medicines containing ethanol elevate blood acetaldehyde concentrations in neonates. Eur J Pediatr. 2016 Jun;175(6):841-7. doi: 10.1007/s00431_016_2714_x. Epub 2016 Mar 21. PubMed PMID: 26997167. Nellis G, Metsvaht T, Varendi H, Lass J, Duncan J, Nunn AJ, Turner MA, Lutsar I. Product Substitution as a Way Forward in Avoiding Potentially Harmful Excipients in Neonates. Paediatr Drugs. 2016 Jun;18(3):221-30. doi: 10.1007/s40272_016_0173_5. PubMed PMID: 27099961. Ramos_Martin V, Johnson A, Livermore J, McEntee L, Goodwin J, Whalley S, Docobo_Pérez F, Felton TW, Zhao W, Jacqz_Aigrain E, Sharland M, Turner MA, Hope WW. Pharmacodynamics of vancomycin for CoNS infection: experimental basis for optimal use of vancomycin in neonates. J Antimicrob Chemother. 2016 Apr;71(4):992-1002. doi: 10.1093/jac/dkv451. Epub 2016 Jan 10. PubMed PMID: 26755499; PubMed Central PMCID: PMC4790623. Narayanan RP, Weeks AD, Quenby S, Rycroft D, Hart A, Longworth H, Charnley M, Abayomi J, Topping J, Turner MA, Wilding JP. Fit for Birth - the effect of weight changes in obese pregnant women on maternal and neonatal outcomes: a pilot prospective cohort study. Clin Obes. 2016 Feb;6(1):79-88. doi: 10.1111/cob.12129. Epub 2016 Jan 6. PubMed PMID: 26781604. Bourgeois T, Delezoide AL, Zhao W, Guimiot F, Adle-Biassette H, Durand E, Ringot M, Gallego J, Storme T, Le Guellec C, Kassai B, Turner MA, Jacqz_Aigrain E, Matrot B. Safety study of Ciprofloxacin in newborn mice. Regul Toxicol Pharmacol. 2016 Feb;74:161-9. doi: 10.1016/j.yrtph.2015.11.002. Epub 2015 Nov 26. PubMed PMID: 26627140. Leroux S, Turner MA, Guellec CB, Hill H, van den Anker JN, Kearns GL, Jacqz_Aigrain E, Zhao W; TINN (Treat Infections in Neonates) and GRiP (Global Research in Paediatrics) Consortia. Pharmacokinetic Studies in Neonates: The Utility of an Opportunistic Sampling Design. Clin Pharmacokinet. 2015 Dec;54(12):1273-85. doi: 10.1007/s40262_015_0291_1. PubMed PMID: 26063050. Lally PJ, Pauliah S, Montaldo P, Chaban B, Oliveira V, Bainbridge A, Soe A, Pattnayak S, Clarke P, Satodia P, Harigopal S, Abernethy LJ, Turner MA, Huertas-Ceballos A, Shankaran S, Thayyil S. Magnetic Resonance Biomarkers in Neonatal Encephalopathy (MARBLE): a prospective multicountry study. BMJ Open. 2015 Sep 30;5(9):e008912. doi: 10.1136/bmjopen_2015_008912. PubMed PMID: 26423856; PubMed Central PMCID: PMC4593140. Nellis G, Metsvaht T, Varendi H, Toomper K, Lass J, Mesek I, Nunn AJ, Turner MA, Lutsar I, consortium E. Potentially harmful excipients in neonatal medicines: a pan-European observational study. Arch Dis Child. 2015. Mulla H, Yakkundi S, McElnay J, Lutsar I, Metsvaht T, Varendi H, Nellis G, Nunn A, Duncan J, Pandya H, Turner M. An observational study of blood concentrations and kinetics of methyl- and propyl-parabens in neonates. Pharmaceutical research 2015; 32: 1084-93. Garner RC, Park BK, French NS, Earnshaw C, Schipani A, Selby AM, Byrne L, Siner S, Crawley FP, Vaes WH, van Duijn E, deLigt RA, Varendi H, Lass J, Grynkiewicz G, Maruszak W, Turner MA. Observational infant exploratory [C]paracetamol pharmacokinetic microdose/therapeutic Dose study with accelerator mass spectrometry bioanalysis. British journal of clinical pharmacology 2015. Clarke P, Gardner D, Venkatesh V, Victor S, Muniraman H, Turner MA, Curley A. Investigation of neonatal encephalopathy: the oft 'lost placental 'black box'. Pediatric and developmental pathology : the official journal of the Society for Pediatric Pathology and the Paediatric Pathology Society 2015. Zhao W, Hill H, Le Guellec C, Neal T, Mahoney S, Paulus S, Castellán C, Kassai B, van den Anker JN, Kearns GL, Turner MA, Jacqz_Aigrain E, Consortium T. Population pharmacokinetics of ciprofloxacin in neonates and young infants less than three months of age. Antimicrobial agents and chemotherapy 2014; 58: 6572-80. Whitby T, McGowan P, Turner MA, Morgan C. Concentrated parenteral nutrition solutions and central venous catheter complications in preterm infants. Arch Dis Child Fetal Neonatal Ed 2014. Souza A, Jr., Santos D, Fonseca S, Medeiros M, Batista L, Turner M, Coelho H. Toxic excipients in medications for neonates in Brazil. European journal of pediatrics 2014; 173: 935-45. Smyth RL, Peak M, Turner MA, Nunn AJ, Williamson PR, Young B, Arnott J, Bellis JR, Bird KA, Bracken LE, Conroy EJ, Cresswell L, Duncan JC, Gallagher RM, Gargon E, Hesselgreaves H, Kirkham JJ, Mannix H, Smyth RMD, Thiesen S, Pirmohamed M. ADRIc: Adverse Drug Reactions In Children - a programme of research using mixed methods. Southampton UK: Queen's Printer and Controller of HMSO 2014. Ramos_Martin V, Paulus S, Siner S, Scott E, Padmore K, Newland P, Drew RJ, Felton TW, Docobo_Perez F, Pizer B, Pea F, Peak M, Turner MA, Beresford MW, Hope WW. Population pharmacokinetics of teicoplanin in children. Antimicrobial agents and chemotherapy 2014; 58: 6920-7. Pansieri C, Pandolfini C, Elie V, Turner MA, Kotecha S, Jacqz_Aigrain E, Bonati M. Urea-plasma, bronchopulmonary dysplasia, and azithromycin in European neonatal intensive care units: a survey. Scientific reports 2014; 4: 4076. Ng SM, Watson G, Turner MA, Newland P, Weindling AM. Do maternal factors influence neonatal thyroid status in the extreme premature infant? The journal of maternal_fetal & neonatal medicine : the official journal of the European Association of Perinatal

Medicine, the Federation of Asia and Oceania Perinatal Societies, the International Society of Perinatal Obstet 2014: 1_4. Ng SM, Turner MA, Gamble C, Didi M, Victor S, Atkinson J, Sluming V, Parkes LM, Tietze A, Abernethy LJ, Weindling AM. Effect of thyroxine on brain microstructure in extremely premature babies: magnetic resonance imaging findings in the TIPIT study. *Pediatric radiology* 2014; 44: 987_96. Nellis G, Lutsar I, Varendi H, Toompere K, Turner MA, Duncan J, Metsvaht T. Comparison of two alternative study designs in asses Morgan C, McGowan P, Herwitker S, Hart AE, Turner MA. Postnatal head growth in preterm infants: a randomized controlled parenteral nutrition study. *Pediatrics*. 2014 Jan;133(1):e120_8. doi: 10.1542/peds.2013.2207. Adverse drug reactions and off_label and unlicensed medicines in children: a nested case_control study of inpatients in a pediatric hospital. Bellis JR, Kirkham JJ, Thiesen S, Conroy EJ, Bracken LE, Mannix HL, Bird KA, Duncan JC, Peak M, Turner MA, Smyth RL, Nunn AJ, Pirmohamed M. *BMC Med*. 2013 Nov 7;11:238. doi: 10.1186/1741_7015_11_238. Incidence, characteristics and risk factors of adverse drug reactions in hospitalized children _ a prospective observational cohort study of 6,601 admissions. Thiesen S, Conroy EJ, Bellis JR, Bracken LE, Mannix HL, Bird KA, Duncan JC, Cresswell L, Kirkham JJ, Peak M, Williamson PR, Nunn AJ, Turner MA, Pirmohamed M, Smyth RL. *BMC Med*. 2013 Nov 7;11:237. doi: 10.1186/1741_7015_11_237. The Application of Mechanical Aerosol Delivery Systems in an in vitro Model of Mechanically Ventilated Neonates. Ehtezazi T, Turner MA. *Recent Pat Drug Deliv Formul*. 2013 Dec;7(3):174_83. Clinical trials in neonatal sepsis. Oeser C, Lutsar I, Metsvaht T, Turner MA, Heath PT, Sharland M. *J Antimicrob Chemother*. 2013 Jul 30. [Epub ahead of print] An explanatory randomised placebo controlled trial of levothyroxine supplementation for babies born <28 weeks' gestation: results of the TIPIT trial. Ng SM, Turner MA, Gamble C, Didi M, Victor S, Manning D, Settle P, Gupta R, Newland P, Weindling AM. *Trials*. 2013 Jul 11;14:211. doi: 10.1186/1745_6215_14_211. Manipulation of drugs to achieve the required dose is intrinsic to paediatric practice but is not supported by guidelines or evidence. Richey RH, Shah UU, Peak M, Craig JV, Ford JL, Barker CE, Nunn AJ, Turner MA. *BMC Pediatr*. 2013 May 21;13:81. doi: 10.1186/1471_2431_13_81. Arnott J, Hesselgreaves H, Nunn AJ, Peak M, Pirmohamed M, Smyth RL, Turner MA, Young B. Enhancing Communication about Paediatric Medicines: Lessons from a Qualitative Study of Parents' Experiences of Their Child's Suspected Adverse Drug Reaction. *PLoS One*. 2012;7(10):e46022. Recent Reviews From Paediatric Formulations Development to Access: Advances Made and Remaining Challenges. Litalien C, Bérubé S, Tuleu C, Gilpin A, Landry ÉK, Valentin M, . . . Turner MA (preprint). *British Journal of Clinical Pharmacology*. doi:10.1111/bcp.15293 Current knowledge, challenges and innovations in developmental pharmacology: A combined connect4children Expert Group and European Society for Developmental, Perinatal and Paediatric Pharmacology White Paper. Smits A, Annaert P, Cavallaro G, De Cock PAJG, de Wildt SN, Kindblom JM, Lagler FB, Moreno C, Pokorna P, Schreuder MF, Standing JF, Turner MA, Vitiello B, Zhao W, Weingberg AM, Willmann R, van den Anker J, Allegaert K. *Br J Clin Pharmacol*. 2021 Jun 27. doi: 10.1111/bcp.14958. Online ahead of print. Recommendations by the European Network of Paediatric Research at the European Medicines Agency (Enpr_EMA) Working Group on preparedness of clinical trials about paediatric medicines process. Siapkara A, Fracasso C, Egger GF, Rizzari C, Trasorras CS, Athanasiou D, Turner MA; Working Group Membership. *Arch Dis Child*. 2021 Apr 15;archdischild_2020_321433. doi: 10.1136/archdischild_2020_321433. The connect4children (c4c) Consortium: Potential for Improving European Clinical Research into Medicines for Children*. Turner MA, Hildebrand H, Fernandes RM, de Wildt SN, Mahler F, Hankard R, Leary R, Bonifazi F, Nobels P, Cheng K, Attar S, Rossi P, Rocchi F, Claverol J, Nafria B, Giaquinto C. *Pharmaceut Med*. 2021 Mar;35(2):71_79. The urgent need for research coordination to advance knowledge on COVID_19 in children. Bourgeois FT, Avillach P, Turner MA. *Pediatr Res*. 2020 Nov 11;1_3. doi: 10.1038/s41390_020_01259_8. Online ahead of print. European research networks to facilitate drug research in children*. Turner MA, Cheng K, de Wildt S, Hildebrand H, Attar S, Rossi P, Bonifazi D, Ceci A, Claverol J, Nafria B, Giaquinto C. *Br J Clin Pharmacol*. 2020 Sep 6. doi: 10.1111/bcp.14545. Online ahead of print. Neonatal sepsis: need for consensus definition, collaboration and core outcomes. Molloy EJ, Wynn JL, Bliss J, Koenig JM, Keij FM, McGovern M, Kuester H, Turner MA, Giannoni E, Mazela J, Degtyareva M, Strunk T, Simons SHP, Janota J, Plotz FB, van den Hoogen A, de Boode W, Schlappbach LJ, Reiss IKM; on behalf of the Infection, Inflammation, Immunology and Immunisation (I4) section of the ESPR. *Pediatr Res*. 2020 Jul;88(1):2_4. doi: 10.1038/s41390_020_0850_5. Epub 2020 Mar 19. Challenges in developing a consensus definition of neonatal sepsis. McGovern M, Giannoni E, Kuester H, Turner MA, van den Hoogen A, Bliss JM, Koenig JM, Keij FM, Mazela J, Finnegan R, Degtyareva M, Simons SHP, de Boode WP, Strunk T, Reiss IKM, Wynn JL, Molloy EJ; Infection, Inflammation, Immunology and Immunisation (I4) section of the ESPR. *Pediatr Res*. 2020 Jul;88(1):14_26. doi: 10.1038/s41390_020_0785_x Big Data in the Assessment of Pediatric Medication Safety. McMahon AW, Cooper WO, Brown JS, Carleton B, Doshi_Velez F, Kohane I, Goldman JL, Hoffman MA, Kamaleswarar R, Sakiyama M, Sekine S, Sturkenboom MCJM, Turner MA, Califf RM. *Pediatrics*. 2020 Feb;145(2). pii: e20190562. doi: 10.1542/peds.2019_0562. Off_label use of medicines in neonates, infants, children, and adolescents: a joint policy statement by the European Academy of Paediatrics and the European society for Developmental Perinatal and Pediatric Pharmacology. Schrier L, Hadjipanayis A, Stiris T, Ross_Russell RI, Valiulis A, Turner MA, Zhao W, De Cock P, de Wildt SN, Allegaert K, van den Anker J *Eur J Pediatr*. 2020 Jan 3. doi: 10.1007/s00431_019_03556_9. [Epub ahead of print] Standardising neonatal and paediatric antibiotic clinical trial design and conduct: the PENTA_ID network view. Folgori L, Lutsar I, Standing JF, Walker AS, Rolidis E, Zaoitis TE, Jafri H, Giaquinto C, Turner MA, Sharland M *BMJ Open*. 2019 Dec 31;9(12):e032592. Diagnosing and Preventing Hearing Loss in the Genomic Age. McDermott JH, Molina_Ramirez LP, Bruce IA, Mahaveer A, Turner M, Miele G, Body R, Mahood R, Ulph F, MacLeod R, Harvey K, Booth N, Demain LAM, Wilson P, Black GC, Morton CC, Newman WG. *Trends Hear*. 2019 Jan_Dec;23:2331216519878983. doi: 10.1177/2331216519878983. Assessment of long_term neurodevelopmental outcome following trials of medicinal products in newborn infants. Marlow N, Doyle LW, Anderson P, Johnson S, Bhatt_Mehta V, Natalucci G, Darlow BA, Davis JM, Turner MA; International Neonatal Consortium (INC). *Pediatr Res*. 2019 Aug 9. doi: 10.1038/s41390_019_0526_1. Necrotizing Enterocolitis: Using Regulatory Science and Drug Development to Improve Outcomes. Caplan MS, Underwood MA, Modi N, Patel R, Gordon PV, Sylvester KG, McElroy S, Manzoni P, Gephart S, Chwals WJ, Turner MA, Davis JM; Necrotizing Enterocolitis Workgroup of the International Neonatal Consortium. *J Pediatr*. 2019 Jun 21. pii: S0022_3476(19)30598_0. doi: 10.1016/j.jpeds.2019.05.032. Challenges in Designing Clinical Trials to Test New Drugs in the Pregnant Woman and Fetus. Turner MA, Kenny L, Alfrevic Z. *Clin Perinatol*. 2019 Jun;46(2):399_416. Sharing Data to Accelerate Medicine Development and Improve Neonatal Care: Data Standards and Harmonized Definitions. Costeloe K, Turner MA, Padula MA, Shah PS, Modi N, Soll R, Haumont D, Kusuda S, Göpel W, Chang YS, Smith PB, Lui K, Davis JM, Hudson LD; International Neonatal Consortium *J Pediatr*. 2018Dec;203:437_441.e1. Accuracy of intravenous and enteral preparations involving small volumes for paediatric use: a review. Ainscough LP, Ford JL, Morecroft CW, Peak M, Turner MA, Nunn AJ, Roberts M *Eur J Hosp Pharm*. 2018 Mar;25(2):66_71. Frameworks for evaluating medicines in children. * Turner MA, Hirschfeld S. *Clinical Therapeutics*, Special issue on pediatric medicines The roles of clinical research networks in paediatric drug development. * Turner MA, Attar S, de Wildt S, Vassal G, Mangiarini L, Giaquinto C. *Clinical Therapeutics*, Special issue on pediatric medicines * Enrollment of Neonates in More Than One Clinical Trial. Davis JM, Baer GR, Portman R, Nelson R, Storari L, Aranda JV, Bax R, Zajicek A, Klein A, Turner M, Baygani S, Thomson M, Allegaert K; International Neonatal Consortium. *Clin Ther*. 2017 Oct;39(10):1959_1969. doi: 10.1016/j.clinthera.2017.09.006 Regulatory Science in Neonates: A Framework That Supports Evidence_Based Drug Therapy. * Turner MA, Portman RJ, Davis JM. *JAMA Pediatr*. 2017 Aug 1;171(8):721_722. doi: 10.1001/jamapediatrics.2017.1360. PubMed PMID: 28604936. Challenges and strategies to facilitate formulation development of pediatric drug products: Safety qualification of excipients. * Buckley LA, Salunke S, Thompson K, Baer G, Fegley D, Turner MA. *Int J Pharm*. 2017 Jul 17. pii: S0378_5173(17)30641_5. doi: 10.1016/j.ijpharm.2017.07.042. [Epub ahead of print] PubMed PMID: 28729174. Optimising the use of medicines to reduce acute kidney injury in children and babies. Oni L, Hawcutt DB, Turner MA, Beresford MW, McWilliam S, Barton C, Park BK, Murray P, Wilm B, Cople I, Floyd R, Peak M, Sharma A, Antoine DJ. *Pharmacol Ther*. 2017 Jun;174:55_62. doi: 10.1016/j.pharmthera.2017.02.018. Epub 2017 Feb 12. Review. PubMed PMID: 28202365. * The future of pediatric research: European perspective. Molloy EJ, Modi N, Greenough A, Lagercrantz H, Bearer CF, Turner M. *Pediatr Res*. 2017 Jan;81(1_2):138_139 Safety, dosing, and pharmaceutical quality for studies that evaluate medicinal products (including biological products) in neonates. Ward RM, Benjamin D, Barrett JS, Allegaert K, Portman R, Davis JM, Turner MA. *Pediatr Res*. 2017 May;81(5):692_711. doi: 10.1038/pr.2016.221. Propofol as an Adjunct for Neonatal Intubation: The Contribution of Clinical Pharmacology. * Turner MA, Davis JM. *J Pediatr*. 2016 Dec;179:9_10. doi: 10.1016/j.jpeds.2016.09.033 The International Neonatal Consortium: collaborating to advance regulatory science for neonates. * Turner MA, Davis JM, McCune S, Bax R, Portman RJ, Hudson LD. *Pediatr Res*. 2016 Oct;80(4):462_4. doi: 10.1038/pr.2016.119. Training in research competencies: a strategy for neonatology. Menon G, Turner MA, Ogilvy_Stuart AL, Greenough A, Arch

Dis Child Educ Pract Ed. 2016 Jul 22. pii: edpract_2015_309926. doi: 10.1136/archdischild_2015_309926. [Epub ahead of print] The International Neonatal Consortium: collaborating to advance regulatory science for neonates. * Turner MA, Davis JM, McCune S, Bax R, Portman RJ, Hudson LD. *Pediatr Res*. 2016 Jul 6. doi: 10.1038/pr.2016.119. [Epub ahead of print] Why are Excipients Important to Neonates? * Turner MA, Shah U. *Curr Pharm Des*. 2015;21(39):5680_7. PubMed PMID: 26323411. Davis JM, Turner MA. Global Collaboration to Develop New and Existing Drugs for Neonates. *JAMA Pediatr*. 2015 Oct;169(10):887_8. doi: 10.1001/jamapediatrics.2015.1640. PubMed PMID: 26258395. Turner MA, Mooij MG, Vaes WH, Windhorst AD, Hendrikse NH, Knibbe CA, K rgvee LT, Maruszak W, Gryniewicz G, Garner RC, Tibboel D, Park BK, de Wildt SN. Pediatric microdose and microtracer studies using 14C in Europe. *Clin Pharmacol Ther*. 2015 Sep;98(3):234_7. doi: 10.1002/cpt.163. Epub 2015 Jul 17. PubMed PMID: 26095095. Turner MA, Catapano M, Hirschfeld S, Giaquinto C; GRiP (Global Research in Paediatrics). Paediatric drug development: The impact of evolving regulations. *Adv Drug Deliv Rev*. 2014 Feb 18. pii: S0169_409X(14)00025_8. doi: 10.1016/j.addr.2014.02.003. [Epub ahead of print] Review. PubMed PMID: 24556465. Risk assessment of neonatal excipient exposure: Lessons from food safety and other areas. Turner MA, Duncan JC, Shah U, Metsvaht T, Varendi H, Nellis G, Lutsar I, Yakkundi S, McElnay JC, Pandya H, Vaconsin P, Storme T, Rieutord A, Nunn AJ. *Adv Drug Deliv Rev*. 2013 Nov 13. pii: S0169_409X(13)00262_7. doi: 10.1016/j.addr.2013.11.003. [Epub ahead of print]

Projects

As Co_Coordinator of the IHI_funded public private partnership connect4children, c4c, I oversee the development of a pan_European paediatric clinical research network that provides strategic feasibility advice, education, support for trials, and foundational paediatric work on data standards. As Europe Co_Director of the International Neonatal Consortium of the Critical Path Institute I oversee several Working Groups that address pre_competitive aspects of neonatal drug development and regulatory science As Chair of EnprEMA (2013 _ 2019) with EMA co_Chair I oversaw several Working Groups that addressed pre_competitive aspects of paediatric drug development I have contributed to Paediatric Investigation Plans submitted to the European Medicines Agency by 4 different small_to_medium_sized enterprises (SMEs) for the following medicines in neonates: • Ciprofloxacin • Fluconazole • Azithromycin • Dobutamine • Vancomycin As Director of R&D for the Trust • Setting up an industry_friendly environment • Providing advice about regulatory issues for medicines and devices research in the NHS to a range of companies • Developing systems for innovation in the Trust As Chair of Neonatal CSG for NIHR MCRN (until 2020) • Advice to global Pharma about the design and feasibility of studies and Paediatric Investigation Plans

Memberships

Honorary Fellow of the Faculty of Pharmaceutical Medicine President of the European Society for Developmental, Perinatal, and Paediatric Pharmacology (2019 _ 2022) Director of Research and Development, Liverpool Women's NHS Foundation Trust (2007 – present) Chair, European Network for Paediatric Research at the European Medicines Agency (2013 – 2019) Chair, MCRN / AMR Neonatal Clinical Studies Group (2009 – 2020) Chair, NICE Guideline Development Group for Neonatal Antibiotics for the prevention and treatment of early onset neonatal infection (2010 – 2012)

Other Relevant Information