

# RUH Staff Publications Database

## Publications during 2024

### 1. Longitudinal dynamics and clinically available predictors of poor response to COVID-19 vaccination in multiple myeloma

**Item Type:** Journal Article

**Authors:** Agarwal, Gaurav;Moore, Sally;Sadler, Ross;Varghese, Sherin;Turner, Alison;Chen, Lucia Y.;Larham, Jemma;Gray, Nathanael;Carty, Oluremi;Barrett, Joe;Koshiaris, Constantinos;Kothari, Jaimal;Bowcock, Stella;Oppermann, Udo;Gamble, Vicky;Cook, Gordon;Kyriakou, Chara;Drayson, Mark;Basu, Supratik;McDonald, Sarah, et al

**Publication Date:** 2024

**Journal:** Haematologica

**Abstract:** Not available.

**DOI:** 10.3324/haematol.2023.284286

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38268439&custid=ns010877>

### 2. Effectiveness of interventions on occupational stress, health and well-being, performance, and job satisfaction for midwives: A systematic mixed methods review

**Item Type:** Journal Article

**Authors:** Anchors, Zoe G.;Arnold, Rachel;D Burnard, Sara;Bressington, Catherine A.;Moreton, Annette E. and Moore, Lee J.

**Publication Date:** 2024

**Journal:** Women and Birth : Journal of the Australian College of Midwives , pp. 101589

**Abstract:** Background: Work-related stress is high in midwifery with negative implications for midwives' health and performance. This systematic review therefore examined which stress management interventions (SMIs) are most effective at reducing occupational stress and improving midwives' health and well-being, performance, and job satisfaction.; Methods: A systematic review included studies if they were: investigating midwives or student midwives; examining an individual- or organisation-level intervention; reporting the intervention effects on at least one outcome (e.g., job performance); peer-reviewed; and published in English. Methodological quality was assessed using the Mixed Methods Appraisal Tool. A narrative synthesis was conducted and data were presented by SMI level (i.e., individual vs. organisation) and modality type (e.g., mindfulness, care model). Sum codes were used to compare the effects of individual- and organisation-level SMIs on outcomes.; Findings: From 2605 studies identified, 30 were eligible (18 individual- and 12 organisation-level SMIs). Eight studies were deemed low quality. While individual- and organisation-level SMIs were equally effective in improving job satisfaction and performance, there was a trend for organisation-level SMIs more effectively reducing work stress and improving health and well-being. Specific individual- (i.e., mindfulness, simulation training) and organisation-level (i.e., reflective groups, midwifery care models) SMIs were most beneficial.; Conclusion: It is recommended that health practitioners and policy makers

implement interventions that target both individual- and organisation-levels to optimally support midwives' work stress, health, well-being, and performance. Notwithstanding these findings and implications, some studies had poor methodological quality; thus, future research should better follow intervention reporting guidelines.; Competing Interests: Conflict of interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. (Copyright © 2024 The Authors. Published by Elsevier Ltd.. All rights reserved.)

**DOI:** 10.1016/j.wombi.2024.02.005

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38580584&custid=ns010877>

### 3. Cardiac arrest in vascular surgical patients receiving anaesthetic care: an analysis from the 7th National Audit Project (NAP7) of the Royal College of Anaesthetists

**Item Type:** Journal Article

**Authors:** Armstrong, R. A.;Cook, T. M.;Kunst, G.;Kane, A. D.;Kursumovic, E.;Lucas, D. N.;Nickols, G.;Soar, J. and Mouton, R.

**Publication Date:** 2024

**Journal:** Anaesthesia 79(5), pp. 506-513

**Abstract:** The 7th National Audit Project of the Royal College of Anaesthetists studied peri-operative cardiac arrest in the UK. We report the results of the vascular surgery cohort from the 12-month case registry, from 16 June 2021 to 15 June 2022. Anaesthesia for vascular surgery accounted for 2% of UK anaesthetic caseload and included 69 (8%) reported peri-operative cardiac arrests, giving an estimated incidence of 1 in 670 vascular anaesthetics (95%CI 1 in 520-830). The high-risk nature of the vascular population is reflected by the proportion of patients who were ASA physical status 4 (30, 43%) or 5 (19, 28%); the age of patients (80% aged > 65 y); and that most cardiac arrests (57, 83%) occurred during non-elective surgery. The most common vascular surgical procedures among patients who had a cardiac arrest were: aortic surgery (38, 55%); lower-limb revascularisation (13, 19%); and lower-limb amputation (8, 12%). Among patients having vascular surgery and who had a cardiac arrest, 28 (41%) presented with a ruptured abdominal aortic aneurysm. There were 48 (70%) patients who had died at the time of reporting to NAP7 and 11 (16%) were still in hospital, signifying poorer outcomes compared with the non-vascular surgical cohort. The most common cause of cardiac arrest was major haemorrhage (39, 57%), but multiple other causes reflected the critical illness of the patients and the complexity of surgery. This is the first analysis of the incidence, management and outcomes of peri-operative cardiac arrest during vascular anaesthesia in the UK. (© 2024 The Authors. Anaesthesia published by John Wiley & Sons Ltd on behalf of Association of Anaesthetists.)

**DOI:** 10.1111/anae.16208

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38173364&custid=ns010877>

### 4. Right ventricular assessment of the adolescent footballer's heart

**Item Type:** Journal Article

**Authors:** Augustine, D. X.;Willis, J.;Sivalokanathan, S.;Wild, C.;Sharma, A.;Zaidi,

A.;Pearce, K.;Stuart, G.;Papadakis, M.;Sharma, S. and Malhotra, A.

**Publication Date:** 2024

**Journal:** Echo Research and Practice 11(1), pp. 7

**Abstract:** Introduction: Athletic training can result in electrical and structural changes of the right ventricle that may mimic phenotypical features of arrhythmogenic right ventricular cardiomyopathy (ARVC), such as T-wave inversion and right heart dilatation. An erroneous interpretation may have consequences ranging from false reassurance in an athlete vulnerable to cardiac arrhythmias, to unnecessary sports restriction in a healthy individual. The primary aim of this study was to define normal RV dimension reference ranges for academy adolescent footballers of different ethnicities. Secondary aims include analysis of potential overlap between this adolescent group with ARVC criteria and comparison with normal adult ranges.; Results: Electrocardiographic (ECG) and echocardiographic data of 1087 academy male footballers aged between 13 and 18 years old (mean age  $16.0 \pm 0.5$  years), attending mandatory cardiac screening were analysed. Ethnicity was categorised as white (n = 826), black (African/Caribbean; n = 166) and mixed-race (one parent white and one parent black; n = 95). Arrhythmogenic right ventricular cardiomyopathy major criteria for T-wave inversion was seen in 3.3% of the cohort. This was more prevalent in black footballers (12%) when compared to mixed race footballers (6.3%) or white footballers (1%),  $P < 0.05$ . Up to 59% of the cohort exceeded adult reference ranges for some of the right ventricular parameters, although values were similar to those seen in adult footballers. There were no differences in right ventricular dimensions between ethnicities. In particular, the right ventricular outflow tract diameter would fulfil major criteria for ARVC dimension in 12% of footballers. Overall, 0.2% of the cohort would fulfil diagnosis for 'definite' arrhythmogenic right ventricular cardiomyopathy and 2.2% would fulfil diagnosis for 'borderline' arrhythmogenic right ventricular cardiomyopathy for RV dimensions and ECG changes. This was seen more frequently in black footballers (9.9%) than mixed race footballers (3.9%) or white footballer (0.6%),  $P < 0.05$ . Among athletes meeting definite or borderline arrhythmogenic right ventricular cardiomyopathy criteria, no cardiomyopathy was identified after comprehensive clinical assessment, including with cardiac magnetic resonance imaging, exercise testing, ambulatory electrocardiograms and familial evaluation.; Conclusion: Right heart sizes in excess of accepted adult ranges occurred in as many as one in two adolescent footballers. Structural adaptations in conjunction with anterior T-wave inversion may raise concern for ARVC, highlighting the need for evaluation in expert settings. (© 2024. The Author(s).)

**DOI:** 10.1186/s44156-023-00039-4

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38424646&custid=ns010877>

## 5. Addressing Comorbidities in People with Parkinson's Disease: Considerations From An Expert Panel

**Item Type:** Journal Article

**Authors:** Carroll, Camille;Clarke, Carl E.;Grosset, Donald;Rather, Arshad;Mohamed, Biju;Parry, Miriam;Reddy, Prashanth;Fackrell, Robin and Chaudhuri, Kallol Ray

**Publication Date:** 2024

**Journal:** Journal of Parkinson's Disease 14(1), pp. 53-63

**Abstract:** In the UK, guidance exists to aid clinicians and patients deciding when treatment for Parkinson's disease (PD) should be initiated and which therapies to consider. National

Institute for Health and Care Excellence (NICE) guidance recommends that before starting PD treatment clinicians should discuss the following: the patient's individual clinical circumstances; lifestyle; preferences; needs and goals; as well as the potential benefits and harms of the different drug classes. Individualization of medicines and management in PD significantly improves patients' outcomes and quality of life. This article aims to provide simple and practical guidance to help clinicians address common, but often overlooked, co-morbidities. A multi-disciplinary group of PD experts discussed areas where clinical care can be improved by addressing commonly found co-morbidities in people with Parkinson's (PwP) based on clinical experience and existing literature, in a roundtable meeting organized and funded by Bial Pharma UK Ltd. The experts identified four core areas (bone health, cardiovascular risk, anticholinergic burden, and sleep quality) that, if further standardized may improve treatment outcomes for PwP patients. Focusing on anticholinergic burden, cardiac risk, sleep, and bone health could offer a significant contribution to personalizing regimes for PwP and improving overall patient outcomes. Within this opinion-based paper, the experts offer a list of guiding factors to help practitioners in the management of PwP.

**DOI:** 10.3233/JPD-230168

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38217610&custid=ns010877>

## 6. Patients' perspectives on systemic sclerosis-related Raynaud's phenomenon in the feet: A qualitative study from the OMERACT Foot and Ankle Working Group

**Item Type:** Journal Article

**Authors:** Chapman, Lara S.;Alcacer-Pitarch, Begonya;Pauling, John D.;Flurey, Caroline A.;Redmond, Anthony C.;Richards, Pamela;Herrick, Ariane L.;Merkel, Peter A.;Proudman, Susanna;Menz, Hylton B.;Helliwell, Philip S.;Hannan, Marian T.;Domsic, Robyn T.;Saketkoo, Lesley A.;Shea, Beverley and Siddle, Heidi J.

**Publication Date:** 2024

**Journal:** Seminars in Arthritis and Rheumatism 65, pp. 152372

**Abstract:** Objective: To explore, from patients' perspectives, the symptoms and impact of Raynaud's phenomenon (RP) on the feet of patients with systemic sclerosis (SSc-RP), and to identify which foot-related domains are important to patients.; Methods: Forty participants (34 women) with SSc-RP took part in one of six focus groups held in the United Kingdom or United States. Participants were purposively sampled to ensure diversity in disease type, duration, and ethnicity. The topic guide included questions on RP impact, self-management, and treatment expectations. Qualitative content analysis was employed to identify key concepts in the data relating to foot-specific symptoms and their impact. Themes were organized by corresponding domains of potential importance.; Results: Twenty-eight participants (70 %) reported experiencing RP in their feet. Five themes were identified corresponding to domains of potential importance: temperature changes, pain, cramping and stiffness, numbness, and color changes. These issues negatively affected participants' lives, impairing walking, driving, and socializing, and causing issues with footwear and hosiery.; Conclusions: This large qualitative study exploring the experiences of patients with SSc-RP in the feet identified several key domains of high importance to patients. SSc-RP is common in the feet, presents in several patterns, and impacts multiple aspects of patients' lives. These findings indicate where future foot-specific interventions for RP could be targeted. Findings from this study improve understanding of what domains are important to patients with SSc-RP affecting the feet and will contribute to the development of a core outcome set for foot and ankle disorders in rheumatic and musculoskeletal diseases.; Competing Interests: Declaration of competing interest The authors have no competing

interests to declare. (Copyright © 2024 The Authors. Published by Elsevier Inc. All rights reserved.)

**DOI:** 10.1016/j.semarthrit.2024.152372

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38325052&custid=ns010877>

## 7. A single bout of vigorous intensity exercise enhances the efficacy of rituximab against human chronic lymphocytic leukaemia B-cells ex vivo

**Item Type:** Journal Article

**Authors:** Collier-Bain, Harrison;Emery, Annabelle;Causer, Adam J.;Brown, Frankie F.;Oliver, Rebecca;Dutton, David;Crowe, Josephine;Augustine, Daniel;Graby, John;Leach, Shoji;Eddy, Rachel;Rothschild-Rodriguez, Daniela;Gray, Juliet C.;Cragg, Mark S.;Cleary, Kirstie L.;Moore, Sally;Murray, James;Turner, James E. and Campbell, John P.

**Publication Date:** 2024

**Journal:** Brain, Behavior, and Immunity 118, pp. 468-479

**Abstract:** Chronic lymphocytic leukaemia (CLL) is characterised by the clonal proliferation and accumulation of mature B-cells and is often treated with rituximab, an anti-CD20 monoclonal antibody immunotherapy. Rituximab often fails to induce stringent disease eradication, due in part to failure of antibody-dependent cellular cytotoxicity (ADCC) which relies on natural killer (NK)-cells binding to rituximab-bound CD20 on B-cells. CLL cells are diffusely spread across lymphoid and other bodily tissues, and ADCC resistance in survival niches may be due to several factors including low NK-cell frequency and a suppressive stromal environment that promotes CLL cell survival. It is well established that exercise bouts induce a transient relocation of NK-cells and B-cells into peripheral blood, which could be harnessed to enhance the efficacy of rituximab in CLL by relocating both target and effector cells together with rituximab in blood. In this pilot study, n = 20 patients with treatment-naïve CLL completed a bout of cycling 15 % above anaerobic threshold for ~ 30-minutes, with blood samples collected pre-, immediately post-, and 1-hour post-exercise. Flow cytometry revealed that exercise evoked a 254 % increase in effector (CD3 - CD56 + CD16 + ) NK-cells in blood, and a 67 % increase in CD5 + CD19 + CD20 + CLL cells in blood (all p < 0.005). NK-cells were isolated from blood samples pre-, and immediately post-exercise and incubated with primary isolated CLL cells with or without the presence of rituximab to determine specific lysis using a calcein-release assay. Rituximab-mediated cell lysis increased by 129 % following exercise (p < 0.001). Direct NK-cell lysis of CLL cells - independent of rituximab - was unchanged following exercise (p = 0.25). We conclude that exercise improved the efficacy of rituximab-mediated ADCC against autologous CLL cells ex vivo and propose that exercise should be explored as a means of enhancing clinical responses in patients receiving anti-CD20 immunotherapy.; **Competing Interests:** Declaration of competing interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. (Copyright © 2024 The Authors. Published by Elsevier Inc. All rights reserved.)

**DOI:** 10.1016/j.bbi.2024.03.023

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38503395&custid=ns010877>

## 8. Peri-operative cardiac arrest due to suspected anaphylaxis as reported to the 7th National Audit Project of the Royal College of Anaesthetists

**Item Type:** Journal Article

**Authors:** Cook, T. M.;Kane, A. D.;Armstrong, R. A.;Kursumovic, E. and Soar, J.

**Publication Date:** 2024

**Journal:** Anaesthesia 79(5), pp. 498-505

**Abstract:** The 7th National Audit Project (NAP7) of the Royal College of Anaesthetists studied peri-operative cardiac arrest. Among 59 cases reported as possible anaphylaxis, 33 (56%) were judged to be so by the review panel with high or moderate confidence. Causes in excluded cases included: isolated severe hypotension; bronchospasm; and oesophageal intubation. Severe bronchospasm leading to cardiac arrest was uncommon, but notably in one case led to a reported flat capnograph. In the baseline survey, anaesthetists estimated anaphylaxis as the cause of 10% of cases of peri-operative cardiac arrests and to be among the four most common causes. In a year-long registry of peri-operative cardiac arrest, suspected anaphylaxis was the seventh most common cause accounting for 4% of reports. Initial management was most often with low-dose intravenous adrenaline, and this was without complications. Both the NAP7 baseline survey and case registry provided evidence of reluctance to starting chest compressions when systolic blood pressure had fallen to below 50 mmHg and occasionally even when it was unrecordable. All 33 patients were resuscitated successfully but one patient later died. The one death occurred in a relatively young patient in whom chest compressions were delayed. Overall, peri-operative anaphylaxis leading to cardiac arrest occurred with a similar frequency and patterns of presentation, location, initial rhythm and suspected triggers in NAP7 as in the 6th National Audit Project (NAP6). Outcomes in NAP7 were generally better than for equivalent cases in NAP6. (© 2024 The Authors. Anaesthesia published by John Wiley & Sons Ltd on behalf of Association of Anaesthetists.)

**DOI:** 10.1111/anae.16229

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38205586&custid=ns010877>

## 9. Independent sector and peri-operative cardiac arrest as reported to the 7th National Audit Project of the Royal College of Anaesthetists

**Item Type:** Journal Article

**Authors:** Cook, T. M.;Kane, A. D.;Bouch, C.;Armstrong, R. A.;Kursumovic, E. and Soar, J.

**Publication Date:** 2024

**Journal:** Anaesthesia 79(4), pp. 380-388

**Abstract:** The 7th National Audit Project (NAP7) of the Royal College of Anaesthetists studied peri-operative cardiac arrest including those that occurred in the independent healthcare sector, which provides around 1 in 6 NHS-funded care episodes. In total, 174 (39%) of 442 independent hospitals contacted agreed to participate. A survey examining provider preparedness for cardiac arrest had a response rate of 23 (13%), preventing useful analysis. An activity survey with 1912 responses (from a maximum of 45% of participating hospitals) showed that, compared with the NHS caseload, the independent sector caseload was less comorbid, with fewer patients at the extremes of age or who were severely obese, and with a large proportion of elective orthopaedic surgery undertaken during weekday



working hours. The survey suggested suboptimal compliance rates with monitoring recommendations. Seventeen reports of independent sector peri-operative cardiac arrest comprised 2% of NAP7 reports and underreporting is likely. These patients were lower risk than NHS cases, reflecting the sector's case mix, but included cases of haemorrhage, anaphylaxis, cardiac arrhythmia and pulmonary embolus. Good and poor quality care were seen, the latter including delayed recognition and treatment of patient deterioration, and poor care delivery. Independent sector outcomes were similar to those in the NHS, though due to the case mix, improved outcomes might be anticipated. Assessment of quality of care was less often favourable for independent sector reports than NHS reports, though assessments were often uncertain, reflecting poor quality reports. Overall, NAP7 is unable to determine whether peri-operative care relating to cardiac arrest is more, equally or less safe than in the NHS. (© 2024 Association of Anaesthetists.)

**DOI:** 10.1111/anae.16175

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38173350&custid=ns010877>

**10. Airway and respiratory complications during anaesthesia and associated with peri-operative cardiac arrest as reported to the 7th National Audit Project of the Royal College of Anaesthetists**

**Item Type:** Journal Article

**Authors:** Cook, T. M.;Oglesby, F.;Kane, A. D.;Armstrong, R. A.;Kursumovic, E. and Soar, J.

**Publication Date:** 2024

**Journal:** Anaesthesia 79(4), pp. 368-379

**Abstract:** The 7th National Audit Project (NAP7) of the Royal College of Anaesthetists studied complications of the airway and respiratory system during anaesthesia care including peri-operative cardiac arrest. Among 24,721 surveyed cases, airway and respiratory complications occurred commonly (n = 421 and n = 264, respectively). The most common airway complications were: laryngospasm (157, 37%); airway failure (125, 30%); and aspiration (27, 6%). Emergency front of neck airway was rare (1 in 8370, 95%CI 1 in 2296-30,519). The most common respiratory complications were: severe ventilation difficulty (97, 37%); hyper/hypocapnia (63, 24%); and hypoxaemia (62, 23%). Among 881 reports to NAP7 and 358 deaths, airway and respiratory complications accounted for 113 (13%) peri-operative cardiac arrests and 32 (9%) deaths, with hypoxaemia as the most common primary cause. Airway and respiratory cases had higher and lower survival rates than other causes of cardiac arrest, respectively. Patients with obesity, young children (particularly infants) and out-of-hours care were overrepresented in reports. There were six cases of unrecognised oesophageal intubation with three resulting in cardiac arrest. Of these cases, failure to correctly interpret capnography was a recurrent theme. Cases of emergency front of neck airway (6, approximately 1 in 450,000) and pulmonary aspiration (11, approximately 1 in 25,000) leading to cardiac arrest were rare. Overall, these data, while distinct from the 4th National Audit Project, suggest that airway management is likely to have become safer in the last decade, despite the surgical population having become more challenging for anaesthetists. (© 2023 The Authors. Anaesthesia published by John Wiley & Sons Ltd on behalf of Association of Anaesthetists.)

**DOI:** 10.1111/anae.16187

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38031494&custid=ns010877>

## 11. NAP7 and airway management: as important as life and death

**Item Type:** Journal Article

**Authors:** Cook, T.;Oglesby, F. and Soar, J.

**Publication Date:** 2024

**Journal:** Anaesthesia 79(5), pp. 548-549

**DOI:** 10.1111/anae.16246

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38319863&custid=ns010877>

## 12. Judgements of quality of care in NAP7: a clarification from the authors

**Item Type:** Journal Article

**Authors:** Cook, Tim M.;Lucas, D. N. and Soar, Jasmeet

**Publication Date:** 2024

**Journal:** Anaesthesia

**DOI:** 10.1111/anae.16286

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38516759&custid=ns010877>

## 13. Real-world use of thrombopoietin receptor agonists for the management of immune thrombocytopenia in adult patients in the United Kingdom: Results from the TRAIT study

**Item Type:** Journal Article

**Authors:** Cooper, Nichola;Scully, Marie;Percy, Charles;Nicolson, Phillip L. R.;Lowe, Gillian;Bagot, Catherine N.;Thachil, Jecko;Grech, Henri;Nokes, Tim;Hill, Quentin A.;Bradbury, Charlotte;Talks, Kate;Dutt, Tina;Evans, Gillian;Pavord, Sue;Wexler, Sarah;Charania, Asad;Collington, Sarah J.;Ervin, Andrew;Ramscar, Nicholas, et al

**Publication Date:** 2024

**Journal:** British Journal of Haematology

**Abstract:** Few studies have reported the real-world use of both romiplostim and eltrombopag in immune thrombocytopenia (ITP). TRAIT was a retrospective observational study aimed to evaluate the platelet responses and adverse effects associated with the use of these thrombopoietin receptor agonists (TPO-RAs) in adult patients with ITP in the United Kingdom. Of 267 patients (median age at diagnosis, 48 years) with ITP (primary ITP n = 218], secondary ITP n = 49]) included in the study, 112 (42%) received eltrombopag and 155 (58%) received romiplostim as the first prescribed TPO-RA. A platelet count  $\geq 30 \times 10^9 /L$  was achieved in 89% of patients with the first TPO-RA treatments, while 68% achieved a platelet count  $\geq 100 \times 10^9 /L$ . Treatment-free response (TFR; platelet count  $\geq 30 \times 10^9 /L$ , 3 months after discontinuing treatment) was achieved by 18% of the total patients. Overall, 61 patients (23%) switched TPO-RAs, most of whom achieved platelet counts  $\geq 30 \times 10^9 /L$  with the second TPO-RA (23/25 who switched from eltrombopag to romiplostim 92%]; 28/36 who switched from romiplostim to eltrombopag 78%]). TFR was associated with secondary



ITP, early TPO-RA initiation after diagnosis, the presence of comorbidity and no prior splenectomy or treatment with steroids or mycophenolate mofetil. Both TPO-RAs had similar efficacy and safety profiles to those reported in clinical studies. (© 2024 The Authors. British Journal of Haematology published by British Society for Haematology and John Wiley & Sons Ltd.)

**DOI:** 10.1111/bjh.19345

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38429869&custid=ns010877>

#### 14. A Novel cause of abdominal pain presenting with anuria and renal failure

**Item Type:** Journal Article

**Authors:** Corkill, Joel;Rupret, Simon;Scrivens, Emma and Ali, Ayman

**Publication Date:** 2024

**Journal:** BMJ Case Reports 17(1), pp. 1-4

**Abstract:** A girl in early adolescence with autism presented with 3 months of abdominal pain and 36 hours of anuria. She had recently received treatment for urinary tract infections, anxiety and menorrhagia (she had undergone menarche a few months earlier). Due to the pain, she had pulled out an incisor. Bladder scan showed 923 mL, creatinine was 829mmol/L but urethral catheter insertion did not drain urine. An unenhanced CT scan revealed an absent left kidney, didelphys uterus and right-sided hydronephrosis caused by haematocolpos in keeping with a diagnosis of OHVIRA syndrome and ureteric obstruction of a single kidney causing acute renal failure. She underwent vaginal septoplasty, drainage of the haematocolpos and right ureteric stent.

**DOI:** 10.1136/bcr-2023-257922

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cin20&AN=175309725&custid=ns010877>

#### 15. Is traditional stone clinic the optimal use of NHS resources?

**Item Type:** Journal Article

**Authors:** Corkill, Joel;Sale, Adrian;Gallegos, Christopher and Jefferies, Edward

**Publication Date:** 2024

**Journal:** Urolithiasis 52(1), pp. 29

**Abstract:** There is no clear guidance on the efficacy of stone follow-up. NICE have been unable to make recommendations with current published evidence. The aim of this study was to understand the patient journey resulting in surgical intervention, and whether traditional stone follow-up is effective. A retrospective review of patients undergoing ureteroscopy (URS) or percutaneous nephrolithotomy (PCNL) over a 3 year period identified 471 patients who underwent these procedures to treat stone disease. Records were interrogated for the following: symptoms, mechanism of booking, reason for intervention, stone size, stone location, risk factors and previous follow-up. Of 471 patients who underwent intervention, 168 were booked from stone clinic follow-up (36%). Of these, 96% were symptomatic and 4% were asymptomatic. When risk factors were removed, this figure

was reduced to 1%. Sepsis rate for emergency admissions differs between those followed up (13%) versus new presentations (19%). There was no statistically significant difference in the outpatient imaging frequency between patients booked from an emergency admission (80% having imaging every 6 months) and those from the clinic (82%). Our Hospital provides on average 650 stone clinic appointments a year with a cost of £93,000. Given the low rate of intervention in patients with asymptomatic renal stones, a symptomatic, direct-access emergency stone clinic could be a better model of care and use of NHS resources. Urgent research is required in this area to further assess if this is the case. (© 2024. Crown.)

**DOI:** 10.1007/s00240-023-01523-6

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38300331&custid=ns010877>

**16. Route of drug administration in out-of-hospital cardiac arrest: A protocol for a randomised controlled trial (PARAMEDIC-3).**

**Item Type:** Journal Article

**Authors:** Couper, K.; Ji, C.; Lall, R.; Deakin, C. D.; Fothergill, R.; Long, J.; Mason, J.; Michelet, F.; Nolan, J. P.; Nwankwo, H.; Quinn, T.; Slowther, A. M.; Smyth, M. A.; Walker, A.; Chowdhury, L.; Norman, C.; Sprauve, L.; Starr, K.; Wood, S.; Bell, S., et al

**Publication Date:** 2024

**Journal:** Resuscitation Plus 17(pagination), pp. Article Number: 100544. Date of Publication: March 2024

**Abstract:** Aims: The PARAMEDIC-3 trial evaluates the clinical and cost-effectiveness of an intraosseous first strategy, compared with an intravenous first strategy, for drug administration in adults who have sustained an out-of-hospital cardiac arrest.

**DOI:** 10.1016/j.resplu.2023.100544

**17. How do patient reported outcome measures affect treatment intensification and patient satisfaction in the management of psoriatic arthritis? A cross sectional study of 503 patients**

**Item Type:** Journal Article

**Authors:** Coyle, Conor; Watson, Lily; Whately-Smith, Caroline; Brooke, Mel; Kiltz, Uta; Lubrano, Ennio; Queiro, Ruben; Trigos, David; Brandt-Juergens, Jan; Choy, Ernest; D'Angelo, Salvatore; Delle Sedie, Andrea; Dernis, Emmanuelle; Wirth, Théo; Guis, Sandrine; Helliwell, Philip; Ho, Pauline; Hueber, Axel; Joven, Beatriz; Koehm, Michaela, et al

**Publication Date:** 2024

**Journal:** Rheumatology (Oxford, England)

**Abstract:** Objectives: The ASSIST study investigated prescribing in routine psoriatic arthritis (PsA) care and whether the patient reported outcome: PsA Impact of Disease questionnaire (PsAID-12), impacted treatment. This study also assessed a range of patient and clinician factors and their relationship to PsAID-12 scoring and treatment modification.; Methods: Patients with PsA were selected across the UK and Europe between July 2021-March 2022. Patients completed the PsAID questionnaire, with the results shared with their physician. Patient characteristics, disease activity, current treatment methods, treatment strategies, medication changes and patient satisfaction scores were recorded.; Results: 503 patients recruited. 36.2% had changes made to treatment, 88.8% of this had treatment

escalation. Overall, the mean PsAID-12 score was higher for patients with treatment escalation; the PsAID-12 score was associated with odds of treatment escalation (OR: 1.58;  $p < 0.0001$ ). However, most clinicians reported PsAID-12 did not impact their decision to escalate treatment, instead supporting treatment reduction decisions. Physician's assessment of disease activity had the most statistically significant effect on likelihood of treatment escalation, (OR = 2.68, per 1-point score increase). Escalation was more likely in patients not treated with biologic therapies. Additional factors associated with treatment escalation included: patient characteristics, physician characteristics, disease activity and disease impact.; Conclusion: This study highlights multiple factors impacting treatment decision making for individuals with PsA. PsAID-12 scoring correlates with multiple measures of disease severity and odds of treatment escalation. However, most clinicians reported the PsAID-12 did not influence treatment escalation decisions. PsAID scoring could be used to increase confidence in treatment de-escalation. (© The Author(s) 2024. Published by Oxford University Press on behalf of the British Society for Rheumatology.)

**DOI:** 10.1093/rheumatology/kead679

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38191998&custid=ns010877>

## 18. Real-world experience of nintedanib for progressive fibrosing interstitial lung disease in the UK

**Item Type:** Journal Article

**Authors:** Dixon, Giles; Hague, Samuel; Mulholland, Sarah; Adamali, Huzaifa; Khin, Aye Myat Noe; Thould, Hannah; Connon, Roisin; Minnis, Paul; Murtagh, Eoin; Khan, Fasihul; Toor, Sameen; Lawrence, Alexandra; Naqvi, Marium; West, Alex; Coker, Robina K.; Ward, Katie; Yazbeck, Leda; Hart, Simon; Garfoot, Theresa; Newman, Kate, et al

**Publication Date:** 2024

**Journal:** ERJ Open Research 10(1)

**Abstract:** Background: Nintedanib slows progression of lung function decline in patients with progressive fibrosing (PF) interstitial lung disease (ILD) and was recommended for this indication within the United Kingdom (UK) National Health Service in Scotland in June 2021 and in England, Wales and Northern Ireland in November 2021. To date, there has been no national evaluation of the use of nintedanib for PF-ILD in a real-world setting.; Methods: 26 UK centres were invited to take part in a national service evaluation between 17 November 2021 and 30 September 2022. Summary data regarding underlying diagnosis, pulmonary function tests, diagnostic criteria, radiological appearance, concurrent immunosuppressive therapy and drug tolerability were collected via electronic survey.; Results: 24 UK prescribing centres responded to the service evaluation invitation. Between 17 November 2021 and 30 September 2022, 1120 patients received a multidisciplinary team recommendation to commence nintedanib for PF-ILD. The most common underlying diagnoses were hypersensitivity pneumonitis (298 out of 1120, 26.6%), connective tissue disease associated ILD (197 out of 1120, 17.6%), rheumatoid arthritis associated ILD (180 out of 1120, 16.0%), idiopathic nonspecific interstitial pneumonia (125 out of 1120, 11.1%) and unclassifiable ILD (100 out of 1120, 8.9%). Of these, 54.4% (609 out of 1120) were receiving concomitant corticosteroids, 355 (31.7%) out of 1120 were receiving concomitant mycophenolate mofetil and 340 (30.3%) out of 1120 were receiving another immunosuppressive/modulatory therapy. Radiological progression of ILD combined with worsening respiratory symptoms was the most common reason for the diagnosis of PF-ILD.; Conclusion: We have demonstrated the use of nintedanib for the treatment of PF-ILD across a broad range of underlying conditions. Nintedanib is frequently co-prescribed alongside immunosuppressive and immunomodulatory therapy. The use of nintedanib for the treatment of PF-ILD has demonstrated acceptable tolerability in a real-world setting.;

Competing Interests: Conflict of interest: A.J. Simpson has received funding to his institution from Boehringer Ingelheim (BI) to undertake an educational meeting. A. West has received support from BI for speaking at or chairing educational events, and attendance and travel to educational meetings; and is part of an advisory board for BI and Avalyn Pharmaceuticals. A. John has received funding from BI to attend an educational event. A.M. Wilson has received grants from Aseptika, Brainomix and BASF, has received speakers' fees from BI, has received support for attending meetings by Chiesi, and has institutional interests with Celgene Corporation, GSK and Insmad Inc. A. Crawshaw has received speakers' fees from BI and AstraZeneca (AZ). A.U. Wells has undertaken advisory board activity and consultant work for BI, Roche and Veracyte. C.C. Huntley has received an honorarium for educational content from BI and sponsorship for conference attendance. D. Dosanjh has received a speaker's fee from BI, meeting attendance costs from AZ and is part of the advisory board for AZ, Gilead, BI and Synairgen. E. Renzoni has received institutional funding, honoraria for educational events and funding for conference attendance from BI, and is member of the advisory board for BI and Roche. F. Chua has received consulting fees, honoraria, support for conference attendance and is an advisory board member for BI. G. Saini has received institutional payment for educational presentation from BI. G. Dixon, H. Stone, L.M. Nicol and I.A. Forrest have received support for educational event attendance from BI. J.C.L. Rodrigues has received grant funding from NIHR, consulting fees from NHSx and HeartFlow, honoraria from Sanofi, Aidence and 4-C Research market research, meeting attendance support from Aidence and HeartFlow, leadership role in Heart and Lung Imaging LTD (HLH), stock in Radnet and shares in HLH. K. Tsaneva-Atanasova has financial support from EPSRC grant. M. Naqvi has received a grant from NHS Digital, honoraria from BI, AZ and Roche, support for meeting attendance from BI and advisory board membership for BI, and is ILD Pharmacist Network Chair and ILD-IN Co-chair. M.G. Jones has received grants from Royal Society, BI, NC3Rs, MRC, AAIR Charity and the British Lung Foundation. P.M. George has received an institutional grant from BI, honoraria from BI, Roche, Teva, Cipla and Brainomix, meeting attendance support from BI and Roche and has stock in Brainomix. P. Molyneaux has grant funding from AZ, consulting fees from Roche, BI, AZ, Trevi and Qureight, and honoraria from BI and Roche; and is an associate editor of this journal. P. Rivera-Ortega has received grant funding from MRC, institutional grant funding from BI, Roche, CSL Behring, Fibrogen, Vicore Pharma AB, Gilead Sciences and Galecto, consulting fees from BI and Roche, honoraria from BI, Roche and Respiratory Effectiveness Group (REG), support for meeting attendance from BI and REG, is a chair of the REG and member of the Global Writing Group Committee for REMAP-ILD. R.K. Coker has received honoraria from BI. S. Agnew has received honoraria from BI, support for meeting attendance from BI and is member of the BTS ILD registry advisory board. S.L. Barratt has received consulting fees and honoraria from BI. S. Hart has received research grant from BI, consulting fees from Trevi Therapeutics, honoraria and support for meeting attendance from BI and Chiesi, was Chair of the BTS Standard of Care Committee 2019–2022, and is a Trustee of Action for Pulmonary Fibrosis and an associate editor of this journal. S. Barth received honoraria from BI for educational meeting facilitating. T. Garfoot received support to attend the ILD IN annual conference. T. Gatheral has received speakers' fees from BI. Conflict of interest: The remaining authors have no competing interests. (Copyright ©The authors 2024.)

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**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38226064&custid=ns010877>

## 19. New horizons in the diagnosis and management of Alzheimer's Disease in older adults

**Item Type:** Journal Article

**Authors:** Dolphin, Helena;Dyer, Adam H.;Morrison, Laura;Shenkin, Susan D.;Welsh, Tomas and Kennelly, Sean P.

**Publication Date:** 2024

**Journal:** Age & Ageing 53(2), pp. 1-11

**Abstract:** Alzheimer's Disease (ad) is the most common cause of dementia, and in addition to cognitive decline, it directly contributes to physical frailty, falls, incontinence, institutionalisation and polypharmacy in older adults. Increasing availability of clinically validated biomarkers including cerebrospinal fluid and positron emission tomography to assess both amyloid and tau pathology has led to a reconceptualisation of ad as a clinical–biological diagnosis, rather than one based purely on clinical phenotype. However, co-pathology is frequent in older adults which influence the accuracy of biomarker interpretation. Importantly, some older adults with positive amyloid or tau pathological biomarkers may never experience cognitive impairment or dementia. These strides towards achieving an accurate clinical–biological diagnosis are occurring alongside recent positive phase 3 trial results reporting statistically significant effects of anti-amyloid Disease-Modifying Therapies (DMTs) on disease severity in early ad. However, the real-world clinical benefit of these DMTs is not clear and concerns remain regarding how trial results will translate to real-world clinical populations, potential adverse effects (including amyloid-related imaging abnormalities), which can be severe and healthcare systems readiness to afford and deliver potential DMTs to appropriate populations. Here, we review recent advances in both clinical–biological diagnostic classification and future treatment in older adults living with ad. Advocating for access to both more accurate clinical–biological diagnosis and potential DMTs must be done so in a holistic and gerontologically attuned fashion, with geriatricians advocating for enhanced multi-component and multi-disciplinary care for all older adults with ad. This includes those across the ad severity spectrum including older adults potentially ineligible for emerging DMTs.

**DOI:** 10.1093/ageing/afae005

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cin20&AN=175800452&custid=ns010877>

20. **The effects of short-term, progressive exercise training on disease activity in smouldering multiple myeloma and monoclonal gammopathy of undetermined significance: a single-arm pilot study**

**Item Type:** Journal Article

**Authors:** Emery, A.;Moore, S.;Crowe, J.;Murray, J.;Peacock, O.;Thompson, D.;Betts, F.;Rapps, S.;Ross, L.;Rothschild-Rodriguez, D.;Arana Echarri, A.;Davies, R.;Lewis, R.;Augustine, D. X.;Whiteway, A.;Afzal, Z.;Heaney, Jlj;Drayson, M. T.;Turner, J. E. and Campbell, J. P.

**Publication Date:** 2024

**Journal:** BMC Cancer 24(1), pp. 174

**Abstract:** Background: High levels of physical activity are associated with reduced risk of the blood cancer multiple myeloma (MM). MM is preceded by the asymptomatic stages of monoclonal gammopathy of undetermined significance (MGUS) and smouldering multiple myeloma (SMM) which are clinically managed by watchful waiting. A case study (N = 1) of a former elite athlete aged 44 years previously indicated that a multi-modal exercise programme reversed SMM disease activity. To build from this prior case study, the present pilot study firstly examined if short-term exercise training was feasible and safe for a group of MGUS and SMM patients, and secondly investigated the effects on MGUS/SMM disease activity.; Methods: In this single-arm pilot study, N = 20 participants diagnosed with MGUS or



SMM were allocated to receive a 16-week progressive exercise programme. Primary outcome measures were feasibility and safety. Secondary outcomes were pre- to post-exercise training changes to blood biomarkers of MGUS and SMM disease activity- monoclonal (M)-protein and free light chains (FLC)- plus cardiorespiratory and functional fitness, body composition, quality of life, blood immunophenotype, and blood biomarkers of inflammation.; Results: Fifteen (3 MGUS and 12 SMM) participants completed the exercise programme. Adherence was  $91 \pm 11\%$ . Compliance was  $75 \pm 25\%$  overall, with a notable decline in compliance at intensities  $> 70\% \dot{V}O_{2PEAK}$ . There were no serious adverse events. There were no changes to M-protein ( $0.0 \pm 1.0$  g/L,  $P = .903$ ), involved FLC ( $+ 1.8 \pm 16.8$  mg/L,  $P = .839$ ), or FLC difference ( $+ 0.2 \pm 15.6$  mg/L,  $P = .946$ ) from pre- to post-exercise training. There were pre- to post-exercise training improvements to diastolic blood pressure ( $- 3 \pm 5$  mmHg,  $P = .033$ ), sit-to-stand test performance ( $+ 5 \pm 5$  repetitions,  $P = .002$ ), and energy/fatigue scores ( $+ 10 \pm 15\%$ ,  $P = .026$ ). Other secondary outcomes were unchanged.; Conclusions: A 16-week progressive exercise programme was feasible and safe, but did not reverse MGUS/SMM disease activity, contrasting a prior case study showing that five years of exercise training reversed SMM in a 44-year-old former athlete. Longer exercise interventions should be explored in a group of MGUS/SMM patients, with measurements of disease biomarkers, along with rates of disease progression (i.e., MGUS/SMM to MM).; Registration: <https://www.isrctn.com/ISRCTN65527208> (14/05/2018). (© 2024. The Author(s).)

**DOI:** 10.1186/s12885-024-11817-6

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38317104&custid=ns010877>

## 21. Anaesthetic records: an evaluation of variation across England

**Item Type:** Journal Article

**Authors:** Fenton, R.;Thompson, C.;Drake, S.;Foley, L. and Cook, T. M.

**Publication Date:** 2024

**Journal:** Anaesthesia Reports 12(1), pp. e12287

**Abstract:** We collected blank non-specialist anaesthetic records from 71 National Health Service Trusts in England. A data set was established by collating all data items found in an initial tranche of 28 records. All 71 records were subsequently analysed for each data item in this data set. We found significant variation: the most populated record included 216 data items and the least included 38 data items: a greater than five-fold variation. There was significant variation in the inclusion of data items commonly considered important to patient safety; 42% of records omitted documentation of fasting status, 72% omitted documentation of a discussion around the risk of accidental awareness during general anaesthesia, 92% omitted documentation of quantitative neuromuscular blockade monitoring and 63% omitted documentation for 'Stop Before You Block' when performing regional anaesthesia. The study highlights significant variability in the composition of anaesthetic records across England which may impact on its value as a data repository, an action trigger, a medicolegal account, and a tool to facilitate safe handover. Standardisation of the anaesthetic record or the establishment of standards of recording would help to allay potential risks to patient safety and assist in guiding future procurement of electronic solutions for anaesthetic records. (© 2024 Association of Anaesthetists.)

**DOI:** 10.1002/anr3.12287

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN>



=38533388&custid=ns010877

22. **Supraglottic Airway Versus Tracheal Intubation for Airway Management in Out-of-Hospital Cardiac Arrest: A Systematic Review, Meta-Analysis, and Trial Sequential Analysis of Randomized Controlled Trials**

**Item Type:** Journal Article

**Authors:** Forestell, Ben;Ramsden, Sophie;Sharif, Sameer;Centofanti, John;Al Lawati, Kumait;Fernando, Shannon M.;Welsford, Michelle;Nichol, Graham;Nolan, Jerry P. and Rochweg, Bram

**Publication Date:** 2024

**Journal:** Critical Care Medicine 52(2), pp. e89-e99

**Abstract:** Objectives: Given the uncertainty regarding the optimal approach for airway management for adult patients with out-of-hospital cardiac arrest (OHCA), we conducted a systematic review and meta-analysis to compare the use of supraglottic airways (SGAs) with tracheal intubation for initial airway management in OHCA.; Data Sources: We searched MEDLINE, PubMed, Embase, Cochrane Library, as well as unpublished sources, from inception to February 7, 2023.; Study Selection: We included randomized controlled trials (RCTs) of adult OHCA patients randomized to SGA compared with tracheal intubation for initial prehospital airway management.; Data Extraction: Reviewers screened abstracts, full texts, and extracted data independently and in duplicate. We pooled data using a random-effects model. We used the modified Cochrane risk of bias 2 tool and assessed certainty of evidence using the Grading Recommendations Assessment, Development, and Evaluation approach. We preregistered the protocol on PROSPERO (CRD42022342935).; Data Synthesis: We included four RCTs ( n = 13,412 patients). Compared with tracheal intubation , SGA use probably increases return of spontaneous circulation (ROSC) (relative risk RR] 1.09; 95% CI, 1.02-1.15; moderate certainty) and leads to a faster time to airway placement (mean difference 2.5 min less; 95% CI, 1.6-3.4 min less; high certainty). SGA use may have no effect on survival at longest follow-up (RR 1.06; 95% CI, 0.84-1.34; low certainty), has an uncertain effect on survival with good functional outcome (RR 1.11; 95% CI, 0.82-1.50; very low certainty), and may have no effect on risk of aspiration (RR 1.04; 95% CI, 0.94 to 1.16; low certainty).; Conclusions: In adult patients with OHCA, compared with tracheal intubation, the use of SGA for initial airway management probably leads to more ROSC, and faster time to airway placement, but may have no effect on longer-term survival outcomes or aspiration events.; Competing Interests: Dr. Sharif holds a McMaster University Department of Medicine Internal Career Research Award. Dr. Nichol's institution received funding from the National Institutes of Health, the Centers for Disease Control and Prevention, and Abiomed Inc.; he received funding from OLL Medical Corp., Vapotherm Inc., ZOLL Circulation Inc., CPR Therapeutics Inc., Heartbeam Inc., Invero Health LLC, Kestra Medical Technologies Inc., and Orixha Inc. Dr. Nolan disclosed he is Editor-in-Chief Resuscitation of Elsevier Journal. The remaining authors have disclosed that they do not have any potential conflicts of interest. (Copyright © 2023 by the Society of Critical Care Medicine and Wolters Kluwer Health, Inc. All Rights Reserved.)

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**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=37962112&custid=ns010877>

23. **Effectiveness of sequential lines of biologic and targeted small molecule drugs in psoriasis: A systematic review and meta-analysis**

**Item Type:** Journal Article

**Authors:** Gollins, Charlotte E.; Vincent, Rosie; Fahy, Caoimhe; McHugh, Neil and Tillett, William

**Publication Date:** 2024

**Journal:** Skin Health and Disease 4(2), pp. e350

**Abstract:** To assess current evidence of effectiveness of sequential lines of biologic and targeted small molecule drugs for psoriasis beyond first line. A systematic search of the literature (Medline, Embase and bibliographic) was undertaken in October and December 2022 to find all studies assessing effectiveness of biologics and targeted small molecules when used beyond first-line in adults with psoriasis (PROSPERO CRD42022365298). Data extraction and a bias assessment (Risk Of Bias In Non-randomized Studies-of Interventions/Cochrane RoB2) were undertaken for all included studies. A random effects proportional meta-analysis was undertaken for PASI75/90/100 at 12-16 weeks for each line of treatment (1st to 4th). Of 2666 abstracts identified, a full text review was undertaken of 177 studies; 20 manuscripts met eligibility criteria. Twenty studies were included in the analysis: 19 observational studies and one sub analysis of a RCT; n = 6495 (average age 49.7 years, female 35.1%). Eleven studies assessed second line biologic, nine assessed third + line. A meta-analysis of PASI75 at 12-16 weeks found pooled effect percentage achieving PASI75 of 61%, 56%, 79% and 61% in 1st, 2nd, 3rd and 4th line biologics respectively. Meta-analyses of PASI90/100 also found no evidence of diminished effectiveness with sequential lines (PASI90 46.1%, 39.9%, 55.8% and 33.7% and PASI100 36.7%, 30.3%, 46.7% and 30.4% in 1st to 4th line respectively). Available evidence for effectiveness of biologics beyond first line in psoriasis is predominantly observational, at high risk of bias and of low quality. There is very limited data for effectiveness beyond second line. Evidence indicates that biologics can be effective to fourth-line.; Competing Interests: WRT has received research funding, speaker fees or honoraria from Abbvie, Amgen, Eli-Lilly, GSK, Janssen, MSD, Novartis, Ono-Pharma, Pfizer and UCB. CF has received honoraria (speaker fees) from Pfizer and Eli Lilly. NJM has received a grant for unrelated work from UCB, honoraria (speaker fee) from Janssen and participated in data monitoring and safety in the NIHR HTA Astute trial. RV has received payment to her institution (speaker fees) from Leo Pharma and funding from Dermal to attend an educational event. CG has no conflicts of interest to declare. (© 2024 The Authors. Skin Health and Disease published by John Wiley & Sons Ltd on behalf of British Association of Dermatologists.)

**DOI:** 10.1002/ski2.350

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38577060&custid=ns010877>

24. **Corrigendum to "Temperature control after adult cardiac arrest: An updated systematic review and meta-analysis" [Resuscitation 191 (2023)109928] (Resuscitation (2023) 191, (S0300957223002411), (10.1016/j.resuscitation.2023.109928)).**

**Item Type:** Journal Article

**Authors:** Granfeldt, A.; Holmberg, M. J.; Nolan, J. P.; Soar, J. and Andersen, L. W.

**Publication Date:** 2024

**Journal:** Resuscitation 194(pagination), pp. Article Number: 110052. Date of Publication: January 2024

**Abstract:** The authors regret, that during their work creating Consensus on Science with Treatment Recommendations (CoSTRs) for ILCOR they discovered three data errors. This corrigendum addresses these data errors in the article.<sup>1</sup> 1) In eTable 4 and in the abstract, we have reported the odds ratio from the meta-analysis instead of the risk ratio for favorable neurological outcome at 90 or 180 days. The correction of this error changes the estimate from an odds ratio of 1.27 (95% CI: 0.89 to 1.81) to a risk ratio of 1.16 (95% CI: 0.92 to 1.47). The overall conclusion of the manuscript was not affected by the error. 2) In eTable 5, the pooled risk ratio for a favorable neurological outcome at 180 days was based on a random effects analysis instead of an intended fixed effect analysis, as reported in the corresponding eFigure 9. The correction of this error changes the estimate from a risk ratio of 1.22 (95% CI: 0.61 to 2.45) to 1.01 (95% CI: 0.88 to 1.15). The updated estimate changes the certainty in the evidence for this outcome from very low to low due to less serious imprecision. 3) In eFigure 8 of the supplemental content, instead of 130 total events in the study by Wolfrum it should have been 120 total events<sup>2</sup>. The correction of the number of total events changes the estimate from a risk ratio of 1.14 [95% CI: 0.75 to 1.72] (Fig. 1) to 1.21 [95% CI: 0.80 to 1.83] (Fig. 2). The effect estimate was further from the null but did not change the significance of the result. This was an isolated error to the mentioned figure and does not affect the original manuscript. [Table presented] [Table presented]

**DOI:** 10.1016/j.resuscitation.2023.110052

25. **Corrigendum to "Temperature control after adult cardiac arrest: An updated systematic review and meta-analysis" [Resuscitation 191 (2023)109928]**

**Item Type:** Journal Article

**Authors:** Granfeldt, Asger;Holmberg, Mathias J.;Nolan, Jerry P.;Soar, Jasmeet and Andersen, Lars W.

**Publication Date:** 2024

**Journal:** Resuscitation 194, pp. 110052

**DOI:** 10.1016/j.resuscitation.2023.110052

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38029469&custid=ns010877>

26. **Harm during airway management by anaesthetists: its absence in randomised controlled trials does not mean it does not exist**

**Item Type:** Journal Article

**Authors:** Hansel, J. and Cook, T. M.

**Publication Date:** 2024

**Journal:** Anaesthesia 79(4), pp. 444-445

**DOI:** 10.1111/anae.16245

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38306494&custid=ns010877>

**27. Unrecognised oesophageal intubation: a sequential Bayesian exploration of clinical signs**

**Item Type:** Journal Article

**Authors:** Hansel, J.;Higgs, A. and Cook, T. M.

**Publication Date:** 2024

**Journal:** Anaesthesia 79(3), pp. 325-326

**DOI:** 10.1111/anae.16134

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=37736685&custid=ns010877>

**28. Research delivery secondments: A scoping review**

**Item Type:** Journal Article

**Authors:** Hare, Naomi;Grieve, Sharon;Valentine, Janine and Menzies, Julie

**Publication Date:** 2024

**Journal:** Nursing Open 11(1), pp. 1-13

**DOI:** 10.1002/nop2.2089

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cin20&AN=175056575&custid=ns010877>

**29. Facilitators and barriers to community pharmacy PrEP delivery: a scoping review**

**Item Type:** Journal Article

**Authors:** Harrison, China;Family, Hannah;Kesten, Joanna;Denford, Sarah;Scott, Anne;Dawson, Sarah;Scott, Jenny;Sabin, Caroline;Copping, Joanna;Harryman, Lindsey;Cochrane, Sarah and Horwood, Jeremy

**Publication Date:** 2024

**Journal:** Journal of the International AIDS Society 27(3), pp. e26232

**Abstract:** Introduction: Pre-exposure prophylaxis (PrEP) is an effective medication to reduce the risk of acquiring HIV. PrEP is available free of charge in the UK from sexual health clinics. Expanding PrEP delivery to community pharmacies holds promise and aligns with UK government goals to eliminate new cases of HIV by 2030. The aim of this scoping review was to describe the existing evidence about the barriers to and facilitators of community pharmacy oral PrEP delivery, for pharmacists and pharmacy clients, as aligned with the Capacity Opportunity, Motivation Behaviour (COM-B) Model.; Methods: Five bibliographic and five review databases were searched from inception to August 2023. Literature of any study design was included if it discussed barriers and facilitators of community pharmacy PrEP delivery. Trial registrations, protocols and news articles were excluded.; Results: A total of 649 records were identified, 73 full texts were reviewed and 56 met the inclusion criteria, predominantly from high-income/westernized settings. Most of the included literature was original research (55%), from the United States (77%) conducted

during or after the year 2020 (63%). Barriers to PrEP delivery for pharmacists included lack of knowledge, training and skills (capability), not having the necessary facilities (opportunity), concern about the costs of PrEP and believing that PrEP use could lead to risk behaviours and sexually transmitted infections (motivation). Facilitators included staff training (capability), time, the right facilities (opportunity), believing PrEP could be a source of profit and could reduce new HIV acquisitions (motivation). For clients, barriers included a lack of PrEP awareness (capability), pharmacy facilities (opportunity) and not considering pharmacists as healthcare providers (motivation). Facilitators included awareness of PrEP and pharmacist's training to deliver it (capability), the accessibility of pharmacies (opportunity) and having an interest in PrEP (motivation).; Discussion: To effectively enhance oral PrEP delivery in UK community pharmacies, the identified barriers and facilitators should be explored for UK relevance, addressed and leveraged at the pharmacy team, client and care pathway level.; Conclusions: By comprehensively considering all aspects of the COM-B framework, community pharmacies could become crucial providers in expanding PrEP accessibility, contributing significantly to HIV prevention efforts. (© 2024 The Authors. Journal of the International AIDS Society published by John Wiley & Sons Ltd on behalf of International AIDS Society.)

**DOI:** 10.1002/jia2.26232

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38494652&custid=ns010877>

**30. PUMA guidelines: a fail-safe when sustained exhaled carbon dioxide is absent following attempted tracheal intubation**

**Item Type:** Journal Article

**Authors:** Higgs, A.;Chrimes, N.;Nolan, J. P. and Cook, T. M.

**Publication Date:** 2024

**Journal:** Anaesthesia 79(1), pp. 102-103

**DOI:** 10.1111/anae.16129

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=37690078&custid=ns010877>

**31. Critical Care Management of Patients After Cardiac Arrest: A Scientific Statement from the American Heart Association and Neurocritical Care Society**

**Item Type:** Journal Article

**Authors:** Hirsch, Karen G.;Abella, Benjamin S.;Amorim, Edilberto;Bader, Mary Kay;Barletta, Jeffrey F.;Berg, Katherine;Callaway, Clifton W.;Friberg, Hans;Gilmore, Emily J.;Greer, David M.;Kern, Karl B.;Livesay, Sarah;May, Teresa L.;Neumar, Robert W.;Nolan, Jerry P.;Oddo, Mauro;Peberdy, Mary Ann;Poloyac, Samuel M.;Seder, David;Taccone, Fabio Silvio, et al

**Publication Date:** 2024

**Journal:** Neurocritical Care 40(1), pp. 1-37

**Abstract:** The critical care management of patients after cardiac arrest is burdened by a lack of high-quality clinical studies and the resultant lack of high-certainty evidence. This results in limited practice guideline recommendations, which may lead to uncertainty and

variability in management. Critical care management is crucial in patients after cardiac arrest and affects outcome. Although guidelines address some relevant topics (including temperature control and neurological prognostication of comatose survivors, 2 topics for which there are more robust clinical studies), many important subject areas have limited or nonexistent clinical studies, leading to the absence of guidelines or low-certainty evidence. The American Heart Association Emergency Cardiovascular Care Committee and the Neurocritical Care Society collaborated to address this gap by organizing an expert consensus panel and conference. Twenty-four experienced practitioners (including physicians, nurses, pharmacists, and a respiratory therapist) from multiple medical specialties, levels, institutions, and countries made up the panel. Topics were identified and prioritized by the panel and arranged by organ system to facilitate discussion, debate, and consensus building. Statements related to postarrest management were generated, and 80% agreement was required to approve a statement. Voting was anonymous and web based. Topics addressed include neurological, cardiac, pulmonary, hematological, infectious, gastrointestinal, endocrine, and general critical care management. Areas of uncertainty, areas for which no consensus was reached, and future research directions are also included. Until high-quality studies that inform practice guidelines in these areas are available, the expert panel consensus statements that are provided can advise clinicians on the critical care management of patients after cardiac arrest. (© 2023. The Author(s).)

**DOI:** 10.1007/s12028-023-01871-6

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38040992&custid=ns010877>

### 32. Resuscitation great Kazuo Okada-sensei - Pioneer of resuscitation in Asia

**Item Type:** Journal Article

**Authors:** Iwami, Taku;Nonogi, Hiroshi;Han Lim, Swee;Nolan, Jerry P. and Sakamoto, Tetsuya

**Publication Date:** 2024

**Journal:** Resuscitation 195, pp. 110036

**Abstract:** Competing Interests: Declaration of Competing Interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

**DOI:** 10.1016/j.resuscitation.2023.110036

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=37935277&custid=ns010877>

### 33. The Lancet Commission on prostate cancer: planning for the surge in cases

**Item Type:** Journal Article

**Authors:** James, Nicholas D.;Tannock, Ian;N'Dow, James;Feng, Felix;Gillessen, Silke;Ali, Syed Adnan;Trujillo, Blanca;Al-Lazikani, Bissan;Attard, Gerhardt;Bray, Freddie;Compérat, Eva;Eeles, Ros;Fatiregun, Omolara;Grist, Emily;Halabi, Susan;Haran, Áine;Herchenhorn, Daniel;Hofman, Michael;Jalloh, Mohamed;Loeb, Stacy, et al

**Publication Date:** 2024



**Journal:** Lancet (London, England)

**Abstract:** Competing Interests: Declaration of interests NDJ reports advisory board and personal fees from AstraZeneca, Bayer, Clovis, Janssen, Merck, Merck Sharp & Dohme, Novartis, Sanofi, Astellas, and AAA Accelerator Solutions. FF reports personal fees from Janssen, Astellas, Serimmune, Foundation Medicine, Exact Sciences, Bristol-Myers Squibb, Varian Medical Systems, Novartis, Roivant, Myovant, Bayer, BlueStar Genomics, Artera, Tempus, Genentech, PFS Genomics, and Amgen, and holds stock options in Serimmune, BlueStar Genomics, and Artera. SG reports fees from Tolremo, Ipsen, Silvio Grasso Consulting, WebMD–Medscape, the American Society of Clinical Oncology, European Society for Medical Oncology, Peer Voice, SAKK, the German-speaking European School of Oncology, Radiotelevisione Svizzera Italiana, the Swiss Academy of Multidisciplinary Oncology, Meister ConCept, AdMeTech Foundation, EPG Health, Intellisphere, and Schweizerische Gessellschaft für Medizinische Onkologie. SG also reports travel support from AstraZeneca, Bayer, Intellisphere, and Gilead, paid advisory board participation for Merck Sharp & Dohme, Telixpharma, Bristol-Myers Squibb, AAA International, Orion, Bayer, Novartis, Modra Pharmaceuticals, AstraZeneca, Myriad Genetic, Daiichi Sankyo, Boehringer Ingelheim, Innomedica, MacroGenics, and Pfizer, and holds a patent (WO2009138392). BA-L reports fees from the Cancer Prevention and Research Institute of Texas, the Commonwealth Foundation, the Lyda Hill Foundation, Cancer Research UK, the Wellcome Trust, the Bob Champion Trust, AstraZeneca, Astex Pharmaceuticals, the New York Genome Center, and Existencia, travel support from Cancer Research UK, Astex, the STAT summit, the American Society of Hematology, and the American Association for Cancer Research, and participation in a Cancer Research UK data strategy board. GA reports fees from Janssen, Novartis, Astellas, the Institute of Cancer Research, Veracyte, Artera, Pfizer, AstraZeneca, Astellas, Novartis, Arvinas, Bayer, Sanofi, Propella, and Orion, holds a patent related to blood-based methylation markers (GB1915469.9), and has received equipment from Agilent. EC reports fees from Janssen. RE reports book royalties plus support and fees from the UK National Institute for Health and Care Research, AstraZeneca, Bayer, Ipsen, the Active Surveillance Movember Committee, the American Society of Clinical Oncology, University of Chicago, Dana Farber Cancer Institute, the Spanish National Cancer Research Center, Our Future Health, Jnetics UK, the Institute of Cancer Research, and Convergence Science Centre. RE also reports a pending Cancer Research UK patent, a stock ISA, receipt of gifts from patients (within limits allowed), and other financial interests in private medical practice. SH reports participation on data safety monitoring boards and advisory boards. DH reports fees from Techtrials, Astellas, Adium, Ipsen, Janssen, Bayer, Merck Sharp & Dohme, and Pfizer. MH reports fees or grant funding from the Prostate Cancer Foundation, the Prostate Cancer Theranostics and Imaging Centre of Excellence, the Australian National Health and Medical Research Council, Movember, the US Department of Defense, Medical Research Future Fund, Bayer, the Peter MacCallum Foundation, Isotopia, the Australian Nuclear Science and Technology Organisation, Merck Sharpe & Dohme, Novartis, AstraZeneca, and Astellas. MH also reports unremunerated leadership or fiduciary role in Australian Friends of Sheba. MMog reports fees from NHS England, the UK National Institute for Health and Care Research, and Bayer. CM reports fees from UK National Institute for Health and Care Research, the UK Medical Research Council, Prostate Cancer UK, Cancer Rsearch UK, Sonacare, Ipsen, Bayer, and Astellas. AMo reports fees from Bayer, Myovant, Pfizer, Astellas, AstraZeneca, AAA, Bayer, Exelixis, Janssen, Lantheus, Myovant, Merck, Novartis, Sanofi, and Telix, participation in data Safety monitoring boards and advisory boards for Gilead, and a leadership or fiduciary role in ZERO Prostate Cancer. MMor reports fees from the National Cancer Institute Comprehensive Cancer Center, Lantheus, AstraZeneca, Amgen, Daiichi, Convergent, Pfizer, Clarity, Blue Earth Diagnostics, POINT Diagnostics, Z-Alpha, Ambrx, Flare, Fusion, Curium, Transtherabio, Doximity, BMS, and Celgene, reports a US patent application (18/448 609) for a method of treating prostate cancer, and holds stock options in Doximity. DM reports fees from Novartis, Janssen, Bayer, Astellas, Ipsen, and AstraZeneca. PLN reports fees from Bayer, Astellas, Boston Scientific, AIQ, Astellas, Novartis, Janssen, Blue Earth, Nanocan, and Theranano, and holds stock options in Stratagen Bio, Nanocan, and Reversal Therapeutics. CP reports fees from Artera, which has a financial relationship

with University College London (his employer) as part of a data licensing agreement. All other authors declare no competing interests.

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**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38583453&custid=ns010877>

**34. Can the Heald anal stent help to reduce anastomotic or rectal stump leak in elective and emergency colorectal surgery? A single-center experience**

**Item Type:** Journal Article

**Authors:** Jones, Michael; Moran, Brendan; Heald, Richard John and Bunni, John

**Publication Date:** 2024

**Journal:** Annals of Coloproctology 40(1), pp. 82-85

**Abstract:** Anastomotic and rectal stump leaks are feared complications of colorectal surgery. Diverting stomas are commonly used to protect low rectal anastomoses but can have adverse effects. Studies have reported favorable outcomes for transanal drainage devices instead of diverting stomas. We describe our use of the Heald anal stent and its potential impact in reducing anastomotic or rectal stump leak after elective or emergency colorectal surgery. We performed a single-center retrospective analysis of patients in whom a Heald anal stent had been used to "protect" a colorectal anastomosis or a rectal stump, in an elective or emergency context, for benign and malignant pathology. Intraoperative and postoperative outcomes were reviewed using clinical and radiological records. The Heald anal stent was used in 93 patients over 4 years. Forty-six cases (49%) had a colorectal anastomosis, and 47 (51%) had an end stoma with a rectal stump. No anastomotic or rectal stump leaks were recorded. We recommend the Heald anal stent as a simple and affordable adjunct that may decrease anastomotic and rectal stump leak by reducing intraluminal pressure through drainage of fluid and gas.

**DOI:** 10.3393/ac.2023.00038.0005

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38414124&custid=ns010877>

**35. Understanding the impacts of chronic pain on autistic adolescents and effective pain management: a reflexive thematic analysis adolescent-maternal dyadic study**

**Item Type:** Journal Article

**Authors:** Jordan, Abbie; Parchment, Amelia; Gauntlett-Gilbert, Jeremy; Jones, Abigail; Donaghy, Bethany; Wainwright, Elaine; Connell, Hannah; Walden, Joseline and Moore, David J.

**Publication Date:** 2024

**Journal:** Journal of Pediatric Psychology 49(3), pp. 185-194

**Abstract:** Objective: Sensory elements are core features in chronic pain and autism, yet knowledge of the pain experience in autistic adolescents is limited. Little is known regarding how autistic adolescents experience chronic pain, manage their pain and perceive psychological treatment for their chronic pain.; Methods: Ten autistic adolescents (6 female,

3 male, and 1 self-identified as agender) with chronic pain and their mothers (n = 10) participated in semistructured interviews concerning their perceptions of living with chronic pain. Participants were recruited from U.K. pain management services. According to preference, interviews were conducted individually (n = 10) or dyadically (n = 10 participants across 5 dyads). Data were analyzed using inductive reflexive thematic analysis.; Results: Two themes were generated. Theme 1, "overstimulated and striving for control" described how adolescents' experience of heightened sensitivity enhanced adolescents' levels of anxiety and subsequent pain, illustrating a reciprocal relationship between anxiety, pain, and sensory elements. Theme 2, "not everyone fits the mold" captured how autistic adolescents positioned themselves as distinct from others due to the unique nature of being autistic and living with pain. This sense of difference negatively impacted adolescents' ability to engage with and benefit from the standard treatment for chronic pain.; Conclusions: Findings suggest that autistic adolescents living with pain experience pain and face barriers to effective pain treatment. Our results identify the need for educational resources to facilitate clinicians to better understand the experience of autistic adolescents living with pain. In turn, such understanding may improve treatment and outcomes in this population. (© The Author(s) 2024. Published by Oxford University Press on behalf of the Society of Pediatric Psychology.)

**DOI:** 10.1093/jpepsy/jsae004

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38324735&custid=ns010877>

### 36. Observed gaps in UK anaesthetic monitoring practice

**Item Type:** Journal Article

**Authors:** Kane, A. D.;Davies, M. T.;Armstrong, R. A.;Kursumovic, E.;Soar, J. and Cook, T. M.

**Publication Date:** 2024

**Journal:** Anaesthesia 79(1), pp. 93-95

**DOI:** 10.1111/anae.16147

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=37855065&custid=ns010877>

### 37. The Conundrum of Cancer-Associated Thrombosis: Lesson Learned from Two Intriguing Cases and Literature Review

**Item Type:** Journal Article

**Authors:** Laurino, Simona;Russi, Sabino;Omer, Ludmila Carmen;D'Angelo, Alberto;Bozza, Giovanni;Gallucci, Giuseppina;Falco, Geppino;Roviello, Giandomenico and Bochicchio, Anna Maria

**Publication Date:** 2024

**Journal:** Diseases (Basel, Switzerland) 12(3)

**Abstract:** The correlation between cancer and venous thromboembolism (VTE) is solid, whereas the knowledge about cancer-related arterial thromboembolism (ATE) still needs a deeper investigation to clarify its pathogenesis. We describe two cases that represent useful hints for a comprehensive review of the thrombotic issue. A 75-year-old man with advanced

rectal cancer treated with fluoropyrimidines suffered two catheter-related VTE events managed according to current guidelines. There was no indication for "extended" anticoagulant therapy for him, but during antithrombotic wash-out and fluoropyrimidines plus panitumumab regimen, he suffered a massive right coronary artery (RCA) thrombosis. Another patient with no cardiovascular (CV) risk factors and affected by advanced bladder cancer was treated with a platinum-containing regimen and suffered an acute inferior myocardial infarction 2 days after chemotherapy administration. He was successfully treated with primary Percutaneous Transluminal Coronary Angioplasty of RCA, discontinuing platinum-based therapy. Our observations raise the issue of cancer-associated thrombosis (CAT) complexity and the potential correlation between arterial and venous thrombotic events. Moreover, physicians should be aware of the thrombotic risk associated with anticancer therapies, suggesting that an appropriate prophylaxis should be considered.

**DOI:** 10.3390/diseases12030047

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38534971&custid=ns010877>

**38. Working with public contributors in Parkinson's research: What were the changes, benefits and learnings? A critical reflection from the researcher and public contributor perspective**

**Item Type:** Journal Article

**Authors:** Lithander, Fiona E.; Tenison, Emma; Jones, David Ashford; Stocker, Sue; Hopewell-Kelly, Noreen; Gibson, Andy and McGrath, Carmel

**Publication Date:** 2024

**Journal:** Health Expectations 27(1), pp. 1-14

**Abstract:** Introduction: This paper provides a critical reflection from both the researcher and public contributor (PC) perspective on the benefits and the learnings taken from involving PCs in research related to Parkinson's. Approach to Patient and Public Involvement (PPI): This paper reports on how PCs shaped the design and development of the PRIME-UK research programme study materials through input into information leaflets, consent forms and other patient-facing documents used across three studies within the PRIME-UK research programme. The PRIME-UK research programme is designed to improve the quality of life of people with Parkinson's and this project included three studies: a cross-sectional study, a randomised control trial and a qualitative study. We captured these impacts using Public Involvement Impact Logs, which provide a framework allowing researchers and PCs to report on the learnings, immediate outcomes and impacts from PPI. For this project, the impact logs enabled us to provide reflections from PCs and researchers on the process of involving 'the public' in Parkinson's research. Findings: This paper builds on existing evidence of the range of benefits and challenges that emerge from working with patients and the public in Parkinson's research; this includes reflecting on the changes made to the study materials and benefits for the people involved. Four themes emerged from the reflections that were common to the researchers and PCs; these were the importance of providing a supportive environment; recognition of the benefit of the evaluation of the impact of PPI; acknowledgement that engagement of PPI can make a positive difference to the research process and that timely communication and the use of face-to-face communication, where available, is key. Furthermore, we demonstrate how impact logs provide a useful and straightforward tool for evaluating public involvement practices and supporting the feedback process. Conclusion: We offer key recommendations for involving patients and the public in Parkinson's research and suggest approaches that could be implemented to capture the impacts of public involvement. Public Contribution:

Public contributors (PCs) were involved in the design and development of the participant information leaflets, consent forms and other patient-facing documents used for studies within the PRIME-UK research programme. In addition, PCs evaluated their involvement using impact logs and co-authored this paper.

**DOI:** 10.1111/hex.13914

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cin20&AN=175641756&custid=ns010877>

### 39. **Assessing the sensitivity and specificity of myositis-specific and associated autoantibodies: a sub-study from the MyoCite cohort**

**Item Type:** Journal Article

**Authors:** Loganathan, Aravinthan;Gupta, Latika;Rudge, Alex;Lu, Hui;Bowler, Elizabeth;McMorrow, Fionnuala;Naveen, R.;Anuja, Anamika K.;Agarwal, Vikas;McHugh, Neil and Tansley, Sarah

**Publication Date:** 2024

**Journal:** Rheumatology (Oxford, England)

**Abstract:** Objectives: Myositis-specific and associated autoantibodies are important biomarkers in routine clinical use. We assessed local testing performance for myositis autoantibodies by comparing line immunoassay (LIA) to protein radio-immunoprecipitation and identifying clinical characteristics associated with each myositis autoantibody in the MyoCite cohort.; Methods: Serum samples from patients within the MyoCite cohort, a well-characterised retro-prospective dataset of adult and juvenile idiopathic inflammatory myopathy (IIM) patients in Lucknow, India (2017-2020), underwent LIA at Sanjay Gandhi Postgraduate Institute of Medical Science (SGPGIMS), Lucknow. Immunoprecipitation of 147 IIM patient serum samples (125 adult-onset, 22 juvenile-onset) was conducted at the University of Bath, with researchers blind to LIA results. LIA performance was assessed against Immunoprecipitation as the reference standard, measuring sensitivity, specificity, and inter-rater agreement. Univariate and multivariate logistic regression determined clinical associations for specific MSA.; Results: Immunoprecipitation identified myositis autoantibodies in 56.5% (n = 83) of patient samples, with anti-Jo1 (n = 16; 10.9%) as the most common, followed by anti-MDA5 (n = 14, 9.5%). While LIA showed good agreement for anti-Jo1, anti-PL7 and anti-PL12 (Cohen's  $\kappa$  0.79, 0.83, and 1, respectively), poor agreement was observed in other subgroups, notably anti-TIF1 $\gamma$  (Cohen's  $\kappa$  0.21). Strongly positive samples, especially in myositis-specific autoantibodies, correlated more with immunoprecipitation results. Overall, 59 (40.1%) samples exhibited non-congruence on LIA and Immunoprecipitation, and  $\kappa$  values for LIA's for anti-TIF1 $\gamma$ , anti-Ku, anti-PmScl, anti-Mi2, and anti-SAE ranged between 0.21-0.60.; Conclusion: While LIA reliably detected anti-Jo1, anti-PL7, anti-PL12, anti-MDA5, and anti-NXP-2, it also displayed false positives and negatives. Its effectiveness in detecting other autoantibodies, such as anti-TIF1 $\gamma$ , was poor. (© The Author(s) 2024. Published by Oxford University Press on behalf of the British Society for Rheumatology.)

**DOI:** 10.1093/rheumatology/keae167

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38479813&custid=ns010877>

### 40. **Drop attacks: a practical guide**

**Item Type:** Journal Article

**Authors:** Manford, Evelyn;Garg, Anupam and Manford, Mark

**Publication Date:** 2024

**Journal:** Practical Neurology 24(2), pp. 106-113

**Abstract:** 'Drop attacks' encompass both falls and transient loss of consciousness, but the term is not clearly defined. We offer our definition and explore the differential diagnoses. The most common causes are cardiovascular. We discuss clinical and electrographic criteria that suggest underlying arrhythmia or other serious cardiac disorders that require further investigation, and the potential diagnoses that may underlie these 'worrying syncopes'. Vestibular dysfunction also commonly causes collapses, sometimes without typical vertigo. These two common conditions may coexist especially in the elderly. Falls in elderly people often require assessment through a lens of frailty and multifactorial risk factors, rather than seeking a unitary diagnosis. Some drop attacks may be due to longstanding epilepsy and we discuss how to approach these cases. Functional neurological disorder is a common cause in younger people, for which there may also be clinical clues. We review the rarer causes of collapse that may be described as drop attacks, including cataplexy and hydrocephalic attacks.; **Competing Interests:** Competing interests: None declared. (© Author(s) (or their employer(s)) 2024. No commercial re-use. See rights and permissions. Published by BMJ.)

**DOI:** 10.1136/pn-2023-003791

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=37891001&custid=ns010877>

#### 41. Peri-operative cardiac arrest in the older frail patient as reported to the 7th National Audit Project of the Royal College of Anaesthetists

**Item Type:** Journal Article

**Authors:** Moppett, I. K.;Kane, A. D.;Armstrong, R. A.;Kursumovic, E.;Soar, J. and Cook, T. M.

**Publication Date:** 2024

**Journal:** Anaesthesia

**Abstract:** Frailty increases peri-operative risk, but details of its burden, clinical features and the risk of, and outcomes following, peri-operative cardiac arrest are lacking. As a preplanned analysis of the 7th National Audit Project of the Royal College of Anaesthetists, we described the characteristics of older patients living with frailty undergoing anaesthesia and surgery, and those reported to the peri-operative cardiac arrest case registry. In the activity survey, 1676 (26%) of 6466 patients aged > 65 y were reported as frail (Clinical Frailty Scale score  $\geq$  5). Increasing age and frailty were both associated with increasing comorbidities and the proportion of surgery undertaken as an emergency. Except in patients who were terminally ill (Clinical Frailty Scale score 9), increasing frailty was associated with an increased proportion of complex or major surgery. The rate of use of invasive arterial blood pressure monitoring was associated with frailty only until Clinical Frailty Scale score 5, and then plateaued or fell. Of 881 cardiac arrests reported to the 7th National Audit Project, 156 (18%) were in patients aged > 65 y and living with frailty, with an estimated incidence of 1 in 1204 (95%CI 1 in 1027-1412) and a mortality rate of 1 in 2020 (95%CI 1 in 1642-2488), approximately 2.6-fold higher than in adults who were not frail. Hip fracture, emergency laparotomy, emergency vascular surgery and urological surgery were the most common surgical procedures in older patients living with frailty who had a cardiac arrest. We report a high burden of frailty within the surgical population, requiring complex, urgent surgery, and



the extent of poorer outcomes of peri-operative cardiac arrest compared with patients of the same age not living with frailty. (© 2024 The Authors. Anaesthesia published by John Wiley & Sons Ltd on behalf of Association of Anaesthetists.)

**DOI:** 10.1111/anae.16267

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38556808&custid=ns010877>

**42. British Gynaecological Cancer Society (BGCS) vulval cancer guidelines: An update on recommendations for practice 2023**

**Item Type:** Journal Article

**Authors:** Morrison, Jo;Baldwin, Peter;Hanna, Louise;Andreou, Adrian;Buckley, Lynn;Durrant, Lisa;Edey, Katharine;Faruqi, Asma;Fotopoulou, Christina;Ganesan, Raji;Hillaby, Kathryn and Taylor, Alexandra

**Publication Date:** 2024

**Journal:** European Journal of Obstetrics & Gynecology & Reproductive Biology 292, pp. 210-238

**DOI:** 10.1016/j.ejogrb.2023.11.013

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cin20&AN=174323208&custid=ns010877>

**43. The characteristics and predictors of mortality in periprosthetic fractures around the knee**

**Item Type:** Journal Article

**Authors:** Nasser, Ahmed A. H. H.;Sidhu, Manpreet;Prakash, Rohan;Mahmood, Ansar;Osman, Khabab;Chauhan, Govind S.;Nandra, Rajpal;Dewan, Varun;Davidson, Jerome;Al-Azzawi, Mohammed;Smith, Christian;Gawad, Mothana;Palaiologos, Ioannis;Cuthbert, Rory;Wignadasan, Warran;Banks, Daniel;Archer, James;Odeh, Abdulrahman;Moore, Thomas;Tahir, Muaaz, et al

**Publication Date:** 2024

**Journal:** The Bone & Joint Journal 106-B(2), pp. 158-165

**Abstract:** Aims: Periprosthetic fractures (PPFs) around the knee are challenging injuries. This study aims to describe the characteristics of knee PPFs and the impact of patient demographics, fracture types, and management modalities on in-hospital mortality.; Methods: Using a multicentre study design, independent of registry data, we included adult patients sustaining a PPF around a knee arthroplasty between 1 January 2010 and 31 December 2019. Univariate, then multivariable, logistic regression analyses were performed to study the impact of patient, fracture, and treatment on mortality.; Results: Out of a total of 1,667 patients in the PPF study database, 420 patients were included. The in-hospital mortality rate was 6.4%. Multivariable analyses suggested that American Society of Anesthesiologists (ASA) grade, history of peripheral vascular disease (PVD), history of rheumatic disease, fracture around a loose implant, and cerebrovascular accident (CVA) during hospital stay were each independently associated with mortality. Each point increase in ASA grade independently correlated with a four-fold greater mortality risk (odds ratio (OR)

4.1 (95% confidence interval (CI) 1.19 to 14.06);  $p = 0.026$ ). Patients with PVD have a nine-fold increase in mortality risk (OR 9.1 (95% CI 1.25 to 66.47);  $p = 0.030$ ) and patients with rheumatic disease have a 6.8-fold increase in mortality risk (OR 6.8 (95% CI 1.32 to 34.68);  $p = 0.022$ ). Patients with a fracture around a loose implant (Unified Classification System (UCS) B2) have a 20-fold increase in mortality, compared to UCS A1 (OR 20.9 (95% CI 1.61 to 271.38);  $p = 0.020$ ). Mode of management was not a significant predictor of mortality. Patients managed with revision arthroplasty had a significantly longer length of stay (median 16 days;  $p = 0.029$ ) and higher rates of return to theatre, compared to patients treated nonoperatively or with fixation.; Conclusion: The mortality rate in PPFs around the knee is similar to that for native distal femur and neck of femur fragility fractures. Patients with certain modifiable risk factors should be optimized. A national PPF database and standardized management guidelines are currently required to understand these complex injuries and to improve patient outcomes.; Competing Interests: A. A. H. H. Nasser and A. Mahmood report funding from Queen Elizabeth Hospital Birmingham Charity Trauma Research and Education Fund, related to this study. (© 2024 The British Editorial Society of Bone & Joint Surgery.)

**DOI:** 10.1302/0301-620X.106B2.BJJ-2023-0700.R1

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38425310&custid=ns010877>

#### 44. TIF1-gamma IgG2 isotype is not associated with malignancy in juvenile dermatomyositis patients

**Item Type:** Journal Article

**Authors:** Nguyen, Huong D.;Jouen, Fabienne;Déchelotte, Benoit;Cordel, Nadège;Gitiaux, Cyril;Bodemer, Christine;Quatier, Pierre;Belot, Alexandre;O'Brien, Kathryn;Cancemi, Dario;Melki, Isabelle;Fabien, Nicole;Tansley, Sarah;Boyer, Olivier;Wedderburn, Lucy R. and Bader-Meunier, Brigitte

**Publication Date:** 2024

**Journal:** Rheumatology (Oxford, England)

**DOI:** 10.1093/rheumatology/keae182

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38498839&custid=ns010877>

#### 45. Peri-operative decisions about cardiopulmonary resuscitation among adults as reported to the 7th National Audit Project of the Royal College of Anaesthetists

**Item Type:** Journal Article

**Authors:** Nolan, J. P.;Soar, J.;Kane, A. D.;Moppett, I. K.;Armstrong, R. A.;Kursumovic, E. and Cook, T. M.

**Publication Date:** 2024

**Journal:** Anaesthesia 79(2), pp. 186-192

**Abstract:** Current guidance recommends that, in most circumstances, cardiopulmonary resuscitation should be attempted when cardiac arrest occurs during anaesthesia, and when a patient has a pre-existing 'do not attempt cardiopulmonary resuscitation' recommendation, this should be suspended. How this guidance is translated into everyday clinical practice in

the UK is currently unknown. Here, as part of the 7th National Audit Project of the Royal College of Anaesthetists, we have: assessed the rates of pre-operative 'do not attempt cardiopulmonary resuscitation' recommendations via an activity survey of all cases undertaken by anaesthetists over four days in each participating site; and analysed our one-year case registry of peri-operative cardiac arrests to understand the rates of cardiac arrest in patients who had 'do not attempt cardiopulmonary resuscitation' decisions pre-operatively. In the activity survey, among 20,717 adults (aged > 18 y) undergoing surgery, 595 (3%) had a 'do not attempt cardiopulmonary resuscitation' recommendation pre-operatively, of which less than a third (175, 29%) were suspended. Of the 881 peri-operative cardiac arrest reports, 54 (6%) patients had a 'do not attempt cardiopulmonary resuscitation' recommendation made pre-operatively and of these 38 (70%) had a clinical frailty scale score  $\geq 5$ . Just under half (25, 46%) of these 'do not attempt cardiopulmonary resuscitation' recommendations were formally suspended at the time of anaesthesia and surgery. One in five of these patients with a 'do not attempt cardiopulmonary resuscitation' recommendation who had a cardiac arrest survived to leave hospital and of the seven patients with documented modified Rankin Scale scores before and after cardiac arrest, four remained the same and three had worse scores. Very few patients who had a pre-existing 'do not attempt cardiopulmonary resuscitation' recommendation had a peri-operative cardiac arrest, and when cardiac arrest did occur, return of spontaneous circulation was achieved in 57%, although > 50% of these patients subsequently died before discharge from hospital. (© 2023 The Authors. Anaesthesia published by John Wiley & Sons Ltd on behalf of Association of Anaesthetists.)

**DOI:** 10.1111/anae.16179

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=37991058&custid=ns010877>

#### 46. Peri-operative cardiac arrest in children as reported to the 7th National Audit Project of the Royal College of Anaesthetists

**Item Type:** Journal Article

**Authors:** Oglesby, F. C.; Scholefield, B. R.; Cook, T. M.; Smith, J. H.; Pappachan, V. J.; Kane, A. D.; Armstrong, R. A.; Kursumovic, E. and Soar, J.

**Publication Date:** 2024

**Journal:** Anaesthesia

**Abstract:** The 7th National Audit Project of the Royal College of Anaesthetists studied peri-operative cardiac arrest. An activity survey estimated UK paediatric anaesthesia annual caseload as 390,000 cases, 14% of the UK total. Paediatric peri-operative cardiac arrests accounted for 104 (12%) reports giving an incidence of 3 in 10,000 anaesthetics (95%CI 2.2-3.3 per 10,000). The incidence of peri-operative cardiac arrest was highest in neonates (27, 26%), infants (36, 35%) and children with congenital heart disease (44, 42%) and most reports were from tertiary centres (88, 85%). Frequent precipitants of cardiac arrest in non-cardiac surgery included: severe hypoxaemia (20, 22%); bradycardia (10, 11%); and major haemorrhage (9, 8%). Cardiac tamponade and isolated severe hypotension featured prominently as causes of cardiac arrest in children undergoing cardiac surgery or cardiological procedures. Themes identified at review included: inappropriate choices and doses of anaesthetic drugs for intravenous induction; bradycardias associated with high concentrations of volatile anaesthetic agent or airway manipulation; use of atropine in the place of adrenaline; and inadequate monitoring. Overall quality of care was judged by the panel to be good in 64 (62%) cases, which compares favourably with adults (371, 52%). The study provides insight into paediatric anaesthetic practice, complications and peri-operative cardiac arrest. (© 2024 The Authors. Anaesthesia published by John Wiley & Sons Ltd on behalf of Association of Anaesthetists.)

**DOI:** 10.1111/anae.16251

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38369586&custid=ns010877>

**47. Neurological presentation of profound hypothyroidism**

**Item Type:** Journal Article

**Authors:** Paisey, Christopher and Chohan, Gurjit

**Publication Date:** 2024

**Journal:** Practical Neurology 24(1), pp. 74-75

**DOI:** 10.1136/pn-2023-003859

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cin20&AN=176416090&custid=ns010877>

**48. Is the level of varicella-zoster virus IgG associated with symptomatic status of genital herpes simplex virus infection? A case-control study**

**Item Type:** Journal Article

**Authors:** Palmer, Bret S.;Tang, Alan;Winchester, Stephen;Atkins, Mark;Barton, Simon and Kelleher, Peter

**Publication Date:** 2024

**Journal:** International Journal of STD & AIDS 35(4), pp. 314-318

**DOI:** 10.1177/09564624231221172

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cin20&AN=175792026&custid=ns010877>

**49. A Risk Assessment and Planning Tool to Prevent Sudden Unexpected Death in Infancy: Development and Evaluation of The Baby Sleep Planner**

**Item Type:** Journal Article

**Authors:** Pease, Anna;Ingram, Jenny;Lambert, Becky;Patrick, Karen;Pitts, Kieren;Fleming, Peter J. and Blair, Peter S.

**Publication Date:** 2024

**Journal:** JMIR Pediatrics and Parenting 7, pp. e49952

**Abstract:** Background: Successful national safer sleep campaigns in the United Kingdom have lowered the death rates from sudden unexpected death in infancy (SUDI) over the past 3 decades, but deaths persist in socioeconomically deprived families. The circumstances of current deaths suggest that improvements in support for some families to follow safer sleep advice more consistently could save lives.; Objective: This study aimed to

develop and evaluate a risk assessment and planning tool designed to improve the uptake of safer sleep advice in families with infants at increased risk of SUDI.; Methods: A co-design approach was used to develop the prototype interface of a web-based tool with 2 parts: an individual SUDI risk assessment at birth and a downloadable plan for safety during times of disruption. The advice contained within the tool is concordant with national guidance from the Lullaby Trust, the United Nations International Children's Emergency Fund (UNICEF), and the National Institute for Health and Care Excellence. User testing of the prototype tool was conducted by inviting health visitors, midwives, and family nurses to use it with families eligible for additional support. Qualitative interviews with health professionals and families allowed for iterative changes to the tool and for insights into its function and influence on parental behavior.; Results: A total of 22 health professionals were enrolled in the study, of whom 20 (91%) were interviewed. They reported appreciating the functionality of the tool, which allowed them to identify at-risk families for further support. They felt that the tool improved how they communicated about risks with families. They suggested expanding its use to include relevance in the antenatal period and having versions available in languages other than English. They reported using the tool with 58 families; 20 parents gave consent to be interviewed by the research team about their experiences with the tool. Families were positive about the tool, appreciated the trustworthy information, and felt that it was useful and appropriate and that the plans for specific infant sleeps would be of benefit to them and other family members.; Conclusions: Our tool combines risk assessment and safety planning, both of which have the potential to improve the uptake of lifesaving advice. Refinements to the tool based on these findings have ensured that the tool is ready for further evaluation in a larger study before being rolled out to families with infants at increased risk. (©Anna Pease, Jenny Ingram, Becky Lambert, Karen Patrick, Kieren Pitts, Peter J Fleming, Peter S Blair, The Baby Sleep Project Family Advisory Group. Originally published in JMIR Pediatrics and Parenting (<https://pediatrics.jmir.org>), 22.02.2024.)

**DOI:** 10.2196/49952

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38386377&custid=ns010877>

50. **COVID-19 Stroke Apical Lung Examination Study 2: a national prospective CTA biomarker study of the lung apices, in patients presenting with suspected acute stroke (COVID SALES 2)**

**Item Type:** Journal Article

**Authors:** Ratneswaren, T.;Chan, N.;Aeron-Thomas, J.;Sait, S.;Adesalu, O.;Alhawamdeh, M.;Benger, M.;Garnham, J.;Dixon, L.;Tona, F.;McNamara, C.;Taylor, E.;Lobotesis, K.;Lim, E.;Goldberg, O.;Asmar, N.;Evbomwan, O.;Banerjee, S.;Holm-Mercer, L.;Senor, J., et al

**Publication Date:** 2024

**Journal:** NeuroImage.Clinical 42, pp. 103590

**Abstract:** Background: Apical ground-glass opacification (GGO) identified on CT angiography (CTA) performed for suspected acute stroke was developed in 2020 as a coronavirus-disease-2019 (COVID-19) diagnostic and prognostic biomarker in a retrospective study during the first wave of COVID-19.; Objective: To prospectively validate whether GGO on CTA performed for suspected acute stroke is a reliable COVID-19 diagnostic and prognostic biomarker and whether it is reliable for COVID-19 vaccinated patients.; Methods: In this prospective, pragmatic, national, multi-center validation study performed at 13 sites, we captured study data consecutively in patients undergoing CTA for suspected acute stroke from January-March 2021. Demographic and clinical features associated with stroke and COVID-19 were incorporated. The primary outcome was the

likelihood of reverse-transcriptase-polymerase-chain-reaction swab-test-confirmed COVID-19 using the GGO biomarker. Secondary outcomes investigated were functional status at discharge and survival analyses at 30 and 90 days. Univariate and multivariable statistical analyses were employed.; Results: CTAs from 1,111 patients were analyzed, with apical GGO identified in 8.5 % during a period of high COVID-19 prevalence. GGO showed good inter-rater reliability (Fleiss  $\kappa = 0.77$ ); and high COVID-19 specificity (93.7 %, 91.8-95.2) and negative predictive value (NPV; 97.8 %, 96.5-98.6). In subgroup analysis of vaccinated patients, GGO remained a good diagnostic biomarker (specificity 93.1 %, 89.8-95.5; NPV 99.7 %, 98.3-100.0). Patients with COVID-19 were more likely to have higher stroke score (NIHSS (mean +/- SD) 6.9 +/- 6.9, COVID-19 negative, 9.7 +/- 9.0, COVID-19 positive;  $p = 0.01$ ), carotid occlusions (6.2 % negative, 14.9 % positive;  $p = 0.02$ ), and larger infarcts on presentation CT (ASPECTS 9.4 +/- 1.5, COVID-19 negative, 8.6 +/- 2.4, COVID-19 positive;  $p = 0.00$ ). After multivariable logistic regression, GGO (odds ratio 15.7, 6.2-40.1), myalgia (8.9, 2.1-38.2) and higher core body temperature (1.9, 1.1-3.2) were independent COVID-19 predictors. GGO was associated with worse functional outcome on discharge and worse survival after univariate analysis. However, after adjustment for factors including stroke severity, GGO was not independently predictive of functional outcome or mortality.; Conclusion: Apical GGO on CTA performed for patients with suspected acute stroke is a reliable diagnostic biomarker for COVID-19, which in combination with clinical features may be useful in COVID-19 triage.; Competing Interests: Declaration of Competing Interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. (Copyright © 2024 The Author(s). Published by Elsevier Inc. All rights reserved.)

**DOI:** 10.1016/j.nicl.2024.103590

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38513535&custid=ns010877>

**51. Baseline Expression of Immune Gene Modules in Blood is Associated With Primary Response to Anti-TNF Therapy in Crohn's Disease Patients.**

**Item Type:** Journal Article

**Authors:** Reppell, M.;Smaoui, N.;Waring, J. F.;Pivorunas, V.;Guay, H.;Lin, S.;Chanchlani, N.;Bewshea, C.;Goodhand, J. R.;Kennedy, N. A.;Anderson, C. A.;Patel, V.;Mazhar, Z.;Saich, R.;Colleypriest, B.;Tham, T. C.;Iqbal, T. H.;Kaushik, V.;Murugesan, S.;Singhi, S., et al

**Publication Date:** 2024

**Journal:** Journal of Crohn's and Colitis 18(3), pp. 431-445

**Abstract:** Background and Aims: Anti-tumour necrosis factor [anti-TNF] therapy is widely used for the treatment of inflammatory bowel disease, yet many patients are primary non-responders, failing to respond to induction therapy. We aimed to identify blood gene expression differences between primary responders and primary non-responders to anti-TNF monoclonal antibodies [infliximab and adalimumab], and to predict response status from blood gene expression and clinical data.

**52. Management of severe ME/CFS in children and young people in the UK: a British Paediatric Surveillance Unit study**

**Item Type:** Journal Article

**Authors:** Royston, Alexander Peter;Burge, Sarah;Idini, Ilaria;Brigden, Amberly and Pike, Katharine Claire



**Publication Date:** 2024

**Journal:** BMJ Paediatrics Open 8(1)

**Abstract:** Objective: Severe myalgic encephalomyelitis or chronic fatigue syndrome (ME/CFS) in children and young people (CYP) is a little-understood condition which significantly impacts education, development and quality of life. We used data from a population-wide surveillance study to explore the screening investigation, referral and management of suspected cases of paediatric severe ME/CFS.; Methods: A British Paediatric Surveillance Unit (BPSU) study reported cases of CYP with suspected severe ME/CFS between February 2018 and February 2019. Paediatricians reporting cases to BPSU and allied healthcare professionals in two large specialist paediatric ME/CFS centres were invited to complete questionnaires for CYP meeting the surveillance case definition. The study focused primarily on CYP with confirmed severe ME/CFS and the extent to which their care met NICE (The National Institute for Health and Care Excellence) recommendations but also considered separately those with probable or possible severe ME/CFS.; Results: This study includes a total of 92 CYP with suspected severe ME/CFS; 33 meeting criteria for severe ME/CFS and an additional 59 classified as probable or possible severe ME/CFS. For 16 possible cases, incomplete investigation to exclude alternative diagnoses prevented confirmation of a severe ME/CFS diagnosis. Only 21 of 33 (64%) confirmed severe ME/CFS cases had been referred to specialist services. The management provided varied considerably between patients and four received nothing at all. Of the management provided, the most frequent approaches were medication (67%), activity management (61%) and physiotherapy (61%). Domiciliary assessments and support, and social services referrals were received by 12% and 6% of confirmed severe cases. Similar proportions of management approaches were seen in probable/possible severe ME/CFS.; Conclusion: Full investigation is frequently incomplete in CYP with suspected severe ME/CFS and recommendations for referral and management are poorly implemented, in particular the needs of CYP who are unable to leave their home might be poorly met.; Competing Interests: Competing interests: No, there are no competing interests. © Author(s) (or their employer(s)) 2024. Re-use permitted under CC BY. Published by BMJ.)

**DOI:** 10.1136/bmjpo-2023-002436

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38453418&custid=ns010877>

**53. British Society of Rheumatology guideline working group response to European Medicines Agency safety update on Hydroxychloroquine**

**Item Type:** Journal Article

**Authors:** Russell, Mark D.;Dey, Mrinalini;Flint, Julia;Davie, Philippa;Allen, Alexander;Crossley, Amy;Frishman, Margreta;Gayed, Mary;Hodson, Kenneth;Khamashta, Munther;Moore, Louise;Panchal, Sonia;Piper, Madeleine;Reid, Clare;Saxby, Katherine;Schreiber, Karen;Senvar, Naz;Tosounidou, Sofia;van de Venne, Maud and Warburton, Louise

**Publication Date:** 2024

**Journal:** Rheumatology 63(2), pp. e37-e38

**DOI:** 10.1093/rheumatology/kead384

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cin20&AN=175238999&custid=ns010877>

#### 54. Top cardiac arrest randomised trials of 2023

**Item Type:** Journal Article

**Authors:** Scquizzato, Tommaso;Sandroni, Claudio;Soar, Jasmeet and Nolan, Jerry P.

**Publication Date:** 2024

**Journal:** Resuscitation 196, pp. 110133

**Abstract:** Competing Interests: Declaration of competing interest The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: TS is the Social Media Editor of Resuscitation, CS is a member of the Editorial Board of Resuscitation, JS is an Editor of Resuscitation, and JPN is the Editor-In-Chief of Resuscitation.

**DOI:** 10.1016/j.resuscitation.2024.110133

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38311283&custid=ns010877>

#### 55. Changing Medication-Related Beliefs: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

**Item Type:** Journal Article

**Authors:** Sheils, Elizabeth;Tillett, William;James, Delyth;Brown, Sarah;Dack, Charlotte;Family, Hannah and Chapman, Sarah C. E.

**Publication Date:** 2024

**Journal:** Health Psychology 43(3), pp. 155-170

**Abstract:** Objective: Medication-related beliefs, for example, beliefs that medicines are unnecessary or that side effects are likely, can influence medication behaviors and experiences, potentially impacting quality of life and mortality. At times, it may be useful to change medication-related beliefs, for example, to reduce patients' concerns about side effects when extensive evidence suggests side effects are rare. Currently we do not know the most effective methods to address medication beliefs. Method: Systematic review and meta-analysis of randomized controlled trials that measured medication-related beliefs in people prescribed medication for longterm condition(s). We extracted data on behavior change techniques (BCTs), belief measure, study and patient characteristics, risk of bias, and quality of description. Results: We identified 56 trials randomizing 8,714 participants. In meta-analysis, interventions led to small-to-medium effects ( $n = 36$ , Hedges'  $g = .362$ , 95% confidence interval CI [.20, .52],  $p, .001$ ) in increasing beliefs about medication need/benefit and reducing concerns about medication ( $n = 21$ , Hedges'  $g = -.435$ , 95% CI [-0.72, -0.15],  $p, .01$ ). Effect sizes were higher for interventions that reported a significant effect on adherence. Problem solving, information about health consequences, and social support (unspecified) were the most prevalent BCTs. Fourteen BCTs were associated with significant effects on need/benefit beliefs and four BCTs were associated with significant effects on concern beliefs. Conclusion: It is possible to modify medication-related beliefs using a range of interventions and techniques. Future research should explore the best ways to operationalize these BCTs for specific health conditions to support medication beliefs and improve adherence. Public Significance Statement This review advances the field through highlighting techniques that can lead to a change in medication beliefs and as a consequence improved adherence. The meta-analysis indicated that beliefs regarding the necessity of medication and concerns about medication are modifiable. Importantly, it

showed that these beliefs are strongly associated with medication adherence. Specific behavior change techniques that led to a significant change in medication belief were identified. These findings advance the field of medication adherence highlighting which techniques are most likely to be effective.; Objetivo: Las creencias relacionadas con los medicamentos, por ejemplo, las creencias de que los medicamentos son innecesarios o que es probable que se produzcan efectos secundarios, pueden influir en las conductas y experiencias con los medicamentos, lo que podría afectar la calidad de vida y la mortalidad. En ocasiones, puede resultar útil cambiar las creencias relacionadas con los medicamentos, por ejemplo, para reducir las preocupaciones de los pacientes sobre los efectos secundarios cuando la evidencia extensa sugiere que los efectos secundarios son raros. Actualmente no conocemos los métodos más eficaces para abordar las creencias sobre la medicación. Métodos: Revisión sistemática y metaanálisis de pruebas controladas aleatorizadas que midieron las creencias relacionadas con la medicación en personas a las que se les recetaron medicamentos para afecciones a largo plazo. Extrajimos datos sobre Técnicas de Cambio de Comportamiento (BCT, por sus siglas en inglés), medidas de creencias, características del estudio y del paciente, riesgo de sesgo y calidad de la descripción. Resultados: Identificamos 56 pruebas que asignaron al azar a 8,714 participantes. En el metaanálisis, las intervenciones produjeron efectos de pequeños a medianos ( $n=36$ ,  $g$  de Hedges = .362, IC Intervalo de Confianza] del 95% 0.20, 0.52],  $p$  ,.001) en el aumento de las creencias sobre la necesidad/beneficio de la medicación y reducir las preocupaciones sobre la medicación ( $n=21$ ,  $g$  de Hedges = -.435, IC del 95% -0.72, -0.15],  $p$ ,.01). Los tamaños del efecto fueron mayores para las intervenciones que informaron un efecto significativo sobre la adherencia. La resolución de problemas, la información sobre las consecuencias para la salud y el apoyo social (sin especificar) fueron los BCTs más prevalentes. Catorce BCTs se asociaron con efectos significativos sobre las creencias de necesidad/beneficio y cuatro BCTs se asociaron con efectos significativos sobre las creencias de preocupación. Conclusión: Es posible modificar las creencias relacionadas con la medicación utilizando una variedad de intervenciones y técnicas. Las investigaciones futuras deberían explorar las mejores formas de poner en práctica estos BCTs para condiciones de salud específicas para respaldar las creencias sobre la medicación y mejorar la adherencia.

**DOI:** 10.1037/hea0001316

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cin20&AN=175476913&custid=ns010877>

## 56. Post-operative surveillance following curative resection of colorectal cancer in an elderly population.

**Item Type:** Journal Article

**Authors:** Shekleton, F.; Baker, W. and Courtney, E.

**Publication Date:** 2024

**Journal:** British Journal of Surgery. Conference: Annual Scientific Meeting of the Surgical Research Society. Cambridge United Kingdom 111(Supplement 2) (pp ii6), pp. Date of Publication: March 2024

**Abstract:** Introduction: There are over 42,000 new cases of colorectal cancer in the UK each year with the highest incidence rates in those aged 85-89. Post-colorectal cancer surveillance aims to reduce cancer incidence and mortality, but its necessity and effectiveness remain debated especially in an elderly population. This study explores the relevance of computer tomography (CT) and colonoscopy surveillance in patients aged 75 and over who have undergone curative resection for colorectal cancer.

## 57. A quantitative evaluation of aerosol generation during cardiopulmonary resuscitation

**Item Type:** Journal Article

**Authors:** Shrimpton, A. J.;Brown, V.;Vassallo, J.;Nolan, J. P.;Soar, J.;Hamilton, F.;Cook, T. M.;Bzdek, B. R.;Reid, J. P.;Makepeace, C. H.;Deutsch, J.;Ascione, R.;Brown, J. M.;Benger, J. R. and Pickering, A. E.

**Publication Date:** 2024

**Journal:** Anaesthesia 79(2), pp. 156-167

**Abstract:** It is unclear if cardiopulmonary resuscitation is an aerosol-generating procedure and whether this poses a risk of airborne disease transmission to healthcare workers and bystanders. Use of airborne transmission precautions during cardiopulmonary resuscitation may confer rescuer protection but risks patient harm due to delays in commencing treatment. To quantify the risk of respiratory aerosol generation during cardiopulmonary resuscitation in humans, we conducted an aerosol monitoring study during out-of-hospital cardiac arrests. Exhaled aerosol was recorded using an optical particle sizer spectrometer connected to the breathing system. Aerosol produced during resuscitation was compared with that produced by control participants under general anaesthesia ventilated with an equivalent respiratory pattern to cardiopulmonary resuscitation. A porcine cardiac arrest model was used to determine the independent contributions of ventilatory breaths, chest compressions and external cardiac defibrillation to aerosol generation. Time-series analysis of participants with cardiac arrest ( $n = 18$ ) demonstrated a repeating waveform of respiratory aerosol that mapped to specific components of resuscitation. Very high peak aerosol concentrations were generated during ventilation of participants with cardiac arrest with median (IQR range) 17,926 (5546-59,209 1523-242,648) particles.l<sup>-1</sup>, which were 24-fold greater than in control participants under general anaesthesia (744 (309-2106 23-9099) particles.l<sup>-1</sup>,  $p < 0.001$ ,  $n = 16$ ). A substantial rise in aerosol also occurred with cardiac defibrillation and chest compressions. In a complimentary porcine model of cardiac arrest, aerosol recordings showed a strikingly similar profile to the human data. Time-averaged aerosol concentrations during ventilation were approximately 270-fold higher than before cardiac arrest (19,410 (2307-41,017 104-136,025]) vs. 72 (41-136 23-268]) particles.l<sup>-1</sup>,  $p = 0.008$ ). The porcine model also confirmed that both defibrillation and chest compressions generate high concentrations of aerosol independent of, but synergistic with, ventilation. In conclusion, multiple components of cardiopulmonary resuscitation generate high concentrations of respiratory aerosol. We recommend that airborne transmission precautions are warranted in the setting of high-risk pathogens, until the airway is secured with an airway device and breathing system with a filter. (© 2023 The Authors. Anaesthesia published by John Wiley & Sons Ltd on behalf of Association of Anaesthetists.)

**DOI:** 10.1111/anae.16162

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=37921438&custid=ns010877>

## 58. Quantification of aerosol generation during positive pressure ventilation via a supraglottic airway with an intentional leak

**Item Type:** Journal Article

**Authors:** Shrimpton, A. J.;Quayle, A. C.;Sleep, D. L.;Brown, J. M. and Cook, T. M.

**Publication Date:** 2024

**Journal:** Anaesthesia 79(3), pp. 318-320

**DOI:** 10.1111/anae.16197

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38217363&custid=ns010877>

59. **Comment on: 'The use of fluorinated gases and quantification of carbon emission for common vitreoretinal procedures'**

**Item Type:** Journal Article

**Authors:** Tavassoli, Shokufeh

**Publication Date:** 2024

**Journal:** Eye (London, England) 38(1), pp. 225

**DOI:** 10.1038/s41433-023-02651-4

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=37355757&custid=ns010877>

60. **Not too big, not too small: blood pressure cuff size matters.**

**Item Type:** Journal Article

**Authors:** Thatcher, A. L. and Welsh, T. J.

**Publication Date:** 2024

**Journal:** Evidence-Based Nursing (pagination)

**DOI:** 10.1136/ebnurs-2023-103893

61. **Pulmonary Hypertension: Intensification and Personalization of Combination Rx (PHoenix): A phase IV randomized trial for the evaluation of dose-response and clinical efficacy of riociguat and selexipag using implanted technologies**

**Item Type:** Journal Article

**Authors:** Varian, Frances; Dick, Jennifer; Battersby, Christian; Roman, Stefan; Ablott, Jenna; Watson, Lisa; Binmahfooz, Sarah; Zafar, Hamza; Colgan, Gerry; Cannon, John; Suntharalingam, Jay; Lordan, Jim; Howard, Luke; McCabe, Colm; Wort, John; Price, Laura; Church, Colin; Hamilton, Neil; Armstrong, Iain; Hameed, Abdul, et al

**Publication Date:** 2024

**Journal:** Pulmonary Circulation 14(1), pp. e12337

**Abstract:** Approved therapies for the treatment of patients with pulmonary arterial hypertension (PAH) mediate pulmonary vascular vasodilatation by targeting distinct biological pathways. International guidelines recommend that patients with an inadequate response to dual therapy with a phosphodiesterase type-5 inhibitor (PDE5i) and endothelin receptor antagonist (ERA), are recommended to either intensify oral therapy by adding a selective prostacyclin receptor (IP) agonist (selexipag), or switching from PDE5i to a soluble guanylate-cyclase stimulator (sGCS; riociguat). The clinical equipoise between these therapeutic choices provides the opportunity for evaluation of individualized therapeutic

effects. Traditionally, invasive/hospital-based investigations are required to comprehensively assess disease severity and demonstrate treatment benefits. Regulatory-approved, minimally invasive monitors enable equivalent measurements to be obtained while patients are at home. In this 2 × 2 randomized crossover trial, patients with PAH established on guideline-recommended dual therapy and implanted with CardioMEMS™ (a wireless pulmonary artery sensor) and ConfirmRx™ (an insertable cardiac rhythm monitor), will receive ERA + sGCS, or PDEi + ERA + IP agonist. The study will evaluate clinical efficacy via established clinical investigations and remote monitoring technologies, with remote data relayed through regulatory-approved online clinical portals. The primary aim will be the change in right ventricular systolic volume measured by magnetic resonance imaging (MRI) from baseline to maximal tolerated dose with each therapy. Using data from MRI and other outcomes, including hemodynamics, physical activity, physiological measurements, quality of life, and side effect reporting, we will determine whether remote technology facilitates early evaluation of clinical efficacy, and investigate intra-patient efficacy of the two treatment approaches.;

Competing Interests: Dr Frances Varian: MRC clinical fellow, travel and conference funding from Janssen Ltd. Dr Jennifer Dick, Mr Christian Battersby, Mr Stefan Roman, Miss Jenna Ablott, Dr Lisa Watson, Mrs Sarah Bizmahfooz, and Dr Hamza Zafar: none declared. Dr Gerry Colgan: no direct conflicts, has undertaken consultancy work & honoraria for Janssen Ltd, Bayer Ltd, MSD. Received research funding from Janssen Ltd. Dr John Cannon: support to attend conferences from Janssen and been paid for advisory boards by Janssen and Ferrer. Jay Suntharalingam and Dr Jim Lordan: none declared. Professor Luke Howard: I have received honoraria for advisory boards, steering committees, and speaking from Janssen. My department has received research funding support from Janssen. I have received personal support for travel, accommodation, and registration at international meetings. I have received honoraria for advisory boards and speaking from MSD. I have received honoraria for advisory boards from Endotronix. Colm McCabe: none declared. Dr John Wort: I have received honoraria from Janssen, MSD, Ferrer, and Acceleron, research grants from Janssen and Ferrer and travel and accommodation grants from Janssen. Laura Price and Dr Colin Church: none declared. Dr Neil Hamilton: Honoraria from MSD and Janssen, travel and accommodation grants from Janssen, participation on advisory boards for Bayer, MSD, Janssen, and Vifor, and is a board member on the NHS Specialist respiratory clinical reference group. Dr Abdul Hameed: none declared. Dr Judith Hurdman, Dr Iain Armstrong and Dr Charlie Elliot: none declared. Prof Robin Condliffe: No COI. Received honoraria for speaking and advisory boards from Janssen and MS. Prof Martin Wilkins: support from NIHR for clinical research facility and biomedical research center infrastructure support BHF center support (RE/18/4/34215), consulting fees for MorphogenIX, Janssen and Janssen, Kinaset, Chiesi, Aerami, BenevolentAI, Novartis, and VIVS, participation on data safety monitoring board for Acceleron and GSK. Associate Professor Alastair Webb: none declared. Dr David Adlam: none declared. Professor Ray L Benza: steering and adjudication committees ABBOTT. Professor Kazem Rahimi: receives grants from the Oxford Martin School and the British Heart Foundation. He is an associate editor of Heart and a specialty editor of PLOS Medicine. And he is a cofounder of Zeesta and sits on the advisory board of Medtronic. Dr Moha Shojaei, Dr Nan Lin, Prof James Wason, Dr Alasdair McIntosh, Prof Alex McConnachie, and Dr Jennifer Middleton: none declared. Dr Roger Thompson: I have received honoraria, travel support, and grant funding from Janssen. Prof David Kiely: Support and grants received from NIHR Sheffield Biomedical Research Centre, Janssen Pharmaceuticals; additional grants from Ferrer; consulting fees, honoraria payments, and supports for attending meetings received from Janssen Pharmaceuticals, Ferrer, Altavant, MSD, and united Therapeutics, participants on advisory boards with Janssen and MSD; members of clinical reference group for specialist respiratory medicine (NHS England) and lead of UK national audit of pulmonary hypertension. Dr Mark Toshner: funding from NIHR Cambridge BRC, NIHR HTA; consulting fees from MorphogenIX and Jansen; participation on data safety monitoring board/advisory board with ComCov and FluCov. Dr Alex Rothman: research funding: Wellcome Trust Clinical Research Career Development Fellowship (206632/Z/17/Z), Medical Research Council (UK) Experimental Medicine Award (MR/W026279/1), NIHR Biomedical Research Center Sheffield, Contribution in kind:



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**DOI:** 10.1002/pul2.12337

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38500737&custid=ns010877>

## 62. Caecal malakoplakia: a rare mimic of malignancy

**Item Type:** Journal Article

**Authors:** Voon Chong, Jeffrey Li and Ali, Noor

**Publication Date:** 2024

**Journal:** BMJ Case Reports 17(1), pp. 1-4

**Abstract:** Malakoplakia is a rare granulomatous disease. Its aetiology is unclear but possible theories include infection with microorganisms (especially *Escherichia coli*), immunosuppression and impaired lysosomal function. It has been commonly documented to affect the genitourinary tract but can affect any organ, with the gastrointestinal system being the next most affected. We present a woman in her 70s, with a 2-week history of right-sided abdominal pain, 13 years following her renal transplant. She was admitted for treatment of an *E. coli* bacteraemia. CT scan had shown a caecal pole mass, highly suspicious for malignancy. It was surgically resected, and histology revealed findings of malakoplakia within the colon. Surgical intervention was combined with a prolonged course of antibiotics for successful treatment. We highlight the ability of malakoplakia to mimic malignancy and should be considered in the differentials in the context of an immunosuppressed patient with radiological findings of a colonic mass.

**DOI:** 10.1136/bcr-2023-257130

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cin20&AN=175309698&custid=ns010877>

## 63. Effects of physical form of beta-lactoglobulin and calcium ingestion on GLP-1 secretion, gastric emptying and energy intake in humans; a randomised crossover trial.

**Item Type:** Journal Article

**Authors:** Watkins, J. D.;Smith, H. A.;Hengist, A.;Nielsen, S. B.;Mikkelsen, U. R.;Saunders, J.;Koumanov, F.;Betts, J. A. and Gonzalez, J. T.

**Publication Date:** 2024

**Journal:** The British Journal of Nutrition , pp. 1-26

**Abstract:** The aim of this study was to assess whether adding calcium to aggregate or native forms of beta-lactoglobulin alters gut hormone secretion, gastric emptying rates and energy intake in healthy men and women. Fifteen healthy adults (mean $\pm$ SD: 9M/6F, age: 24 $\pm$ 5 years) completed 4 trials in a randomised, double-blind, crossover design. Participants consumed test drinks consisting of 30 g beta-lactoglobulin in a native form with

(NATIVE+MINERALS) and without (NATIVE) a calcium-rich mineral supplement; and in an aggregated form both with (AGGREG+MINERALS) and without the mineral supplement (AGGREG). Arterialised blood was sampled for 120 min postprandially to determine gut hormone concentrations. Gastric emptying was determined using <sup>13</sup>C-acetate and <sup>13</sup>C-octanoate, and energy intake was assessed with an ad libitum meal at 120 min. A protein\*mineral interaction effect was observed for total glucagon-like peptide-1 (GLP-1TOTAL) incremental area under the curve (iAUC; p<0.01) whereby MINERALS+AGGREG increased GLP-1TOTAL iAUC to a greater extent than AGGREG (1882+/-603 vs 1550+/-456 pmol.L<sup>-1</sup>.120 min, p<0.01), but MINERALS+NATIVE did not meaningfully alter the GLP-1 iAUC compared with NATIVE (1669+/-547 vs 1844+/-550 pmol.L<sup>-1</sup>.120 min, p=0.09). A protein\*minerals interaction effect was also observed for gastric emptying half-life (p<0.01) whereby MINERALS+NATIVE increased gastric emptying half-life compared with NATIVE (83+/-14 vs 71+/-8 min, p<0.01), whereas no meaningful differences were observed between MINERALS+AGGREG vs AGGREG (p=0.70). These did not result in any meaningful changes in energy intake (protein\*minerals interaction, p = 0.06). These data suggest that the potential for calcium to stimulate GLP-1 secretion at moderate protein doses may depend on protein form. This study was registered at clinicaltrials.gov (NCT04659902).

**64. Effects of physical form of β -lactoglobulin and calcium ingestion on GLP-1 secretion, gastric emptying and energy intake in humans: a randomised crossover trial**

**Item Type:** Journal Article

**Authors:** Watkins, Jonathan D.;Smith, Harry A.;Hengist, Aaron;Nielsen, Søren B.;Mikkelsen, Ulla Ramer;Saunders, John;Koumanov, Francoise;Betts, James A. and Gonzalez, Javier T.

**Publication Date:** 2024

**Journal:** The British Journal of Nutrition , pp. 1-10

**Abstract:** The aim of this study was to assess whether adding Ca<sup>2+</sup> to aggregate or native forms of β -lactoglobulin alters gut hormone secretion, gastric emptying rates and energy intake in healthy men and women. Fifteen healthy adults (mean ± sd: 9M/6F, age: 24 ± 5 years) completed four trials in a randomised, double-blind, crossover design. Participants consumed test drinks consisting of 30 g of β -lactoglobulin in a native form with (NATIVE + MINERALS) and without (NATIVE) a Ca<sup>2+</sup> -rich mineral supplement and in an aggregated form both with (AGGREG + MINERALS) and without the mineral supplement (AGGREG). Arterialised blood was sampled for 120 min postprandially to determine gut hormone concentrations. Gastric emptying was determined using <sup>13</sup>C-acetate and <sup>13</sup>C-octanoate, and energy intake was assessed with an ad libitum meal at 120 min. A protein × mineral interaction effect was observed for total glucagon-like peptide-1 (GLP-1 TOTAL ) incremental AUC (iAUC; P < 0.01), whereby MINERALS + AGGREG increased GLP-1 TOTAL iAUC to a greater extent than AGGREG (1882 ± 603 v . 1550 ± 456 pmol.l<sup>-1</sup> .120 min, P < 0.01), but MINERALS + NATIVE did not meaningfully alter the GLP-1 iAUC compared with NATIVE (1669 ± 547 v . 1844 ± 550 pmol.l<sup>-1</sup> .120 min, P = 0.09). A protein × minerals interaction effect was also observed for gastric emptying half-life ( P < 0.01) whereby MINERALS + NATIVE increased gastric emptying half-life compared with NATIVE (83 ± 14 v . 71 ± 8 min, P < 0.01), whereas no meaningful differences were observed between MINERALS + AGGREG v . AGGREG ( P = 0.70). These did not result in any meaningful changes in energy intake (protein × minerals interaction, P = 0.06). These data suggest that the potential for Ca<sup>2+</sup> to stimulate GLP-1 secretion at moderate protein doses may depend on protein form. This study was registered at clinicaltrials.gov (NCT04659902).

**DOI:** 10.1017/S0007114524000321

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN>

=38287700&custid=ns010877

## 65. Complications of fibrotic interstitial lung disease for the general radiologist

**Item Type:** Journal Article

**Authors:** Watson, S.;Dixon, G.;Savill, A.;Gibbons, M. A.;Barratt, S. L. and Rodrigues, J. C. L.

**Publication Date:** 2024

**Journal:** Clinical Radiology 79(5), pp. 323-329

**Abstract:** Interstitial lung diseases (ILDs) are a heterogeneous group of conditions characterised by non-infective inflammation and scarring of the lung parenchyma. They are not infrequently encountered by the general radiologist in both acute and outpatient reporting settings who may even be the first to make the diagnosis. In the acute setting, patients with ILD can present with respiratory deterioration due to a number of causes and in addition to the common causes of dyspnoea, an acute exacerbation of ILD needs to be considered. An exacerbation can be initiated by common triggers such as infection, pulmonary embolism (PE), and heart failure, and it can also be initiated by an insult to the lung or occur due to an unknown cause. Particular care needs to be taken when interpreting computed tomography (CT) examinations in these patients as the findings of an acute exacerbation are non-specific and patient and technical factors can cause spurious appearances including dependent changes, breathing artefact and contrast medium opacification. In the non-acute setting, patients with ILD are at increased risk of lung cancer and pulmonary hypertension (PH), with lung cancer being a particularly important consideration as treatments carry the risk of triggering an acute exacerbation or deterioration in lung function. Overall, this review aims to provide an overview for the general radiologist of additional factors to consider when interpreting scans in patients with ILD and how the presence of ILD impacts the differential diagnoses and complications that can occur in these patients in both acute and non-acute settings. (Crown Copyright © 2024. Published by Elsevier Ltd. All rights reserved.)

**DOI:** 10.1016/j.crad.2024.01.015

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=38429136&custid=ns010877>

## 66. Virtual wards for people with frailty: what works, for whom, how and why - a rapid realist review.

**Item Type:** Journal Article

**Authors:** Westby, M.;Ijaz, S.;Savovic, J.;McLeod, H.;Dawson, S.;Welsh, T.;Le Roux, H.;Walsh, N. and Bradley, N.

**Publication Date:** 2024

**Journal:** Age and Ageing 53(3) (pagination), pp. Article Number: afae039. Date of Publication: 01 Mar 2024

**Abstract:** Background: Virtual wards (VWs) deliver multidisciplinary care at home to people with frailty who are at high risk of a crisis or in crisis, aiming to mitigate the risk of acute hospital admission. Different VW models exist, and evidence of effectiveness is inconsistent.

**DOI:** 10.1093/ageing/afae039

**67. Virtual wards for people with frailty: what works, for whom, how and why—a rapid realist review**

**Item Type:** Journal Article

**Authors:** Westby, Maggie;Ijaz, Sharea;Savović, Jelena;McLeod, Hugh;Dawson, Sarah;Welsh, Tomas;Roux, Hein Le;Walsh, Nicola and Bradley, Natasha

**Publication Date:** 2024

**Journal:** Age & Ageing 53(3), pp. 1-14

**Abstract:** Background Virtual wards (VWs) deliver multidisciplinary care at home to people with frailty who are at high risk of a crisis or in crisis, aiming to mitigate the risk of acute hospital admission. Different VW models exist, and evidence of effectiveness is inconsistent. Aim We conducted a rapid realist review to identify different VW models and to develop explanations for how and why VWs could deliver effective frailty management. Methods We searched published and grey literature to identify evidence on multidisciplinary VWs. Information on how and why VWs might 'work' was extracted and synthesised into context-mechanism-outcome configurations with input from clinicians and patient/public contributors. Results We included 17 peer-reviewed and 11 grey literature documents. VWs could be short-term and acute (1–21 days), or longer-term and preventative (typically 3–7 months). Effective VW operation requires common standards agreements, information sharing processes, an appropriate multidisciplinary team that plans patient care remotely, and good co-ordination. VWs may enable delivery of frailty interventions through appropriate selection of patients, comprehensive assessment including medication review, integrated case management and proactive care. Important components for patients and caregivers are good communication with the VW, their experience of care at home, and feeling involved, safe and empowered to manage their condition. Conclusions Insights gained from this review could inform implementation or evaluation of VWs for frailty. A combination of acute and longer-term VWs may be needed within a whole system approach. Proactive care is recommended to avoid frailty-related crises.

**DOI:** 10.1093/ageing/afae039

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cin20&AN=176275791&custid=ns010877>

**68. Mortality surrogates in combined pulmonary fibrosis and emphysema**

**Item Type:** Journal Article

**Authors:** Zhao, An;Gudmundsson, Eyjolfur;Mogulkoc, Nesrin;van Moorsel, Coline;Corte, Tamera J.;Vasudev, Pardeep;Romei, Chiara;Chapman, Robert;Wallis, Tim J. M.;Denneny, Emma;Goos, Tinne;Savas, Recep;Ahmed, Asia;Brereton, Christopher J.;van Es, Hendrik,W.;Jo, Helen;De Liperi, Annalisa;Duncan, Mark;Pontoppidan, Katarina;De Sadeleer, Laurens,J., et al

**Publication Date:** 2024

**Journal:** The European Respiratory Journal 63(4)

**Abstract:** Background: Idiopathic pulmonary fibrosis (IPF) with coexistent emphysema, termed combined pulmonary fibrosis and emphysema (CPFE) may associate with reduced forced vital capacity (FVC) declines compared to non-CPFE IPF patients. We examined

associations between mortality and functional measures of disease progression in two IPF cohorts.; Methods: Visual emphysema presence (>0% emphysema) scored on computed tomography identified CPFE patients (CPFE/non-CPFE: derivation cohort n=317/n=183, replication cohort n=358/n=152), who were subgrouped using 10% or 15% visual emphysema thresholds, and an unsupervised machine-learning model considering emphysema and interstitial lung disease extents. Baseline characteristics, 1-year relative FVC and diffusing capacity of the lung for carbon monoxide ( D LCO ) decline (linear mixed-effects models), and their associations with mortality (multivariable Cox regression models) were compared across non-CPFE and CPFE subgroups.; Results: In both IPF cohorts, CPFE patients with ≥10% emphysema had a greater smoking history and lower baseline D LCO compared to CPFE patients with <10% emphysema. Using multivariable Cox regression analyses in patients with ≥10% emphysema, 1-year D LCO decline showed stronger mortality associations than 1-year FVC decline. Results were maintained in patients suitable for therapeutic IPF trials and in subjects subgrouped by ≥15% emphysema and using unsupervised machine learning. Importantly, the unsupervised machine-learning approach identified CPFE patients in whom FVC decline did not associate strongly with mortality. In non-CPFE IPF patients, 1-year FVC declines ≥5% and ≥10% showed strong mortality associations.; Conclusion: When assessing disease progression in IPF, D LCO decline should be considered in patients with ≥10% emphysema and a ≥5% 1-year relative FVC decline threshold considered in non-CPFE IPF patients.; Competing Interests: Conflict of interest: J. Jacob reports fees from Boehringer Ingelheim, Roche, NHSX, Takeda and GlaxoSmithKline, unrelated to the submitted work, and was supported by Wellcome Trust Clinical Research Career Development Fellowship 209553/Z/17/Z and the NIHR Biomedical Research Centre at University College London. N. Mogulkoc reports grant TUBITAK (EJP Rare Disease project “COCOS-IPF”), fees from Boehringer Ingelheim, Roche, and Nobel Turkey unrelated to the submitted work, and received support for travel to meetings from Roche and Actelion. T.J. Corte reports unrestricted educational grants from Boehringer Ingelheim, Roche, Biogen and Galapagos, fees from Roche, BMS, Boehringer Ingelheim, Vicore and DevPro, assistance for travel to meetings from Boehringer Ingelheim, and participation on a data safety monitoring board or advisory board for Roche, BMS, Boehringer Ingelheim, Vicore, Ad Alta, Bridge Biotherapeutics and DevPro. P. Vasudev reports financial interests from Blackford Analysis. T. Goos is supported by Research Foundation Flanders (1S73921N). L.J. De Sadeleer is supported by Marie Skłodowska-Curie actions postdoctoral fellowship within the European Union's Horizon Europe research and innovation programme. H. Jo reports fees from Boehringer Ingelheim and Roche, and received assistance for travel to meetings from Boehringer Ingelheim and Roche. S. Verleden reports consultancy fees from Boehringer Ingelheim and Sanofi. M. Vermant is supported by an FWO (Research Flanders Foundation) fellowship. S.M. Janes reports fees from AstraZeneca, Bard1 Bioscience, Achilles Therapeutics and Jansen unrelated to the submitted work, received assistance for travel to meetings from AstraZeneca and Takeda, and is the investigator lead on grants from GRAIL Inc., GlaxoSmithKline plc and Owlstone. A.U. Wells reports personal fees and non-financial support from Boehringer Ingelheim, Bayer and Roche Pharmaceuticals, and personal fees from Blade, outside of the submitted work. The remaining authors report no relevant conflicts of interest. (Copyright ©The authors 2024. For reproduction rights and permissions contact [permissions@ersnet.org](mailto:permissions@ersnet.org).)

**DOI:** 10.1183/13993003.00127-2023

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cmedm&AN=37973176&custid=ns010877>

**69. Lack of regional pathways impact on surgical delay: Analysis of the Orthopaedic Trauma Hospital Outcomes-Patient Operative Delays (ORTHOPOD) study.**

**Item Type:** Journal Article

**Authors:** Ahmed, H. E.;Baldock, T.;Wei, N.;Walshaw, T.;Walker, R.;Trompeter, A.;Scott,

S.;Eardley, W. G. P.;Stevenson, I.;Yoong, A.;Rankin, I.;Dixon, J.;Lim, J. W.;Sattar, M.;McDonald, S.;Davies, H.;Jones, L.;Nolan, M.;McGinty, R.;Stevenson, H., et al

**Publication Date:** 2023

**Journal:** Injury 54(12) (pagination), pp. Article Number: 111007. Date of Publication: December 2023

**Abstract:** Introduction: Current practice following injury within the United Kingdom is to receive surgery, at the institution of first contact regardless of ability to provide timely intervention and inconsiderate of neighbouring hospital resource and capacity. This can lead to a mismatch of demand and capacity, delayed surgery and stress within hospital systems, particularly with regards to elective services. We demonstrate through a multicentre, multinational study, the impact of this at scale. Methodology: ORTHOPOD data collection period was between 22/08/2022 and 16/10/2022 and consisted of two arms. Arm 1 captured orthopaedic trauma caseload and capacity in terms of sessions available per centre and patients awaiting surgery per centre per given week. Arm 2 recorded patient and injury demographics, time of decision making, outpatient and inpatient timeframes as well as time to surgery. Hand and spine cases were excluded. For this regional comparison, regional trauma networks with a minimum of four centres enrolled onto the ORTHOPOD study were exclusively analysed.

**DOI:** 10.1016/j.injury.2023.111007

70. **Impact of the Airways-2 trial on advanced airway management use in out-of-hospital cardiac arrest in England.**

**Item Type:** Journal Article

**Authors:** Aljanoubi, M.;Brown, T.;Booth, S.;Deakin, C. D.;Fothergill, R.;Nolan, J. P.;Soar, J.;Perkins, G. D.;Couper, K. and collaborators, B. O. T. O.

**Publication Date:** 2023

**Journal:** Resuscitation Conference, pp. Resuscitation

**Abstract:** Purpose of the study: The Airways-2 randomised controlled trial showed that the use of a supraglottic airway was not superior to tracheal intubation in out-of-hospital cardiac arrest.1 In this study, we evaluate the association between the trial results publication and advanced airway management in out-of-hospital cardiac arrest in England.

71. **A second update on mapping the human genetic architecture of COVID-19.**

**Item Type:** Journal Article

**Authors:** Andrews, S. J.;Stevens, C.;Daly, M.;Pathak, G. A.;Iwasaki, A.;Karjalainen, J.;Mehtonen, J.;Pirinen, M.;Trankiem, A.;Balaconis, M. K.;Veerapen, K.;Wolford, B. N.;Ahmad, H. F.;Andrews, S.;von Hohenstaufen Puoti, K. A.;Boer, C.;Boua, P. R.;Cadilla, C. L.;Chwialkowska, K.;Colombo, F., et al

**Publication Date:** 2023

**Journal:** Nature 621(7977), pp. E7-E26

**DOI:** 10.1038/s41586-023-06355-3

72. **Diagnostic delay in axial spondylarthritis: A lost battle?.**



**Item Type:** Journal Article

**Authors:** Barnett, R.;Gaffney, K. and Sengupta, R.

**Publication Date:** 2023

**Journal:** Best Practice and Research: Clinical Rheumatology 37(3) (pagination), pp. Article Number: 101870. Date of Publication: Setember 2023

**Abstract:** Diagnostic delay in axial spondylarthritis (axSpA) remains an unacceptable worldwide problem; with evidence suggesting significant detrimental impact both clinically on the individual, and economically on society. There is therefore, a need for global action across various healthcare professions that come into contact with patients living, and suffering, with undiagnosed axSpA. Recent estimates of the median diagnostic delay suggest that globally, individuals with axSpA wait between 2 and 6 years for a diagnosis - revealing a clear benchmark for improvement. This timespan presents a window of opportunity for earlier diagnosis and intervention, which will likely improve patient outcomes. This review describes the current diagnostic delay as estimated across countries and over time, before presenting evidence from published strategies that may be implemented to improve this delay across primary and secondary care, including for specialties treating extra-musculoskeletal manifestations of axSpA (ophthalmology, gastroenterology, dermatology). Ongoing campaigns tackling delayed diagnosis in axSpA are also highlighted.

**DOI:** 10.1016/j.berh.2023.101870

### 73. **Safety and Feasibility of a 16-Week Progressive Exercise Intervention in Treatment Naive Chronic Lymphocytic Leukaemia.**

**Item Type:** Journal Article

**Authors:** Brown, F. F.;Oliver, R.;Causer, A. J.;CollierBain, H. D.;Emery, A.;Eddy, R.;Dutton, D.;Crowe, J.;Augustine, D.;Graby, J.;Rees, D.;Rothschild Rodriguez, D.;Peacock, O.;Moore, S.;Murray, J.;Turner, J. E. and Campbell, J. P.

**Publication Date:** 2023

**Journal:** Blood Conference: 65th ASH Annual Meeting. San Diego United States, pp. Date of Publication: 28 Nov 2023

**Abstract:** A growing body of evidence from preclinical and human epidemiology studies of multiple cancer types indicate that physical activity can delay or avert the outgrowth of cancer, in a mechanistic process that may involve exercise-induced alterations to anti-cancer immunity. Many Chronic Lymphocytic leukaemia (CLL) patients present with asymptomatic, early-stage disease that is monitored until disease progression. Thus, exercise may be an effective way to manage disease burden and delay progression in treatment naive CLL. The primary objective of this pilot study was to investigate the safety and feasibility of an exercise programme in people with treatment naive CLL, and preliminarily explore the effects of exercise training on CLL counts, body composition, cardiorespiratory fitness, and immune cell phenotypes including T-cells. We approached N = 100 treatment naive CLL patients (Binet stage A and B) (Figure 1). Trial uptake was 40%, thus n = 40 participants with treatment naive CLL were screened. After assessing suitability for exercise (e.g., resting electrocardiogram and other safety tests), n = 11 participants were excluded - the majority of these, n = 9, were due to the presence of cardiac abnormalities. Consequently, n = 28 participants were randomised into a 16-week, home-based, supervised, personalised, progressive exercise intervention ( n = 14: mean +/- SD: age = 62 +/- 12 years) or 16-weeks of usual care, control group ( n = 14: mean +/- SD: age = 61 +/- 10 years). The overall retention rate was 86%, with 79% of the exercise group and 93% of the control group completing the trial. Adherence to the exercise intervention was 92 +/- 8%.

One serious adverse event was reported (hospitalisation for pneumonia) that was unrelated to the trial and one adverse event was reported (syncope following exercise) that was related to the trial. Together, this evidence indicates that exercise training is both safe and feasible in people with treatment naive CLL who passed pre-trial screening. The exercise intervention elicited a 2% increase in DEXA-derived lean mass in the exercise group compared to a 0.4% decrease in the control group ( $p = .01$ ) (Table 1). DEXA-derived total body fat percentage decreased by 4% and 1% and fat mass decreased by 3% and 2% ( $p < 0.05$ ). Resting systolic and diastolic blood pressure was lower at post-intervention in both groups ( $p < 0.05$ ) suggesting the observed changes could be the result of "white coat hypertension" pre-intervention. Additionally, no changes were observed for whole-body mass, BMI, bone mineral density, resting heart rate, or measures of cardiorespiratory fitness (all  $p > 0.05$ ). This trial provided a unique opportunity to investigate the effects of regular exercise on neoplastic activity in humans (i.e., CLL counts) without the confounding presence of anti-cancer therapy. Resting blood samples collected pre- and post-intervention were analysed by flow cytometry to enumerate CD5<sup>+</sup>CD19<sup>+</sup> CLL cells clonally restricted to kappa or lambda. No differences were observed for clonal CLL cells over time or between conditions ( $p > 0.05$ ) (Table 1). We also analysed resting blood samples collected pre- and post-intervention by flow cytometry to enumerate T cell subsets. No statistically significant changes were observed between conditions pre-intervention to post-intervention for CD4<sup>+</sup> or CD8<sup>+</sup> T-cell subsets including, naive (CD27<sup>+</sup>CD45RA<sup>+</sup>), stem cell-like memory (CD27<sup>+</sup>CD45RA<sup>+</sup>CD127<sup>+</sup>CD95<sup>+</sup>), central memory (CD27<sup>+</sup>CD45RA<sup>-</sup>), effector memory (CD27<sup>-</sup>CD45RA<sup>-</sup>), EMRAs (CD27<sup>-</sup>CD45RA<sup>+</sup>) or exhausted T-cells (PD1<sup>+</sup>, Tim3<sup>+</sup>) or FoxP3 T-regulatory cells (CD4<sup>+</sup>CD127<sup>low</sup>CD25<sup>+</sup>FoxP3<sup>+</sup>) (all  $p > 0.05$ ). Our results show that exercise is safe and feasible in people with treatment naive CLL who passed pre-trial screening. In addition, exercise training increased lean mass. No changes were observed to CLL cells. The latter finding is unsurprising given the poorly immunogenic profile of CLL.

**74. A Single Bout of Exercise Enhances the Efficacy of Rituximab Against Autologous Chronic Lymphocytic Leukaemia B Cells Ex Vivo By Transiently Increasing Natural Killer Cell Frequency in Blood, and Simultaneously Mobilises CD5<sup>+</sup>CD19<sup>+</sup>CD20<sup>+</sup> B Cells into Blood.**

**Item Type:** Journal Article

**Authors:** CollierBain, H. D.;Emery, A.;Causer, A. J.;Brown, F. F.;Oliver, R.;Dutton, D.;Crowe, J.;Augustine, D.;Graby, J.;Leach, S.;Eddy, R.;Rothschild Rodriguez, D.;Gray, J. C.;Cragg, M. S.;Cleary, K. L.;Moore, S.;Murray, J.;Turner, J. E. and Campbell, J. P.

**Publication Date:** 2023

**Journal:** Blood Conference: 65th ASH Annual Meeting. San Diego United States, pp. Date of Publication: 28 Nov 2023

**Abstract:** Chronic Lymphocytic Leukaemia (CLL) is characterised by the proliferation and accumulation of clonal B cells (B-CLL cells) and is often treated with anti-CD20 monoclonal antibody immunotherapies, including rituximab. One of the mechanism-of-action of rituximab is antibody-dependent cellular cytotoxicity (ADCC) which occurs when natural killer (NK) cells detect rituximab bound to CD20<sup>+</sup> target cells. Rituximab often fails to induce stringent disease eradication, due in part to the diffuse distribution of clonal cells across multiple lymphoid and non-lymphoid tissues where NK cell frequency can be low. It is well established that an individual bout of aerobic exercise induces a transient relocation of lymphocytes - including NK cells and B cells - into peripheral blood. We hypothesised that this exercise-induced lymphocytosis could be harnessed to enhance the efficacy of rituximab in CLL by relocating both target and effector cells together with rituximab into blood. In this pilot study  $n = 20$  treatment naive patients with CLL (mean  $\pm$  SD: age = 62  $\pm$  10 years; height = 174.0  $\pm$  7.5 cm; body mass = 83.3  $\pm$  16.8 kg; body fat = 31.7  $\pm$  9.8 %; blood leukocytes = 30.70  $\pm$  22.21  $\times 10^9/L$ ; anaerobic threshold = 14.1  $\pm$  2.9 mL.kg<sup>-1</sup>.min<sup>-1</sup>) participated. Participants cycled at a moderate intensity (15% above their anaerobic

threshold) for ~30-minutes, with blood samples collected pre-, post-, and 1-hour post-exercise. Given the importance of CD16<sup>+</sup> NK cells in evoking ADCC, we enumerated NK cell subsets in blood samples collected pre, post-, and 1-hour post-exercise by flow cytometry. As expected, exercise induced a preferential increase of CD56<sup>+</sup>CD16<sup>+</sup> (+255%, p < 0.001), CD57<sup>+</sup>CD16<sup>+</sup> NK cells (+322%, p < 0.001), CD16<sup>+</sup> NK cells (+322%, p < 0.001), and CD16<sup>+</sup> NK cells. We posited that the enhancement to rituximab mediated ADCC would have greater, clinically relevant implications if there was also a concomitant exercise-induced mobilisation of B-CLL cells expressing CD20 into blood from different body tissues. Flow cytometry revealed a +63% increase in CD5<sup>+</sup>CD19<sup>+</sup>CD20<sup>+</sup> B-CLL cells (p = 0.002) in blood after exercise. Further analyses revealed that CD5<sup>+</sup>CD19<sup>+</sup>CD20<sup>+</sup> B-CLL cells with a phenotype consistent with recent egress from lymphoid tissue (CD5<sup>bright</sup>CXCR4<sup>dim</sup>; 70%, p = 0.004) and B-CLL cells with a propensity to migrate to peripheral tissues (CD5<sup>dim</sup>CXCR4<sup>bright</sup>; 67%, p = 0.002) were mobilised, with no change to overall CD20 surface antigen density (p = 1.0) - determined by median fluorescence intensity. Furthermore, exercise evoked a +69% (p = 0.022) increase in CD5<sup>+</sup>CD19<sup>+</sup>CD20<sup>+</sup> B-CLL cells expressing CD49d, which is considered one of the strongest predictors of CLL prognosis. Taken together, these data demonstrate that exercise increased the frequency of CD20<sup>+</sup> B-CLL cells with lymphoid origins and prognostic relevance into the blood, therefore rendering them susceptible to rituximab mediated ADCC. Our results show that individual bouts of moderate intensity aerobic exercise temporarily increased the number of cytotoxic CD16<sup>+</sup> NK cells, and CD20<sup>+</sup> B-CLL cells in blood. Additionally, our ex vivo investigations demonstrated enhanced rituximab mediated ADCC following exercise. Thus, exercise could be explored as a means of improving clinical responses in patients receiving rituximab, and/or other anti-CD20 monoclonal antibodies such as, Obinutuzumab.

**75. UK cancer healthcare professionals collaborating with colleagues in low- and middleincome counties: Mapping the extent and nature of partnerships.**

**Item Type:** Journal Article

**Authors:** Diprose, K.;Lewis, P.;Young, A.;Sirohi, B.;Ranasinghe, N.;Mutebi, M. C.;Gyawali, B.;Lodge, M.;Sullivan, R.;Cowan, R. and Stanway, S. J.

**Publication Date:** 2023

**Journal:** Journal of Clinical Oncology Conference: 2023 American Society of Clinical Oncology Annual Meeting, ASCO. Chicago, IL United States, pp. Date of Publication: June 2023

**Abstract:** Background: Most cancer deaths occur in low- & middle-income countries (LMICs). In 2020, the UK Global Cancer Network (UKGCN) formed to unite those interested in Global Oncology & to strengthen collaborative work with colleagues in LMICs to reduce morbidity & mortality from cancer. For the first time in the UK, the UKGCN undertook a mapping exercise, to document the number & type of collaborations between the UK & LMIC partners.

**76. THE ROLE OF THE HISTORICAL CLINICAL AND IMAGING DATA IN TARGETED LUNG HEALTH CHECK SCREENING REVIEW MEETINGS.**

**Item Type:** Journal Article

**Authors:** Dixon, G.;Rash, N.;Buckley, E.;Edey, A.;Masani, V. and Bibby, A.

**Publication Date:** 2023

**Journal:** Thorax Conference, pp. British

**Abstract:** Introduction The Somerset, Wiltshire, Avon and Gloucester (SWAG) Cancer

Alliance are undertaking a Phase 3 Pilot in the National TLHC programme. SWAG covers a population of 2.6 million with an estimated 366,500 eligible participants. Weekly Screening Review Meetings (SRM) are undertaken to review actionable cases. The SWAG SRM has established access to local PACS imaging databases to enable review of relevant historical imaging. Methods TLHC participant data were captured for participants in the West Bath and Bridgewater regions between August 2022 and June 2023. SRM outcomes were scrutinised and pathway changes were categorised. Actionable incidental findings were downgraded according to additional available clinical information and historical imaging. Pulmonary nodule follow up recommendations were downgraded on the basis of historical imaging. Results 3133 screening participants underwent a baseline low dose CT scan. 874/3133 (27.9%) participants were discussed in an SRM with 95/874 (10.9%) undergoing pathway change following review with local historical clinical and imaging information. 56 pulmonary nodule findings and 29 incidental findings were downgraded with the use of historical imaging. Table 1 highlights the range of incidental findings which were downgraded and the rationale for downgrade. Historic clinical information enabled pathway change in 10 participants. Reasons included known conditions (bronchiectasis, chronic lymphocytic leukaemia) and the participant already being under outpatient surveillance (e.g. ascending aortic dilatation). In total the use of historical imaging in the SRM prevented 47/874 (5.4%) of the participants discussed undergoing unnecessary interval imaging for a known pulmonary nodule. Discussion Screening review meetings with access to local historic imaging and secondary care health records can result in a significant reduction in the need for pulmonary nodule surveillance. Access to local historic imaging databases is crucial to reduce unnecessary patient and healthcare burden. Local clinical information can enable SRMs to review findings in the context of known clinical history enabling accurate and personalised decision making. These data would suggest all SRMs should aim to have access to local historical clinical and imaging records regarding their participants. (Table Presented).

#### 77. **Artificial Intelligence as a Diagnostic Tool in Non-Invasive Imaging in the Assessment of Coronary Artery Disease.**

**Item Type:** Journal Article

**Authors:** Doolub, G.;Mamalakis, M.;Alabed, S.;Van der Geest, R. J.;Swift, A. J.;Rodrigues, J. C. L.;Garg, P.;Joshi, N. V. and Dastidar, A.

**Publication Date:** 2023

**Journal:** Medical Sciences (Basel, Switzerland) 11(1) (pagination), pp. Date of Publication: 24 Feb 2023

**Abstract:** Coronary artery disease (CAD) remains a leading cause of mortality and morbidity worldwide, and it is associated with considerable economic burden. In an ageing, multimorbid population, it has become increasingly important to develop reliable, consistent, low-risk, non-invasive means of diagnosing CAD. The evolution of multiple cardiac modalities in this field has addressed this dilemma to a large extent, not only in providing information regarding anatomical disease, as is the case with coronary computed tomography angiography (CCTA), but also in contributing critical details about functional assessment, for instance, using stress cardiac magnetic resonance (S-CMR). The field of artificial intelligence (AI) is developing at an astounding pace, especially in healthcare. In healthcare, key milestones have been achieved using AI and machine learning (ML) in various clinical settings, from smartwatches detecting arrhythmias to retinal image analysis and skin cancer prediction. In recent times, we have seen an emerging interest in developing AI-based technology in the field of cardiovascular imaging, as it is felt that ML methods have potential to overcome some limitations of current risk models by applying computer algorithms to large databases with multidimensional variables, thus enabling the inclusion of complex relationships to predict outcomes. In this paper, we review the current literature on the various applications of AI in the assessment of CAD, with a focus on

multimodality imaging, followed by a discussion on future perspectives and critical challenges that this field is likely to encounter as it continues to evolve in cardiology.

**78. Electronic collection of cancer patient-reported outcomes using a novel digital oncology platform: A multi-site randomized controlled trial.**

**Item Type:** Journal Article

**Authors:** Fidyk, C.;Popat, S.;Tay, N.;Smith, L.;Bowen, R.;Khawaja, S.;Leonard, P.;Montazeri, A.;Peck, R.;Raslan, A.;Ridley, P.;Thandar, H.;Skene, S.;Kirby, G.;Patel, R. and Michael, A.

**Publication Date:** 2023

**Journal:** Journal of Clinical Oncology Conference: 2023 American Society of Clinical Oncology Annual Meeting, ASCO. Chicago, IL United States, pp. Date of Publication: June 2023

**Abstract:** Background: Cancer is the leading contributor of disease burden worldwide, and incidence rates are estimated to rise 47% by 2040. With increasing numbers of people living with cancer, alongside healthcare workforce shortages, current models for cancer monitoring and surveillance are unsustainable. Within the UK's National Health Service (NHS), this is exacerbated by a rising backlog following the COVID-19 pandemic. Furthermore, a 2020 Macmillan Cancer Support survey showed that current patient information and support is scattered, inaccessible, and poorly personalized. There is an urgent need for effective personalized tools to support cancer patient self-management and data collection to enable healthcare professional (HCP) monitoring and remote follow-up.

**79. The P323L substitution in the SARS-CoV-2 polymerase (NSP12) confers a selective advantage during infection.**

**Item Type:** Journal Article

**Authors:** Goldswain, H.;Dong, X.;PenriceRandal, R.;Alruwaili, M.;Shawli, G. T.;Prince, T.;Williamson, M. K.;Raghwan, J.;Randle, N.;Jones, B.;DonovanBanfield, I.;Salguero, F. J.;Tree, J. A.;Hall, Y.;Hartley, C.;Erdmann, M.;Bazire, J.;Jearanaiwitayakul, T.;Baillie, J. K.;Semple, M. G., et al

**Publication Date:** 2023

**Journal:** Genome Biology 24(1) (pagination), pp. Article Number: 47. Date of Publication: December 2023

**Abstract:** Background: The mutational landscape of SARS-CoV-2 varies at the dominant viral genome sequence and minor genomic variant population. During the COVID-19 pandemic, an early substitution in the genome was the D614G change in the spike protein, associated with an increase in transmissibility. Genomes with D614G are accompanied by a P323L substitution in the viral polymerase (NSP12). However, P323L is not thought to be under strong selective pressure.

**80. 'Super Rehab': Can we achieve coronary artery disease regression? A feasibility study protocol.**

**Item Type:** Journal Article

**Authors:** Graby, J.;Khavandi, A.;Gillison, F.;Smith, T.;Murphy, D.;Peacock, O.;McLeod, H.;Dastidar, A.;Antoniades, C.;Thompson, D. and Rodrigues, J. C. L.

**Publication Date:** 2023

**Journal:** BMJ Open 13(12) (pagination), pp. Article Number: e080735. Date of Publication: 12 Dec 2023

**Abstract:** Introduction Patients diagnosed with coronary artery disease (CAD) are currently treated with medications and lifestyle advice to reduce the likelihood of disease progression and risk of future major adverse cardiovascular events (MACE). Where obstructive disease is diagnosed, revascularisation may be considered to treat refractory symptoms. However, many patients with coexistent cardiovascular risk factors, particularly those with metabolic syndrome (MetS), remain at heightened risk of future MACE despite current management. Cardiac rehabilitation is offered to patients post-revascularisation, however, there is no definitive evidence demonstrating its benefit in a primary prevention setting. We propose that an intensive lifestyle intervention (Super Rehab, SR) incorporating high-intensity exercise, diet and behavioural change techniques may improve symptoms, outcomes, and enable CAD regression. This study aims to examine the feasibility of delivering a multicentre randomised controlled trial (RCT) testing SR for patients with CAD, in a primary prevention setting. Methods and analysis This is a multicentre randomised controlled feasibility study of SR versus usual care in patients with CAD. The study aims to recruit 50 participants aged 18-75 across two centres. Feasibility will be assessed against rates of recruitment, retention and, in the intervention arm, attendance and adherence to SR. Qualitative interviews will explore trial experiences of study participants and practitioners. Variance of change in CAD across both arms of the study (assessed with serial CT coronary angiography) will inform the design and power of a future, multi-centre RCT. Ethics and dissemination Ethics approval was granted by South West - Frenchay Research Ethics Committee (reference: 21/SW/0153, 18 January 2022). Study findings will be disseminated via presentations to relevant stakeholders, national and international conferences and open-access peer-reviewed research publications. Trial registration number ISRCTN14603929.

**DOI:** 10.1136/bmjopen-2023-080735

**81. Natural history of non-functioning pituitary microadenomas: Results from the UK non-functioning pituitary adenoma consortium.**

**Item Type:** Journal Article

**Authors:** Hamblin, R.;Fountas, A.;Lithgow, K.;Loughrey, P. B.;Bonanos, E.;Shinwari, S. K.;Mitchell, K.;Shah, S.;Grixti, L.;Matheou, M.;Isand, K.;McLaren, D. S.;Surya, A.;Ullah, H. Z.;Klaucane, K.;Jayasuriya, A.;Bhatti, S.;Mavilakandy, A.;Ahsan, M.;Mathew, S., et al

**Publication Date:** 2023

**Journal:** European Journal of Endocrinology 189(1), pp. 87-95

**Abstract:** Objective: The optimal approach to the surveillance of non-functioning pituitary microadenomas (micro-NFPAs) is not clearly established. Our aim was to generate evidence on the natural history of micro-NFPAs to support patient care.

**82. Contrast echocardiography: a practical guideline from the British Society of Echocardiography.**

**Item Type:** Journal Article

**Authors:** Hampson, R.;Senior, R.;Ring, L.;Robinson, S.;Augustine, D. X.;Becher, H.;Anderson, N.;Willis, J.;Chandrasekaran, B.;Kardos, A.;Siva, A.;Leeson, P.;Rana, B. S.;Chahal, N. and Oxborough, D.

**Publication Date:** 2023



**Journal:** Echo Research and Practice 10(1) (pagination), pp. Article Number: 23. Date of Publication: December 2023

**Abstract:** Ultrasound contrast agents (UCAs) have a well-established role in clinical cardiology. Contrast echocardiography has evolved into a routine technique through the establishment of contrast protocols, an excellent safety profile, and clinical guidelines which highlight the incremental prognostic utility of contrast enhanced echocardiography. This document aims to provide practical guidance on the safe and effective use of contrast; reviews the role of individual staff groups; and training requirements to facilitate its routine use in the echocardiography laboratory.

**DOI:** 10.1186/s44156-023-00034-9

**83. Radiomics-based decision support tool assists radiologists in small lung nodule classification and improves lung cancer early diagnosis.**

**Item Type:** Journal Article

**Authors:** Hunter, B.;Argyros, C.;Inglese, M.;LintonReid, K.;Pulzato, I.;Nicholson, A. G.;Kemp, S. V.;L. Shah P.;Molyneaux, P. L.;McNamara, C.;Burn, T.;Guilhem, E.;Mestas Nunez, M.;Hine, J.;Choraria, A.;Ratnakumar, P.;Bloch, S.;Jordan, S.;Padley, S.;Ridge, C. A., et al

**Publication Date:** 2023

**Journal:** British Journal of Cancer 129(12), pp. 1949-1955

**Abstract:** Background: Methods to improve stratification of small ( $\leq 15$  mm) lung nodules are needed. We aimed to develop a radiomics model to assist lung cancer diagnosis.

**84. TITLE UNDERSTANDING CURRENT PRACTICES FOR THE MANAGEMENT OF ADVANCED EPITHELIAL HIGH-GRADE OVARIAN CANCER IN THE UK: INTERIM DATA FROM THE OC-NOW SURVEY (2023).**

**Item Type:** Journal Article

**Authors:** McCormack, S.;Fotopoulou, C.;Miller, R.;Bowen, R.;Michael, A.;Wesselbaum, A.;Ullmann, A. and Manchanda, R.

**Publication Date:** 2023

**Journal:** International Journal of Gynecological Cancer Conference, pp. International

**Abstract:** Introduction Background Advanced high-grade ovarian cancer (OC) treatment has recently evolved to include novel targeted agents such as PARP-inhibitors. Our survey explores current management of advanced OC in the UK. Methods Methodology This interim descriptive analysis uses data collected between March-April 2023 from structured interviews with UK-based healthcare professionals (HCPs) involved in secondary care management of advanced OC (OC-NOW). Results The analysis included 50 OC MDT members. Respondents were mainly based in England (84%; 42/50). Most HCPs (68%; 19/28) used the DESKTOP-III criteria to identify candidates for secondary cytoreduction, with up to 30% of patients considered as eligible in 85% (23/27) of centres. HRD (100%; 41/41) and BRCA1/2 (98%; 40/41) were routinely tested before planning maintenance treatment. Most respondents (90%; 36/40) reported that HRD test results had a turnaround time of 6 weeks. The median number (interquartile range [IQR]) of patients with a BRCA mutation (BRCAmut) was 20.0% (15.0-20.0%), while 25.0% (18.8-30.0%) were HRD (test positive) and BRCA wild type (HRD/BRCAwt), 49.0% (35.0-60.0%) were HRp (test

negative) and 10.0% (5.0-11.2%) were HRnd (HR test failure/not determined/inconclusive). Platinum sensitivity was seen as predictive of PARPi maintenance therapy benefit, irrespective of HRD status (table 1). Conclusion/Implications Conclusion These results provide an update on UK practice in advanced OC. HRD and BRCA1/2 are now routinely assessed with turnaround times on time for maintenance therapy decision making. For Platinum Sensitive OC, PARPi maintenance is typically considered irrespective of HRD status.

#### 85. **EBUS TBNA FOR MOLECULAR TESTING IN LUNG CANCER - HOW MUCH IS ENOUGH?.**

**Item Type:** Journal Article

**Authors:** McKerr, C. N.;Wong, H.;Marchand, C. L. and Masani, V. D.

**Publication Date:** 2023

**Journal:** Thorax Conference, pp. British

**Abstract:** Background With the advent of immunotherapy and tyrosine kinase inhibitors, molecular testing has become routine and essential to guide oncological treatments. Endobronchial ultrasound and transbronchial needle aspirate (EBUS-TBNA) is a safe and accurate method for sampling mediastinal malignancies to diagnose and stage lung cancers. Sufficient tissue sampling for drug sensitivity testing (DST) is essential to ensure timely diagnosis and treatment. However, there is no clear guidance on the recommended number of passes per lymph node needed to facilitate this. One study concluded that a median of 4 passes was needed to obtain sufficient tissue in adenocarcinomas.<sup>1</sup> However, this required rapid on-site cytopathology evaluation (ROSE) and didn't include DST for squamous carcinomas. Standard practice at Royal United Hospital Bath is to perform 3 lymph node passes. Samples are deemed sufficient based on macroscopic appearances determined by the endoscopist. The objective of our audit was to determine if our practice provided adequate tissue for successful DST in line with national standards, which should be greater than 90% of samples.<sup>2</sup> Method A total of 251 cases were audited between 2018-2023. Of these, 107 were diagnostic of lung adenocarcinoma, squamous cell carcinoma and non-small cell lung cancer NOS and sent for DST. Exclusion criteria included other diagnoses, samples not sent for DST, and cases with more than 3 lymph node passes recorded on the EBUS report. Samples in which some drug sensitivity testing could take place but there was not enough tissue for all the required tests were categorised as insufficient. Results Of the 107 cases, 98 (91.6%) were adequate samplings for DST and 9 (8.4%) were insufficient. All insufficient cases had a diagnosis of adenocarcinoma. Conclusion Performing 3 lymph node passes were sufficient for DST without the support of ROSE and matched national standards in providing enough tissue sample for DST. This potentially can reduce the procedure duration for patients whilst maintaining diagnostic standards.

#### 86. **Management and treatment of children, young people and adults with systemic lupus erythematosus: British Society for Rheumatology guideline scope.**

**Item Type:** Journal Article

**Authors:** Md Yusof Md.Y.;Smith, E. M. D.;Ainsworth, S.;Armon, K.;Beresford, M. W.;Brown, M.;Cherry, L.;Edwards, C. J.;Flora, K.;Gilman, R.;Griffiths, B.;Gordon, C.;Howard, P.;Isenberg, D.;Jordan, N.;Kaul, A.;Lanyon, P.;Laws, P. M.;Lightstone, L.;Lythgoe, H., et al

**Publication Date:** 2023

**Journal:** Rheumatology Advances in Practice 7(3) (pagination), pp. Article Number: rkad093. Date of Publication: 2023

**Abstract:** The objective of this guideline is to provide up-to-date, evidence-based recommendations for the management of SLE that builds upon the existing treatment guideline for adults living with SLE published in 2017. This will incorporate advances in the assessment, diagnosis, monitoring, non-pharmacological and pharmacological management of SLE. General approaches to management as well as organ-specific treatment, including lupus nephritis and cutaneous lupus, will be covered. This will be the first guideline in SLE using a whole life course approach from childhood through adolescence and adulthood. The guideline will be developed with people with SLE as an important target audience in addition to healthcare professionals. It will include guidance related to emerging approved therapies and account for National Institute for Health and Care Excellence Technology Appraisals, National Health Service England clinical commissioning policies and national guidance relevant to SLE. The guideline will be developed using the methods and rigorous processes outlined in 'Creating Clinical Guidelines: Our Protocol' by the British Society for Rheumatology.

**87. The visibility of research within mandatory National Health Service Trust Induction programmes in England: an exploratory survey study.**

**Item Type:** Journal Article

**Authors:** Menzies, J.;Grieve, S.;Ainsworth, L.;Sharman, V.;Smith, V. and Henshall, C.

**Publication Date:** 2023

**Journal:** Journal of Research in Nursing 28(6-7), pp. 545-557

**Abstract:** Background: Mandatory NHS Trust induction programmes are an integral part of staff orientation processes. Although research is recognised as fundamental to high-quality care, little data exist regarding whether research information is included within hospital induction.

**DOI:** 10.1177/17449871231205816

**88. Predictors of mortality in periprosthetic fractures of the hip: Results from the national PPF study.**

**Item Type:** Journal Article

**Authors:** Nasser, A. A. H. H.;Prakash, R.;Handford, C.;Osman, K.;Chauhan, G. S.;Nandra, R.;Mahmood, A.;Dewan, V.;Davidson, J.;AlAzzawi, M.;Smith, C.;Gawad, M.;Palaiologos, I.;Cuthbert, R.;Wignadasan, W.;Banks, D.;Archer, J.;Odeh, A.;Moores, T.;Tahir, M., et al

**Publication Date:** 2023

**Journal:** Injury 54(12) (pagination), pp. Article Number: 111152. Date of Publication: December 2023

**Abstract:** Introduction: Periprosthetic fractures (PPFs) around the hip joint are increasing in prevalence. In this collaborative study, we aimed to investigate the impact of patient demographics, fracture characteristics, and modes of management on in-hospital mortality of PPFs involving the hip.

**DOI:** 10.1016/j.injury.2023.111152

**89. Erratum to: Mapping the human genetic architecture of COVID-19 (Nature, (2021), 600, 7889, (472-477), 10.1038/s41586-021-03767-x).**

**Item Type:** Journal Article

**Authors:** Niemi, M. E. K.;Karjalainen, J.;Liao, R. G.;Neale, B. M.;Daly, M.;Ganna, A.;Pathak, G. A.;Andrews, S. J.;Kanai, M.;Veerapen, K.;FernandezCadenas, I.;Schulte, E. C.;Striano, P.;Marttila, M.;Minica, C.;Marouli, E.;Karim, M. A.;Wendt, F. R.;Savage, J.;Sloofman, L., et al

**Publication Date:** 2023

**Journal:** Nature 621(7977), pp. E7-E26

**DOI:** 10.1093/1476-4687

90. **INOVATYON/ ENGOT-ov5 study: Randomized phase III international study comparing trabectedin/pegylated liposomal doxorubicin (PLD) followed by platinum at progression vs carboplatin/PLD in patients with recurrent ovarian cancer progressing within 6-12 months after last platinum line.**

**Item Type:** Journal Article

**Authors:** Ottevanger, N. B.;D'Incalci, M.;Chekerov, R.;Nyvang, G. B.;Iglesias, M.;Westermann, A.;Tsibulak, I.;Colombo, N.;Gadducci, A.;Rulli, E.;Biagioli, E.;Fossati, R.;Funari, G.;Carlucci, L.;Poli, D.;Caudana, M. C.;Tasca, G.;Nicoletto, M. O.;Tognon, G.;DeCensi, A., et al

**Publication Date:** 2023

**Journal:** British Journal of Cancer 128(8), pp. 1503-1513

**Abstract:** Background: This trial investigated the hypothesis that the treatment with trabectedin/PLD (TP) to extend the platinum-free interval (TFIp) can improve overall survival (OS) in patients with recurrent ovarian cancer (OC).

91. **GWAS and meta-analysis identifies 49 genetic variants underlying critical COVID-19.**

**Item Type:** Journal Article

**Authors:** PairoCastineira, E.;Rawlik, K.;Bretherick, A. D.;Qi, T.;Wu, Y.;Nassiri, I.;McConkey, G. A.;Klaric, L.;Kousathanas, A.;Richmond, A.;Malinauskas, T.;Thwaites, R.;Morrice, K.;Maslove, D.;Nichol, A.;Semple, M. G.;Knight, J.;Hinds, C.;Horby, P.;Ling, L., et al

**Publication Date:** 2023a

**Journal:** Nature 617(7962), pp. 764-768

**Abstract:** Critical illness in COVID-19 is an extreme and clinically homogeneous disease phenotype that we have previously shown<sup>1</sup> to be highly efficient for discovery of genetic associations<sup>2</sup>. Despite the advanced stage of illness at presentation, we have shown that host genetics in patients who are critically ill with COVID-19 can identify immunomodulatory therapies with strong beneficial effects in this group<sup>3</sup>. Here we analyse 24,202 cases of COVID-19 with critical illness comprising a combination of microarray genotype and whole-genome sequencing data from cases of critical illness in the international GenOMICC (11,440 cases) study, combined with other studies recruiting hospitalized patients with a strong focus on severe and critical disease: ISARIC4C (676 cases) and the SCOURGE consortium (5,934 cases). To put these results in the context of existing work, we conduct a meta-analysis of the new GenOMICC genome-wide association study (GWAS) results with previously published data. We find 49 genome-wide significant associations, of which 16 have not been reported previously. To investigate the therapeutic implications of these

findings, we infer the structural consequences of protein-coding variants, and combine our GWAS results with gene expression data using a monocyte transcriptome-wide association study (TWAS) model, as well as gene and protein expression using Mendelian randomization. We identify potentially druggable targets in multiple systems, including inflammatory signalling (JAK1), monocyte-macrophage activation and endothelial permeability (PDE4A), immunometabolism (SLC2A5 and AK5), and host factors required for viral entry and replication (TMPRSS2 and RAB2A).

**DOI:** 10.1038/s41586-023-06034-3

**92. Author Correction: GWAS and meta-analysis identifies 49 genetic variants underlying critical COVID-19 (Nature, (2023), 617, 7962, (764-768), 10.1038/s41586-023-06034-3).**

**Item Type:** Journal Article

**Authors:** PairoCastineira, E.;Rawlik, K.;Bretherick, A. D.;Qi, T.;Wu, Y.;Nassiri, I.;McConkey, G. A.;Klaric, L.;Kousathanas, A.;Richmond, A.;Malinauskas, T.;Thwaites, R.;Morrice, K.;Maslove, D.;Nichol, A.;Semple, M. G.;Knight, J.;Hinds, C.;Horby, P.;Ling, L., et al

**Publication Date:** 2023b

**Journal:** Nature 619(7971), pp. E61

**Abstract:** Correction to: Nature Published online 17 May 2023 In the version of this article initially published, the name of Ana Margarita Baldion-Elorza, of the SCOURGE Consortium, appeared incorrectly (as Ana Maria Baldion) and has now been amended in the HTML and PDF versions of the article.

**DOI:** 10.1038/s41586-023-06383-z

**93. Anaphylactic Responses to Neuromuscular Blockade Drugs and Reversal Drugs.**

**Item Type:** Journal Article

**Authors:** Quayle, A. C. and Cook, T. M.

**Publication Date:** 2023

**Journal:** Current Anesthesiology Reports 13(4), pp. 219-228

**Abstract:** Purpose of Review: This review discusses the incidence of anaphylaxis to neuromuscular blockade drugs (NMBDs), the mechanism and clinical features, as well as theories around sensitisation (including the pholcodine hypothesis), the developing area of anaphylaxis to reversal agents, and testing practices. Recent Findings: The incidence and characteristics of anaphylaxis to NMBDs have recently been better established by large observational studies. In addition to the well-established IgE-mediated mechanism, new research has highlighted other mechanisms, including the mast cell receptor "MRGPRX2." Sensitisation through other pharmacological, environmental, or occupational exposure appears to exist, with a body of evidence implicating pholcodine resulting in its recent withdrawal from the European market. The impact of this is awaited. Sugammadex has become an increasing area of focus. Whilst initially proposed as a potential treatment for anaphylaxis, the weight of evidence does not support this and importantly sugammadex has emerged as a cause of anaphylaxis.

**DOI:** 10.1007/s40140-023-00575-z

**94. Dyadic perspectives on loneliness and social isolation among people with dementia and spousal carers: findings from the IDEAL programme.**

**Item Type:** Journal Article

**Authors:** Rippon, I.;Victor, C. R.;Martyr, A.;Matthews, F. E.;Quinn, C.;Rusted, J. M.;Jones, R. W.;Collins, R.;van Horik, J.;Pentecost, C.;Allan, L. and Clare, L.

**Publication Date:** 2023

**Journal:** Aging and Mental Health (pagination), pp. Date of Publication: 2023

**Abstract:** Objectives: This study aims to investigate the impact of self and partner experiences of loneliness and social isolation on life satisfaction in people with dementia and their spousal carers.

**DOI:** 10.1080/13607863.2023.2286618

95. **Our early experiences in using renal volume to estimate split renal function in comparison with [99mTc] Tc-DMSA scans.**

**Item Type:** Journal Article

**Authors:** Shaw, C.;Ross, J.;Collin, N. and Laurence, I.

**Publication Date:** 2023

**Journal:** Nuclear Medicine Communications.Conference: British Nuclear Medicine Society Autumn Meeting, BNMS 2023.London United Kingdom 44(12), pp. 1201-1202

**Abstract:** Purpose: We set out to explore how renal volume, calculated from CT imaging and presented as ratios of left kidney volume: right kidney volume, compares to [99mTc] Tc-DMSA split function. This is an account of our findings and areas identified for further investigation.

96. **Multiple components of cardiopulmonary resuscitation are high risk aerosol generating procedures.**

**Item Type:** Journal Article

**Authors:** Shrimpton, A.;Brown, V.;Vassallo, J.;Nolan, J.;Soar, J.;Hamilton, F.;Cook, T.;Bzdek, B.;Reid, J.;Makepeace, C.;Deutsch, J.;Ascione, R.;Brown, J.;Benger, J. and Pickering, T.

**Publication Date:** 2023

**Journal:** Resuscitation Conference, pp. Resuscitation

**Abstract:** Introduction: There is ongoing controversy as to whether cardiopulmonary resuscitation (CPR) is an aerosol generating procedure as there are no human studies of aerosol generation during resuscitation.

97. **Feasibility of retrospective chart review to assess alignment of urinary tract infection diagnosis, testing and treatment decisions with UKHSA diagnostic guidance in patients 65 years+ in the emergency department.**

**Item Type:** Journal Article

**Authors:** Slatter, M.;Hay, A. and Jones, M.



**Publication Date:** 2023

**Journal:** JAC-Antimicrobial Resistance Conference, pp. BSAC

**Abstract:** Background: UKHSA urinary tract infection (UTI) diagnostic guidance uses presence/ absence of specific symptoms/signs to guide decisions on urine culture and antibiotic treatment.<sup>1</sup> The goal is treatment of those with highest risk of infection, avoiding serious illness, whilst limiting antibiotic overuse. UK improvement initiatives<sup>2,3</sup> encourage hospitals to align with UKHSA guidance. UTI is a common infection in the emergency department (ED) and diagnosis can be challenging in the elderly.<sup>4,5</sup> Objectives: To explore retrospective chart review to quantify UTI treatment alignment with UKHSA UTI guidance.<sup>1</sup> Identify ED patients aged 65 years+ (65+) with primary diagnosis of UTI. Limit to non-admitted for manageable sample. Complete retrospective chart review to elicit documented UTI symptoms/signs and associated: (i) urine dipstick testing; (ii) urine sampling for microscopy, culture and susceptibility (MC&S); and (iii) antibiotic treatment. Assess alignment with relevant UKHSA guidance. Estimate time taken.

## 98. SPORT IN TEENAGERS WITH DISABILITIES: A REVIEW OF THE BARRIERS AND BENEFITS.

**Item Type:** Journal Article

**Authors:** Allen, D.;Guiton, G. and Allen, M.

**Publication Date:** 2022

**Journal:** BMJ Paediatrics Open Conference: Royal College of Paediatrics and Child Health, RCPCH and the Young Person's Health Special Interest Group, YPHSIG 2022. Birmingham United Kingdom, pp. Date of Publication: 2022

**Abstract:** Objectives Adolescents with disabilities face barriers to engagement with physical activity that their able-bodied peers do not. As a result, disabled teenagers may be dissuaded from participating in sport, due to the perceived and actual risks involved. However, exercise offers numerous benefits to the physical and mental health of adolescents with disabilities. This review aims to investigate the potential barriers these teenagers may face that discourage them from exercising, as well as the benefits they could receive. Finally, potential facilitators to increase involvement in sport will be investigated. Methods A literature review was performed to investigate the benefits of exercise for adolescents with disabilities, as well as the barriers and facilitators to participation. PubMed was searched for eligible articles by expanding the following search terms to include synonyms, and combining them with the Boolean operator, 'AND': adolescents; exercise; disability; benefits. Resultant articles were screened for eligibility by abstract and full-text manuscript. Results This review included adolescents with the following conditions: neurological disabilities, particularly spinal cord injuries; cerebral palsy; epilepsy; other physical disabilities. The benefits conveyed to those teenagers engaging in sport firstly included emotional improvements: a higher sense of self-worth and improved self-esteem, improved relationships with family members. Furthermore, physical benefits of exercise were reported in these populations: increased aerobic capacity, and a general improvement in physical health; improvements in teenagers' gross motor functions; better seizure control for adolescents with epilepsy, and improved cognitive function. Despite these potential benefits, the literature emphasised that these teenagers faced numerous challenges which hindered their participation in sport. The first barrier to exercise was due to advice from healthcare professionals, teachers or family that their exercise should be limited or stopped due to their disability. Similarly, it was reported that confusion and conflicting advice created an uncomfortable environment for adolescents in which to explore an interest in sport. Secondly, teenagers were reported to limit their own exercise participation due to their own fears of exacerbating or worsening their physical health. Finally, embarrassment or fear about how their sporting performance would be perceived by others was a social barrier. In

order to combat these barriers to participation in sport, several facilitators were identified in the literature that increase teenagers' likelihood to exercise. Firstly, social factors, such as exercising in a group, finding an encouraging sports coach, or having family support to exercise all increased physical activity levels. Furthermore, introducing an aspect of fun into sport increased participation; examples included exercising with people the adolescent considered fun, or including animals into exercise, for example through therapeutic horse-riding. Finally, a teenager's self-motivation to exercise greatly increased their engagement. Conclusions Teenagers with disabilities face numerous barriers to participation in sport, however the potential benefits of exercise are substantial. Higher levels of physical activity are associated with better mental and physical health. Several facilitators exist to improve adolescents' involvement with exercise. Key strategies include making exercise fun, encouraging selfmotivation to exercise, and creating a positive social environment around sporting activities.

#### **99. Drugs for advanced life support.**

**Item Type:** Journal Article

**Authors:** Andersen, L. W.;Nolan, J. P. and Sandroni, C.

**Publication Date:** 2022

**Journal:** Intensive Care Medicine (pagination), pp. Date of Publication: 2022

#### **100. Parkinson's disease: the nutrition perspective.**

**Item Type:** Journal Article

**Authors:** Breasail, M. O.;Smith, M. D.;Tenison, E.;Henderson, E. J. and Lithander, F. E.

**Publication Date:** 2022

**Journal:** Proceedings of the Nutrition Society 81(1), pp. 12-26

**Abstract:** Parkinson's disease (PD) is the second most common neurodegenerative disease after Alzheimer's disease and affects about 1% of the population over the age of 60 years in industrialised countries. The aim of this review is to examine nutrition in PD across three domains: dietary intake and the development of PD; whole body metabolism in PD and the effects of PD symptoms and treatment on nutritional status. In most cases, PD is believed to be caused by a combination of genetic and environmental factors and although there has been much research in the area, evidence suggests that poor dietary intake is not a risk factor for the development of PD. The evidence about body weight changes in both the prodromal and symptomatic phases of PD is inconclusive and is confounded by many factors. Malnutrition in PD has been documented as has sarcopaenia, although the prevalence of the latter remains uncertain due to a lack of consensus in the definition of sarcopaenia. PD symptoms, including those which are gastrointestinal and non-gastrointestinal, are known to adversely affect nutritional status. Similarly, PD treatments can cause nausea, vomiting and constipation, all of which can adversely affect nutritional status. Given that the prevalence of PD will increase as the population ages, it is important to understand the interplay between PD, comorbidities and nutritional status. Further research may contribute to the development of interventional strategies to improve symptoms, augment care and importantly, enhance the quality of life for patients living with this complex neurodegenerative disease.

#### **101. Report of the 2020 British Nuclear Medicine Society survey of nuclear medicine equipment, workforce and workload.**

**Item Type:** Journal Article

**Authors:** Irwin, A. G.;Turner, C. L. and Redman, S.

**Publication Date:** 2022

**Journal:** Nuclear Medicine Communications 43(6), pp. 731-741

**Abstract:** The British Nuclear Medicine Society (BNMS) survey represents the only resource that brings together detailed information on equipment, workforce and workload from the practice of nuclear medicine in the UK. This article is a report of the most recent BNMS survey which was collected during 2019 and 2020. The survey used two methods to collect data: for equipment and workforce, participants created or updated existing online records; for workload information, respondees were asked to submit 12months of data from local radiology information systems. Following the survey, the BNMS database contained a total of 191 sites (63% of known sites) having either equipment or workforce data or both. In total 39 centres provided workload data which included over 175000 examinations. A combination of automated tools and visual inspection were used to clean, sort and validate submitted data into formats that allowed further analysis and extraction of useful parameters. Results are presented that the authors believe may be useful for nuclear medicine professionals and other stakeholders. Potential applications include benchmarking for service review and equipment replacement/updating. The survey represents a valuable resource that might be used by the BNMS secretariat to respond to specific queries from BNMS members. Nucl Med Commun 43: 731-741 Copyright © 2022 Wolters Kluwer Health, Inc. All rights reserved.

## 102. Whole-genome sequencing reveals host factors underlying critical COVID-19.

**Item Type:** Journal Article

**Authors:** Kousathanas, A.;PairoCastineira, E.;Rawlik, K.;Stuckey, A.;Odhams, C. A.;Russell, C. D.;Malinauskas, T.;Wu, Y.;Shen, X.;Elliott, K. S.;Griffiths, F.;Oosthuyzen, W.;Morrice, K.;Keating, S.;Wang, B.;Rhodes, D.;Klaric, L.;Zechner, M.;Parkinson, N.;Siddiq, A., et al

**Publication Date:** 2022

**Journal:** Nature 607(7917), pp. 97-103

**Abstract:** Critical COVID-19 is caused by immune-mediated inflammatory lung injury. Host genetic variation influences the development of illness requiring critical care<sup>1</sup> or hospitalization<sup>2-4</sup> after infection with SARS-CoV-2. The GenOMICC (Genetics of Mortality in Critical Care) study enables the comparison of genomes from individuals who are critically ill with those of population controls to find underlying disease mechanisms. Here we use whole-genome sequencing in 7,491 critically ill individuals compared with 48,400 controls to discover and replicate 23 independent variants that significantly predispose to critical COVID-19. We identify 16 new independent associations, including variants within genes that are involved in interferon signalling (IL10RB and PLSCR1), leucocyte differentiation (BCL11A) and blood-type antigen secretor status (FUT2). Using transcriptome-wide association and colocalization to infer the effect of gene expression on disease severity, we find evidence that implicates multiple genes-including reduced expression of a membrane flippase (ATP11A), and increased expression of a mucin (MUC1)-in critical disease. Mendelian randomization provides evidence in support of causal roles for myeloid cell adhesion molecules (SELE, ICAM5 and CD209) and the coagulation factor F8, all of which are potentially druggable targets. Our results are broadly consistent with a multi-component model of COVID-19 pathophysiology, in which at least two distinct mechanisms can predispose to life-threatening disease: failure to control viral replication; or an enhanced tendency towards pulmonary inflammation and intravascular coagulation. We show that comparison between cases of critical illness and population controls is highly efficient for the

detection of therapeutically relevant mechanisms of disease.

**DOI:** 10.1038/s41586-022-04576-6

**103. Pneumomediastinum in COVID-19: a phenotype of severe COVID-19 pneumonitis? The results of the United Kingdom (POETIC) survey.**

**Item Type:** Journal Article

**Authors:** Melhorn, J.;Achaiah, A.;Conway, F. M.;Thompson, E. M. F.;Skylberg, E. W.;Durrant, J.;Hasan, N. A.;Madani, Y.;Naran, P.;Vijayakumar, B.;Tate, M. J.;Trevelyan, G. E.;Zaki, I.;Doig, C. A.;Lynch, G.;Warwick, G.;Aujayeb, A.;Jackson, K. A.;Iftikhar, H.;Noble, J. H., et al

**Publication Date:** 2022

**Journal:** The European Respiratory Journal (pagination), pp. Date of Publication: 10 Feb 2022

**Abstract:** BACKGROUND: There is an emerging understanding that coronavirus disease 2019 (COVID-19) is associated with increased incidence of pneumomediastinum. We aimed to determine its incidence among patients hospitalised with COVID-19 in the United Kingdom and describe factors associated with outcome.

**104. The effects of exercise on complement system proteins in humans: a systematic scoping review.**

**Item Type:** Journal Article

**Authors:** RothschildRodriguez, D.;Causer, A. J.;Brown, F. F.;CollierBain, H. D.;Moore, S.;Murray, J.;Turner, J. E. and Campbell, J. P.

**Publication Date:** 2022

**Journal:** Exercise Immunology Review 28, pp. 1-35

**Abstract:** BACKGROUND: The complement system is comprised of the classical, lectin and alternative pathways that result in the formation of: pro-inflammatory anaphylatoxins; opsonins that label cells for phagocytic removal; and, a membrane attack complex that directly lyses target cells. Complement-dependent cytotoxicity (CDC) - cell lysis triggered by complement protein C1q binding to the Fc region of antibodies bound to target cells - is another effector function of complement and a key mechanism-of-action of several monoclonal antibody therapies. At present, it is not well established how exercise affects complement system proteins in humans.

**105. Severe myalgic encephalomyelitis/chronic fatigue syndrome in children and young people: a British Paediatric Surveillance Unit study.**

**Item Type:** Journal Article

**Authors:** Royston, A. P.;Rai, M.;Brigden, A.;Burge, S.;Segal, T. Y. and Crawley, E. M.

**Publication Date:** 2022

**Journal:** Archives of Disease in Childhood (pagination), pp. Date of Publication: 01 Dec 2022

**Abstract:** OBJECTIVES:

106. **Prognostic value of National Early Warning Scores (NEWS2) and component physiology in hospitalised patients with COVID-19: A multicentre study.**

**Item Type:** Journal Article

**Authors:** Scott, L. J.;Tavare, A.;Hill, E. M.;Jordan, L.;Juniper, M.;Srivastava, S.;Redfern, E.;Little, H. and Pullyblank, A.

**Publication Date:** 2022

**Journal:** Emergency Medicine Journal (pagination)

**Abstract:** Background: National Early Warning Scores (NEWS2) are used to detect all-cause deterioration. While studies have looked at NEWS2, the use of virtual consultation and remote monitoring of patients with COVID-19 mean there is a need to know which physiological observations are important.

107. **Commissioning for Quality and Innovation (CQUIN) schemes revisiting urinary tract infection (UTI) management. What worked? What lasted? What next?.**

**Item Type:** Journal Article

**Authors:** Slatter, M.;Aprilia, V.;Boyd, R. and Chan, T.

**Publication Date:** 2022

**Journal:** JAC-Antimicrobial Resistance Conference, pp. Infection

**Abstract:** Background: UK CQUIN schemes encourage an improvement focus on a specific area of care. In 2019, CQUIN CCG1a: Improving the management of lower UTI in older people<sup>1</sup> was adopted at the RUH resulting in increased alignment with UK guidance on diagnosis and treatment.<sup>2</sup> Our aim was to investigate whether this improvement was sustained two years later. This would help inform quality improvement interventions prior to adoption of the 2022 CQUIN, CCG2: Appropriate antibiotic prescribing for UTI in adults aged 16+.<sup>3</sup> Objectives: Service evaluation of the UTI pathway including compliance with two of the CQUIN care processes for UTI diagnosis in patients age 65 + presenting to ED (not admitted): (i) diagnosis excludes use of urine dipstick in people aged 65+; and (ii) urine sample sent to microbiology as per UK guidance.<sup>2</sup> Methods: A search of the electronic patient record for key terms (Table 1) identified 6076 ED attendances for patients age 65+ between 1 August and 31 October 2021 of which 40 were identified with a primary diagnosis of UTI not requiring hospital admission. Paramedic, ED and Urgent Treatment Centre notes (paper and electronic) were reviewed in detail and information gathered regarding presence/absence of UTI symptoms aligned to diagnostic guidelines;<sup>2</sup> presence/absence of urine dipstick test; and presence/absence of urine sample for culture and susceptibility testing. Findings were compared with identical trust data for patients (admitted and nonadmitted) obtained during the 2019 CQUIN: Q1 April-June; Q2 July-September; Q3 October-December. During this period improvement interventions were implemented.

108. **'You're kind of left to your own devices': a qualitative focus group study of patients with breast, prostate or blood cancer at a hospital in the South West of England, exploring their engagement with exercise and physical activity during cancer treatment and in the months following standard care.**

**Item Type:** Journal Article

**Authors:** Smith, S. K.;Wiltshire, G.;Brown, F. F.;Dhillon, H.;Osborn, M.;Wexler, S.;Beresford, M.;Tooley, M. A. and Turner, J. E.

**Publication Date:** 2022

**Journal:** BMJ Open 12(3), pp. e056132

**Abstract:** OBJECTIVES: The aim of this study was to explore the experiences of patients with breast, prostate or blood cancer, regarding their (1) engagement with exercise and physical activity during treatment and in the months following standard care, and (2) the meanings attached to these lifestyle behaviours. DESIGN: A qualitative study using focus groups. The groups were audio recorded, transcribed and analysed using Framework analysis. SETTING: A hospital-based cancer treatment centre in the South-West of England. PARTICIPANTS: Eighteen people who had either completed treatment or were currently on maintenance therapy for breast, prostate or blood cancer (non-Hodgkin lymphoma or Hodgkin lymphoma).

109. **Needs of patients with parkinsonism and their caregivers: a protocol for the PRIME-UK cross-sectional study.**

**Item Type:** Journal Article

**Authors:** Tenison, E.;Lithander, F. E.;Smith, M. D.;PendryBrazier, D.;BenShlomo, Y. and Henderson, E. J.

**Publication Date:** 2022

**Journal:** BMJ Open 12(5), pp. e057947

**Abstract:** INTRODUCTION: People with parkinsonism are a highly heterogeneous group and the disease encompasses a spectrum of motor and non-motor symptoms which variably emerge and manifest across the disease course, fluctuate over time and negatively impact quality of life. While parkinsonism is not directly the result of ageing, it is a condition that mostly affects older people, who may also be living with frailty and multimorbidity. This study aims to describe the broad range of health needs for people with parkinsonism and their carers in relation to their symptomatology, disability, disease stage, comorbidities and sociodemographic characteristics. METHODS AND ANALYSIS: In this single site cross-sectional study, people with parkinsonism will be sent a study information pack for themselves and their primary informal caregiver, if relevant. Data are collected via questionnaire, with additional support, if required, to maximise participation. A specific strategy has been developed to target and proactively recruit patients lacking capacity to consent, including those in residential care settings, with input from a personal consultee prior to completion of a bespoke questionnaire by a representative. Caregivers are also recruited to look at various health outcomes. Results will be displayed as descriptive statistics and regression models will be used to test simple associations and interactions. ETHICS AND DISSEMINATION: This protocol was approved by the London-Brighton & Sussex Research Ethics Committee (REC reference 20/LO/0890). The results of this protocol will be disseminated through publication in an international peer-reviewed journal; presentation at academic meetings and conferences; and a lay summary uploaded to the PRIME-Parkinson website. TRIAL REGISTRATION NUMBER: ISRCTN11452969; Pre-results.

110. **Randomized multicenter trial of 3 weekly cabazitaxel versus weekly paclitaxel chemotherapy in the first-line treatment of HER2 negative metastatic breast cancer (MBC).**

**Item Type:** Journal Article

**Authors:** Bahl, A.;Braybrooke, J.;Bravo, A.;Foulstone, E.;Ball, J.;Churn, M.;Dubey, S.;Spensley, S.;Bowen, R.;Waters, S.;Riddle, P.;Wheatley, D.;Stephens, P.;Mansi, J.;Bezecny, P.;Madhusudan, S.;Verrill, M.;Markham, A.;Pearson, S. and Wilson, W.



**Publication Date:** 2021

**Journal:** Journal of Clinical Oncology Conference, pp. Annual

**Abstract:** Background: Paclitaxel is commonly used as first line chemotherapy for HER2 negative MBC. However, with response rates of 21.5-53.7% and a significant risk of peripheral neuropathy there is a need for more effective and better tolerated chemotherapy (CCT).

111. **Machine learning risk prediction of mortality for patients undergoing surgery with perioperative SARS-CoV-2: The COVIDSurg mortality score.**

**Item Type:** Journal Article

**Authors:** Bravo, L.;Nepogodiev, D.;Glasbey, J. C.;Li, E.;Simoës, J. F. F.;Kamarajah, S. K.;Picciocchi, M.;Abbott, T. E. F.;Ademuyiwa, A. O.;Arnaud, A. P.;Agarwal, A.;Brar, A.;Elhadi, M.;Mazingi, D.;Cardoso, V. R.;Lawday, S.;Sayyed, R.;Omar, O. M.;de la Madina, A. R.;Slater, L., et al

**Publication Date:** 2021

**Journal:** British Journal of Surgery 19(4) (pagination), pp. Article Number: znab183. Date of Publication: 01 Jan 2021

112. **Case report a breathless teenager.**

**Item Type:** Journal Article

**Authors:** Cochrane, C. N.;Collin, N. and Langton Hewer, S. C.

**Publication Date:** 2021

**Journal:** Breathe 17(2) (pagination), pp. Article Number: 210027. Date of Publication: 01 Jun 2021

113. **Are you OK?.**

**Item Type:** Journal Article

**Authors:** Finlay, F.;Baverstock, A. and Cotton, H.

**Publication Date:** 2021

**Journal:** Archives of Disease in Childhood: Education and Practice Edition 108(2), pp. 124

114. **Interobserver Agreement in the Diagnosis of Parkinson Disease with Cardiac <sup>123</sup>I-Metaiodobenzylguanidine Scintigraphy.**

**Item Type:** Journal Article

**Authors:** Foley, R. W.;Redman, S. L.;Laurence, I. J.;Graham, R. N. and Little, D.

**Publication Date:** 2021

**Journal:** Journal of Nuclear Medicine Technology 49(3), pp. 262-264

**Abstract:** The aim of this study was to analyze the interobserver agreement of visual and quantitative assessment of cardiac <sup>123</sup>I-metaiodobenzyl-guanidine scintigraphy.

115. **Research into ageing and frailty.**

**Item Type:** Journal Article

**Authors:** Gordon, A. L.;Witham, M. D.;Henderson, E. J.;Harwood, R. H. and Masud, T.

**Publication Date:** 2021

**Journal:** Future Healthcare Journal 8(2), pp. E237-E242

**Abstract:** Research into ageing covers opportunities and challenges posed by an older population, and research to understand the ageing processes across the lifespan. The evidence base for Comprehensive Geriatric Assessment (CGA) is well established and efforts should now shift to understanding how to implement its principles across different healthcare contexts. Research around syndromes common in older people has progressed with variable success; while effective therapies for falls and cognitive impairment have been identified, older people with advanced frailty have commonly been excluded from Parkinson's disease and continence research. Research to understand the mechanisms of ageing has potential to mitigate against or treat emerging sarcopenia and cognitive impairment, and thus modify frailty trajectories. Pharmacogenetics could individualise therapeutics to reduce polypharmacy. These issues can only be addressed with development of infrastructure, capacity and expertise in ageing research. Commonly used research methodologies must be adapted to take account of frailty, cognitive impairment and functional dependency.

116. **Over-the-counter antacids linked to severe hypokalaemia in the context of threatened preterm labour.**

**Item Type:** Journal Article

**Authors:** Lattey, K.;Quinn, S. and O'Brien, K.

**Publication Date:** 2021

**Journal:** BMJ Case Reports 14(1) (pagination), pp. Article Number: e236083. Date of Publication: 11 Jan 2021

**Abstract:** A healthy multiparous woman presented at 35 weeks and 4 days' gestation with threatened preterm labour on multiple occasions. An incidental finding of severe hypokalaemia (2.4 mmol/L) was detected on routine blood tests. The cause of this hypokalaemia was not initially obvious. It was eventually linked to overuse of over-the-counter antacids for pregnancy-associated heartburn. The patient was managed with parenteral and then oral electrolyte replacement which corrected a pH of 7.55, bicarbonate of 36.7 mEq/L and a base excess 13.1. In this case report we consider whether hypokalaemia could be linked to uterine irritability and threatened preterm labour, whether antacids were being abused in the context of an eating disorder and the importance of taking a full drug history.

117. **Considerations for a combined index for limited cutaneous systemic sclerosis to support drug development and improve outcomes.**

**Item Type:** Journal Article

**Authors:** Lescoat, A.;Murphy, S. L.;Roofeh, D.;Pauling, J. D.;Hughes, M.;Sandler, R.;Zimmermann, F.;Wessel, R.;Townsend, W.;Chung, L.;Denton, C. P.;Merkel, P. A.;Steen, V.;Allanore, Y.;Del Galdo, F.;Godard, D.;Cella, D.;Farrington, S.;Buch, M. H. and Khanna, D.

**Publication Date:** 2021

**Journal:** Journal of Scleroderma and Related Disorders 6(1), pp. 66-76

**Abstract:** Systemic sclerosis (systemic scleroderma) is characterized by a heterogeneous range of clinical manifestations. Systemic sclerosis is classified into limited cutaneous systemic sclerosis and diffuse cutaneous systemic sclerosis subgroups based on the extent of skin involvement. Randomized controlled trials in scleroderma have mainly focused on diffuse cutaneous systemic sclerosis partly because the measurement of skin involvement, critical for evaluating a therapeutic intervention, is more dynamic in this subset. Nonetheless, limited cutaneous systemic sclerosis, the most common cutaneous subset (about two-third), is also associated with significant morbidity and detrimental impact on health-related quality of life. The lack of interventional studies in limited cutaneous systemic sclerosis is partly due to a lack of relevant outcome measures to evaluate this subgroup. Combining several clinically meaningful outcomes selected specifically for limited cutaneous systemic sclerosis may improve representativeness in clinical trials and responsiveness of outcomes measured in randomized controlled trials. A composite index dedicated to limited cutaneous systemic sclerosis combining such relevant outcomes could advance clinical trial development for limited cutaneous systemic sclerosis by providing the opportunity to test and select among candidate drugs that could act as disease-modifying treatments for this neglected subgroup of systemic sclerosis. This proposed index would include items selected by expert physicians and patients with limited cutaneous systemic sclerosis across domains grounded in the lived experience of limited cutaneous systemic sclerosis. This article reviews the reasons behind the relative neglect of limited cutaneous systemic sclerosis, discusses the current state of outcome measures for limited cutaneous systemic sclerosis, identifies challenges, and proposes a roadmap for a combined limited cutaneous systemic sclerosis-specific treatment response index.

118. **Results from VERONICA: A randomized, phase II study of second-/third-line venetoclax (VEN) + fulvestrant (F) versus F alone in estrogen receptor (ER)-positive, HER2-negative, locally advanced, or metastatic breast cancer (LA/MBC).**

**Item Type:** Journal Article

**Authors:** Lindeman, G. J.;Bowen, R.;Jerzak, K. J.;Song, X.;Decker, T.;Boyle, F. M.;McCune, S. L.;Armstrong, A.;Shannon, C. M.;Bertelli, G.;Fernando, T. M.;Desai, R.;Gupta, K.;Hsu, J. Y.;Flechais, A. and Bardia, A.

**Publication Date:** 2021

**Journal:** Journal of Clinical Oncology Conference, pp. Annual

**Abstract:** Background: For patients (pts) with ER-positive, HER2-negative MBC, CDK4/6 inhibitors + endocrine therapy (ET) is standard first-line treatment, with single-agent ET considered for second-line. Nevertheless, most pts progress. A novel therapeutic target is the antiapoptotic protein BCL2, which is overexpressed in~85% of primary ER-positive breast cancers. VEN is a potent, selective BCL2 inhibitor that has shown promising clinical activity in pts with ER-positive and BCL2-positive MBC who have received prior ET. We report the prespecified primary and updated (for overall survival [OS]) analysis of VERONICA (NCT03584009), a phase II study of VEN + F vs F in ER-positive, HER2-negative LA/MBC.

119. **Mapping the human genetic architecture of COVID-19.**

**Item Type:** Journal Article

**Authors:** Niemi, M. E. K.;Karjalainen, J.;Liao, R. G.;Neale, B. M.;Daly, M.;Ganna, A.;Pathak, G. A.;Andrews, S. J.;Kanai, M.;Veerapen, K.;FernandezCadenas, I.;Schulte, E.

C.;Striano, P.;Marttila, M.;Minica, C.;Marouli, E.;Karim, M. A.;Wendt, F. R.;Savage, J.;Sloofman, L., et al

**Publication Date:** 2021

**Journal:** Nature 600(7889), pp. 472-477

**Abstract:** The genetic make-up of an individual contributes to the susceptibility and response to viral infection. Although environmental, clinical and social factors have a role in the chance of exposure to SARS-CoV-2 and the severity of COVID-19<sup>1,2</sup>, host genetics may also be important. Identifying host-specific genetic factors may reveal biological mechanisms of therapeutic relevance and clarify causal relationships of modifiable environmental risk factors for SARS-CoV-2 infection and outcomes. We formed a global network of researchers to investigate the role of human genetics in SARS-CoV-2 infection and COVID-19 severity. Here we describe the results of three genome-wide association meta-analyses that consist of up to 49,562 patients with COVID-19 from 46 studies across 19 countries. We report 13 genome-wide significant loci that are associated with SARS-CoV-2 infection or severe manifestations of COVID-19. Several of these loci correspond to previously documented associations to lung or autoimmune and inflammatory diseases<sup>3-7</sup>. They also represent potentially actionable mechanisms in response to infection. Mendelian randomization analyses support a causal role for smoking and body-mass index for severe COVID-19 although not for type II diabetes. The identification of novel host genetic factors associated with COVID-19 was made possible by the community of human genetics researchers coming together to prioritize the sharing of data, results, resources and analytical frameworks. This working model of international collaboration underscores what is possible for future genetic discoveries in emerging pandemics, or indeed for any complex human disease.

**DOI:** 10.1038/s41586-021-03767-x

120. **Erratum: A systematic review and meta-analysis to inform cancer screening guidelines in idiopathic inflammatory myopathies (Rheumatology (2021) 60 (2615-2628) DOI: 10.1093/rheumatology/keab166).**

**Item Type:** Journal Article

**Authors:** Oldroyd, A. G. S.;Allard, A. B.;Callen, J. P.;Chinoy, H.;Chung, L.;Fiorentino, D.;George, M. D.;Gordon, P.;Kolstad, K.;Kurtzman, D. J. B.;Machado, P. M.;McHugh, N. J.;Postolova, A.;SelvaO'Callaghan, A.;Schmidt, J.;Tansley, S.;Vleugels, R. A.;Werth, V. P. and Aggarwal, R.

**Publication Date:** 2021

**Journal:** Rheumatology (United Kingdom) 60(11), pp. 5483

**Abstract:** When this paper first published. Dr Sarah Tansley was erroneously given two affiliations. She is only affiliated with the Royal National Hospital for Rheumatic Diseases, Royal United Hospitals Bath NHS Foundation Trust, Bath, UK. She is not affiliated with the Department of Neurology, Neuromuscular Centre, Gottingen, Germany. This has been corrected online.

121. **Removing hospital-based triage from suspected colorectal cancer pathways: the impact and learning from a primary care-led electronic straight-to-test pathway.**

**Item Type:** Journal Article

**Authors:** Orchard, P.;Arvind, N.;Wint, A.;Kynaston, J.;Lyons, A.;Loveday, E. and Pullyblank, A.

**Publication Date:** 2021

**Journal:** BMJ Quality & Safety 30(6), pp. 467-474

**Abstract:** BACKGROUND: The 2-week wait referral pathway for suspected colorectal cancer was introduced in England to improve time from referral from a general practitioner (GP) to diagnosis and treatment. Patients are required to be seen by a hospital clinician within 2 weeks if their symptoms meet the criteria set by the National Institute for Health and Care Excellence (NICE) and to start cancer treatment within 62 days. To achieve this, many hospitals have introduced a straight-to-test (STT) strategy requiring hospital-based triage of referrals. We describe the impact and learning from a new pathway which has removed triage and moved the process of requesting tests from hospital to GPs in primary care.

**122. Estimating premorbid intelligence in people living with dementia: A systematic review.**

**Item Type:** Journal Article

**Authors:** Overman, M. J.;Leeworthy, S. and Welsh, T. J.

**Publication Date:** 2021

**Journal:** International Psychogeriatrics 33(11), pp. 1145-1159

**Abstract:** Objectives: In diagnosing dementia, estimating premorbid functioning is critical for accurate detection of the presence and severity of cognitive decline. However, which assessments of premorbid intelligence are most suitable for use in clinical practice is not well established. Here, we systematically evaluate the validity of instruments for measuring premorbid intelligence in people living with dementia. Design and setting: In this systematic review, electronic databases (EMBASE, PsycINFO, MEDLINE, CINAHL, and AMED) were searched to identify studies reporting on objective measures of premorbid intelligence in dementia. Participants from included studies were recruited from local communities and clinical settings.

**123. A quantitative evaluation of aerosol generation during supraglottic airway insertion and removal.**

**Item Type:** Journal Article

**Authors:** Shrimpton, A. J.;Brown, J. M.;Cook, T. M. and Pickering, A. E.

**Publication Date:** 2021

**Journal:** Anaesthesia (pagination), pp. Date of Publication: 25 Aug 2021

**124. Impact of Bacillus Calmette-Gue'rin (BCG) vaccination on postoperative mortality in patients with perioperative SARS-CoV-2 infection.**

**Item Type:** Journal Article

**Authors:** Tabiri, S.;Kamarajah, S. K.;Nepogodiev, D.;Li, E.;Sravanam, S.;Owusu, S. A.;Mahama, H.;Agyeman, Y. N.;Arthur, J.;Kunfah, S. M.;Gyamfi, F. E.;Owusu, E. A.;Wandoh, P.;Bhangu, A.;SiawAcheampong, K.;Argus, L.;Chaudhry, D.;Dawson, B. E.;Glasbey, J. C.;Gujjuri, R. R., et al

**Publication Date:** 2021

**Journal:** BJS Open 5(6) (pagination), pp. Article Number: zrab131. Date of Publication: 01 Nov 2021

125. **Cerebral autosomal recessive arteriopathy with subcortical infarcts and leukoencephalopathy (CARASIL).**

**Item Type:** Journal Article

**Authors:** Tan, R. Y.;Drazyk, A. M.;Urankar, K.;Bailey, C.;Graf, S.;Markus, H. and Giffin, N. J.

**Publication Date:** 2021

**Journal:** Practical Neurology 21(5), pp. 448-451

**Abstract:** A 44-year-old Caucasian man presented with seizures and cognitive impairment. He had marked retinal drusen, and MR brain scan showed features of cerebral small vessel disease; he was diagnosed with a leukoencephalopathy of uncertain cause. He died at the age of 46 years and postmortem brain examination showed widespread small vessel changes described as a vasculopathy of unknown cause. Seven years postmortem, whole-genome sequencing identified a homozygous nonsense HTRA1 mutation (p.Arg302Ter), giving a retrospective diagnosis of cerebral autosomal recessive arteriopathy with subcortical infarcts and leukoencephalopathy.

126. **Ambulatory management of secondary spontaneous pneumothorax: A randomised controlled trial.**

**Item Type:** Journal Article

**Authors:** Walker, S. P.;Keenan, E.;Bintcliffe, O.;Stanton, A. E.;Roberts, M.;Pepperell, J.;Fairbairn, I.;McKeown, E.;Goldring, J.;Maddekar, N.;Walters, J.;West, A.;Bhatta, A.;Knight, M.;Mercer, R.;Hallifax, R.;White, P.;Miller, R. F.;Rahman, N. M. and Maskell, N. A.

**Publication Date:** 2021

**Journal:** European Respiratory Journal 57(6) (pagination), pp. Article Number: 2003375. Date of Publication: 01 Jun 2021

**Abstract:** Secondary spontaneous pneumothorax (SSP) is traditionally managed with an intercostal chest tube attached to an underwater seal. We investigated whether use of a one-way flutter valve shortened patients' length of stay (LoS). This open-label randomised controlled trial enrolled patients presenting with SSP and randomised to either a chest tube and underwater seal (standard care: SC) or ambulatory care (AC) with a flutter valve. The type of flutter valve used depended on whether at randomisation the patient already had a chest tube in place: in those without a chest tube a pleural vent (PV) was used; in those with a chest tube in situ, an Atrium Pneumostat (AP) valve was attached. The primary end-point was LoS. Between March 2017 and March 2020, 41 patients underwent randomisation: 20 to SC and 21 to AC (13=PV, 8=AP). There was no difference in LoS in the first 30 days following treatment intervention: AC (median=6 days, IQR 14.5) and SC (median=6 days, IQR 13.3). In patients treated with PV there was a high rate of early treatment failure (6/13; 46%), compared to patients receiving SC (3/20; 15%) (p=0.11) Patients treated with AP had no (0/8 0%) early treatment failures and a median LoS of 1.5 days (IQR 23.8). There was no difference in LoS between ambulatory and standard care. Pleural Vents had high rates of treatment failure and should not be used in SSP. Atrium Pneumostats are a safer alternative, with a trend towards lower LoS.

127. **Against the odds: unlikely COVID-19 recovery.**

**Item Type:** Journal Article

**Authors:** Bisson, E.;Presswood, E.;Kenyon, J.;Shelton, F. and Hall, T.

**Publication Date:** 2020

**Journal:** BMJ Supportive & Palliative Care (pagination), pp. Date of Publication: 03 Jul 2020

**Abstract:** BACKGROUND: We present a 67-year-old male, with palliative hypopharyngeal squamous cell carcinoma, who contracted COVID-19 infection while in hospital. Cancer diagnosis, among other clinical features, increases the risk of poor outcome of COVID-19 infection. A recently validated risk calculator (COVID-GRAM) can help to guide prognosis. EVENTS: COVID-19 infection caused significant clinical deterioration in this patient. A Treatment Escalation Plan of ward-based care was put in place and the palliative care team involved. The goal of care was comfort.

128. **Rhombencephalitis.**

**Item Type:** Journal Article

**Authors:** Cleaver, J.;James, R. and Rice, C. M.

**Publication Date:** 2020

**Journal:** Practical Neurology (pagination), pp. Date of Publication: 08 Dec 2020

**Abstract:** Rhombencephalitis-inflammation of the brainstem and cerebellum-has myriad clinical presentations including encephalopathy, cranial neuropathies, long tract signs and cerebellar dysfunction and is associated with significant morbidity and mortality. There are a variety of potential underlying causes that respond variably to treatment, including infections, parainfective syndromes, inflammatory disorders including autoimmune encephalitis and paraneoplastic syndromes. Here, we review its clinical presentation and outline a practical approach to its investigation, aiming to facilitate prompt diagnosis and confirmation of the underlying cause, to start appropriate management early and optimise the clinical outcome.

129. **Development of a structured process for fair allocation of critical care resources in the setting of insufficient capacity: a discussion paper.**

**Item Type:** Journal Article

**Authors:** Cook, T.;Gupta, K.;Dyer, C.;Fackrell, R.;Wexler, S.;Boyes, H.;Colleypriest, B.;Graham, R.;Meehan, H.;Merritt, S.;Robinson, D. and Marden, B.

**Publication Date:** 2020

**Journal:** Journal of Medical Ethics (pagination), pp. Date of Publication: 20 Nov 2020

**Abstract:** Early in the COVID-19 pandemic there was widespread concern that healthcare systems would be overwhelmed, and specifically, that there would be insufficient critical care capacity in terms of beds, ventilators or staff to care for patients. In the UK, this was avoided by a threefold approach involving widespread, rapid expansion of critical care capacity, reduction of healthcare demand from non-COVID-19 sources by temporarily pausing much of normal healthcare delivery, and by governmental and societal responses that reduced demand through national lockdown. Despite high-level documents designed to



help manage limited critical care capacity, none provided sufficient operational direction to enable use at the bedside in situations requiring triage. We present and describe the development of a structured process for fair allocation of critical care resources in the setting of insufficient capacity. The document combines a wide variety of factors known to impact on outcome from critical illness, integrated with broad-based clinical judgement to enable structured, explicit, transparent decision-making founded on robust ethical principles. It aims to improve communication and allocate resources fairly, while avoiding triage decisions based on a single disease, comorbidity, patient age or degree of frailty. It is designed to support and document decision-making. The document has not been needed to date, nor adopted as hospital policy. However, as the pandemic evolves, the resumption of necessary non-COVID-19 healthcare and economic activity mean capacity issues and the potential need for triage may yet return. The document is presented as a starting point for stakeholder feedback and discussion.

**130. IV Contrast - not an excuse for radiology bashing.**

**Item Type:** Journal Article

**Authors:** Little, D.

**Publication Date:** 2020

**Journal:** British Journal of Surgery 107(12), pp. E638

**131. UK dental care for children - a specialist workforce analysis.**

**Item Type:** Journal Article

**Authors:** Mills, R. W.

**Publication Date:** 2020

**Journal:** British Dental Journal (pagination), pp. Date of Publication: 20 Oct 2020

**Abstract:** Introduction The main specialties involved with the treatment of children in the UK are paediatric dentistry and orthodontics. In December 2019, these accounted for approximately 38% of all specialists listed by the General Dental Council (GDC). Recent evidence of difficulties filling specialist NHS job posts and the absence of specialists in some UK postal areas suggests a demographic analysis of these specialties is timely. Aims To gather data and help contribute towards assessing the need for future specialist training places by mapping GDC-listed specialists registered in UK postal areas and plotting specialists' first GDC registration dates. Method The data were obtained from the GDC. Results In ten years' time, approximately 40% (n = 92) of currently registered specialists in paediatric dentistry and 37% (n = 487) of specialists in orthodontics will be aged 60 years or over. Forty-four percent (n = 54) of 124 UK postal areas had no specialist in paediatric dentistry while 2% (n = 3) had no specialist in orthodontics. Conclusion Demographic profiling can be compiled from data available to the public. This is likely to be of interest for those responsible for specialist workforce planning and funding NHS specialist dental care for children.

**132. Multidisciplinary collaboration among young specialists: results of an international survey by the emerging EULAR network and other young organisations.**

**Item Type:** Journal Article

**Authors:** Najm, A.;Kostine, M.;Pauling, J. D.;Ferreira, A. C.;Stevens, K.;Smith, E.;EguiluzGracia, I.;Studenic, P.;RodriguezCarrio, J.;Ramiro, S.;Alunno, A.;Richez, C.;Nikiphorou, E. and Sepriano, A.

**Publication Date:** 2020

**Journal:** RMD Open 6(2) (pagination), pp. Date of Publication: 01 Se 2020

**Abstract:** BACKGROUND: Multidisciplinary collaboration is defined as a collective work involving multiple disciplines and is common in clinical care and research. Our aim was to describe current clinical and research collaboration among young specialists and to identify unmet needs in this area.

**133. Results of a randomized phase III study of dysphagia-optimized intensity modulated radiotherapy (Do-IMRT) versus standard IMRT (S-IMRT) in head and neck cancer.**

**Item Type:** Journal Article

**Authors:** Nutting, C.;Rooney, K.;Foran, B.;Pettit, L.;Beasley, M.;Finneran, L.;Roe, J.;Tyler, J.;Roques, T.;Cook, A.;Petkar, I.;Bhide, S.;Srinivasan, D.;Boon, C.;De Winton, E.;Frogley, R.;Mertens, K.;Emson, M. and Hall, E.

**Publication Date:** 2020

**Journal:** Journal of Clinical Oncology Conference, pp. 2020

**Abstract:** Background: Most newly diagnosed oro-& hypopharyngeal cancers (OPC, HPC) are treated with (chemo)RT with curative intent but at the consequence of adverse effects on quality of life. CRUK/14/014 investigated if using Do-IMRT to reduce RT dose to the dysphagia/aspiration related structures (DARS) improved swallowing function compared to S-IMRT.

**134. Experiences of mentoring ST4-ST5s amongst a group of orthodontic trainers at Bristol Dental School and Hospital.**

**Item Type:** Journal Article

**Authors:** Parvizi, F.;Ireland, A. J. and Fowler, E.

**Publication Date:** 2020

**Journal:** Journal of Orthodontics 47(2), pp. 129-139

**Abstract:** OBJECTIVE: To explore the experiences of mentoring higher-grade trainees amongst senior orthodontic trainers at Bristol Dental School. DESIGN: Qualitative study using interpretive methodology. SETTING: University of Bristol Dental School. PARTICIPANTS: Six consultant orthodontists, five of whom also have district general hospital experience.

**135. A stakeholder meeting exploring the ethical perspectives of immediately sequential bilateral cataract surgery.**

**Item Type:** Journal Article

**Authors:** Quinn, M.;Gray, D.;Bardan, A. S.;Zarei, M.;Sparrow, J. and Liu, C.

**Publication Date:** 2020

**Journal:** Journal of Medical Ethics (pagination), pp. Date of Publication: 21 Se 2020

**Abstract:** PURPOSE: The purported benefits and risks of immediately sequential bilateral

cataract surgery (ISBCS) have been well described, yet the procedure remains controversial among UK ophthalmologists. As many of the controversies of ISBCS are underpinned by ethical dilemmas, the aim of this work was to explore the ethical perspectives of ISBCS from a variety of stakeholder viewpoints.

**136. Intrinsic plus posture.**

**Item Type:** Journal Article

**Authors:** Giddins, G.

**Publication Date:** 2019

**Journal:** The Journal of Hand Surgery, European Volume 44(9), pp. 985

**137. Optimizing chemotherapy for frail and elderly patients (pts) with advanced gastroesophageal cancer (aGOAC): The GO2 phase III trial.**

**Item Type:** Journal Article

**Authors:** Hall, P. S.; Swinson, D.; Waters, J. S.; Wadsley, J.; Falk, S.; Roy, R.; Tillett, T.; Nicoll, J.; Cummings, S.; Grumett, S. A.; Kamposioras, K.; Garcia, A.; Allmark, C.; Marshall, H.; Ruddock, S.; Katona, E.; Velikova, G.; Petty, R. D.; Grabsch, H. I. and Seymour, M. T.

**Publication Date:** 2019

**Journal:** Journal of Clinical Oncology Conference, pp. 2019

**Abstract:** Background: Many pts with aGOAC are elderly and/or frail. We previously compared epirubin/ oxaliplatin/ capecitabine (EOCap) vs OCap vs Cap in a pick-the-winner study and found OCap best. GO2 was designed to find the optimum dose of OCap and to explore the use of an objective baseline geriatric assessment to individualize doses for maximum Overall Treatment Utility (OTU), a composite of clinical benefit, tolerability, QL and patient value.

**138. 3-month versus 6-month adjuvant chemotherapy for patients with high-risk stage ii and iii colorectal cancer: 3-year follow-up of the scot non-inferiority rct.**

**Item Type:** Journal Article

**Authors:** Ivesono, T.; Boydo, K. A.; Kerro, R. S.; RoblesZurita, J.; Saunders, M. P.; Briggso, A. H.; Cassidy, J.; Hollander, N. H.; Taberner, J.; Haydon, A.; Glimelius, B.; Harkino, A.; Allano, K.; McQueen, J.; Pearson, S.; Waterston, A.; Medley, L.; Wilson, C.; Elliso, R.; Essapen, S., et al

**Publication Date:** 2019

**Journal:** Health Technology Assessment 23(64), pp. 1-88

**Abstract:** Background: Oxaliplatin and fluoropyrimidine chemotherapy administered over 6 months is the standard adjuvant regimen for patients with high-risk stage II or III colorectal cancer. However, the regimen is associated with cumulative toxicity, characterised by chronic and often irreversible neuropathy.

**139. Randomized phase II trial of venetoclax + fulvestrant versus fulvestrant in estrogen receptor+, HER2-locally advanced or metastatic breast cancer following recurrence or progression during or after a CDK4/6 inhibitor: VERONICA.**

**Item Type:** Journal Article

**Authors:** Lindeman, G. J.;Bardia, A.;Bowen, R.;Flechais, A.;Lei, G.;Hogea, A.;Mobasher, M. and Rafii, S.

**Publication Date:** 2019

**Journal:** Journal of Clinical Oncology Conference, pp. 2019

**Abstract:** Background: CDK4/6 inhibitors (CDK4/6is) administered with endocrine therapy have demonstrated improvements in progression-free survival (PFS) for estrogen receptor (ER)+ advanced breast cancer (BC), but resistance occurs, and new options are needed in the post-CDK4/6i setting. BCL2 is an estrogen-responsive anti-apoptotic molecule overexpressed in 75% of BCs. The BCL2 inhibitor venetoclax (Ven) has shown improved outcomes and tolerability in hematological malignancies such as chronic lymphocytic leukemia, and has been investigated in BC. A phase 1 b study of Ven + tamoxifen demonstrated safety and an efficacy signal in ER+, BCL2+ metastatic BC (mBC). Preclinical data for Ven + fulvestrant (Ful) have also shown synergy. Based on these proof-of-principle data, the current study evaluates safety and efficacy of Ven + Ful vs Ful in women with ER+, HER2-locally advanced (LA)/mBC progressing after first- or second-line of prior therapy for metastatic disease, including  $\geq 8$  wks of a CDK4/6i.

**140. Cerebral oximetry in cardiac arrest: a potential role but with limitations.**

**Item Type:** Journal Article

**Authors:** Sandroni, C.;Parnia, S. and Nolan, J. P.

**Publication Date:** 2019

**Journal:** Intensive Care Medicine 45(6), pp. 904-906

**DOI:** 10.1007/s00134-019-05572-7

**141. South-West of England's Experience of the Safety and Tolerability Pirfenidone and Nintedanib for the Treatment of Idiopathic Pulmonary Fibrosis (IPF).**

**Item Type:** Journal Article

**Authors:** Barratt, S. L.;Mulholland, S.;Al Jbour, K.;Steer, H.;Gutsche, M.;Foley, N.;Srivastava, R.;Sharp, C. and Adamali, H. I.

**Publication Date:** 2018

**Journal:** Frontiers in Pharmacology 9(pagination), pp. Article Number: 1480. Date of Publication: 17 Dec 2018

**Abstract:** Purpose: Pirfenidone and nintedanib are two novel antifibrotic agents licensed for the treatment IPF. Prior to being approved for use in England for patients with FVC  $>50\%$  and  $<80\%$ , these were made available for all IPF patients under the Mild Patient Program (MPP) and Patient In Need Scheme (PIN). Prescribing of these medications is restricted to specialist centers. We sought to characterize the population of patients prescribed antifibrotics and determine the drug tolerability of these medications in the Northern hub of the Southwest of England regional ILD network.

**142. Pathological gambling and internet addiction among nursing students: a pilot study.**

**Item Type:** Journal Article

**Authors:** Comparcini, D.;Simonetti, V.;Galli, F.;Buccoliero, D.;Palombelli, E.;Senede, G. and Cicolini, G.

**Publication Date:** 2018

**Journal:** Professioni Infermieristiche 71(1), pp. 19-29

**DOI:** 10.7429/pi.2018.711019

143. **Establishing priorities on the range of conditions managed by UK community practitioner nurse prescribers: A modified Delphi consensus study.**

**Item Type:** Journal Article

**Authors:** Courtenay, M.;Franklin, P.;Griffiths, M.;Hall, T.;Macangus, J.;Myers, J.;PenistonBird, F. and Radley, K.

**Publication Date:** 2018

**Journal:** Journal of Advanced Nursing (pagination), pp. Date of Publication: 06 Ar 2018

**Abstract:** AIM: To provide national consensus on the range of conditions community practitioner nurse prescribers manage and for which it is considered important that they can prescribe. BACKGROUND: Around 35,000 community practitioner nurse prescribers in the United Kingdom are able to prescribe from a limited formulary. Although prescribing is a key role for these nurses, there has been a decline in the numbers of community practitioner nurse prescribers who prescribe. It is evident that changing patterns of client and service delivery, changes the role of community nurses and the conditions they manage, however, little is known about the conditions community practitioner nurse prescribers manage. DESIGN AND METHODS: A modified Delphi approach comprising three on-line surveys delivered to a national Expert Panel of 89 qualified community practitioner prescribers. Data collection took place between January-March 2017.

144. **Tip for maintaining sterility in antegrade on-table colonoscopy.**

**Item Type:** Journal Article

**Authors:** Green, N.;Williamson, M. and Bunni, J.

**Publication Date:** 2018

**Journal:** Annals of the Royal College of Surgeons of England , pp. 1

145. **MULTIPARAMETRIC MRI: CO-MORBIDITY ASSESSMENT.**

**Item Type:** Journal Article

**Authors:** McKeon, J.

**Publication Date:** 2018

**Journal:** International Journal of Surgery Conference, pp. ASiT

**Abstract:** Aim: Standardised management and co-morbidity documentation during clinic appointments in the Urology department at the Royal United Hospital is poor. This audit identifies new patients with elevated Prostate Specific Antigen (PSA) and normal Per-rectum findings under-going further investigation for prostate cancer.

146. **SCOT: Tumor sidedness and the influence of chemotherapy duration on DFS.**

**Item Type:** Journal Article

**Authors:** Saunders, M. P.;Paul, J.;Crosby, J.;Brown, G.;Iveson, T.;Kerr, R.;Harkin, A.;Allan, K.;McQueen, J.;Pearson, S. R.;Cassidy, J.;Medley, L. C.;Raouf, S.;Harrison, M.;Brewster, A.;Rees, C.;Ellis, R.;Thomas, A. L.;Churn, M. and Maka, N.

**Publication Date:** 2018

**Journal:** Journal of Clinical Oncology Conference: 2018 Gastrointestinal Cancers Symposium. San Francisco, CA United States, pp. Date of Publication: February 2018

**Abstract:** Background: Patients with R-sided tumours who develop metastatic disease have a worse prognosis compared to patients with L-sided tumours. The latter may also have a greater benefit from treatment with EGFR inhibitors. In general, registry studies and meta-analyses have shown that patients with loco-regional R-sided tumours have a worse overall survival (OS). This has recently been confirmed by the PETACC8 study but only after they had relapsed. There was not a significant difference in disease free survival (DFS).

147. **RATIONALISING SKELETAL BONE SCAN STAGING IN PROSTATE CANCER.**

**Item Type:** Journal Article

**Authors:** Thompson, A.;Marsdin, E.;Chippagiri, A. and Phull, J.

**Publication Date:** 2018

**Journal:** International Journal of Surgery Conference, pp. ASiT

**Abstract:** Aim: Around 80% of metastatic prostate cancer involves the skeleton. Current guidelines suggest skeletal staging with bone scintigraphy in high risk groups (predominantly Gleason  $\geq 4$ , PSA $>20$  or clinically higher stage features).

148. **OUTPATIENT REMOVAL OF URETERIC STENTS IN RENAL TRANSPLANT PATIENTS IMPROVES PATIENT OUTCOMES.**

**Item Type:** Journal Article

**Authors:** Thompson, A.;Roberts, C.;Edwards, A. and Morgan, J.

**Publication Date:** 2018

**Journal:** International Journal of Surgery Conference, pp. ASiT

**Abstract:** Aim: To determine whether renal transplant patients who had a planned ureteric stent removal in theatre at 6 weeks were on time and whether delayed removal impacted on rates of urinary tract infections (UTIs). Audit results lead to collaboration with the Urology Directorate and stent removal is now performed in urology outpatients at North Bristol Trust.

149. **Adjunctive rifampicin for Staphylococcus aureus bacteraemia (ARREST): a multicentre, randomised, double-blind, placebo-controlled trial.**

**Item Type:** Journal Article

**Authors:** Thwaites, G. E.;Nsutebu, E.;Greig, J.;Wyllie, S. A.;Auckland, C.;Cairns, J.;Armando, G. R.;Graham, C.;Chadwick, P. R.;Barlow, G.;Gordon, N. C.;Nayar, D.;Llewelyn, M.;Edgeworth, J. D.;Scarborough, M.;Kamfose, M.;de Veciana, A.;Peto, L.;Pill,

G.;Clarke, T., et al

**Publication Date:** 2018

**Journal:** The Lancet 391(10121), pp. 668-678

**Abstract:** Background: Staphylococcus aureus bacteraemia is a common cause of severe community-acquired and hospital-acquired infection worldwide. We tested the hypothesis that adjunctive rifampicin would reduce bacteriologically confirmed treatment failure or disease recurrence, or death, by enhancing early S aureus killing, sterilising infected foci and blood faster, and reducing risks of dissemination and metastatic infection.

**DOI:** 10.1016/S0140-6736

150. **Ethics of resuscitation and end-of-life decisions.**

**Item Type:** Journal Article

**Authors:** Bossaert, L. L.;Perkins, G. D.;Askitopoulou, H.;Raffay, V. I.;Greif, R.;Haywood, K. L.;Mentzelopoulos, S. D.;Nolan, J. P.;Van de Voorde, P. and Xanthos, T. T.

**Publication Date:** 2017

**Journal:** Notfall Und Rettungsmedizin 20(Supplement 1) (pp 119-132), pp. Date of Publication: 01 Aug 2017

151. **Volar Tenodesis for the Treatment of Swan-neck Deformity; A Systematic Review.**

**Item Type:** Journal Article

**Authors:** Kiziridis, G. and Giddins, G. E. B.

**Publication Date:** 2017

**Journal:** The Journal of Hand Surgery Asian-Pacific Volume 22(3), pp. 267-274

**Abstract:** BACKGROUND: Swan-neck deformity is a common problem particularly in patients with Rheumatoid arthritis. Mobile swan-neck deformities (Nalebuff types I,II) can be treated non-operatively and operatively. In this paper we report on a systematic review of the treatment of swan-neck deformities with volar tenodesis.

152. **The Outcome of Treatment of Flexor Sheath (seed) Ganglia by a Percutaneous Partial Pulley Release.**

**Item Type:** Journal Article

**Authors:** Lavalette, D. and Giddins, G.

**Publication Date:** 2017

**Journal:** The Journal of Hand Surgery Asian-Pacific Volume 22(2), pp. 219-221

**Abstract:** BACKGROUND: The aims of this study were to assess the safety and efficacy of a technique of partial percutaneous pulley release.

153. **Effective pain management in patients in hospital.**

**Item Type:** Journal Article



**Authors:** McCabe, C.

**Publication Date:** 2017

**Journal:** Nursing Standard (Royal College of Nursing (Great Britain) : 1987) 31(29), pp. 42-46

**Abstract:** Chronic pain is experienced by between one third and one half of the UK population. Nurses should ensure that patients' pain is assessed and managed when they present to hospital, including pre-existing chronic pain and acute pain as a result of trauma or surgical interventions. Acute pain that is inadequately managed may result in chronic pain, impeding the patient's return to normal function and daily activities. Depression and increasing age affect the likelihood of patients experiencing chronic pain. Nurses should be familiar with the pain assessment tools available for use with older people and be aware of the potential issues of polypharmacy and altered sensitivity to medication in older people. Nurses can manage patients' pre-existing chronic pain, or likely post-operative pain, by working collaboratively with patients, their carers or families where appropriate, and the multidisciplinary team. For patients undergoing surgery, this cooperation should begin preoperatively and continue into the post-operative period.

154. **Post resuscitation care: Section 5 of the European Resuscitation Council Guidelines for Resuscitation 2015.**

**Item Type:** Journal Article

**Authors:** Nolan, J. P.;Soar, J.;Cariou, A.;Cronberg, T.;Moulaert, V. R. M.;Deakin, C.;Bottiger, B. W.;Friberg, H.;Sunde, K. and Sandroni, C.

**Publication Date:** 2017

**Journal:** Notfall Und Rettungsmedizin 20(Supplement 1) (pp 90-117), pp. Date of Publication: 01 Aug 2017

155. **An evaluation of the Florence Nightingale Foundation scholarships.**

**Item Type:** Journal Article

**Authors:** Rose, M.;Tod, A.;McCabe, C. and Giordano, R.

**Publication Date:** 2017

**Journal:** Nursing Standard (Royal College of Nursing (Great Britain) : 1987) 31(21), pp. 40-44

**Abstract:** The Florence Nightingale Foundation (FNF) is a charity that awards scholarships in leadership, travel and research to nurses, midwives and other healthcare professionals to promote excellence in practice. The FNF offers mentoring support to scholars, and provides support with career development and writing articles for publication, in addition to the financial award. The leadership scholarships are bespoke: leadership scholars can access a range of development opportunities that are specially commissioned for them, and select their programme of study and experiences, based on their individual needs. All scholarships provide opportunities to represent the FNF and to meet other scholars at the FNF annual conference. This article provides an overview of the FNF scholarships, based on the findings of two evaluations that demonstrated the value of these scholarships in improving services for patients and carers, as well as enhancing the careers of individual scholars.

156. **Authors' reply to Kruger and Large and Ryan.**

**Item Type:** Journal Article

**Authors:** Sinclair, L. and Leach, R.

**Publication Date:** 2017

**Journal:** BMJ (Clinical Research Ed.) 357, pp. j1966

157. **Principal results of the cancer of the ovary abiraterone trial (CORAL): A phase II study of abiraterone in patients with recurrent epithelial ovarian cancer (CRUKE/12/052).**

**Item Type:** Journal Article

**Authors:** Banerjee, S.; Kilburn, L.; Bowen, R.; Tovey, H.; Hall, M.; Kaye, S.; Rustin, G.; Gore, M.; McLachlan, J.; Attygalle, A.; Tunariu, N.; Lima, J. P.; Chatfield, P.; Jeffs, L.; Folkard, E.; Hills, M.; Perry, S.; Attard, G.; Dowsett, M. and Bliss, J.

**Publication Date:** 2016

**Journal:** Annals of Oncology 27(Supplement 6) (pp vi569), pp. Date of Publication: 1 October 2016

158. **Retention of laryngoscopy skills in medical students: A randomised, cross-over study of the Macintosh, A.P. Advance™, C-MAC and Airtraq laryngoscopes.**

**Item Type:** Journal Article

**Authors:** Hunter, I.; Ramanathan, V.; Balasubramanian, P.; Evans, D. A.; Hardman, J. G. and Mccahon, R. A.

**Publication Date:** 2016

**Journal:** Anaesthesia (pagination), pp. Date of Publication: 2016

**Abstract:** In addition to being effective and easy to learn how to use, the ideal laryngoscope should be associated with minimal reduction in skill performance during gaps in practice over time. We compared the time taken to intubate the trachea of a manikin by novice medical students immediately after training, and then after 1 month, with no intervening practice. We designed a two-period, four-group, randomised, cross-over trial to compare the Macintosh, Venner™ A.P. Advance™ with difficult airway blade, C-MAC with D-Blade and Airtraq with wireless video-viewer. A bougie was used to aid intubation with the Macintosh and the C-MAC. After training, there was no significant difference in median (IQR [range]) intubation time using the videolaryngoscopes compared with the Macintosh, which took 30 (26.5-35 [12-118])s. One month later, the intubation time was longer using the C-MAC (41 (29.5-52 [20-119])s;  $p = 0.002$ ) and A.P. Advance (40 (28.5-57.5 [21-107])s;  $p = 0.0003$ ) compared with the Macintosh (27 (21-29 [16-90])s); there was no difference using the Airtraq (27 (20.5-32.5 [15-94])s;  $p = 0.258$ ) compared with the Macintosh. While skill acquisition after a brief period of learning and practice was equal for each laryngoscope, performance levels differed after 1 month without practice. In particular, the consistency of performance using the C-MAC and A.P. Advance was worse compared with the Macintosh and the Airtraq. While the clinical significance of this is doubtful, we believe that reliable and consistent performance at laryngoscopy is desirable; for the devices that we tested, this requires regular practice.

159. **The 'go-between' study: A simulation study comparing the 'Traffic Lights' and 'SBAR' tools as a means of communication between anaesthetic staff.**

**Item Type:** Journal Article

**Authors:** MacdougallDavis, S. R.;Kettley, L. and Cook, T. M.

**Publication Date:** 2016

**Journal:** Anaesthesia (pagination), pp. Date of Publication: 2016

**Abstract:** Communicating non-urgent, urgent and frank emergency requests for assistance between anaesthetists in theatre often requires a 'go-between' - frequently a non-anaesthetic healthcare professional - to transmit information. We compared the currently recommended situation, background, assessment, recommendation (SBAR) tool with a newly devised Traffic Lights tool ('red alert', 'amber assist' and 'green query') in a simulation study to assess communication quality using 12 validated clinical scenarios of varying urgency. Compared to SBAR, Traffic Lights was used more consistently ('very clear' or 'clear' Traffic Lights 94% vs SBAR 69%); transferred information better (two or three pieces of information correctly transferred Traffic Lights 85%, SBAR 44%; and was judged to lead to greater clarity (all  $p < 0.0001$ ). Message delivery time was significantly reduced (Traffic Lights 20.5 s vs SBAR 45.5 s, median (95% CI) difference 25 (19-30) s,  $p < 0.001$ ). Users rated the Traffic Lights system as significantly more useful than SBAR, with 96% of participants preferring the Traffic Lights tool. Results were independent of go-between training. We recommend the adoption of this communication tool as standard practice for anaesthetic teams. 2016

160. **Re: Adverse psychological outcomes following colposcopy and related procedures: A systematic review.**

**Item Type:** Journal Article

**Authors:** Sholapurkar, S. L.

**Publication Date:** 2016

**Journal:** BJOG: An International Journal of Obstetrics and Gynaecology 123(13), pp. 2224

161. **Analysis of burden in caregivers of people with Alzheimer's disease using self-report and supervision hours.**

**Item Type:** Journal Article

**Authors:** Haro, J. M.;KahleWroblewski, K.;Bruno, G.;Belger, M.;Dell'Agnello, G.;Dodel, R.;Jones, R. W.;Reed, C. C.;Vellas, B.;Wimo, A. and Argimon, J. M.

**Publication Date:** 2014

**Journal:** The Journal of Nutrition, Health & Aging (pagination), pp. Date of Publication: 31 Mar 2014

**Abstract:** Objectives This study aimed to describe the baseline characteristics of informal carers of community-living Alzheimer's disease (AD) patients by AD severity group and to identify factors associated with two measures of caregiver burden. Design and setting GERAS is a prospective observational study in France, Germany, and the UK, designed to assess costs and resource use associated with AD, for patients and their caregivers, stratified by disease severity. Participants 1497 community-dwelling AD patients and their primary caregivers. Measurements Subjective caregiver burden assessed using the Zarit

Burden Interview [ZBI] and time spent supervising patients (an objective measure of burden recorded using the Resource Utilization in Dementia instrument) during the month before the baseline visit were recorded. Separate multiple linear regression analyses using ZBI total score and caregiver supervision time as dependent variables were performed to identify patient and caregiver factors independently associated with caregiver burden. Results Increasing AD severity was associated with both subjective caregiver burden (ZBI total score) and overall caregiver time, which includes supervision time (both  $p < 0.001$ , ANOVA). Better patient functioning (on instrumental activities of daily living) was independently associated with both a lower ZBI total score and less supervision time, whereas higher levels of caregiver distress due to patient behavior were associated with greater caregiver burden. Other factors independently associated with an increased ZBI total score included younger caregiver age, caregiver self-reported depression, caring for a male patient, and longer time since AD diagnosis. Caregivers living with the patient, being a male caregiver, patient living in a rural location, higher patient behavioral problem subdomain scores for apathy and psychosis, more patient emergency room visits, not receiving food delivery and receiving financial support for caregiving were all associated with greater caregiver supervision time. Conclusion Our results show that subjective caregiver burden and caregiver time are influenced by different factors, reinforcing the need to consider both aspects of caregiving when trying to minimize the burden of AD. However, interventions that minimize caregiver distress and improve patient functioning may impact on both subjective and objective burden. © 2014 Serdi and Springer-Verlag France.

162. **Assessing response in breast cancer with dynamic contrast-enhanced magnetic resonance imaging: Are signal intensity-time curves adequate?.**

**Item Type:** Journal Article

**Authors:** Woolf, D. K.; Padhani, A. R.; Taylor, N. J.; Gogbashian, A.; Li, S. P.; Beresford, M. J.; AhSee, M. L.; Stirling, J.; Collins, D. J. and Makris, A.

**Publication Date:** 2014

**Journal:** Breast Cancer Research and Treatment 147(2), pp. 335-343

**Abstract:** Quantitative DCE-MRI parameters including  $K^{trans}$  (transfer constant  $\text{min}^{-1}$ ) can predict both response and outcome in breast cancer patients treated with neoadjuvant chemotherapy (NAC). Quantitative methods are time-consuming to calculate, requiring expensive software and interpretive expertise. For diagnostic purposes, signal intensity-time curves (SITCs) are used for tissue characterisation. In this study, we compare the ability of NAC-related changes in SITCs with  $K^{trans}$  to predict response and outcomes. 73 women with primary breast cancer underwent DCE-MRI studies before and after two cycles of NAC. Patients received anthracycline and/or docetaxel-based chemotherapy. At completion of NAC, patients had local treatment with surgery & radiotherapy and further systemic treatments. SITCs for paired DCE-MRI studies were visually scored using a five-curve type classification schema encompassing wash-in and wash-out phases and correlated with  $K^{trans}$  values and to the endpoints of pathological response, OS and DFS. 58 paired patients studies were evaluable. The median size by MRI measurement for 52 tumours was 38 mm (range 17-86 mm) at baseline and 26 mm (range 10-85 mm) after two cycles of NAC. Median baseline  $K^{trans}$  ( $\text{min}^{-1}$ ) was 0.214 (range 0.085-0.469), and post-two cycles of NAC was 0.128 (range 0.013-0.603). SITC shapes were significantly related to  $K^{trans}$  values both before ( $\chi^2 = 43.3$ ,  $P = 0.000$ ) and after two cycles of NAC ( $\chi^2 = 60.5$ ,  $P = 0.000$ ). Changes in curve shapes were significantly related to changes in  $K^{trans}$  ( $\chi^2 = 53.5$ ,  $P = 0.000$ ). Changes in curve shape were significantly correlated with clinical ( $P = 0.005$ ) and pathological response ( $P = 0.005$ ). Reductions in curve shape of  $\geq 1$  point were significant for overall improved survival using Kaplan-Meier analysis with a 5-year OS of 80.9 versus 68.6 % ( $P = 0.048$ ). SITCs require no special software to generate and provide a useful method of assessing the effectiveness of NAC for primary breast cancer.

163. **Self-assessment.**

**Item Type:** Journal Article

**Authors:** Hazeldine, B. and Green, S.

**Publication Date:** 2011

**Journal:** Paediatrics and Child Health (United Kingdom) 21(8), pp. 385-388

164. **Erratum to: Internal herniation through the foramen of Winslow during pregnancy: MR findings.**

**Item Type:** Journal Article

**Authors:** MacDonald, K.;Hayward, S.;Nixon, M. and Holbrook, A.

**Publication Date:** 2011

**Journal:** Abdominal Imaging , pp. 1

165. **Too cold for comfort: a neonate with severe hypothermia.**

**Item Type:** Journal Article

**Authors:** Sargant, N.;Sen, E. S. and Marden, B.

**Publication Date:** 2011

**Journal:** Emergency Medicine Journal (pagination), pp. Date of Publication: 01 Nov 2011

**Abstract:** Severe neonatal hypothermia is an infrequent presentation to the Emergency Department. This case report describes the successful resuscitation and rapid rewarming of a newborn baby who presented to the Emergency Department with a core temperature of 14.8degreeC. This is the lowest temperature documented in the literature to date from which an infant has been successfully resuscitated. Copyright Article author (or their employer) 2011.

166. **Efficacy and safety of insulin glulisine in patients with type 1 diabetes.**

**Item Type:** Journal Article

**Authors:** Dreyer, M.;Prager, R.;Robinson, A.;Busch, K.;Ellis, G.;Souhami, E. and Van Leendert, R.

**Publication Date:** 2005

**Journal:** Hormone and Metabolic Research 37(11), pp. 702-707

**Abstract:** Insulin glulisine (glulisine), a human insulin analogue with a rapid-acting time-action profile, has been developed to fulfil the mealtime (bolus) insulin requirement in patients with diabetes. The aim of this multinational, multi-centre, controlled, open-label, randomized, parallel-group study was to compare the efficacy and safety of insulin glulisine (glulisine) to that of insulin lispro (lispro) in adults diagnosed with Type 1 diabetes. Of the 683 patients randomized, 672 received treatment (339 patients received glulisine, 333 patients received lispro). Over the 26-week study, a similar reduction in mean HbA1c occurred in both groups (adjusted mean change from baseline - 0.14% in both groups). The basal insulin dose was relatively unchanged from baseline in the glulisine group but

increased in the lispro group (glulisine: 0.12 IU vs. lispro: 1.82 IU;  $p = 0.0001$ ). As a consequence, total daily insulin dose decreased in the glulisine group but increased in the lispro group (glulisine: -0.86 IU vs. lispro: 1.01 IU;  $p = 0.0123$ ). There was no relevant difference between the two groups in the reporting of symptomatic hypoglycaemia (overall, nocturnal and severe). This study demonstrates that glulisine provides equivalent glycaemic control to lispro. The clinical relevance of any difference in total daily insulin dose remains to be established. © Georg Thieme Verlag KG Stuttgart.

**167. British society for matrix biology autumn meeting.**

**Item Type:** Journal Article

**Authors:** Sudre, L.;Cheung, F.;Kevorkian, L.;Young, D. A.;Darrah, C.;Donell, S. T.;Shepstone, L.;Porter, S.;Brockbank, S.;Edwards, D. R.;Parker, A. E.;Clark, I. M.;Boubriak, O. A.;Urban, J. P. G.;Cui, Z.;Tew, S. R.;Li, Y.;Tweats, L. M.;Hawkins, R. E.;Hardingham, T. E., et al

**Publication Date:** 2005

**Journal:** International Journal of Experimental Pathology 86(3), pp. A1-A56

**168. Comparison of patient-controlled and operator-controlled conscious sedation for restorative dentistry.**

**Item Type:** Journal Article

**Authors:** Bavisha, K. A.;Elias, M.;Paris, S.;Leon, A. R. and Flynn, P. J.

**Publication Date:** 2004

**Journal:** European Journal of Anaesthesiology 21(4), pp. 284-288

**Abstract:** Background and objective: The use of midazolam for conscious sedation is an accepted method of anxiety control in restorative dentistry. A lack of predictability in its effects requires the dose of midazolam to be adjusted to individual patient's requirements. We determined whether patient-controlled sedation was a suitable alternative to operator-controlled sedation in restorative dentistry.

**DOI:** 10.1097/00003643-200404000-00006

**169. Bax expression correlates with cellular drug sensitivity to doxorubicin, cyclophosphamide and chlorambucil but not fludarabine, cladribine or corticosteroids in B cell chronic lymphocytic leukemia.**

**Item Type:** Journal Article

**Authors:** Bosanquet, A. G.;Sturm, I.;Wieder, T.;Essmann, F.;Bosanquet, M. I.;Head, D. J.;Dorken, B. and Daniel, P. T.

**Publication Date:** 2002

**Journal:** Leukemia 16(6), pp. 1035-1044

**Abstract:** In B-CLL, non-proliferating B cells accumulate due to defective apoptosis. Cytotoxic therapies trigger apoptosis and deregulation of apoptotic pathways contributes to chemoresistance. Loss of the apoptosis-promoting Bax has been implicated in resistance to cytotoxic therapy. We therefore evaluated ex vivo drug sensitivity of CLL, producing chemoresponse data which are prognostic indicators for B-CLL, in particular in the case of

purine nucleoside analogs. To analyze the underlying mechanisms of drug resistance, we compared endogenous Bax and Bcl-2 expression to ex vivo response to eight drugs, and to survival in 39 B-CLL patients. We found that reduced Bax levels correlated well with ex vivo resistance to traditional B-CLL therapies - anthracyclines, alkylating agents and vincristine (all P 0.5). Mutational analysis of p53 could not explain the loss of Bax protein expression. Levels of Bcl-2 were not associated with sensitivity to any drug. In contrast to the ex vivo data, neither Bax or Bcl-2 expression nor doxorubicin sensitivity were associated with increased survival whereas sensitivity to fludarabine correlated with better overall survival (P = 0.031). These findings suggest that the resistance to purine nucleoside analogs and corticosteroids in B-CLL is due to inactivation of pathways different from those activated by anthracyclines, vinca alkaloids and alkylating agents and may be the molecular rationale for the efficacy of purine analogs in this disease.

**170. The Effect of Pumicing on the in Vivo Use of a Resin Modified Glass Poly(Alkenoate) Cement and a Conventional No-Mix Composite for Bonding Orthodontic Brackets.**

**Item Type:** Journal Article

**Authors:** Ireland, A. J. and Sherriff, M.

**Publication Date:** 2002

**Journal:** Journal of Orthodontics 29(3), pp. 217-220

**Abstract:** Objective: Pumicing of the enamel prior to direct bonding with conventional diacrylate bonding agents has been shown to be unnecessary. It is not known whether this is also the case with resin-modified glass poly(alkenoate) cements. The aims of this study were two-fold: (a) to determine whether pumicing prior to bonding has an effect on the in vivo failure of brackets bonded with either Right-On or Fuji II LC; (b) to determine whether there is a difference in the in vivo failure of brackets bonded with either Right-On or Fuji II LC.

**DOI:** 10.1093/ortho/29.3.217

**171. Anterior hip pain - Have you considered femoroacetabular impingement?.**

**Item Type:** Journal Article

**Authors:** Chakraverty, J. K. and Snelling, N. J.

**Publication Date:**

**Journal:** International Journal of Osteopathic Medicine.(no Pagination)

**Abstract:** Anterior hip pain is a frequent presentation in both primary care and musculoskeletal practice. Common diagnoses of anterior hip pain include iliopsoas tendinopathy and bursitis, snapping hip syndrome, osteoarthritis of the hip and sacro-iliac joint dysfunction or spinal referred pain. More potentially serious conditions including inguinal hernias, avascular necrosis of the femoral head and psoas abscess all need to be considered. One cause of anterior hip pain is femoroacetabular impingement (FAI). Here follows a short review of the typical clinical presentations, imaging features and management options of FAI. The possible role of osteopathy in the management of this condition will also be briefly discussed. © 2011 Elsevier Ltd. All rights reserved.

**172. Re: Groin pain in sacral insufficiency fracture. Avoiding delayed diagnosis.**

**Item Type:** Journal Article

**Authors:** Chakraverty, J. and Snelling, N.



**Publication Date:**

**Journal:** International Journal of Osteopathic Medicine.(no Pagination)

**173. The effects of vault drainage on postoperative morbidity after vaginal hysterectomy for benign gynaecological disease: A randomised controlled trial.**

**Item Type:** Journal Article

**Authors:** Dua, A.;Galimberti, A.;Subramaniam, M.;Popli, G. and Radley, S.

**Publication Date:**

**Journal:** BJOG: An International Journal of Obstetrics and Gynaecology.(no Pagination)

**Abstract:** Objective To evaluate the efficacy of vault drainage in reducing the immediate postoperative morbidity associated with vaginal hysterectomy carried out for benign gynaecological conditions. Design Randomised controlled trial. Setting A tertiary referral gynaecology centre in UK. Population A total of 272 women who underwent vaginal hysterectomy for benign conditions between March 2005 and June 2010. Methods The 272 women were randomised to have a drain inserted or not inserted, 'drain' or 'no drain', respectively, before vault closure during vaginal hysterectomy, using a sealed envelope technique. The surgical procedures were performed using the surgeons' standard technique and postoperative care was delivered according to the unit's protocol. Main outcome measures The primary outcome measure was reduction in postoperative febrile morbidity. Secondary outcome measures were hospital readmission rate, blood transfusion, change in postoperative haemoglobin and length of stay. Results In all, 135 women were randomised to have a drain and 137 to 'no drain'. There were no differences in the incidence of febrile morbidity, length of stay, change in haemoglobin or need for postoperative blood transfusion between the two groups. Conclusions The routine use of vault drain at vaginal hysterectomy for benign disorders has no significant effect on postoperative morbidity. The use of vault drain in this context is not recommended. © 2011 The Authors BJOG An International Journal of Obstetrics and Gynaecology © 2011 RCOG.

**174. Characterization of basal-like breast cancer: an update.**

**Item Type:** Journal Article

**Authors:** HoYen, C.;Bowen, R. L. and Jones, J. L.

**Publication Date:**

**Journal:** Diagnostic Histopathology.(no Pagination)

**Abstract:** Basal-like breast cancers express genes and proteins associated with the basal layer of mammary epithelium and account for 10-25% of breast cancers. These tumours are of particular interest because they follow an aggressive clinical course and currently lack any form of standard targeted systemic therapy. Over recent years, numerous studies have sought to further characterize this sub-group and dissect out the molecular features that define them. Several biomarkers represent credible novel therapeutic targets and can be evaluated using routine laboratory techniques. As such the basal-like sub-type is becoming increasingly relevant to the histopathologist. However, since recognition of this sub-type is not part of the minimum dataset for breast cancer reporting, many will be unfamiliar with diagnosing these lesions. In this paper, we review the key characteristics of basal-like cancers, discuss closely related entities (triple negative and hereditary breast cancer), and consider the role of molecular markers implicated in these tumours. © 2012 Elsevier Ltd. All rights reserved.

**175. A new approach to data integration with AI to enhance the specificity of prostate cancer diagnosis.**

**Item Type:** Journal Article

**Authors:** Moreira Da Silva, N. S.; Vasdev, N.; Budd, J.; Yeung, M.; Giganti, F.; Davies, L.; Burn, P. R.; Hindley, R. G.; Ibrahim, M.; Bradley, A. J.; Maskell, G.; Andreou, A.; Liyanage, S.; Persad, R.; Aning, J.; Barrett, T. J.; Hinton, M. D. B.; Padhani, A. R.; Sala, E.; Rix, A. W., et al

**Publication Date:**

**Abstract:** Introduction & Objectives: Many patients receive a negative biopsy after MRI for suspected prostate cancer. Could numbers of unnecessary biopsies be reduced by combining clinical data with PI-RADS and AI?

176. **Case report: Spontaneous coronary artery dissection during elective caesarean section under spinal anaesthesia.**

**Item Type:** Journal Article

**Authors:** Newell, C. P.; Seller, C.; Vizhi, M. and Turner, N.

**Publication Date:**

**Journal:** Anaesthesia.(no Pagination)

**Abstract:** A 37-year-old woman, otherwise healthy, had an acute myocardial infarction associated with acute left ventricular failure during an elective caesarean section under spinal anaesthesia. Emergency coronary catheterisation postoperatively revealed a probable dissection distally in the D1 branch of the left anterior descending artery. We review the recent literature and case reports on spontaneous coronary artery dissection, and discuss its recommended management. © 2011 The Authors. Anaesthesia © 2011 The Association of Anaesthetists of Great Britain and Ireland.

177. **"Airway management complications during anaesthesia, in intensive care units and in emergency departments in the UK".**

**Item Type:** Journal Article

**Authors:** Woodall, N. M.; Bengler, J. R.; Harper, J. S. and Cook, T. M.

**Publication Date:**

**Journal:** Trends in Anaesthesia and Critical Care.(no Pagination)

**Abstract:** In 2011 the Royal College of Anaesthetists and the Difficult Airway Society published their joint report, the Fourth National Audit Project (NAP4). This project investigated airway management practises and the major complications of airway management during anaesthesia, in the intensive care unit (ICU) and emergency departments (ED) throughout the UK over a one year period. Reports of 184 major complications were received: 133 during anaesthesia, 36 from ICU and 15 in the ED. In total 38 deaths were attributed to airway management: 16 during anaesthesia, 18 from ICU and 4 from the ED. During the year-long investigation 2.9 million general anaesthetics were estimated to have been administered, giving a point estimate of death from an airway event during anaesthesia as one per 180,000 general anaesthetics and a major complication rate of one in 22,000. When compared to anaesthesia the risk of a major airway complication was 36 times higher in the ED and 56 times higher in ICU. Detailed analysis of the individual cases identified a number of themes and learning points leading to the publication of over 160 recommendations and important opportunities to improve patient care. © 2012 Elsevier Ltd. All rights reserved.