









How to diagnose myelodysplastic syndrome. What is high risk myelodysplastic syndrome.

Instead of most of the children dying, we went to most of the children living. This demonstrated a survival advantage for interferon irrespective of cytogenetic response.","type":"Image","downloadUrl":"/media/18957/table-3 5-year-survival-rate-and-odds-for-patients-in-the-trial resized.jpg","doiLink":"","attribution":"Reprinted from The Lancet, 345(8962), Allan NC et al., UK Medical Research Council randomised, multicentre trial of interferon-αn1 for chronic myeloid leukaemia: improved survival irrespective of cytogenetic response. More information about the IBI is available at: ,"introText":"","date":"2000-03-02T00:00:00","imageUrl":null,"categories":["Transfusion"],"viewStoryText":"View story", "references": [{"title": "Serious Hazards of Transfusion: a decade of haemovigilance in the UK. ", "referenceText": Ley TJ et al (2008). Clin Exp Immunol. Around this time, disposable needles and syringes were developed to replace metal ones which had to be sharpened regularly.\r\rThe Infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected blood and/or blood products. This established two centres (North Hill Park and Birmingham) which would carry out the diagnosis and management of patients with hypogammaglobulinaemia, covering the entire UK. \rIn 1971, the first UK transplant for SCID was carried out at Westminster Hospital. This was the first consistent chromosome abnormality to be associated with any cancer, specifically chronic myeloid leukaemia (CML).", "type": "Image", "downloadUrl": "/media/18824/c0151835-resized.jpg", "doiLink": "", "attribution": "© Science Photo Library", "youtubeUrl":null, "references":null, "id":0, "relatedItems":null}], "isDecade":1960}, {"title": "Founding of the MRC Leukaemia Unit", "text": "The Royal Postgraduate Medical School hosted the MRC Leukaemia Unit, founded by Sir John Dacie. It might otherwise have taken 10 to 20 years for its widespread introduction had it not been for Hirsh's personal input.\rIn addition, the BSH has assisted clinicians, in the UK and internationally, on the safe and effective management of vitamin K antagonist therapy through the publication of rigorous, systematic, evidence-based guidelines.\r","type":"Image","downloadUrl":"/media/18826/c0167312-resized.jpg","doiLink":"","attribution":"© Science Photo Library","youtubeUrl":null,"references":null,"id":0,"relatedItems":null}],"isDecade":false,"isDecade:false expression of factor VIII - Ted Tuddenham makes a major contribution to haemophilia", "text": "Two papers were published together in 1984 in Nature from Ted Tuddenham's group detailing the purifying, sequencing, cloning and expression of factor VIII. Further progress in this area continues through the work of Professor Peter Hillmen, Dr Anita Hill and many others from Leeds Teaching Hospitals.", "introText": "View story", "referenceText": "View story", "referenceText": "View story", "referenceText": "View story", "referenceText": "Clarke C A, (1995a) Proceedings of the Royal College of Physicians of Edinburgh, 25, 495–508."}, {"title":"Further experimental studies on the prevention of Rh haemolytic disease. More information about the IBI is available at: ,"introText":"","date":"2000-03-02T00:00:00","imageUrl":null,"categories":["Transfusion"], "viewStoryText":"View storyText":"","date":"2000-03-02T00:00:00","imageUrl":null,"categories":["Transfusion"], "viewStoryText":"","date":"Date of Physicians of Edinburgh, 25, 495–508."}, ("title":"Further experimental studies on the prevention of Rh haemolytic disease. [{"title":"Microarray technology: the future of blood testing?","referenceText":"Harrison C N, Butt N, Campbell P, Conneally E, Drummond M, Green A R, Murrin R, Radia D H, Mead A, Reilly J T, Cross N C P, McMullin M F, Beer P A, Butt N, Conneally E, Duncombe A, Green A R, Murrin R, Radia D H, Mead A, Reilly J T, Cross N C P, McMullin M F, Beer P A, Butt N, Conneally E, Duncombe A, Green A R, Mikhaeel N G, Gilleece M H, Hall G W, Knapper S, Mead A, Mesa R A, Sekhar M, Wilkins B, Harrison C N & Writing group: British Committee for Standards in Haematology Guidelines for Investigation and Management of Myelofibrosis 2012.", "referenceText": "Reilly J T, McMullin M F, Beer P A, Butt N, Conneally E, Duncombe A S, Green A R, Mikhaeel G, Gilleece M H, Knapper S, Mead A J, Mesa R A, Sekhar M, Harrison C N (2014) British Journal of Haematology, 167(3); 418-420."}, {"title": "Guideline for the investigation and management of eosinophilia.", "referenceText": "Butt N M, Lambert J, Ali S, Beer P A, Cross N C P, Duncombe A, Ewing J, Harrison C N, Knapper S, McLornan D, Mead A J, Radia D, Bain B J (2017) British Journal of Haematology, 176(4); 553-572."}, {"title": "A guideline for the diagnosis and management of polycythaemia"} vera.","referenceText":"McMullin M F, Harrison C N, Ali S, Cargo C, Chen F, Ewing J, Garg M, Godfrey A, Knapper S, McLornan D P, Nangalia J, Sekhar M, Wadelin F, Mead A J (2019) British Journal of Haematology 184(2); 176-191."}],"copyright":"","imageTitle":"","showFullDate":false,"images": [{"disableMagnifier":false, "downloadWithWatermarkUrl":null, "copyrightLink":"", "date": "2005-03-02T00:00:00", "title": "Blood smear with numerous eosinophils, illustration", "thumbnail": "/media/18862/f0239740-resized.jpg?mode=max&width=300&height=300&rnd=132478511520000000", "description": "In 2005, the JAK2V617F mutation was described in MPNs (myeloproliferative neoplasms) by four groups, including in the UK, which led to changes in the diagnostic criteria and the development of therapeutic agents.\rIn 2007, JAK inhibitors reached the clinic for the first time. They reported that the levels were directly related to the amount of iron in the reticuloendothelial iron stores.\rThen in 1976, Dr Adrian Bomford and Professor Roger Williams at Kings College Hospital London show that life expectancy in GH was significantly prolonged by long-term venesection. This involves removing a pint of blood, usually once a week.\rAlso in 1976, Marcel Simon and colleagues reported that the increased frequency of HLA-A3 allele found in GH patients indicated that the GH gene was located close to the major histocompatability complex (MHC) on chromosome 6p.", "type": "Image", "download Url": "/media/18938/professor-allan-jacobs-resized-for-timeline.jpg", "doi:Link": ", "attribution": "Reprinted from British Journal of Haematology, Vol 84 Issue 4, V Hoffbrand, Professor Allan Jacobs from article Professor Allan Jacobs: a tribute, iii-iv, © 1993 with permission from John Wiley and Sons", "youtubeUrl":null, "references":null, "id":0, "relatedItems":null}], "isDecade":true, "isDe 1971, Marina Seabright in Salisbury developed a reliable chromosome G-banding technique to identify human chromosomes.\rIn 1975, Ed Southern in Oxford developed the technique known as Southern in Oxford developed the technique known as Southern blotting, subsequently used to detect specific genomic rearrangements and lymphoid clonality.\rIn 1977, Fred Sanger published 'DNA sequencing with chain-terminating inhibitors', widely adopted and known as 'Sanger sequencing'. After a high dose of melphalan, some people have some really quite prolonged remissions for up to 10 years. Summary report of a Medical Research Council working-party. (1991) N Engl J Med; 325(6):393-7."}],"copyright":"","imageTitle":"","showFullDate":false,"images":null,"isDecade":false,"isDecade :false,"isDecade :false,"i guidelines on the diagnosis and management of thrombotic thrombotic thrombotic background for the management of thrombotic microangiopathies, defined by thrombocytopenia, microangiopathic haemolytic anaemia (MAHA) and small vessel thrombosis, ","introText":"","date":"2012-04-30T00:00:00","imageUrl":null,"categories":null,"viewStoryText":"View story","references":[{"title":"Guidelines on the diagnosis and management of thrombotic thrombotic thrombotic thrombotic thrombotic microangiopathies.","references":[-] anything about haemophilia. The results of the Destiny study are the most promising, with almost 70% of patients remaining off drug in the first three years.", "introText": "View story Text": "View story Text": "View story Text": "Uiew story Text": "Uiew story Text": "Uiew story Text": "De-escalation of tyrosine kinase inhibitor therapy before complete treatment discontinuation in patients with chronic myeloid leukaemia (DESTINY): a non-randomised, phase 2 trial.", "referenceText": "Clark RE et al (2019). Arterioscler Thromb Vasc Biol. (1980). (1976). ", "introText": "", "date": "2010-06-01T00:00:00", "imageUrl": null, "categories": ["Haemostasis"], "viewStoryText":"View storyText":"View story, "reference Text":"View story, "reference Text":"Flegel, W.A., Gottschall, J.L. and Denomme, G.A. (2015). The Committee for Standards in Haematology, later the British Standards in Haematology, later the British Committee for Standards in Haematology, later the British Standards in Haematology, later the British Committee for Standards in Haematology, later the Briti with the BSI on a haemoglobin standard and ESR tubing. (1976) Thrombosis and haemostasis 35:586-91."}],"copyright":"","imageTitle":"","showFullDate":false,"guid":"41530379-387a-414c-81f1-49eb7a083883","sortOrder":202,"decade":1970},{"title":"Government support for specialist centres: definition of haemophilia centres by the Department of Health, "text": "In 1976 a Department of Health and Social Security memorandum defined the system for haemophilia centres. More information about the IBI is available at: ,"introText": "View Text": "In 1976 a Department of Health, "text": "In 1976 a Department of Healt story", "references": [{"title": "Prenatal determination of fetal RhD type by DNA amplification. This approach was adopted and optimised by Francesco Dazzi at the RPMS and showed that DLI were at their safest and most effective if used for low-level disease (molecular and cytogenetic relapse).", "introText": "1990-06-01T00:00:00", "imageUrl":null, "categories": ["Chronic myeloid leukaemia"], "viewStoryText": "View story", "references": ["title": "Detection of Residual Leukemia After Bone Marrow Transplant for Chronic Myeloid Leukemia: Role of Polymerase Chain Reaction in Predicting Relapse. 2018; 378(12): 1107-1120."}, ["title": "Ibrutinib Plus Venetoclax in Relapsed/Refractory Chronic Lymphocytic Leukemia: The CLARITY Study.", "referenceText": "Hillmen P, Rawstron A C, Brock K, Muñoz-Vicente S, Yates F J, Bishop R, Boucher R, MacDonald D, Fegan C, McCaig A, Schuh A, Pettitt A, Gribben J G, Patten P E M, Devereux S, Bloor A, Fox C P, Forconi F, Munir T. Professor Mel Greaves' work on the immunological classification of paediatric leukaemia and lymphomas contributed to our knowledge of the molecular genetics, epidemiology and genesis of paediatric ALL.\rOne of the first people to appreciate the role of cytogenetic analysis, in that same period was the late Sylvia Lawler, with Lorna Secker Walker, who highlighted for example Ph' positive ALL.", "introText":"", "date":"1973-01-01T00:00:00", "imageUrl":null, "categories":["Paediatrics", "Leukaemia"], "viewStoryText":"View story", "references":[{"title":"Effect of high throughput RHD typing of fetal DNA in maternal plasma on use of anti-RhD immunoglobulin in RhD negative pregnant women: prospective feasibility study. ","referenceText":""}, "title":"Minutes of BSH Committee Meeting held on 21 March 1964.", "referenceText":""}], "copyright":"", "showFullDate":false, "images":null, "isDecade":false, "isDecadeIntro":false, "guid":"c2d3ca4f-3ec6-459c-a988-8fe6f6d64ccc","sortOrder":182,"decade":1960}, {"title":"Major advances in therapy for acute leukaemia in children with leukaemia should be entered into MRC clinical trials.\rThere was an increased importance of rapid publication of results in the British Journal of Haematology and generation of guidelines.\rThe MACHO study was started.","introText":"","date":"1960-01-01T00:00:00","imageUrl":null,"categories":[{"title":"'MACHO' chemotherapy for stage IV B cell lymphoma and B cell acute lymphoblastic leukaemia of childhood.","referenceText":"Hann I M, Eden O B, Barnes J, Pinkerton C R (1990) Br J Haematol. Transfusion, 37, 1108-1110."}], "copyright":"", "imageTitle":"", "showFullDate":false, "guid": "bae4a75b-0cbc-4bbb-808f-cf57dd43c909", "sortOrder": 268, "decade": 1990}, {"title": "Updated guidelines for haemolytic disease of the fetus and newborn", "text": "In 1991, guidelines for anti-D immunoglobulin use were updated to include antenatal prophylaxis.\rIn 1999, guidelines were published in Transfusion Medicine by a joint working group of the British Blood Transfusion Society and the Royal College of Obstetricians and Gynaecologists.\r\rThe Infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected blood and/or blood products. The results were published in 2017 in the journal Blood.\rPhase III trials of ruxolitinib in polycythaemia vera were reported in 2015 showing superior responses in those on ruxolitinib. 23(3); 181-4."}],"copyrightLink":"","showFullDate":"1981-01-01T00:00:00","title":"Deaths from Rh haemolytic disease of the fetus and newborn, 1977-87", "thumbnail": "/media/18747/deaths-from-hdfn figure-1-rcp-journal-resized.jpg?mode=max&width=300&rnd=132459334010000000", "description": "In 1981, additional recommendations were brought in to use anti-D immunoglobulin after potentially sensitising events in pregnancy.","type":"Image","downloadUrl":"/media/18747/deaths-from-hdfn figure-1-rcp-journal-resized.jpg","doiLink":"","attribution":"© J Royal College of Physicians, July 1989 23(3); 181-184","youtubeUrl":null,"copyrightLink":"","date":"1981-184","youtubeUrl":null,"copyrightLink":""," 01-01T00:00:00", "title": "Numbers of deaths from Rh (D) haemolytic disease 1977-87", "thumbnail": "/media/18748/deaths-from-hdfn figure-2-rcp-journal-resized ipg?mode=max&width=300&rnd=132459334110000000", "description": "In 1981, additional recommendations were brought in to use anti-D immunoglobulin after potentially sensitising events in pregnancy.", "type": "Image", "downloadUrl": "/media/18748/deaths-from-hdfn\_figure-2-rcp-journal-resized.jpg", "doiLink": "", "attribution": "© J Royal College of Physicians, July 1989 23(3); 181-184", "youtubeUrl": null, "references": null, "id":0, "relatedItems": null}, "isDecade": false, "isDecadeIntro": false, "guid": "05080c44-3abd-431a-8676-05c83ccf4915", "sortOrder":231, "decade":1980}, {"title": "Major advance in DNA analysis - method of amplification", "text": "Development of the polymerase chain reaction (PCR) by Kary Mullis and application for the molecular diagnosis of sickle cell anaemia.","date":"1985-01-01T00:00:00","imageUrl":null,"categories":["Molecular genetics"],"viewStoryText":"View references","references";[{"title":"Enzymatic amplification of beta-globin genomic sequences and restriction site analysis for diagnosis of sickle cell anaemia.","referenceText":"Saiki R, Scharf S, Faloona F, Mullis K, Horn G, Erlich H, Arnheim N (1985) Science. 1(8232):1228-31."}, ("title":"Chronic idiopathic thrombocytopenic purpura: primum non nocere.", "referenceText":"Chessells J (1989). This followed work from a group of researchers including John Goldman, Ray Lowenthal, Sandy Spiers and David Galton who identified that progenitor cells circulated in the peripheral blood of newly-diagnosed patients with CML. His team's research into clinical and genetic aspects of glucose 6-phosphate dehydrogenase deficiency and haemoglobinopathies led to the molecular cloning of the first human enzyme (G6PD) as well as elucidation of how red cell genetics confer protection against malaria.", "introText":"", "date": "1964-01-01T00:00:00", "imageUrl":null, "categories": ["Haemoglobinopathies"], "viewStoryText": "View story", "references": [{"title": "Multidisciplinary approach in pregnancy-associated thrombotic thrombocytopenic purpura: a case report.","referenceText":"Lucania G et al (2014). Those with D-negative babies are spared the need for this treatment.","introText":"View storyText":"View storyText":"View storyText":"View storyText":"Uiew storyText":"Haemolytic disease of the fetus and newborn"],"viewStoryText":"Uiew storyText":"Uiew storyText":"Haemolytic disease of the fetus and newborn"],"viewStoryText":"Uiew storyText":"Uiew storyText":"Ui RHD genotype.", "referenceText": "NICE Diagnostics guidance [DG25], November 2016. With the active support of Dr Tony Jelliffe, the founder of the British National Lymphoma Investigation, they brought together a group of former patients to found the Hodgkin's Disease Association in 1983. The fetal red blood cells cross the placenta, prompting anti-D antibodies in the mother. Lancet 376(9734):23-32."}, {"title":"Effect of early tranexamic acid administration on mortality, hysterectomy, and other morbidities in women with post-partum haemorrhage (WOMAN): an international, randomised, double-blind, placebo-controlled trial.", "referenceText": "Shakur H et al. This UK trial was the largest randomised investigator-led trial of essential thrombocythaemia in the world and in 2005 reported major practice-changing results.", "date": "1997-01-01T00:00:00", "imageUrl": null, "categories": ["title": "Hydroxyurea compared with anagrelide in high-risk essential thrombocythemia.", "referenceText": "Harrison C N, Campbell P J, Buck G, Wheatley K, East C L, Bareford D, Wilkins B S, van der Walt J D, Reilly J T, Grigg A P, Revell P, Woodcock B E, Green A R. Transfusion 2005; 45:680–688." }, {"title": "Rapid genotyping of blood group antigens by multiplex polymerase chain reaction and DNA microarray hybridization. More information about the IBI is available at: ,"introText":"View story,"references":[{"title":"Deficiency of the GPI anchor caused by a somatic mutation of the PIG-A gene in paroxysmal nocturnal hemoglobinuria. 1392-1397 ©1995, with permission from Elsevier.","youtubeUrl":null,"references":null,"id":0,"relatedItems":null,"isDecade":false,"isDecadeIntro":false,"guid":"65dca458-426d-432b-bb1d-879d1a8edb3c","sortOrder":263,"decade of development of imatinib therapy for CML", "text":"In the 1990s, the crystalline structure of the Bcr-Abl protein was elucidated. It gradually expanded the repertoire of laboratory tests and assays for which it provides EQA exercises, developed programmes for a wide range of point of care test devices and increased its participant numbers from under 100 to over 5000 in 2019.","introText":"","date":"1993-01-01T00:00:00","imageUrl":null,"categories":["Laboratory haematology"],"viewStoryText":"View story","references":[],"copyright":"","imageTitle":"mageTitle":"","showFullDate":false,"isDecade":1990}, {"title":"Major molecular biology advances in understanding methods of coagulation", "text": "The structure of tissue factor was identified in 1994 and was published in the journal Nature. I. This registry has been extremely successful in receiving registrations from nearly half of the hospitals in the UK, with clinical material and DNA on over 3,500 patients.\frac{1}{2}This has allowed detailed studies of clinical data and laboratory projects. More information about the IBI is available at: ,"introText":"","date":"1990-01-01T00:00:00","imageUrl":null,"categories":["Transfusion"],"viewStoryText":"View story","references":["Transfusion"],"viewStoryText":"Uiew story","references":["Transfusion"],"viewStoryText":"","date":"1990-01-01T00:00:00","imageUrl":null,"categories":["Transfusion"],"viewStoryText":"","date":"1990-01-01T00:00:00","imageUrl":null,"categories":["Transfusion"],"viewStoryText":"","date":"1990-01-01T00:00:00","imageUrl":null,"categories":["Transfusion"],"viewStoryText":"","date":"1990-01-01T00:00:00","imageUrl":null,"categories":["Transfusion"],"viewStoryText":"","date":"1990-01-01T00:00:00","imageUrl":null,"categories":["Transfusion"],"viewStoryText":"","date":"1990-01-01T00:00:00","imageUrl":null,"categories":["Transfusion"],"viewStoryText":"","date":"1990-01-01T00:00:00","imageUrl":null,"categories":["Transfusion"],"viewStoryText":"","date":"1990-01-01T00:00:00","imageUrl":null,"categories":["Transfusion"],"viewStoryText":"","date":"1990-01-01T00:00:00","imageUrl":null,"categories":["Transfusion"],"viewStoryText":"","date":"1990-01-01T00:00:00","imageUrl":null,"categories":["Transfusion"],"viewStoryText":"","date":["Transfusion"],"viewStoryText":"","date":["Transfusion"],"viewStoryText":["Transfusion"],"vi plasma products.","referenceText":"Turner ML and Ludlam CA (2008) British Journal of Haematology 144(1):14-23."}, ["title":"Annual reports about blood component safety can be found at www.gov.uk/government/publications/safe-supplies-annual-review ","referenceText":""", "imageTitle":"", "imageTitle":"", "showFullDate":false, "images": [{"disableMagnifier":false, "downloadWithWatermarkUrl":null, "copyrightLink":"","date":"1990-01-01T00:00:00", "title":"Donor blood processing", "thumbnail":"/media/18808/c0010756-resized.jpg?mode=max&width=300&height=300&rnd=132478508300000000", "description":"In 1991, hepatitis C virus (HCV) testing for donors was introduced. Hematol, 7, 119-21."}, {"title": "Efficacy of mycophenolate mofetil as single-agent therapy for refractory immune thrombocytopenic purpura.", "referenceText": "Provan D, Moss AJ, Newland AC, Bussel JB. Since then almost 100 mutations have been described, conferring different levels of sensitivities to imatinib. Lancet, 1997. For such patients, the pioneering work of British haematologists continues to underpin safe treatment with warfarin. ","type":"Image","downloadUrl":"/media/18840/c0470982-resized.jpg","doiLink":"","attribution":"© Science Photo Library","youtubeUrl":null,"references":null,"id":0,"relatedItems":null},  $\{\text{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"2010-06-01T00:00:00","title":"Warfarin tablet","thumbnail":"/media/18826/c0167312-resized.jpg?mode=max&width=300\&rnd=132478509460000000","description":"Direct oral anticoagulants with no need for monitoring, Factor IIa and Factor Xa$ inhibitors, were developed and then introduced to the market between 2010 and 2011. They offer many well-publicised advantages including fixed dosing, rapid inset and short half-lives compared to vitamin K antagonists.\rThe introduced to the market between 2010 and 2011. therapy. At this time the virus for 'non-A non-B hepatitis' had not been identified.\r\rThe Infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected blood and/or blood products. 2001; 115(3):522-540."}],"copyright":"","imageTitle":"","imageTitle":"","showFullDate":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagn mode=max&width=300&height=300&rnd=132478509980000000","description":"The first BSH guideline on the management of myeloma was published in 2001. Half were then given an anti-Rh antibody. Transfusion Medicine Reviews 2006; 20: 273-282."}, {"title":"Ten years of haemovigilance reports of transfusion-related acute lung injury in the UK and the effect of male donor plasma. J Clin Invest. (1989) J Clin Pathol.; 42: 567-84.", "referenceText": "Stasi R, Amadori S, Osborn J, Newland AC, Provan D. It was decided that membership numbers should be capped at 300.\rThis first meeting incorporated a scientific programme, comprising three sessions with invited speakers, organised by Professor (later Sir) J V Dacie.\rIt was agreed the next meeting should take place in Oxford the following year.", "introText": "", "date": "1960-11-19T00:00:00", "imageUrl":null, "categories": ["British Society for Haematology,", "reference Text": "H T Swan (1990) British Journal of Haematology 74 (\$1); 54-56." }], "copyright": "", "imageTitle": "", "showFullDate": true, "images": "The founding of the British Society for Haematology,", "reference Text": "H T Swan (1990) British Journal of Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society for Haematology,", "reference Text": "The founding of the British Society fo

Gareth Morgan, improved by Tim Hughes and optimised by Nick Cross resulted in a quantitative RT-PCR assay that could accurately identify the presence of residual cells after transplant. Not only did he create the journal but his vision extended to the development of groups to bring together all the volunteer unrelated donor registries to facilitate standardisation of practice, consent and regulations – the World Marrow Donor Association (WMDA), and together with Tony Goldstone, the British Society of Blood and Marrow Transplant (BSBMT). This approach was adopted and optimised by Francesco Dazzi at the RPMS and showed that DLI were at their safest and most effective if used for low-level disease (molecular and cytogenetic relapse).","type":"Image","downloadUrl":"/media/18887/c0136997.jpg","doiLink":"","attribution":"© Science Photo Library","youtubeUrl":null,"references":null,"id":0,"relatedItems":null,"id":0,"relatedItems":null,"id":0,"relatedItems":null,"references":null,"id":0,"relatedItems":null,"id":0

mode=max&width=300&height=300&rnd=132501669190000000","description":"A meeting was held in the School of Hygiene and Tropical Medicine in London to consider the formation of a society devoted to haematology. Br J Haematol, Transfus Med. Work at the Royal Postgraduate Medical School (RPMS) over the next decade, commenced by

[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"1960-11-19T00:00:00","title":"Attendance Book from the inaugural meeting on 19 November 1960","thumbnail":"/media/19047/attendance-book-first-meeting-19-nov-1960-copy-resized-for-timeline, ipg?

```
Thrombosis. More information about the IBI is available at: ,"type":"Image","downloadUrl":"/media/18851/f0134469-resized.jpg","doiLink":"","attribution":"© Science Photo Library","youtubeUrl":null,"references":null,"id":0,"relatedItems":null}],"isDecade":false,"isDecadeIntro":false,"guid":"0e8a0fa3-e062-48f9-9397
3ae80dde7657", "sortOrder":299, "decade":2010}, {"title": "Stem cell transplantation used as treatment for congenital immune deficiency", "text": "ViewStoryText": "ViewStoryTex
story", "references": [{"title": "Transplantation of hematopoietic stem cells and long-term survival for primary immunodeficiencies in Europe: entering a new century, do we do better? By 1968 the first successful bone marrow transplant was carried out in the USA, followed shortly in 1971 in the UK.", "introText": "," date": "1960-01-
01T00:00:00", "imageUrl":null, "categories":[["Immune deficiency"], "viewStoryText":"View story", "referenceS":[["Ititle":"Hypogammaglobulinaemia in the United Kingdom. 68(5):1370-1373."], ("title":"Hypogammaglobulinaemia in the United Kingdom. 68(5):1370-1373."], ("title":"Lundwall A et al (1986). The third edition
was further updated in 2005.", "date": "1998-04-16T00:00:00", "imageUrl":null, "categories": ["Anticoagulants"], "viewStoryText": "View references", "references", "refere
subsequently asked to form a similar National Committee in the UK. 1998; 102:439-443."}, {"title":"Treatment reduction for children and young adults with low-risk acute lymphoblastic leukaemia defined by minimal residual disease (UK ALL 2003): A randomized controlled trial. Immunology, 71:323-7(1990)."}, {"title":"Human monoclonal antibodies
to human blood group antigens Kidd Jka and Jkb.", "reference Text": "Thompson K, Barden G, Sutherland J, Beldon I, Melamed M. Along with UK and North American haematologists, Adrian and Paula have been medical advisors, and Adrian is currently chair of the Association's Trustees.\Paediatric guidelines for ITP were published in 1992. (1984).
The idea for a support group for patients and families affected by Hodgkin's Disease came from two Hodgkin's patients, Lewis Cash and Richard Franklin. More information about the IBI is available at: ,"type":"Image","downloadUrl":"/media/18872/m1080480-resized.jpg","doiLink":"","attribution":"© Science Photo
Library", "youtubeUrl":null, "references":null, "isDecade":1980}, {"title":"Intravenous immunoglobulin used to treat immune thrombocytopenia, but is it always necessary?", "text":"In the 1960s, it was assumed that a very low
platelet count in immune thrombocytopenia (ITP) was associated with a high risk of bleeding, so that treatment was orientated to raise the count using steroids. Immunogenetics, 37(2), pp.108-113."}, {"title":"Isolating fetal cells from maternal blood: advances in prenatal diagnosis through molecular technology. 13(4):399-
408."}],"copyright":"","imageTitle":"","showFullDate":false,"images":[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"Excessive iron absorption","thumbnail":"/media/18825/c0156394-resized.jpg?
mode=max&width=300&height=300&rnd=132478509450000000","description":"Feder et al. This was also the year that A W Liley carried out the first clinical trial followed injecting newly-delivered high-risk (those with evidence of fetal-maternal bleed) first-time mothers within
48 hours of delivery. ","referenceText": "French-American-British (FAB) Cooperative Group. Lewis became the first chair. The use of different units of measurement is recognised as a potential source of error in laboratory medicine and standardisation a step towards reducing the variability in diagnostic
tests.","type":"Image","downloadUrl":"/media/18847/f0129766-resized.jpg","doiLink":"","attribution":"© Science Photo Library","youtubeUrl":null,"references":null,"id":0,"relatedItems":null}],"isDecade":false,"isDecadeIntro":false,"guid":"6585055c-4219-4bdd-a71b-ae953ab0e510","sortOrder":302,"decade":2010},{"title":"Ruxolitinib makes an impact
on myeloproliferative disorders", "text": "Phase III trials of the JAK inhibitor ruxolitinib in myelofibrosis were reported in 2011. Lancet Oncol 15(8):874-85."}], "copyrightLink": "", "imageTitle": "", "imageT
myeloma, light micrograph", "thumbnail": "/media/18819/c0151804-resized.jpg?mode=max&width=300&rnd=132478509030000000", "description": "A long-term follow up in 2013 of the Myeloma IX trial showed the overall survival benefit from the use of zoledronic acid.\rin 2014, the NCRI Myeloma X trial showed the benefit of high-dose
chemotherapy plus autologous stem-cell transplantation as consolidation therapy in patients with relapsed multiple myeloma after previous autologous stem-cell transplantation.\rMyeloma XI was a huge UK collaboration and included over 4,300 patients providing one of the largest trial databases in the world. 565-6."}, {"title":"The British
comparative thromboplastin: the use of the national thromboplastin reagent for uniformity of laboratory control of oral anticoagulants and expression of results.", "referenceText": "Poller L. He started to collect patient details in the form of a register and also looked at the GP register to understand the wider presentation and numbers involved, which
would include those who required no treatment and were usually not considered.\rIn 1995, Shirley Watson, the mother of a child with ITP, approached Adrian Newland, Professor John Lilleyman, Professor of Paediatrics at Barts and the London, and Paula Bolton-Maggs, a paediatric haematologist in Liverpool, to set up an ITP Support Association for
patients. N Engl J Med 314(25):1593-1599."}], "copyright":"", "imageTitle":", "showFullDate":false, "guid":"216d2f1f-cfad-4fb7-85f9-746161fb73d9", "sortOrder":225, "decade":true, "isDecadeIntro":false, "guid":"216d2f1f-cfad-4fb7-85f9-746161fb73d9", "sortOrder":225, "decadeIntro":false, "guid":"225, 
 immunoglobulin began to be approved in the 1980s for treating antibody deficiency.\rUsing the patients registered in the two national centres (North Hill Park and Birmingham), a prospective study published in 1985 showed that patients with primary hypogammaglobulinaemia had an increased incidence of non-Hodgkins lymphoma, as well as
stomach cancer.\rBetween 1980 to 1985, Charlie Janeway and Hans Ochs in the USA, pioneered the introduction of intravenous preparations of immunoglobulin therapy for hypogammaglobulinaemic patients.\rThe next major advance improving the quality of life of patients with antibody deficiency was the
development of immunoglobulin replacement by home-therapy, by Helen Chapel, Immunologist, and Victoria Brennan, Immunology Specialist Nurse, in Oxford. This was the first time that patient self-administered home-therapy was used for the treatment of hypogammaglobulinaemia, anywhere in the world. \rHowever, the care of patients
with hypogammaglobulinaemia was punctuated by the transmission of hepatitis C between 1983 and 1994. The outbreaks were in the UK, Sweden, several other European countries and the USA. Following these outbreaks and root cause analysis, critical requirements of good practice in the manufacture of immunoglobulin products and the
importance of good record-keeping were highlighted. This led to the idea that 'it might be possible to destroy any fetal red cells found in the maternal circulation following delivery by means of a suitable antibody. '\rThe first experiments included injecting Rh-negative male policemen with Rh-positive red blood cells. N Eng J Med 365:2357-2365."}
 ""," "reference Text":"Nathwani AC et al (2014). ","reference Text":"Adams RJ et al. More information about the IBI is available at: "intro Text":"View story", "reference Text":"Nathwani AC et al (2014). ","reference Text":"Adams RJ et al. More information about the IBI is available at: "Intro Text":"View story", "reference Text":"Nathwani AC et al (2014). ","reference Text":"Nathwani
 [{"title":"Automated typing of red blood cell and platelet antigens: a whole-genome sequencing study. Annex 3, WHO Technical Report Series, no. ","referenceText":"Wenk R E & Chiafari P A (1997). Over time, NGS (next-generation sequencing) panels have been gradually introduced into routine diagnostic use.","introText":"","date":"2000-03-
02T00:00:00","imageUrl":null,"categories":["Molecular genetics"],"viewStoryText":"View story","references":[{"title":"DNA sequencing of a cytogenetically normal acute myeloid leukemia genome. The group were formed to advise the charity's helpline team, which by this time had become a well-established and valuable source of information and
support to patients.","type":"Image","downloadUrl":"/media/18023/image-3-helpline-team-1995.png","doiLink":"","attribution":"© Lymphoma Action","youtubeUrl":null,"references":null,"id":0,"relatedItems":null,"isDecade":1990},
 {"title":"Lymphoma Action helps found the Lymphoma Coalition","text":"At this time, Lymphoma Association on factor use and complications from then on. 74(12):5463-7."}],"copyright":"","imageTitle":"","showFullDate":false,"images"
[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"1970-01-01T00:00:00","title":"Frederick Sanger, British biochemist","thumbnail":"/media/18839/c0467639-resized.jpg?mode=max&width=300&height=300&rnd=132478509980000000","description":"In 1971, Marina Seabright in Salisbury developed a reliable
 chromosome G-banding technique to identify human chromosomes.\rIn 1975, Ed Southern in Oxford developed the technique known as Southern blotting, subsequently used to detect specific genomic rearrangements and lymphoid clonality.\rIn 1977, Fred Sanger published 'DNA sequencing with chain-terminating inhibitors', widely adopted and
known as 'Sanger sequencing'. In: The Haemolytic Anaemias: Congenital and Acquired Part I—The Congenital Anaemias., 1960 New York, NY Grune & Stratton (pg. Professor L J Witts proposed the formation of a society, the proposal was seconded by Dr J F Wilkinson and a draft constitution of the British Society for Haematology (BSH)
adopted. \rProfessor Witts was appointed as chairman, Dr R Biggs initially maintained the role of secretary (having previously assumed the role of ad hoc honorary secretary) and Dr J W Stewart became the first treasurer. Feb; 176 (3): 395-
411."}],"copyright":"","imageTitle":"","showFullDate":false,"images":null,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecadeIntro":false,"guid":"5edfc35c-9b79-456a-8dca-5f01c7f708bb","sortOrder":319,"decade":2010},{"title":"Stopping treatment in chronic myeloid leukaemia (CML)","text":"The remarkable efficacy of TKIs (tyrosine kinase inhibitors) has given the majority of
patients with CML a normal life expectancy. N Engl J Med 1982;307: 1676-1681."}, {"title":"Randomised comparison of two intensities of oral anticoagulant therapy after tissue heart valve replacement.", "referenceText":"Turpie AG, Gunstensen J, Hirsh J, et al. (1971) Lancet 2(7731):971-2."}, {"title":"Detection of specific sequences among DNA
fragments separated by gel electrophoresis.", "referenceText": "Southern EM (1975). May 11;1(8437):1093-4."}], "copyright": "", "imageTitle": "", "date": "1986-01-01T00:00:00", "title": "Chorionic villus sample and ultrasound
screens", "thumbnail": "/media/18877/m8000039-resized.jpg?mode=max&width=300&rnd=132478511950000000", "description": "The first antenatal diagnosis for haemophilia was reported in 1986. This was based on a mutation in the factor VIII gene analysed in the family and a chorionic villus (prenatal) sample. A letter to the Lancet
journal was published describing the procedure and its outcome.","type":"Image","downloadUrl":"/media/18877/m8000039-resized.jpg","doiLink":"","attribution":"© Science Photo Library","youtubeUrl":null,"copyrightLink":","date":"1986-01-
01T00:00:00", "title": "Southern blots using cloned factor VIII probe on samples of DNA restricted with Bcl I", "thumbnail": "/media/18922/antenatal-diagnosis-and-carrier-detection-of-haemophilia-a-resized-for-timeline.jpg?mode=max&width=300&rnd=132485507680000000", "description": "The first antenatal diagnosis for haemophilia was
reported in 1986. This was based on a mutation in the factor VIII gene analysed in the family and a chorionic villus (prenatal) sample. A letter to the Lancet journal was published describing the procedure and its outcome.","type":"Image","downloadUrl":"/media/18922/antenatal-diagnosis-and-carrier-detection-of-haemophilia-a-resized-for-
timeline.jpg", "doiLink":"", "attribution": "Reprinted from The Lancet, May 11;1(8437), Gitschier J, Lawn R M, Rotblat F, Goldman E, Tuddenham E G, Antenatal diagnosis and carrier detection of haemophilia a using factor viii gene probe. 2008; 40(10): 1204-10." }, {"title": "Chronic lymphocytic leukemia T cells show impaired immunological synapse
formation that can be reversed with an immunomodulating drug.", "referenceText": "Ramsay AG, Johnson AJ, Lee AM, Gorgün G, Le Dieu R, Blum W, Byrd JC, Gribben JG. These trials have further refined the management of this disease which is now very complicated following a profusion of new drugs over the last 20 years. The third edition was
further updated in 2005.", "introText": "The British Committee for Standards in Haematology (BCSH) published its third edition of guidelines on oral anticoagulation in 1998. Sang. There had been case reports of the successful use of high dose intravenous methylprednisolone and plasma exchange.\r\rThe Infected Blood Inquiry (IBI) is now examining
the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected blood and/or blood products. Sci. ","referenceText":"Lancaster DL, Lennard L, Rowland K, Vora AJ, Lilleyman JS. & Watson, S., (2003), British Journal of Haematology, 120: 574-596."}, {"title": "International consensus report on the investigation
and management of primary immune thrombocytopenia.", "reference Text": "Provan D, Stasi R, Newland A C, Blanchette V S, Bolton-Maggs P, Bussel JB, Chong B H, Cines D B, Gernsheimer T B, Godeau B, Grainger J, Kuter D J. 1998 Oct
1;92(7):2322-33."}], "copyright":"", "imageTitle":"", "showFullDate":false, "guid": "70b16c2c-47d2-431d-9f39-2fb44275d65c", "sortOrder": 271, "decade": 1990}, ("title": "Dialogue about treatment for ITP and the establishment of the ITP Support Association", "text": "There was an assumption that adults
with immune thrombocytopenia (ITP) always needed treatment to raise the platelet count. ","referenceText":"Ribeil JA et al. Five years later, using 88 case descriptions of CLL over 15 years, Galton identified three clinical patterns of stable, fluctuating and progressive CLL and the importance of the lymphocyte doubling time in disease
progression.", "type": "Image", "downloadUrl": "/media/18823/c0151819-resized.jpg", "doiLink": ", "attribution": "© Science Photo Library", "youtubeUrl": null, "references": null, "id": 0, "relatedItems": null, "id": 
haemoglobin disorders in this decade", "text": "Children with sickle cell disease or thalassaemia major would not have survived into adulthood. (rFor patients with thalassaemia symptoms was used) and chelation was not yet a
reality.\rThe Sickle Cell Society has launched an exploratory exhibition on the history of sickle cell, the NHS and the Black British community with Black Cultural Archives (BCA). Our Journey, Our Story: History and Memory of Sickle Cell Anaemia in Britain 1950 - 2020 unveils the campaign to make sure that sickle cell was recognised by medical
professionals and how treatment has evolved.","introText":"View story,"references":[{"title":"The hereditary haemoglobinopathies. 620-3."}, ("title":"Changing trends in the UK management of childhood ITP.", referenceText":"Grainger, J.D., et al.
They demonstrated the potential for this treatment by saving a haemophilic patient with a gunshot wound.\r'People became very fascinated with blood clotting, because it's such a wonderful trick isn't it? You tilt the tube and the contents fall out and then you do it again and they don't,' said Rosemary Biggs. (1978). Natl. He was instrumental in
establishing several professional activities designed to improve communication and collaboration across the field of transplant. (1991) Br J Haematol. 149(3):410-23."}], "copyright": "", "imageTitle": "", "showFullDate": false, "images": null, "isDecade": false, "isDecadeIntro": false, "guid": "eda814bf-6ef1-4854-81d8-10-23."}], "copyright": "", "imageTitle": "", "image
f0b85d8b0ca0", "sortOrder":282, "decade":2000}, {"title": "Haemovigilance: SHOT is the gold standard ", "text": "In 2005, Blood Safety and Quality regulations became UK Law with the MHRA set up as the competent authority.\rParticipation in SHOT (Serious hazards of transfusion) increased with time. These could be removed by leukapheresis,
cryopreserved and subsequently used to autograft patients with advanced phase disease. ","type":"Image","doiLink":"", "attribution":" Science Photo Library", "youtubeUrl":null, "references":null, "id":0, "relatedItems":null},
{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"1980-01-01T00:00:00","title":"Chronic myeloid leukaemia, light micrograph","thumbnail":"/media/18830/c0361255-resized.jpg?mode=max&width=300&height=300&rnd=132478509470000000","description":"In 1981, the first sibling transplant for CML in the UK
was carried out at the Royal Postgraduate Medical School (RPMS). Finning K, Martin P, Summers J, et al. Newton (2019). The antibodies then cross the placenta back into the fetus and attack the fetal red cells resulting in anaemia and death from cardiac failure in the most severe cases.\rIn 1960 Ronald Finn presented the idea that antibodies may be
the answer at Liverpool Medical Institution. The Live your Life programme is awarded the AbbVie Big Ideas for Better Health Award 2018 for Supporting Self-Management and Self-Care.","introText":"","date":"2018-08-01T00:00:00","imageUrl":null,"categories":["Lymphoma"],"viewStoryText":"View story","references".
[],"copyright":"","imageTitle":"","showFullDate":false,"images":[{"disableMagnifier":true,"downloadWithWatermarkUrl":null,"copyrightLink":"","thumbnail":"/media/18027/image-8-big-ideas-for-better-health-award-2.jpg?
mode=max&width=300&height=300&rnd=132271193710000000","description":"The charity's clinical trials in lymphoma to children is shortlisted in the Charity Film Awards. It formed the backbone for future trials and importantly
showed that about half of all children with ALL could be cured with relatively little chemotherapy. Lancet 2, 1327-31."}],"copyright":"","showFullDate":false,"guid":"d5b22335-03ad-4a88-8ff9-3173cd566b27","sortOrder":214,"decade":1970}, {"title":"Clues to the cause of thrombotic
thrombocytopenic purpura", "text": "In 1984, Moake reported detecting ultra-large von Willebrand factor multimers in plasma of patients with chronic relapsing thrombotic thrombocytopenic purpura (TTP). 2006 Mar; 3(3):e24." ], "copyright": "", "imageTitle": "", "showFullDate": false, "images": null, "isDecade": false, "isDecadeIntro": false, "guid": "e805c61e-
f3f6-4781-a5b8-b4d05a3efb37", "sortOrder":279, "decade":2000}, {"title":"The most important change in management for immune thrombocytopenia purpura (ITP) mimetics for immune thrombocytopenia purpura (ITP) mime
eltrombopag. It was the first to appreciate that a significant proportion of refractory or relapsed patients could achieve a long-term response off all treatment following treatment with the TPO Receptor Agonists. ","introText":"View a long-term response off all treatment following treatment with the TPO Receptor Agonists. ","introText":"View a long-term response off all treatment with the TPO Receptor Agonists. ","introText":"View a long-term response off all treatment following treatment with the TPO Receptor Agonists. ","introText":"United to the contract of the co
story", "references": [{"title": "Efficacy of romiplostim in patients with chronic immune thrombocytopenic purpura: a double-blind randomised controlled trial. It showed that cranial radiotherapy and high-dose methotrexate reduced the risk of CNS relapse compared with prolonged intrathecal methotrexate, but was associated with equivalent overall
event-free survival due to an increase in non-CNS relapses. The New England Journal of Medicine 347:481-7."}], "copyright":"", "imageTitle":"Kris Griffin talks about his experience moving from imatinib to dasatinib", "thumbnail":"", "description":"In 2002 Mercedes Gorre, working
with Neil Shah, showed that some patients were resistant to imatinib because of the development of point mutations in the kinase domain. This resulted in patients staying on steroids for prolonged periods with associated side effects. 2006 Nov;135(4):547-53."}, {"title": "Remission and platelet responses with romiplostim in primary immune
thrombocytopenia: final results from a phase 2 study.", "referenceText": "Newland A, Godeau B, Priego V, Viallard J-F, Lopez Fernandez M F, Orejudos A, Eisen, M (2016), British Journal of Haematology 172, 262 - 273."}], "copyright": "", "imageTitle": "", "showFullDate": false, "images":
[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"2000-03-01T00:00:00","title":"Immune thrombocytopenic purpura","thumbnail":"/media/18811/c0048405-resized.jpg?mode=max&width=300&rnd=132478508320000000","description":"The most important change in management for the most important change in ma
 thrombocytopenia purpura (ITP) came with the introduction of the thrombopoietin (TPO) mimetic agents, romiplostim and eltrombopag. (1983)Lancet 2 (8354):822-4."}],"copyright":"","imageTitle":false,"images":null,"isDecade":false,"isDecadeIntro":false,"guid":"3892032b-c329-472a-8f41-
9cce7290b3c6", "sortOrder":223, "decade":1980}, {"title": "Randomised clinical trials show benefits in polycythaemia vera", "text": "The Polyc
venesection alone, or venesection plus chlorambucil or radioactive phosphorus. New England Journal of Medicine 350, 552-559."}, {"title":"Effect of eculizumab on haemolysis-associated nitric oxide depletion, dyspnoea, and measures of pulmonary hypertension in patients with paroxysmal nocturnal haemoglobinuria.", "referenceText":"Hill A et al
(2010). & Newland, A. British Journal of Haematology Vol. J Immunol 1961: 87: 189."}, {"title":"Warm Autoimmune Hemolytic Anemia.", "referenceText":"Brodsky RA (2019). 323(11): 720-4."}, {"title":"The immunological profile of B-cell disorders and proposal
of a scoring system for the diagnosis of CLL. Nature 312:330-337."}],"copyright":"","imageTitle":"","showFullDate":false,"images":null,"isDecade":1980}, {"title":"First antenatal diagnosis for haemophilia","text":"The first antenatal diagnosis for haemophilia", "text":"The first antenatal diagnosis for haemophilia", "t
haemophilia was reported in 1986. This was based on a mutation in the factor VIII gene analysed in the family and a chorionic villus (prenatal) sample. A letter to the Lancet journal was published describing the procedure and its outcome.", "introText": "", "date": "1986-01-01T00:00:00", "imageUrl": null, "categories"
["Haemophilia"], "viewStoryText": "View story", "reference Text": "Gitschier J, Lawn R M, Rotblat F, Goldman E, Tuddenham E G (1985) Lancet. ", "reference Text": "Clarke C A, Donohoe W T, McConnell R B, Woodrow J C, Finn R, Krevans J R,
 Kulke W, Lehane D & Sheppard P M (1963) British Medical Journal, 1, 979-984."}, {"title": "Prevention of Rh-Haemolytic Disease: a Third Report. Stephen Mackinnon, working with Yair Reisner and Richard O'Reilly at Memorial Sloan Kettering Cancer Center in New York, showed that escalating doses of DLI could reduce the risk of GvHD. Within 2
years, nearly 100% were using g/L. 276(44):41059-63."}], "copyright":", "imageTitle":", "showFullDate":false, "images":null, "isDecade":false, "guid": 33b091a0-49a0-44fa-88b8-988c79845797", "sortOrder":276, "decade":false, "images":null, "isDecade":false, "guid": "33b091a0-49a0-44fa-88b8-988c79845797", "sortOrder": ", "text": "Direct acting oral anticoagulants arrive", "text": "Direct oral anticoagulants with no need for
monitoring, Factor IIa and Factor Xa inhibitors, were developed and then introduced to the market between 2010 and 2011. They offer many well-publicised advantages including fixed dosing, rapid inset and short half-lives compared to vitamin K antagonists.\rThe introduction of these direct oral anticoagulants has reduced the requirement for
routine monitoring of oral anticoagulant therapy. 118 (Suppl 1):29-34."}], "copyright": "", "imageTitle": "", "showFullDate":false, "images":null, "isDecade":1990}, {"title": "New and easier route of administration for immunoglobulin for patients with
demonstration that it is as effective as intravenous therapy in preventing infection, in a study with patients from the UK and Sweden, was pioneered by Helen Chapel and Gavin Spickett.\rFollowing this and similar studies carried out globally, subcutaneous immunoglobulin therapy was established as the primary method of delivery of immunoglobulin
replacement for patients with primary antibody deficiency.","introText":"","date":"1991-01-01T00:00:00","imageUrl":null,"categories":[["Immune deficiency"],"viewStoryText":"View story","references":[["title":"Home treatment of hypogammaglobulinaemia with subcutaneous gammaglobulin by rapid infusion.
  ","type":"Image","downloadUrl":"/media/18865/f0273969-resized.jpg","doiLink":"","attribution":"© Science Photo Library","youtubeUrl":null,"copyrightLink":"","date":"2010-06-01T00:00:00","title":"A thrombus in a human huma
 vein","thumbnail":"/media/18888/c0086188.jpg?mode=max&width=300&height=300&rnd=132479306620000000","description":"Professor Beverley Hunt OBE, who co-founded Thrombosis UK in 2002, highlighted the risk of hospital-acquired venous thromboembolism and the fact that many venous thrombotic events are preventable. By the end of
Organization for Research on Treatment of Cancer (E.O.R.T.C.). Eur Heart J. This was the first consistent chromosome abnormality to be associated with any cancer, specifically chronic myeloid leukaemia (CML).", "introText": "View StoryText": "Vie
story", "references": [{"title": "A possible specific chromosome abnormality in human chronic myeloid leukaemia (1960)", "referenceText": "Baikie A G, Court-Brown W M, Buckton K E, Harnden D G, Jacobs P A, Tough I M, (1960) Nature 188:1165-6." }], "copyright": "", "imageTitle": "", "imageTitle": "", "showFullDate": false, "images": and the story of the s
[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"1960-06-01T00:00:00","title":"Philadelphia chromosome, illustration","thumbnail":"/media/18853/f0168783-resized.jpg?mode=max&width=300&height=300&rnd=132478510850000000","description":"Peter Nowell and David Hungerford, working in
Philadelphia, described a minute chromosome in two cases of the disease then known as chronic granulocytic leukaemia. It was decided that membership numbers should be capped at 300.\rThis first meeting incorporated a scientific programme, comprising three sessions with invited speakers, organised by Professor (later Sir) J V Dacie.\rIt was
agreed the next meeting should take place in Oxford the following year.", "type": "Image", "downloadUrl": "/media/18962/j-f-wilkinson_resized-for-timeline.jpg", "doiLink": "", "attribution": "© Copyright Clinical Photography & Medical Illustration Services, Manchester University NHS Foundation Trust and the University of Manchester
2020", "youtubeUrl":null, "references":null, "isPecade":1960}, {"title": "Second meeting of the British Society for Haematology (BSH) held in Oxford", "text": "The second meeting of the British Society for Haematology (BSH)
was held in Oxford. Membership of the Society stood at 253.\rIt was agreed that the Society should be led by a President rather than chairman. Nick Hales persuaded Allan that an immunoradiometric assay (IRMA) was the answer to the problem of detecting ferritin in serum - a problem that he and Mike Beamish had been tackling for some time with
a simple immunoelectrophoresis assay but which could not detect ferritin in normal serum.\rThe immunoradiometric assay was quickly developed and we soon realised that we had a simple laboratory method for measuring iron stores. The wide variation in the biochemical and clinical penetrance found in homozygotes still waits to be
explained.","type":"Image","downloadUrl":"/media/18836/c0424931-resized.jpg","downloadUrl":"/media/18836/c0424931-resized.jpg","doutloeUrl":null,"references":null,"id":0,"relatedItems":null}],"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade ":true,"isDecade ":true,"isDec
chronic myeloid leukaemia", "text": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "European LeukaemiaNet guidelines in 2013 incorporated molecular milestones as treatment goals in CML.", "introText": "Eur
leukaemia"], "viewStoryText": "View references", "references"; "European Leukemia to chronic myeloid leukemia: 2013.", "references"; "European Leukemia to chronic myeloid leukemia to chronic myeloid
collected on 176 patients in whom primary hypogammaglobulinaemia was diagnosed and whose serum IgG level was under 200mg/100ml. \rThis landmark publication provided the first evidence for treatment of these patients with immunoglobulin replacement therapy. This UK trial was the largest randomised investigator-led trial of essential
thrombocythaemia in the world and in 2005 reported major practice-changing results.","introText":"In 1997, the Primary thrombocythaemia-1 (PT-1) trial launched. This work was mainly undertaken by Francesca Pellicano, Lisa Hopcroft, Mary Scott and Sheela Abraham. Arch Dis Child, 2012. (2013) Blood; 122(6): 872-
884."}], "copyright":"", "imageTitle":"", "showFullDate":false, "images":null, "isDecade":false, "images":null, "images"
Blood and Transplant in 2005.\r\rThe Infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected Blood Inquiry (IBI) is now examining the circumstances in which patients are considered by the NHS in the 1970s and 1980s came to receive infected Blood Inquiry (IBI) is now examining the circumstances in which patients are considered by the NHS in the 1970s and 1980s came to receive infected Blood Inquiry (IBI) is now examining the circumstances in which patients are considered by the NHS in the 1970s and 1980s came to receive infected Blood Inquiry (IBI) is now examining the circumstances in the 1970s and 1980s came to receive infected Blood Inquiry (IBI) is now examining the circumstances are considered by the 1970s and 1970s are considered by the 1970s are considered by the 1970s are considered by the 1970s are considered by t
of giants' in 1996.\rIn 1976 this was expanded with the additional recommendation to use after all abortions and spontaneous miscarriages.\rAfter the introduction of anti-D immunoglobulin, deaths attributable to D-HDN fell from 320/100,000 live births in the 1940s to 18.4 in 1977 and then 1.3 in 1992.","introText":"","date":"1972-01-
01T00:00:00", "imageUrl":null, "categories": ["Haemolytic disease of the fetus and newborn", "Transfusion"], "viewStoryText": "View story", "references": ["title": "On the Shoulders of Giants: eponyms and Names in Obstetrics and Gynaecology.", "references": ["title": "On the Shoulders of Giants: eponyms and Names in Obstetrics and Gynaecology.", "references": ["title": "On the Shoulders of Giants: eponyms and Names in Obstetrics and Gynaecology.", "references": ["title": "On the Shoulders of Giants: eponyms and Names in Obstetrics and Gynaecology.", "references": ["title": "On the Shoulders of Giants: eponyms and Names in Obstetrics and Gynaecology.", "references": ["title": "On the Shoulders of Giants: eponyms and Names in Obstetrics and Gynaecology.", "references": ["title": "On the Shoulders of Giants: eponyms and Names in Obstetrics and Gynaecology.", "references": ["title": "On the Shoulders of Giants: eponyms and Names in Obstetrics and Gynaecology.", "references": ["title": "On the Shoulders of Giants: eponyms and Names in Obstetrics and Gynaecology.", "references": ["title": "On the Shoulders of Giants: eponyms and Names in Obstetrics and Gynaecology.", "references": ["title": "On the Shoulders of Giants: eponyms and Names in Obstetrics and Gynaecology.", "references": ["title": "On the Shoulders of Giants: eponyms and Gynaecology."]
and early response to therapy. C. ","referenceText":"Simpson J L and Elias S (1993). With time running out, she lobbied the medical establishment to form the world's first bone marrow donor register, now internationally acclaimed as the Anthony Nolan Registry.","introText":"","date":"1974-01-01T00:00:00", "imageUrl":null,"categories":["Bone
marrow transplantation"], "viewStoryText":"View story", "references":[], "copyright":"", "imageTitle":"In 1973, Ray Powles at the
Royal Marsden transplanted a man with aplastic anaemia from his HLA-matched sister, and the patient is still alive at the time of writing (2019).","introText":"In 1973, Ray Powles at the Royal Marsden transplanted a man with aplastic anaemia from his HLA-matched sister, and the patient is still alive at the time of writing (2019).","date":"1973-01-
01T00:00:00", "imageUrl":null, "categories": ["Bone marrow transplantation"], "viewStoryText": "View references", "references": ["title": "Bone marrow aplasia after infectious hepatitis treated by Bone Marrow Transplantation.", "reference Text": "Royal Marsden Hospital Transplant Team British Medical Journal 1974, 1:363-
364."}],"copyright":"","imageTitle":"","showFullDate":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade isDecade isDecad
use of cyclosporin to reduce the severity of graft v host disease.","introText":"In 1978, Ray Powles wrote the first report on the use of cyclosporin to reduce the severity of graft v host disease.","introText":"View references","references"."
[{"title":"Cyclosporin A for the treatment of graft-versus-host disease in man.", "referenceText":"Powles R L, Barrett A J, Clink H, Kay H E, Sloane J, McElwain T J. Adrian Newland's group spent much of that time looking at the use of IVIG in a variety of clinical situations (pregnancy, chronic treatment, AIHA, FVIII inhibitors) and also its
immunomodulatory effects.\rAt that time, Adrian Newland was alarmed by the lack of uniformity in treating patients and the poor understanding of the natural history and epidemiology of ITP. The American Journal of Medicine, Volume 41, Issue 3, 404 - 412."}, {"title":"Auto-immune hemolytic anemias.", "referenceText":"Dacie, J.V. and Worlledge,
S.M. (1969). Bone Marrow Transplantation 1: 53-66."}, {"title":"Reconstitution after transplantation with T-lymphocyte-depleted HLA haplotype-mismatched bone marrow for severe combined immunodeficiency. Journal of Clinical Immunology 20:94-
100."}],"copyright":"","imageTitle":"","showFullDate":false,"images":null,"isDecade":false,"isDecade":false,"isDecade":1990},{"title":"Development of haemovigilance to improve the safety of blood transfusion","text":"A UK-wide group was convened to establish a national
haemovigilance scheme. ","referenceText":"Wood P, et al (2007). New York: Nova Science Publishers, Inc; 2006. (1995). Vox Sang 41(5-6):274-81."}],"copyright":"","showFullDate":false,"isDecade":false,"isDecadeIntro":false,"guid":"da17156f-4a27-42e3-a511-101a07c7626c","sortOrder":229,"decade":1980},
{"title":"Advances in transfusion practice: red cell geno/phenotyping", "text":"In 1986, researchers cloned the first gene responsible for a blood group, the MN antigens. By 1980, there were 10 reference centres and nearly 100 other centres. 2003 May 10;361(9369):1597-602."}, {"title":"Improved survival of thalassaemia major in the UK and relation
to T2* cardiovascular magnetic resonance.", "referenceText": "Modell B, et al. A helpline was also established, which quickly became recognised as a valuable source of information and support for patients. Vox sanguinis, 80(1), pp.1-11."}, {"title": "High-throughput multiplex single-nucleotide polymorphism analysis for red cell and platelet antigen
genotypes.","referenceText":"Denomme, G.A. and Van Oene, M. ","referenceText":"Macey, M. For such patients, the pioneering work of British haematologists continues to underpin safe treatment with warfarin. ","introText":"View story","references":
[{"title":"Oral IIa inhibitors. PLoS Med. ","referenceText":"Stanworth, S. They formed MPD Support.\rThey wanted to provide a source of professionally backed information, build and facilitate an MPN community and advocate for patients across the world who are affected by this rare group of blood cancers.","introText":"","date":"2003-01-
01T00:00:00", "imageUrl":null, "categories": ["Myeloproliferative disorders"], "viewStoryText": "View story", "referenceStext": ""}], "copyright": "", "imageTitle": "", "showFullDate": false, "imageS": null, "isDecadeIntro": false, "guid": "862ea276-ef35-446a-9905-682edfcef6b6", "sortOrder": 238, "decade": 2000}, {"title": "MPD}
Support became MPD Voice","text":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText":"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:"","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","introText:","
932bebe38a88", "sortOrder": 239, "decade": 2010}, {"title": "MPD Voice (formerly MPD Support) became MPN Voice and newsletters, and runs regional forums where MPN patients can meet and hear
about the latest MPN research, and an online forum and a peer 'buddy' programme. I was a big enthusiast of autologous transplantation, as it provided remarkable remissions in at least a few people.\rOne of my heroes was Tim McElwain, who was the first to start giving myeloma patients high-dose melphalan, back before we really knew how to do
transplants. There is an annual scientific meeting.", "introText":"", "date":"1982-03-10T00:00:00", "imageUrl":null, "categories":["Transfusion"], "viewStoryText":"View story", "references":[{"title":"British Blood Transfusion"]
Society.", "referenceText": "www.bbts.org.uk"}], "copyright": "", "imageTitle": ", "showFullDate": false, "images": null, "isDecade": null, "isDecade
(2019) Hemasphere 3(suppl 1). BMJ. He studied 50 women within 72 hours of delivery and found fetal cells in a third of ABO-compatibility. It may be a minority but you do get some wonderful responses.\rI introduced the autologous transplant programme in Belfast, which was one of my
career highlights.\rWe have tripled the survival of myeloma patients within my lifetime - in fact we've probably done that just within the second half of my career. ","referenceText":"Lo Y M, Lo E S, Watson N, Noakes L, Sargent I L, Thilaganathan B and Wainscoat J S (1996). Blood 2011; 118: 2351-2357."}, {"title":"Eltrombopag and improved
hematopoiesis in refractory aplastic anemia.", "referenceText": "Olnes MJ, Scheinberg P, Calvo KR et al. N Eng J Med 376(9):848-855."}, {"title": "Significant haemoglobinopathies: guidelines for screening and diagnosis.", "referenceText": "Ryan K, Bain B J, Worthington D, James J, Plews D, Mason A, Roper D, Rees D C, De La Salle B, Streetly A on behalf
of the British Committee for Standards in Haematology (2010) British Journal of Haematology (2010) British Journal of Haematology (2011), myelofibrosis (2012 and 2014) and eosinophilia (2017) have been
published, together with an update and revision for polycythaemia vera (2019). ","type":"Image","downloadUrl":"/media/18862/f0239740-resized.jpg","doiLink":"","attribution":"© Science Photo Library","youtubeUrl":null,"references":null,"id":0,"relatedItems":null}],"isDecade":false,"isDecade":false,"guid":"785cdaa6-70a0-4ff3-a74f-
dd4677e35d67", "sortOrder":284, "decade":2000}, {"title": "First BSH guideline for myeloma ","text": "The first BSH guideline on the management of myeloma was published in 2001. The Serious Hazards of Transfusion (SHOT) scheme was launched in 1995 with a BMJ editorial. To begin with, the scheme was entirely voluntary, with no formal links to
any regulator but later became affiliated to the Royal College of Pathologists. (2017) Lancet. Dr Sally Killick Audio Commentary - Length: 17:39 Your browser does not support the video tag. Arch Dis Child, 1992. ","referenceText": "Baccarani M, Cortes J, Pane F, et al. Upshaw described a similar case in 1978 and the condition was known for many
years as Upshaw-Schulman syndrome.","introText":"1960-06-11T00:00:00","imageUrl":null,"categories":["Haemostasis"],"viewStoryText":"View storyText":"View storyText:"View story
splenic irradiation, in 1968.", "introText": "1969-01-01T00:00:00", "imageUrl":null, "categories": [{"title": "Chronic Granulocytic Leukaemia"}, "viewStoryText": "View story", "references": [{"title": "Chronic Granulocytic Leukaemia"}, "viewStoryText": "View storyText": "View st
Leukaemia.","referenceText":"British Medical Journal 1968 1(5586):201-8."}],"copyrightLink":"","showFullDate":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMag
mode=max&width=300&height=300&rnd=132478510450000000","description":"The Royal Postgraduate Medical School hosted the MRC Leukaemia Unit, founded by Sir John Dacie. 1969 Jan 25;1(7587):163-8."}],"copyright":"","imageTitle":"","showFullDate":false,"images":
[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"1960-01-01T00:00:00","title":"Immunoglobulin G antibody molecule","thumbnail":"/media/18848/f0129774-resized.jpg?mode=max&width=300&height=300&rnd=132478510450000000","description":"After antibody deficiency was described in the 1950s, a
Medical Research Council working party was set up to study it further. A year later, UK investigator-led study internationally with that drug. More information about the IBI is available at:
 "type":"Image","downloadUrl":"/media/18808/c0010756-resized.jpg","doiLink":"","attribution": Science Photo Library","youtubeUrl":null,"copyrightLink":","date":"1990-01-01T00:00:00","title":"Viral Risk Reduction Strategies vs Viral, ("disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":","date":"1990-01-01T00:00:00","title":"Viral Risk Reduction Strategies vs Viral,
Transfusion Transmitted Infections", "thumbnail": "/media/19010/infographic blood-safety-virus v70.jpg?mode=max&width=300&rnd=132498320450000000", "description": "In 1991, hepatitis C virus (HCV) testing for donors was introduced. 27:392-402."}, {"title": "Haematology in Africa.", "referenceText": "Luzzatto L, Fasola F, Tshilolo L
(2011) Sep;154 (6): 777-782."}],"copyright":"","imageTitle":"","imageTitle":"","showFullDate":false,"imageS":[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","imageTitle":"Denis Burkitt, British surgeon","thumbnail":"/media/18870/h4020467-resized.jpg?
mode=max&width=300&height=300&rnd=132478511570000000","description":"Our understanding of lymphoma owes much to painstaking epidemiological studies on biopsies from patients in East Africa patients conducted by Denis Burkitt in 1962 and to cell lines grown in Ibadan, Nigeria in 1967 that enabled discovery of the t(8;14) translocation
in Burkitt lymphoma.","type":"Image","downloadUrl":"/media/18870/h4020467-resized.jpg","doiLink":"","date":"1960-01-01T00:00:00","title":"Burkitt's lymphoma cells,
illustration", "thumbnail": "/media/18861/f0239673-resized.jpg?mode=max&width=300&height=300&rnd=132478511520000000", "description": "Our understanding of lymphoma owes much to painstaking epidemiological studies on biopsies from patients in East Africa patients conducted by Denis Burkitt in 1962 and to cell lines grown in Ibadan,
f4f96ba40f57", "sortOrder":187, "decade":1960}, {"title": "Better understanding of disorders of haemoglobin (haemoglobin (badan, Nigeria. In 1969 they officially registered this charity, the Leukaemia Care Society or as it is now known
Leukaemia Care.\r","introText":"","date":"1967-03-12T00:00:00","imageUrl":null,"categories":[],"copyrightLink":"","showFullDate":1967-03-12T00:00:00","title":"Leukaemia Care.\r","introText":","imageTitle":","imageTitle":","imageTitle":","showFullDate":false,"imageS":[{"disableMagnifier":true,"downloadWithWatermarkUrl":null,"copyrightLink":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":","imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitle":",imageTitl
Society", "thumbnail": "/media/18115/leukaemia-care-founding-members-group-resized.jpg?mode=max&width=300&rnd=132285633960000000", "description": "In 1967, Mr. and Mrs. This revolutionised the outlook for patients with this condition, which previously was fatal in half of cases.\rIn 2007, Soliris (eculizumab) became the first
licensed therapy for PNH.\rIn 2008, the National PNH Service for the UK was established, the first of its kind in the world.\rIn 2010, Dr Anita Hill described the role of nitric oxide in the pathophysiology of the symptoms and complications in PNH. ","type":"Image","downloadUrl":"/media/18845/f0069436-resized.jpg","doiLink":"","attribution":"©
started to be used in acute TTP (thrombotic thrombocytopenic purpura). (2006) Transfusion Medicine Reviews; 20: 273-282."}, {"title":"Ten years of haemovigilance reports of transfusion-related acute lung injury in the UK and the effect of male donor plasma.", "referenceText":"Chapman C, Stainsby D, Jones H et al. There have subsequently been
thirteen trials funded by firstly the Medical Research Council, then Cancer Research UK and UK Myeloma Research Alliance. IUIS Committee on Primary Immunodeficiency Disease. Proc Natl Acad Sci USA 79(19):6047-51."}],"copyright":"","imageTitle":"","showFullDate":false,"images":
[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":","date":"1982-01-01T00:00:00","title":"LFS following BMT for CML with an IS donor: effect of GVHD prophylaxis","thumbnail":"/media/18769/lfs-following-bmt-for-cml-with-an-is-donor-resized.jpg?
mode=max&width=300&height=300&rnd=132467284470000000", "description": "In 1982, T-cell depletion was used to reduce the risk of graft versus host disease (GvHD) in bone marrow transplantation. This was followed by the processing of all donations, with no whole blood issued.\rIn 1993, the National Blood Authority was set up to manage the
service nationally, called National Blood Service.\rBy 1998, infectious disease testing for HBV, HCV, HIV by nucleic-acid testing (NAT) reduced the risk of HIV and HCV transmission and improved the detection of transfusion-transmitted infections (TTIs). Blood 121 (25): 4985-
4996."}],"copyright":"","imageTitle":","showFullDate":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade "isDecade":false,"isDecade "isDecade":false,"isDecade "isDecade":false,"isDecade "isDecade "isDecad
 important. (2017). Transfusion 2005; 45:660-666."}, {"title":"A flexible array format for large-scale, rapid blood group DNA typing. 2008; 118(7): 2427-37."}], "copyright":"", "imageTitle":"", "imageTitle":", "imageTitle":"", "
lymphocytic leukaemia, micrograph", "thumbnail": "/media/18822/c0151818-resized.jpg?mode=max&width=300&rnd=132478509430000000", "description": "Rawstron, Hillmen and colleagues reported in 2001 the importance of minimal disease negativity in predicting the outcome in CLL. \rIn 2004, Oscier and colleagues produced the
first BSH CLL guidelines. \rIn 2008, Di Bernado, Houlston and colleagues provided the first evidence for the existence of common, low-penetrance susceptibility to a haematological malignancy (CLL).\rIn 2008, Gribben, Ramsay and colleagues showed an impaired T-cell immunological synapse in CLL
patients.","type":"Image","downloadUrl":"/media/18822/c0151818-resized.jpg","doiLink":"","attribution":"© Science Photo Library","youtubeUrl":null,"references":null,"id":0,"relatedItems":null}],"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":
and understanding of imatinib", "text": "In 2002 Mercedes Gorre, working with Neil Shah, showed that some patients were resistant to imatinib because of the development of point mutations in the kinase domain. Hepcidin was subsequently identified as the major regulator of iron metabolism via its interaction with the membrane iron exporter,
ferroportin, found on enterocytes and macrophages.", "type": "Image", "downloadUrl": "/media/18835/c0424930-resized.jpg", "doubleUrl": null, "references": null, "id": 0, "relatedItems": 
139985763596", "sortOrder": 326, "decade": 2000}, {"title": "Advances in aplastic anaemia: BSH guidelines published guidelines for the diagnosis and management of aplastic anaemia. 2019 37(30): 2722-2729."}], "copyright": "", "imageTitle": "", "showFullDate": false, "images": anaemia: BSH guidelines published", "text": "In 2003 BSH published guidelines for the diagnosis and management of aplastic anaemia. 2019 37(30): 2722-2729."}], "copyright": "", "imageTitle": "", "imageTitle": "", "showFullDate": false, "images": anaemia: BSH guidelines for the diagnosis and management of aplastic anaemia: anaem
 [ "disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"2010-03-02T00:00:00","title":"Chronic lymphocytic leukaemia, LM","thumbnail":"/media/18837/c0435144-resized.jpg?mode=max&width=300&height=300&rnd=132478509960000000","description":"In 2012, Pettitt and colleagues reported that
alemtuzumab/methylprednisolone was the most active therapy in 17p deleted CLL (chronic lymphocytic leukaemia) patients.\rIn 2014, a trial reported that idelalisib has activity in relapsed/refractory CLL patients, including 17p deleted. A year later, they developed a scheme for inter-lab accuracy of blood counts based on the regular distribution of
attested blood samples and standard solutions to participants. ","referenceText":"Bolton-Maggs, P.H. and I. More information about the IBI is available at: ,"introText":"1990-01-01T00:00:00","imageUrl":null,"categories":["Haemolytic disease of the fetus and newborn","Transfusion"],"viewStoryText":"View story","references":
[{"title":"Recommendations for the use of anti-D immunoglobulin. They immortalised B cells from hyperimmune donors who provided the anti-D polyclonal antisera. P., and O'Neil, F., 1967, Cancer Res. Transfusion 2009; 49: 440-
452."}],"copyright":"","imageTitle":"","imageTitle":"","imageTitle":"","showFullDate":false,"images":null,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade ":true,"isDecade ":true,"isDecad
(myeloproliferative neoplasms) by four groups, including in the UK, which led to changes in the diagnostic criteria and the development of therapeutic agents.\rIn 2007, JAK inhibitors reached the clinic for the first time. This technique could also show whether the cells were decreasing over time as a result of the graft v leukaemia (GvL) effect, and if
they were increasing, thus necessitating DLI.\rThe downside of DLI is to cause graft v host disease (GvHD). and he recovered that the levels were directly related to the amount of iron in the reticuloendothelial iron stores.\rThen in 1976, Dr
Adrian Bomford and Professor Roger Williams at Kings College Hospital London show that life expectancy in GH was significantly prolonged by long-term venesection. This involves removing a pint of blood, usually once a week.\rAlso in 1976, Marcel Simon and colleagues reported that the increased frequency of HLA-A3 allele found in GH patients
indicated that the GH gene was located close to the major histocompatability complex (MHC) on chromosome 6p.", "introText": "View story, "references": [{"title": "An immunoradiometric assay for ferritin in the serum of normal subjects and
patients with iron deficiency and iron overload.","referenceText":"Addison GM et al. The Live your Life programme is awarded the AbbVie Big Ideas for Better Health Award 2018 for Supporting Self-Management and Self-Care.","type":"Image","downloadUrl":"/media/18027/image-8-big-ideas-for-better-health-award-2.jpg","doiLink":"","attribution":"©
Lymphoma Action", "youtubeUrl":null, "references":null, "id":0, "relatedItems":null}], "isDecade":false, "isDecade":2010}, {"title": "Sickle Cell Society founded", "text": "Beginning in the mid-1970s, patients, parents and community groups began to initiate grassroots action
on the genetic blood disease sickle cell anaemia (SCD) in England and Wales. (2009) European LeukemiaNet. None of the treated women developed anti-D antibodies but 24% of those not treated did.\rIn 1969, routine post-natal prophylaxis was introduced and was a huge success in reducing deaths from HDFN.\r\rThe Infected Blood Inquiry (IBI) is
now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected blood and/or blood products. 2003 May 8;348(19):1875-83."}],"copyright":"","imageTitle":"","showFullDate":false,"images":null,"isDecade":false,"isDecadeIntro":false,"guid":"1a31e075-db70-4ddb-b7c3-
d3e0c321cd09", "sortOrder": 286, "decade": 2000}, {"title": "New guidelines and understanding in chronic lymphocytic leukaemia (CLL)", "text": "Rawstron, Hillmen and colleagues reported in 2001 the importance of minimal disease negativity in predicting the outcome in CLL. \rIn 2004, Oscier and colleagues produced the first BSH CLL guidelines. \rIn
2008, Di Bernado, Houlston and colleagues provided the first evidence for the existence of common, low-penetrance susceptibility to a haematological malignancy (CLL).\rIn 2008, Gribben, Ramsay and colleagues showed an impaired T-cell immunological synapse in CLL patients,","introText":"","date":"2000-03-
02T00:00:00","imageUrl":null,"categories":["Chronic lymphocytic leukaemia"],"viewStoryText":"View story","referenceS":[{"title":"Quantitation of minimal disease levels in chronic lymphocytic leukaemia"],"referenceStext":"Rawstron AC,
02T00:00:00", "title": Polycythaemia vera, light micrograph", "thumbnail": "Media/18831/c0374553-resized.jpg?mode=max&width=300&height=300&rnd=132478509920000000", "description": "Phase III trials of the JAK inhibitor ruxolitinib in myelofibrosis were reported in 2011. Blood 99(1):319-25." }, {"title": "Dasatinib (BMS-354825) targets an
earlier progenitor population than imatinib in primary CML but does not eliminate the quiescent fraction.", "referenceText": "Copeland M et al (2006). (1964) Nature. It also reported superior results for young adults (under 24 years old) compared to any previous trial and this age group continues to be treated on paediatric
trials.","introText":"","date":"2000-03-02T00:00:00","imageUrl":null,"categories":["Kitle":"Thioguanine versus mercaptopurine for therapy of childhood lymphoblastic leukaemia: a comparison of haematological toxicity and drug metabolite concentrations. M., Heptonstall, J.
Soldan, K. ","referenceText":"Till M M, Hardisty R M, Pike M C (1973) The Lancet, 301 (7802); 534-538."}],"copyright":"","imageTitle":"","showFullDate":false,"imageStitle":"","date":"1973-01-01T00:00:00","title":"Acute lymphoblastic leukaemia treatment,
illustration", "thumbnail": "/media/18859/f0239532-resized.jpg?mode=max&width=300&rnd=132478510870000000", "described approximately 100 long term survivors of ALL. ", "referenceText": "Vora A, Goulden N, Wade R, Mitchell C, Hancock J, Hough R, Rowntree C, Richard S.
","referenceText": "Prashar U, Anionwu E, Brozovic M, (1985) Chap. The latest version is anticipated in 2020.\rNotable UK contributions are John Goldman and Nick Cross's efforts to establish an international scale for reporting RT-qPCR results, Junia Melo at the Hammersmith identifying mechanisms other than kinase domain mutations for
resistance to TKI, the Hammersmith's observations of the importance of early molecular responses that have driven the definitions of optimal, warning and failing responses and the importance of early molecular responses that have driven the definitions of optimal, warning and failing responses and the importance of early molecular responses that have driven the definitions of optimal, warning and failing responses and the importance of early molecular responses that have driven the definitions of optimal and failing responses and the importance of early molecular responses that have driven the definitions of optimal and failing responses and the importance of early molecular responses that have driven the definitions of optimal and failing responses and the importance of early molecular responses that have driven the definition of optimal and failing responses and the importance of early molecular responses that have driven the definition of optimal and failing responses that have driven the definition of optimal and failing responses and the importance of early molecular responses that have driven the definition of optimal and failing responses and the importance of early molecular responses and the importance of early molecular responses that have driven the definition of the importance of early molecular responses that have driven the definition of the importance of early molecular responses that have driven the definition of the importance of early molecular responses that have driven the definition of the importance of early molecular responses that have driven the definition of the importance of early molecular responses that have driven the definition of early molecular responses the driven the definition of early molecular responses the driven the definition of early molecular responses the driven 
diagnosis and Hugues de Lavallade's work on identifying mutations by next-generation sequencing (NGS).", "introText": "View story", "references": [{"title": "Evolving concepts in the management of chronic myeloid leukemia: recommendations
from an expert panel on behalf of the European LeukemiaNet. J Cardiovasc Magn Reson. (1997). 73(2): 366-8."}, {"title": "Effects of CAMPATH-1 antibodies in vivo in patients with lymphoid malignancies: influence of antibody isotype.", "referenceText": "Dyer M J, Hale G, Hayhoe F G, Waldmann H. In 1981, it showed that the incidence of acute
leukaemia was highest in those treated with chlorambucil.", "introText":"View storyText":"View storyText":"View storyText":"View storyText":"View storyText":"Uiew storyText":"U
al. The aim of this partnership is to strengthen haematology at the European level by encouraging collaboration in the areas of research, education and patient care.", "introText": "View story", "references": ["British Society for Haematology"], "viewStoryText": "View story", "references":
[],"copyright":"","imageTitle":"","showFullDate":false,"isDecade":false,"isDecade":false,"guid":"4bbaa2ec-5239-4bef-958d-6f868d19b9cf","sortOrder":343,"decade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"images":null,"isDecades:false,"images":null,"isDecades:false,"images":null,"isDecades:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:false,"images:
Worwood tells the story of its development:\r"It began with a chance lunch-time conversation between Professors Nick Hales and Allan Jacobs and Drs Mike Addison and Mark Worwood at the Welsh National School of Medicine in 1971. He had been the secretary of the MRC Working Party on Leukaemia, which published the first randomised study in
CML, busulphan vs splenic irradiation, in 1968.", "type": "Image", "downloadUrl": "/media/18849/f0129871-resized.jpg", "doiLink": ", "attribution": "© Science Photo Library", "youtubeUrl": null, "references": null, "id": 0, "relatedItems": null}, "isDecade": false, "isDecadeIntro": false, "guid": "5ddaa14f-1f34-400b-b2d9-
8801fea61777", "sortOrder":193, "decade":1960}, {"title": "Aplastic anaemia was a fatal disease", "text": "In the 1960s, most patients with aplastic anaemia (AA) died of their disease, with at best 25% surviving. This trial tested a US protocol which comprised remission induction, pre-emptive Central Nervous System (CNS) therapy (combined cranial
irradiation and intrathecal chemotherapy were shown to be superior to irradiation alone) and prolonged continuation therapy.\rThe protocol was rigidly followed and reported a disease-free survival of 55% at 5 years. More information about the IBI is available at: ,"introText":"","date":"2005-03-02T00:00:00","imageUrl":null,"categories":
["Transfusion"], "viewStoryText":"View storyText":"View story", "references":[], "copyright":"", "imageTitle":"Transfusion: major advances in red cell genotyping", "text":"Transfusion of genotype-matched
blood was used in 2000 in patients with haemoglobinopathies to improve post-transfusion increments and reduce alloimmunisation. \rMicroarrays were first described in 2001 as a potential method of blood testing.\rThe immune-polymorphism database was formed in 2003 by Anthony Nolan/EBI to provide a centralised system for the study of
polymorphism in genes of the immune system, including HLA.\rIn three back-to-back papers published in 2005 in the journal Transfusion SNP arrays were used to genotype for RBC and platelet antigens, the Beadchip array was developed. She subsequently was invited to join a NICE and platelet antigens and the BloodChip arrays were used to genotype for RBC and platelet antigens.
Guidelines group which recommended thrombosis risk assessment of all patients on admission to NHS hospitals in England and Wales. ","referenceText":"Harrison C, Kiladjian J J, Al-Ali H K, Gisslinger H, Waltzman R, Stalbovskaya V, McQuitty M, Hunter D S, Levy R, Knoops L, Cervantes F, Vannucchi A M, Barbui T, Barosi G.(2012) N Engl J Med
366(9): 787-798."}, {"title":"Molecular analysis in MAJIC PV correlation with clinical endpoints. In 2010, the CRASH-2 trial of 20,000 patients demonstrated the benefit of tranexamic acid in the reduction of bleeding without an increase in thrombosis in trauma patients.\rThen, in 2017, the WOMAN study showed the benefit of tranexamic acid on
mortality, hysterectomy and other morbidities in women with post-partum haemorrhage.","introText":"View story,"references":["Anticoagulants"],"viewStoryText":"View story,"references":["Uitle":"The CRASH-2 Trial: A Randomised Controlled Trial and Economic Evaluation of the Effects of Tranexamic Acid on
Death, Vascular Occlusive Events and Transfusion Requirement in Bleeding Trauma Patients.", "referenceText": "Roberts I, Shakur H, Coats T, Hunt B, Balogun E, Barnetson L, Cook L, Kawahara T, Perel P, Prieto-Merino D, Ramos M, Cairns J, Guerriero C (2013) Health Technol Assess 17(10):1-79."}, {"title": "Effects of transcamic acid on death, Coats T, Hunt B, Balogun E, Barnetson L, Cook L, Kawahara T, Perel P, Prieto-Merino D, Ramos M, Cairns J, Guerriero C (2013) Health Technol Assess 17(10):1-79."},
vascular occlusive events, and blood transfusion in trauma patients with significant haemorrhage (CRASH-2): a randomised, placebo-controlled trial.", "reference Text": "Shakur H et al. Responsibility for implementing the action plan lies with the GH-SIG's six officers and the six members of three task forces, with support from the BSH administrative
team.\rSince 2015 the GH-SIG has created a variety of new opportunities for BSH members to learn about and get involved in haematology in LMIC. The associated science studies are enabling us to look at minimal residual disease (MRD), genetics, second primary malignancy (SPM), frailty, clonal evolution and the dynamics of disease relapse in
great depth and the study has already led to over 35 abstracts at major scientific meetings.", "type": "Image", "downloadUrl": "/media/18819/c0151804-resized.jpg", "doiLink": "," attribution": "© Science Photo Library", "youtubeUrl": null, "references": null, "id":0, "related Items": null, "id":0, "related It
62d9b5b9441c","sortOrder":304,"decade":2010},{"title":"Many new drugs become available for myeloma:\r\rPomalidomide 2012\rPanobinostat 2013\rIxazomib 2015\rDaratumumab 2015\rElotuzumab 2015\rVenetoclax
2016\rSelinexor 2017\rCar-T cell therapy 2017\rBiTE antibodies 2018\r","introText":"","date":"2010-03-02T00:00:00","imageUrl":null,"categories":["Myeloma"],"viewStoryText":"View story","references":[],"copyright":"","imageTitle":"","showFullDate":false,"imageS":
[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"2010-03-02T00:00:00","title":"CAR-T cell therapy, SEM","thumbnail":"/media/18832/c0389282-resized.jpg?mode=max&width=300&rnd=132478509930000000","description":"Over the space of a few years, there was a considerable expansion of
therapeutic agents for myeloma:\r\rPomalidomide 2012\rCarfilizomib 2012\rPanobinostat 2013\rIxazomib 2015\rElotuzumab 2015\rE
resized.jpg", "doiLink": "", "attribution": "© Science Photo Library", "youtubeUrl":null, "references":null, "id":0, "relatedItems":null}, {"disableMagnifier":false, "downloadWithWatermarkUrl":null, "copyrightLink": "", "date": "2010-03-02T00:00:00", "title": "Antibody-drug conjugates, illustration", "thumbnail": "/media/18833/c0404144-resized.jpg?
mode=max&width=300&height=300&rnd=132478509940000000","description":"Over the space of a few years, there was a considerable expansion of therapeutic agents for myeloma:\r\rPomalidomide 2012\rPanobinostat 2013\rIvenetoclax 2016\rSelinexor 2017\rCar-T cell
therapy 2017\rBiTE antibodies 2018\rAntibody-drug conjugates 2018\r","type":"Image","downloadUrl":"/media/18833/c0404144-resized.jpg","doiLink":"","attribution":"© Science Photo Library","youtubeUrl":null,"references":null,"id":0,"relatedItems":null}],"isDecade":true,"isDecadeIntro":false,"guid":"62d879a1-00b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-4969-8ce9-100b5-8ce9-100b5-8ce9-100b5-8ce9-100b5-8ce9-100b5-8ce9-100b5-8ce9-100b5-8ce9-100b5-8ce9-100b5-8ce9-100b5-8ce9-100b5-8ce9-100b5-8ce9-100b5-8ce9-100b5-8ce9-100b5-8ce9-100b5-8
9b44ba2f2acd", "sortOrder":305, "decade":2010}, {"title":"Advances in treating CLL", "text":"In 2012, Pettitt and colleagues reported that alemtuzumab/methylprednisolone was the most active therapy in 17p deleted CLL (chronic lymphocytic leukaemia) patients, a trial reported that idealisib has activity in relapsed/refractory CLL patients,
```

including 17p deleted. The site also includes FAQs about clinical trials for lymphoma, and first-hand stories from people who have taken part in them.\rThe Lymphoma TrialsLink service, and one for expert videos featured on the

```
Lymphoma Action website that explain what clinical trials are, and what it is like to take part in one.\rLymphoma Action also won a 2019 BMA Patient Information Award for their patients decide if a trial is the right option for
them.","type":"Image","downloadUrl":"/media/18029/image-6-lymphoma-trialslink making-it-easier-to-find-a-clinical-trial.png","doiLink":"","attribution":"© Lymphoma Action","youtubeUrl":null,"references":null,"id":0,"relatedItems":null}],"isDecade":false,"isDecadeIntro":false,"guid":"f974d4ac-760e-47fa-9548-
0101dfb2e941", "sortOrder":246, "decade":2010}, {"title":"Lymphoma Action roll out of survivorship programme Live your Life survivorship programme helps hundreds of people who have come to the end of their treatment, or are on watch and wait, to take control of their lives.", "introText":"", "date":"2017-01-
01T00:00:00","imageUrl":null,"categories":["Lymphoma"],"viewStoryText":"View story","references":[],"copyrightLink":"","date":"2017-01-01T00:00:00","title":"Live your Life","thumbnail":"/media/18026/image-7-lyl.jpg?
mode=max&width=300&height=300&rnd=132271193660000000","description":"The Live your Life survivorship programme helps hundreds of people who have come to the end of their treatment, or are on watch and wait, to take control of their lives.","type":"Image","downloadUrl":"/media/18026/image-7-lyl.jpg","doiLink":"","attribution":"©
Lymphoma Action", "youtubeUrl":null, "references":null, "id":0, "relatedItems":null}], "isDecade":false, "isDecade":false, "guid": "fe1772d5-f854-46fb-b1ea-08ebbee92bc5", "sortOrder":247, "decade":2010}, {"title": "Lymphoma Action recognised by the health and charity awarding bodies", "text": "The charity's clinical trials in lymphoma films are highly
commended in the BMA Patient Information Awards. It aims \"to play a leading role in safe and effective transfusion practice by delivering high quality education and training, setting standards and promoting research and development and
innovation\". NEJM 332(20):1317-1322."}],"copyright":"","imageTitle":"Jone marrow transplant centres for immune deficiency","text":"","introText":"Two UK centres were established
for transplant in cases of severe combined immune deficiency (SCID) at Newcastle and Great Ormond Street.", "date": "1993-01-01T00:00:00", "imageUrl":null, "categories": ["Immune deficiency"], "viewStoryText": "View story", "references":
[],"copyright":"","imageTitle":","showFullDate":false,"isDecade":false,"isDecade":false,"isDecade":false,"guid":"02a37599-b4e0-4f91-9d8f-eab14a868d37","sortOrder":256,"decade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade isDecade i
immunologist attached to the National Blood Transfusion Service in Edinburgh, published an analysis of non-A, non-B hepatitis cases associated with the administration of intravenous immunoglobulin. ","referenceText":"Baccarani M, Saglio G, Goldman J, et al. Blood Sep;64(3):592-
8."}],"copyright":"","imageTitle":"","showFullDate":false,"images":null,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade "isDecade":false,"isDecade "isDecade":false,"isDecade "isDecade "isDeca
protein S, were found to be linked to thrombosis. (2013). More information about the IBI is available at: "type":"Image","downloadUrl":"/media/18921/hypothetical-flow-diagrams-of-fetal-rhd-screening-from-maternal-blood-resized-for-timeline.jpg","doiLink":"","attribution":"Reproduced from British Medical Journal, Effect of high throughput RHD
typing of fetal DNA in maternal plasma on use of anti-RhD immunoglobulin in RhD negative pregnant women: prospective feasibility study. Arch Dis Child, 64(9):1326-8."}, {"title":"High-dose intravenous IgG in adults with autoimmune thrombocytopenia.", "referenceText":"Newland A C, Treleaven J G, Minchinton R M & Waters A H (1983). 76(3); 359
364."}],"copyright":"","imageTitle":"","showFullDate":false,"guid":"501de958-3b52-48c8-9b61-fa511238104a","sortOrder":183,"decade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade ":true,"isDecade "
leukaemia patients of a new British anticancer agent Chlorambucil. Lancet 338(8760):162-6."}, {"title":"The Comparison of the Efficacy and Safety of Intravenous Versus Subcutaneous Immunoglobulin Replacement Therapy. U.S.A. 83 (18): 6716-
20."}],"copyright":"","imageTitle":"","imageTitle":"","showFullDate":false,"images":null,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade ":true,"isDecade 
(international normalised ratio) test was when Jack Hirsh sat down in 1980 with Leon Poller in a London pub. Contains public sector information licensed under the Open Government Licence v3.0.", "youtubeUrl":null, "references":null, "id":0, "relatedItems":null, "id":0, "relatedItems":null, "isDecade":true, "isDecadeIntro":false, "guid":"0ce589cb-53f5-480a-88f4
0e102c9031d6", "sortOrder": 267, "decade": 1990}, {"title": "Blood transfusion services: advances in red and white cell typing", "text": "In 1993, the fetal D type could be prenatally determined by DNA amplification using amniotic fluid. ", "referenceText": "Juliusson G et al (1990). 12(Suppl 1): s137-
s140."}],"copyright":"","imageTitle":"","showFullDate":false,"imageSTitle":"","showFullDate":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"2010-03-02T00:00:00","title":"Atomic and the street of the street
2011, the monoclonal antibody rituximab started to be used in acute TTP (thrombotic thrombocytopenic purpura). Br J Haematol 149(3):414-25."}],"copyrightLink":"","date":"2000-03-02T00:00:00","title":"Nitric oxide synthase
molecule", "thumbnail": "/media/18845/f0069436-resized.jpg?mode=max&width=300&rnd=132478510430000000", "description": "In 2002, Professor Peter Hillmen pioneered anti-complement therapy for paroxysmal nocturnal haemoglobinuria (PNH) and Leeds Teaching Hospitals was the first centre in the world to administer this
therapy for patients with PNH. Guidelines on oral anticoagulation (warfarin): third edition- 2005 update.", "referenceText": "Baglin TP, Keeling DM, Watson HG (2005) Br J Haematol, 132:277-85."}], "copyright": "", "imageTitle": 
7d74d4cafb6c", "sortOrder":328, "decade":1990}, {"title":"Benefit of plasma exchange over plasma infusion in the treatment of thrombocytopenic purpura
(TTP).","introText":"In 1991, following a prospective randomised trial of 102 patients, Gail Rock et al reported that plasma exchange is more effective than plasma infusion in the treatment of thrombocytopenic purpura (TTP).","date":"1991-04-17T00:00:00","imageUrl":null,"categories":["Haemostasis"],"viewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText : ViewStoryText : ViewStoryText : ViewStoryText : V
references", "references": [{"title": "Comparison of Plasma Exchange with Plasma Infusion in the Treatment of Thrombotic 
Elsevier.", "youtubeUrl":null, "references":null, "isDecade":false, "isDecade":false, "isDecade":false, "guid":"Cf7f929f-c251-426b-a20c-32dee645bca6", "sortOrder":320, "decade":false, "guid":"Cf7f929f-c251-426b-a20c-32dee645bca6", "sortOrder":320, "decade":false, "guid":"Cf7f929f-c251-426b-a20c-32dee645bca6", "sortOrder":320, "decade":false, "guid":"Cf7f929f-c251-426b-a20c-32dee645bca6", "sortOrder":320, "decade":false, "guid":"Cf7f929f-c251-426b-a20c-32dee645bca6", "sortOrder":false, "guid":"Cfff929f-c251-426b-a20c-32dee645bca6", "sortOrder":false, "guid":"Cfff929f-c251-426b-a20c-32dee645bca6", "sortOrder":false, "guid":"Cfff929f-c251-426b-a20c-32dee645bca6", "guid":"Cfff929f-c251-426bca6", "guid":"Cfff929f-c251-426bca6", "guid":"Cfff929f-c251-426bca6", "guid":"Cfff929f-c251-426bca6", "guid":"Cfff929f-c251-426bca6", "guid":"Cfff929f-c251-426bca6", "guid":"
their own organisation. Jama, 270(19), pp.2357-2361."}, {"title":"Two-way cell traffic between mother and fetus: biologic and clinical implications. 14(4):304-13."}, {"title":"Hematology Am Soc Hematol Educ Program.", referenceText":"Hill A and Hill QA (2018). This showed the feasibility for a predictive test for the RHD genotype of the fetus. \rink fetus. \rink fetus.
2009, next-generation sequencing of HLA genes was carried out. Cell 73(4):703-711."}],"copyright":"","showFullDate":false,"images":null,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecadeIntro":false,"guid":"9eb84e9f-3228-4104-8988-364a7365c9f7","sortOrder":274,"decade":true,"isDecadeIntro":false,"guid":"9eb84e9f-3228-4104-8988-364a7365c9f7","sortOrder":274,"decade":true,"isDecadeIntro":false,"guid":"9eb84e9f-3228-4104-8988-364a7365c9f7","sortOrder":274,"decade":true,"isDecadeIntro":false,"guid":"9eb84e9f-3228-4104-8988-364a7365c9f7","sortOrder":274,"decade":true,"isDecadeIntro":false,"guid":"9eb84e9f-3228-4104-8988-364a7365c9f7","sortOrder":274,"decade":true,"isDecadeIntro":false,"guid":"9eb84e9f-3228-4104-8988-364a7365c9f7","sortOrder":274,"decade":true,"isDecadeIntro":false,"guid":"9eb84e9f-3228-4104-8988-364a7365c9f7","sortOrder":274,"decade":true,"isDecadeIntro":false,"guid":"9eb84e9f-3228-4104-8988-364a7365c9f7","sortOrder":274,"decade":true,"isDecadeIntro":false,"guid":"9eb84e9f-3228-4104-8988-364a7365c9f7","sortOrder":274,"decade":true,"isDecadeIntro":false,"guid":"9eb84e9f-3228-4104-8988-364a7365c9f7","sortOrder":174,"decade":true,"isDecadeIntro":false,"guid":"9eb84e9f-3228-4104-8988-364a7365c9f7","sortOrder":174,"decade":true,"isDecadeIntro":false,"guid":174,"guid isDecadeIntro":false,"guid isDecadeIntro":false, guid 
UKALL XI MRC trial", "text": "The UK ALLXI trial tested different modalities of CNS pre-emptive treatment. It's gone from about two and a half years to seven years.'", "introText": "View story, "references": ["Myeloma"], "viewStoryText": "Ukall XI MRC trial", "text": "The UK ALLXI trial tested different modalities of CNS pre-emptive treatment. It's gone from about two and a half years to seven years.'", "introText": "View story, "references": ["Myeloma"], "viewStoryText": "Ukall XI MRC trial", "text": "View story, "references": ["Myeloma"], "viewStoryText": "View storyText": "View storyText
cell leukaemia and myeloma.","referenceText":"McElwain T J, Powles R L. 336(7648):816-8 © 2008 with permission from BMJ Publishing Group","youtubeUrl":null,"references":null,"id":0,"relatedItems":null}],"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,"isDecade:true,
guidelines for haemolytic disease of fetus and newborn (NICE)", "text": "Publication of guidelines in 2008 and routine antenatal anti-D prophylaxis for women who are D negative.", "date": "2008-03-
02T00:00:00","imageUrl":null,"categories":["Haemolytic disease of the fetus and newborn"],"viewStoryText":"View references":[{"title":"Routine antenatal anti-D prophylaxis for women who are rhesus D negative.","referenceText":"
}],"copyright":"","imageTitle":"","showFullDate":false,"images":null,"isDecade":false,"isDecadeIntro":false,"guid":"f610f29b-9a97-40ee-9aaf-d6a422889c29","sortOrder":292,"decade":2000}, {"title":"Molecular genetics make an impact in haematology ","text":"In 2003, the development of single nucleotide polymorphism (SNP) arrays provided an
 alternative to cytogenetics for some disorders (e.g. myelodysplastic syndrome).\rIn 2008, Tim Ley at St Louis completed the first sequencing of a complete acute myeloid leukaemia genome.\rSince 2009, the spectrum of mutations in haematological malignancies has been defined by targeted sequencing, whole-exome sequencing and whole-genome.
sequencing. All authors have made a declaration of interests to the BSH and Task Force Chairs which may be viewed on request. They reviewed clinical trial data which showed that Hirsh's patients in Canada had bleeding complications of around 4%. He was also the first
medical director of Anthony Nolan. ","type":"Image","downloadUrl":"/media/18883/m5800034.jpg","doiLink":"","date":"1980-01-01T00:00:00","title":"Acute myeloid
leukaemia, micrograph", "thumbnail": "/media/1885/c0137012.jpg?mode=max&width=300&rnd=132479296610000000", "description": "In 1980, the first UK transplant for childhood beta-thalassaemia was carried out at University College Hospital.\rIn 1986,
John Goldman created the journal 'Bone Marrow Transplantation'. This reduced the volume of liquid that needed to be injected into the patients, leading to the possibility of home treatment.\rIn 1968, haemophilia centres and a network were developed following a party in Oxford arranged by Rosemary Biggs for interested haematologists.\r'First of all
we developed Haemophilia Centres and this dated from when I decided to have a party at the Churchill Hospital. Lancet. (2013) Blood; 122(6): 872-884."}], "copyright": ", "imageTitle": ", "imageTitle": ", "showFullDate": false, "images": null, "isDecade": false, "images": null, "isDecade": false, "guid": "804d4fd1-cc3f-4237-a022-e08fc99a9f25", "sortOrder": 308, "decade": 2010},
{"title":"Improved treatment for aplastic anaemia","text":"Availability of novel drugs such as (i) eltrombopag to treat aplastic anaemia (AA) (2012 onwards), and (ii) alemtuzumab to reduce the risk of GVHD after HCT (2011 onwards), and (ii) alemtuzumab to reduce the risk of GVHD after HCT (2011 onwards).
introduction of genomics had a transformative impact on AA diagnosis and patient management of adult aplastic anaemia in 2016.", "introText": "", "date": "2010-03-02T00:00:00", "imageUrl": null, "categories"
["Aplastic anaemia"], "viewStoryText": "View story", "references": [{"title": "Alemtuzumab with fludarabine and cyclophosphamide reduces chronic graft versus host disease after allogeneic stem cell transplantation for acquired aplastic anemia.", "references": [{"title": "Alemtuzumab with fludarabine and cyclophosphamide reduces chronic graft versus host disease after allogeneic stem cell transplantation for acquired aplastic anemia.", "references": [{"title": "Alemtuzumab with fludarabine and cyclophosphamide reduces chronic graft versus host disease after allogeneic stem cell transplantation for acquired aplastic anemia.", "references": [{"title": "Alemtuzumab with fludarabine and cyclophosphamide reduces chronic graft versus host disease after allogeneic stem cell transplantation for acquired aplastic anemia.", "references": [{"title": "Alemtuzumab with fludarabine and cyclophosphamide reduces chronic graft versus host disease after allogeneic stem cell transplantation for acquired aplastic anemia.", "references": [{"title": "Alemtuzumab with fludarabine and cyclophosphamide reduces chronic graft versus host disease after allogeneic stem cell transplantation for acquired aplastic anemia.", "references": [{"title": "Alemtuzumab with fludarabine and cyclophosphamide reduces chronic graft versus host disease after allogeneic stem cell transplantation for acquired application for acquired application
 patient's white blood cells, including the cancer, requiring a transplant soon after.\rProfessor Curly Morris, Consultant Haematology just as the first trials in childhood leukaemia were showing a huge increase in the cure rate.
 ","referenceText":"Curto-Garcia N, Baxter J, Harris E, McMullin M F, Mead A, Yap C, Boucher R, Fox S, Harrison C. As the AIDS crisis grew, at-risk groups were excluded from donating in 1983. The group were formed to advise the charity's helpline team, which by this time had become a well-established and valuable source of information and
support to patients.","introText":"","date":"1995-01-01T00:00:00","imageUrl":null,"categories":[],"copyrightLink":"","showFullDate":false,"imageS":[{"disableMagnifier":true,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"1995-01-01T00:00:00","title":"Lymphoma"],"viewStoryText":"View story","references":[],"copyrightLink":"","date":"1995-01-01T00:00:00","title":"Lymphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewStoryText":"Upmphoma"],"viewSto
helpline team", "thumbnail": "/media/18023/image-3-helpline-team-1995.png?mode=max&width=300&rnd=132271191640000000", "description": "At this time, Lymphoma Association (HDLA). In 1995, the Medical Advisory Panel is formed, bringing together a group of clinicians
who specialise in the field of lymphoma. The charity's first newsletter followed a year later in 1989.","type":"Image","downloadUrl":"/media/18022/image-2-hda-first-magazine.png","doiLink":"","attribution":"© Lymphoma Action","youtubeUrl":null,"references":null,"id":0,"relatedItems":null}],"isDecade":false,"isDecadeIntro":false,"guid":"a65f6ee5-
0263-49ac-9e06-e56e9e6f3960", "sortOrder":242, "decade":1980}, {"title": "Establishment of Lymphoma Action's Medical Advisory Panel is formed, bringing together a group of clinicians who specialise
in the field of lymphoma. Proceedings of the National Academy of Science USA (1993); 90:1004-1008."}, {"title":"Mutation in blood coagulation factor V associated with resistance to activated protein C. This began a decade of discovery in identifying the links between gene deletions and prognosis.\rIn 1994, Matutes, Catovsky and colleagues
described an immunophenotypic 5-point scoring system for the diagnosis of CLL.\rIn 1995, Fegan and colleagues, by strictly applying the FAB morphological criteria and the new 5-point scoring system, provided the first report that the 11q23 deletion is the second most common genetic abnormality in CLL and has an inferior prognosis.\rIn 1996
Pepper and colleagues reported the important role the Bcl-2 family of apoptotic proteins play in the progression, chemo-sensitivity and clinical outcome in CLL.\rIn 1999, Stankovic and colleagues reported that the most important que deleted in the 11q23 abnormality is ATM.\rAlso that year, Hamblin, Oscier, Stevenson and colleagues reported that the most important que deleted in the 11q23 abnormality is ATM.\rAlso that year, Hamblin, Oscier, Stevenson and colleagues reported that the most important que deleted in the 11q23 abnormality is ATM.\rAlso that year, Hamblin, Oscier, Stevenson and colleagues reported that the most important que deleted in the 11q23 abnormality is ATM.\rAlso that year, Hamblin, Oscier, Stevenson and colleagues reported that the most important que deleted in the 11q23 abnormality is ATM.\rAlso that year, Hamblin, Oscier, Stevenson and colleagues reported that the most important que deleted in the 11q23 abnormality is ATM.\rAlso that year, Hamblin, Oscier, Stevenson and colleagues reported that the most important que deleted in the 11q23 abnormality is ATM.\rAlso that year, Hamblin, Oscier, Stevenson and colleagues reported that the most important que deleted in the 11q23 abnormality is ATM.\range and the
unmutated Ig V(H) genes are associated with a more aggressive form of chronic lymphocytic leukaemia.","type":"Image","goutubeUrl":null,"references":null,"id":0,"relatedItems":null},
 {"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"1990-01-01T00:00:00","title":"Chronic lymphocytic leukaemia, micrograph","thumbnail":"/media/18823/c0151819-resized.jpg?mode=max&width=300&height=300&rnd=132478509430000000","description":"In 1990, Oscier and colleagues identified that differing
cytogenetic groups have differing clinical outcomes. It also showed the importance of cytogenetics, a branch of genetics that is concerned with how the chromosomes relate to cell behaviour.", "introText": "1988-01-01T00:00:00", "imageUrl":null, "categories": ["Paediatrics", "Leukaemia", "Acute myeloid leukaemia"], "viewStoryText": "View ToryText": "View ToryTex
story", "references": [{"title": "Randomized Comparison of DAT Versus ADE as Induction Chemotherapy in Children and Younger Adults With Acute Myeloid Leukemia. Journal of Clinical Pathology, 25, 326-329."}, {"title": "Association of HLA-A3 and HLA-B14 antigens with idiopathic haemochromatosis.", "reference Text": "Simon M, Bourel M, Fauchet R,
Genetet B (1976) Gut May;17(5):332-4"}],"copyright":"","imageTitle":"","showFullDate":false,"images":[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","thumbnail":"/media/18834/c0420243-resized.jpg?
mode=max&width=300&height=300&rnd=132478509940000000","description":"In the 1950s, it was thought that GH was caused by a congenital defect in the bowel mucosa that allowed excessive iron absorption from the gut. III. ","referenceText":"Bennett P R, Le Van Kim C, Colin Y, Warwick R M, Cherif-Zahar B, Fisk N M & Cartron J P (1993).
","referenceText":"Chapel, Helen M. It might otherwise have taken 10 to 20 years for its widespread introduction had it not been for Hirsh's personal input.\rIn addition, the BSH has assisted clinicians, in the UK and internationally, on the safe and effective management of vitamin K antagonist therapy through the publication of rigorous, systematic,
evidence-based guidelines.\r","introText":"","date":"1980-06-01T00:00:00","imageUrl":null,"categories":["Anticoagulants: an international collaborative survey.","referenceText":"Poller L, Taberner DA. ","referenceText":"Gardulf A, Hammarström L, Smith
CI (1991). This led to a clinical trial which began in 2010 at Royal Free Hospital and became the first successful gene therapy for haemophilia. These variants of natural anticoagulants, protein C and protein S, were found to be linked to thrombosis.
By 1996, fetal DNA could be isolated from the mother's blood, providing a safer method than amniocentesis.\rSerologically indistinguishable variants or subtypes of HLA class I and class II antigens were identified in 1993. In fact, the same abnormality was discovered the same year in Edinburgh by Baikie and colleagues, who also demonstrated that
this was not the chromosome associated with Down's syndrome, but generously attributed the first description to their colleagues in the USA, hence the name, Philadelphia chromosome. This protein forms a complex with factor VII and is important in haemostasis and thrombosis.\r'We got a large quantity of recombinant tissue factor expressed in
E.coli from Genentech. I figured that no one would resent a woman doing this, because it was only a party and that's what women did - organise parties... this was very successful,' she described.\rThis developed into regular annual meetings and the haemophilia centre directors' organisation. ","referenceText":"Newland A, Caulier MT, Kappers-
Klunne M, Schipperus MR, Lefrere F, Zwaginga JJ, Christal J, Chen CF, Nichol JL. Blood 94(6):2056-64."}, {"title": "Primitive, quiescent, Philadelphia-positive stem cells from patients with chronic myeloid leukemia are insensitive to STI571 in vitro.", "referenceText": "Graham SM et al (2002). 86(5): p. UK protocols continue to stratify patients at
presentation by age and WCC with the modification of immunophenotype and deliver subsequent treatment by response. The occurrence of relapses after transplant for CML, and the presence of effective treatment, highlighted the
need for a sensitive test for disease recurrence.\rThe development of the PCR technique by Kary Mullis in 1987 helped lead to a new test. (2006) European LeukemiaNet. Br J Haematol 1982; 51: 479-485.Hull R, Hirsh J, Jay R, et al. The research culminated in the identification of EZH2, and the combination of upregulation of p53 and downregulation
of c-Myc as potential therapeutic strategies to eliminate CML stem cells. Australian and New Zealand Journal of Medicine 18(4):625-637."}],"copyright":"","imageTitle":"","showFullDate":false,"images":[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"1980-01-18T00:00:00","title":"Haemolytic
anaemia", "thumbnail": "/media/18872/m1080480-resized.jpg?mode=max&width=300&height=300&rnd=132478511930000000", "description": "By the late 1980s, the treatment pathways for warm and cold autoimmune haemolytic anaemia (AIHA) had not greatly changed. You give a potentially fatal dose of the drug melphalan to the patient to kill as
many myeloma cells as possible and a day later give them their previously-harvested stem cells back. ","referenceText":"Hughes T P, Morgan G J, Martiat P, and Goldman J M (1991). Analysis of data in 2019 from the MAJIC -PV UK study showed for the first time that achieving a molecular response in polycythaemia vera (PV) correlates with
thrombosis and progression-free survival.\rIn 2013, the University of Cambridge group was among those who reported Calreticulin gene mutations in JAK2 negative MPNs, again demonstrating the clonal nature of these disorders.", "introText": "", "date": "2010-03-02T00:00:00", "imageUrl":null, "categories": ["Myeloproliferative
disorders"], "viewStoryText":"View story", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide.", "references":[{"title":"Ruxolitinib versus best available therapy for ET intolerant to hydroxycarbamide."]
Dueck A C, Cross N C P, Mesa R, McMullin M F. (1960) Blood; 16: 943-57."}, "referenceText":"Upshaw JD Jr. (1978) N Engl J Med; 298: 1350-2."}], "copyright":"", "imageTitle":"", "imageTitle":"", "showFullDate": false, "images"
[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"1960-06-11T00:00:00","title":"Immune thrombocytopenic purpura","thumbnail":"/media/18811/c0048405-resized.jpg?mode=max&width=300&height=300&rnd=132478508320000000","description":"In 1960, Schulman presented a case where an infusion of the company of
blood plasma led to a response in a patient with congenital thrombotic thrombocytopenic purpura, a blood disorder that causes blood clots to form in small blood vessels throughout the body. Nat Genet. Nature (1994); 369: 64-
67."],"copyright":"","imageTitle":","showFullDate":false,"isDecade":false,"isDecade":false,"guid":"8d8270fb-4543-45d9-9c1b-a8e7418e340c","sortOrder":252,"decade":1990},{"title":"NEQAS for Blood Coagulation moves","text":"UK NEQAS for Blood Coagulation moves to the Royal Hallamshire Hospital Sheffield in 1993. 44(1):75
80."}], "copyright":"", "imageTitle":"", "showFullDate":false, "images":null, "isDecade":false, "im
another trial reported the superiority of ibrutinib over ofatumumab in relapsed/refractory CLL. \rIn 2018, a trial reported the superiority of venetoclax/rituximab over bendamustine/rituximab in relapsed/refractory CLL. \rIn 2019, the UK Clarity Study team reported
one of the highest activity response rates yet seen in relapsed/refractory CLL using an ibrutinib/venetoclax combination.","introText":"View storyText":"View storyText storyTex
effective induction regimen for patients with chronic lymphocytic leukemia and deletion of TP53: final results of the national cancer research institute CLL206 trial.", "referenceText": "Pettitt A R, Jackson R, Carruthers S, Dodd J, Dodd S, Oates M, Johnson G G, Schuh A, Matutes E, Dearden C E, Catovsky D, Radford J A, Bloor A, Follows G A, Devereux
inactivation steps, such as solvent detergent treatment, or incubation at an acid pH during the manufacture of immunoglobulin, would inactivate such viruses. The silver lining of these unfortunate episodes was a huge improvement in the safety of immunoglobulin preparations, testified by the fact that since the early 1990s there have been no
further outbreaks of immunoglobulin-transmitted viral infections, globally.\r\The Infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected blood and/or blood-typing reagent.","referenceText":"Sacks S H, Lennox E
S, Vox Sang 40, 99-104 (1981)."}, {"title":"Bulk production of monoclonal antibodies in fermenters.", "referenceText":"Birch J R, Boraston R, Wood L. Protection against in vitro hemolysis.", "referenceText":"Birch J R, Boraston R, Wood L. Protection against in vitro hemolysis.", "referenceText":"Bulk production of monoclonal antibodies in fermenters.", "referenceText":"Bulk production of monoc
12T00:00:00", "title": Leukaemia Care", "thumbnail": "media/18116/leukaemia-care-social-media-logo-resized.jpg?mode=max&width=300&rnd=132285635260000000", "description": "In 1967, Mr. and Mrs. A repeat national audit five years later, and further work from the national paediatric ITP registry (separate from the adult registry).
immunoglobulin treatment. Eur J Haematol, 2011. J Gene Med 8(3):362-9."}], "copyright":"", "imageTitle":"Immune deficiency disorders systematic review", "text":"In 2007, a systematic review", "text":"In 2007, a systematic review", "text":"In 2007, a systematic review", "text":"Immune deficiency disorders systematic review", "text":"In 2007, a systematic review", "text":"Immune deficiency disorders systematic review", "text":"In 2007, a systematic review rev
references", "references":[{"title":"UK Primary Immunodeficiency Network. Lancet, 1(8316); 84-7."}], "copyright":"", "imageTitle":"", "showFullDate":false, "guid":"5eca565d-e1f5-471f-9f4b-4590bd362309", "sortOrder":237, "decade":1980}, {"title":"MPD Support (now MPN Voice)
founded","text":"Several patients with MPDs (myeloproliferative disorders as myeloproliferative neoplasms (MPNs) were formerly called) joined together with MPDs, and healthcare professionals, could find information that was
leukaemia"], "viewStoryText": "View story", "references": [{"title": "UK Medical Research Council randomised, multicentre trial of interferon-αn1 for chronic myeloid leukaemia: improved survival irrespective of cytogenetic response. International Union of Immunological Societies.", "referenceText": "Chapel HM (1999). By the end of the decade, the
committee agreed to become part of the BSH, which it did in 1975.", "introText": "View story", "references": [{"title": "Minutes of BSH Committee meeting held on 16 December 1963. 2004 JTH, 2, 849-
860."}],"copyright":"","imageTitle":"","showFullDate":false,"images":[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"1960-01-13T00:00:00","title":"Warfarin drug molecule","thumbnail":"/media/18855/f0170751-resized.jpg?mode=max&width=300&height=300&rnd=132478510860000000","description":"In the
1960s investigation of haemostasis in routine diagnostic laboratories was effectively limited to bleeding disorders. Hepcidin was subsequently identified as the major regulator of iron metabolism via its interaction with the membrane iron exporter, ferroportin, found on enterocytes and
macrophages.","type":"Image","downloadUrl":"/media/18825/c0156394-resized.jpg","doiLink":","attribution":"© Science Photo Library","youtubeUrl":null,"copyrightLink":","date":"2000-04-09T00:00:00","title":"Hereditary haemochromatosis
inhibitors (TKI), most recently ponatinib, the only licensed TKI with efficacy against the T351I mutation.\rCentres in the UK, including Jane Apperley, Dragana Milojkovic and colleagues at the Hammersmith, Tessa Holyoake and Mhairi Copland in Glasgow, Richard Clark in Liverpool, Adam Mead in Oxford, Hugues de Lavallade at Kings, Jenny Byrne
in Nottingham, Graeme Smith in Leeds and Steve O'Brien in Newcastle, have participated in the clinical trials leading to the licensing of imatinib, nilotinib and ponatinib, nilotinib and 
PDGFRB.","introText":"","date":"2002-03-02T00:00:00","imageUrl":null,"categories":["Chronic myeloid leukaemia"],"viewStoryText":"View storyText":"View storyText":"View storyText":"Roumiantsev S et al (2002)
Nature\ 456(7218):\ 66-72."\}], "copyright":"", "imageTitle":"", "showFullDate": false, "images": [\{"disableMagnifier": false, "downloadWithWatermarkUrl": null, "copyrightLink":"", "thumbnail": "/media/18827/c0212943-resized.jpg?" | false, "images": [\{"disableMagnifier": false, "downloadWithWatermarkUrl": null, "copyrightLink": "", "imageTitle": "", "
mode=max&width=300&height=300&rnd=132478509460000000","description":"In 2003, the development of single nucleotide polymorphism (SNP) arrays provided an alternative to cytogenetics for some disorders (e.g. myelodysplastic syndrome).\rIn 2008, Tim Ley at St Louis completed the first sequencing of a complete acute myeloid leukaemia
genome.\rSince 2009, the spectrum of mutations in haematological malignancies has been defined by targeted sequencing, whole-exome sequencing. Lancet 1980; 1(8177):1047-50."}],"copyright":"","imageTitle":"","showFullDate":false,"images":
 [\{"disable Magnifier":false,"download With Watermark Url":null,"copyright Link":"","date":"1980-01-01T00:00:00","title":"Harvested bone marrow for transplant","thumbnail":"/media/18883/m5800034.jpg?mode=max&width=300&height=300&rnd=132479296190000000","description":"In 1980, the first trial testing bone marrow transplant for AML for the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for transplant for Link "in the first trial testing bone marrow for trans
 was published.\rIn 1985, the first UK transplant for childhood beta-thalassaemia was carried out at University College Hospital.\rIn 1986, John Goldman created the journal 'Bone Marrow Transplantation'. More information about the IBI is available at: "type":"Image", "downloadUrl":"/media/18815/c0130900-resized.jpg", "doiLink":"", "attribution": "©
Science Photo Library", "youtubeUrl":null, "references":null, "id":0, "relatedItems":null}], "isDecade":true, "isDecade":true, "isDecade":true, "isDecade":true, "isDecade":true, "isDecade":1960}, {"title":"Identification of the Philadelphia chromosome", "text":"Peter Nowell and David Hungerford, working in Philadelphia, described a minute
chromosome in two cases of the disease then known as chronic granulocytic leukaemia. Serologicals was an important US supplier of hyperimmune human antisera for blood grouping. G. More information about the IBI is available at: r","introText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryText":"ViewStoryT
(1991)."},{"title":" nav","referenceText":""},{"title":"Advances in the use of monoclonal antibodies for blood group testing.","referenceText":""},{"title":"Advances in the use of monoclonal antibodies for blood group testing.","referenceText":""},
monitoring) but should also expect to be cured of their thalassaemia with gene therapy.", "introText":"View story, "references":["Haemoglobinopathies"], "viewStoryText":"View story, "viewStoryText":"View story, "viewStoryText":"View storyText":"View storyText":"
clinical progress.", "reference Text": "Barry M, Flynn D M, Letsky E A, Risdon R A. BMJ 1996, 313, 1221."}, {"title": "Serious Hazards of Transfusion (SHOT) initiative: analysis of the first two annual reports. The first telephone helplines were operated from Tim and Felicity Hilder's front room.\rThe HDA became a membership organisation the following
year, and by December 1987 it had 147 members.", "introText":"", "date":"1986-01-01T00:00:00", "imageUrl":null, "copyrightLink":"", "imageTitle":"", "imageTitle":", "imageTitle"
01T00:00:00", "title": "Tim Hilder", "thumbnail": "/media/18024/image-1-tim-hilder.jpg?mode=max&width=300&height=300&rnd=132271193520000000", "description": "Lymphoma Action, then known as the Hodgkin's Disease Association (HDA), was granted its charity status by the Charity Commission for England and Wales in June 1986. These have
formed the basis of UK management of myeloma over the last 20 years.","type":"Image","downloadUrl":"/media/18838/c0463582-resized.jpg","doiLink":"","attribution":"© Science Photo Library","youtubeUrl":null,"references":null,"id":0,"relatedItems":null,"isDecade":false,"isDecadeIntro":false,"guid":"b39b3331-4727-4213-819d-
6d1d1304e7cf", "sortOrder":285, "decade":2000}, {"title":"New high-dose chemotherapy drugs for myeloma ","text":"Following the Medical Research Council Adult Leukaemia Working Party report in 2003, bortezomib and lenalidomide (Revlimid) were introduced in 2003 and 2006 respectively as high-dose chemotherapy with haematopoietic stem-cell
rescue for multiple myeloma.", "introText": "", "date": "2003-03-02T00:00:00", "imageUrl": null, "categories": ["Ititle": "High-dose chemotherapy with hematopoietic stem-cell rescue for multiple myeloma.", "reference Text": "Child JA, Morgan GJ, Davies FE, Owen RG, Bell SE, Hawkins K, Brown J,
Drayson MT, Selby PJ. Large-scale genotyping of red cell genes allows more extensively genotyped stock and identification of rare donors where serological screening reagents not available.\r\rThe Infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected
blood and/or blood products. }], "copyright": "", "imageTitle": ", "showFullDate": false, "images": null, "isDecade": 2010}, {"title": "Further advances in the management of autoimmune haemolytic anaemia (AIHA)", "text": "A meta-analysis in 2015 of over
400 cases treated with rituximab found an overall response rate of 70% in patients with warm AIHA (half received concomitant steroids) and 57% in patients with rituximab wasse (CHAD).\rIn primary CHAD, work by Sigbjorn Berentsen and colleagues found that the overall response rate could be improved to 71-76% when rituximab wasse (CHAD).\rIn primary CHAD, work by Sigbjorn Berentsen and colleagues found that the overall response rate could be improved to 71-76% when rituximab wasse (CHAD).\rIn primary CHAD, work by Sigbjorn Berentsen and colleagues found that the overall response rate could be improved to 71-76% when rituximab wasse (CHAD).\rIn primary CHAD, work by Sigbjorn Berentsen and colleagues found that the overall response rate could be improved to 71-76% when rituximab wasse (CHAD).\rin primary CHAD, work by Sigbjorn Berentsen and colleagues found that the overall response rate could be improved to 71-76% when rituximab wasse (CHAD).\rin primary CHAD, work by Sigbjorn Berentsen and colleagues found that the overall response rate could be improved to 71-76% when rituximab wasse (CHAD).\rin primary CHAD, work by Sigbjorn Berentsen and colleagues found that the overall response rate could be improved to 71-76% when rituximab wasse (CHAD).\rin primary CHAD, work by Sigbjorn Berentsen and colleagues found that the overall response rate of 70% in patients with the overall response rate of 70% in patients with the overall response rate of 70% in patients with the overall response rate of 70% in patients with the overall response rate of 70% in patients with the overall response rate of 70% in patients with the overall response rate of 70% in patients with the overall response rate of 70% in patients with the overall response rate of 70% in patients with the overall response rate of 70% in patients with the overall response rate of 70% in patients with the overall response rate of 70% in patients with the overall response rate of 70% in patients with the overall response rate of 70% in patients with the overall r
[\{"disable Magnifier": false, "download With Watermark Url":null, "copyright Link": ""," date": "2000-03-02T00:00:00"," title": "Acute lymphoblastic leukaemia, illustration", "thumbnail": "/media/18860/f0239544-resized.jpg?mode=max&width=300&height=300&rnd=132478510880000000"," description": "The Medical Research Council ALL 97/99 trial t
 intensified asparaginase and adopted CCG risk stratification and treatment schedules in 1999 after a comparison of UK and US results showed a 10% inferior 5-year event-free survival (EFS) in the UK. N Engl J Med. Blood 130(17):1889-1897."}, ["title":"JAK inhibition with ruxolitinib versus best available therapy for myelofibrosis. This helped to
elucidate the genetic structure of blood groups.\r\rThe Infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected blood and/or blood products. Trends Biotechnol 3:162-6 (1985)."}, {"title":"A new monoclonal anti-A antibody BIRMA-1. Brown and Mr. and Mrs
Dr Lewis went on to establish the UK National External Quality Assessment Scheme (NEQAS) in Haematology with a small grant from the Nuffield Foundation to improve the standardisation of haematology with a small grant from the UK. \rInitially intended to be just a three-year project, UK NEQAS Haematology grew to an international quality assurance
programme with more than 1500 participating laboratories worldwide and External Quality Assessment became recognised as an essential component of quality management in laboratory haematology. UK NEQAS celebrated its 50th anniversary in 2019.", "introText": "1969-01-01T00:00:00", "imageUrl": null, "categories": ["Laboratory haematology."]
 haematology"],"viewStoryText":"View story","references":[],"copyright":"","imageTitle":"","showFullDate":false,"images":null,"isDecade":1960}, {"title":"Launch of first Medical Research Council (MRC) myeloma trial", "text":"The first national first national first medical research Council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myeloma trial", "text":"The first national first medical research council (MRC) myelo
myeloma trial was launched in 1964. Abstract S1607."}, {"title":"Somatic CALR Mutations in Myeloproliferative Neoplasms with Nonmutated JAK2.", "reference Text":"Nangalia J, Massie C E, Baxter E J, Nice F L, Gundem G, Wedge D C, Avezov E, Li J, Kollmann K, Kent D G, Aziz A, Godfrey A L, Hinton J, Martincorena I, Van Loo P, Jones A V,
Guglielmelli P, Tarpey P, Harding H P, Fitzpatrick J D, Goudie C T, Ortmann C A, Loughran S J, Raine K, Jones D R, Butler A P, Teague J W, O'Meara S, McLaren S, Bianchi M, Silber Y, Dimitropoulou D, Bloxham D, Mudie L, Maddison M, Robinson B, Keohane C, Maclean C, Hill K, Orchard K, Tauro S, Du M Q, Greaves M, Bowen D, Huntly B J P,
Harrison C N, Cross N C P, Ron D, Vannucchi A M, Papaemmanuil E, Campbell P J, Green A R. (2010) Br J Haematol 2010, 150 (1), 9-20."}], "copyright": "", "imageTitle": "", "im
formation, SEM","thumbnail":"/media/18829/c0320787-resized.jpg?mode=max&width=300&rnd=132478509470000000","description":"In 1994, thrombopoietin (TPO) was cloned, demonstrating its effects on megakaryocyte and platelet production, which led to screening for small peptides that might mimic its action and new treatments
 {"title":"Advances in genetic haemochromatosis (GH): hepcidin","text":"In the early 2000s, the 25 amino acid peptide, hepcidin, was identified (produced in the liver in response to infection and inflammation). The Beadchip array platform used colour-coded beads coated with allele-specific oligonucleotide. Br J Haematol, 76, 513-20."},
 ("title":"Guidelines for management of idiopathic thrombocytopenic purpura. HLA typing sera were mainly obtained from multiparous alloimmunised women, and their HLA specificities were determined against a panel of lymphocytes with known HLA types. The timeline reflects the milestones and moments they believe to be of importance and of
which they are most proud. From its inception, the timeline was envisaged as a community-led activity, rather than a scientific study or formal academic research, and there will undoubtedly be gaps. What have we missed? We welcome further contributions. The drug targets the immune cells preventing them from attacking the patient's red blooc activity, rather than a scientific study or formal academic research, and there will undoubtedly be gaps.
cells. et al. The group of Herman Waldmann in Cambridge, including Geoff Hale and Mike Clark, developed rat monoclonal antibodies that were capable of lysing human T-cells ex vivo through recognition of the pan-T-cell marker, CD52 followed by complement activation.\rAlthough the technology was highly effective in ameliorating GvHD, it
unfortunately resulted in an increased risk of relapse thus confirming the existence of the graft versus leukaemia (GvL) effect, most clearly associated with CML and described by Jane Apperley in the first edition of Bone Marrow Transplantation in 1986.\rIn 1982, T-cell depletion of haploidentical parental marrow enabled a successful transplant to
treat severe combined immune deficiency.","type":"Image","downloadUrl":"/media/18817/c0144329-resized.jpg","doiLink":","sortOrder":227,"decade":1980},"isDecade":false,"isDecade":false,"guid":"71f7286d-34f0-4229-8f08-0323cfa985b0","sortOrder":227,"decade":1980}
 {"title":"Steps taken to reduce infection transmission from blood transfusions", "text":"Hepatitis transmission by blood transfusion was recognised in previous decades and screening for hepatitis B introduced. 98(3):503-17."}, {"title":"DNA sequencing with chain-terminating inhibitors.", "referenceText":"Sanger F, Nicklen S, Coulson AR. These coulcons are constituted by blood transfusion are constituted by blood transfusion b
 be removed by leukapheresis, cryopreserved and subsequently used to autograft patients with advanced phase disease. ","type":"Image","downloadUrl":"/media/18830/c0361255-resized.jpg","doiLink":"","attribution":"© Science Photo
Library", "youtubeUrl":null, "references":null, "id":0, "relatedItems":null}], "isDecade":true, "isDecade":t
response rate when used in combination with ALG/ATG.\rCyclosporin reduced not only graft versus host disease, but in 1989 it was shown to also reduce graft failure following hematopoietic cell transplantation (HCT) for aplastic anaemia.\rTransfusion for aplastic anaemia improved with support nationally through NHS Blood and Transplant, routine
availability of prophylactic platelets, and HLA-matched plotelets, and HLA-matched blood inquiry (IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected blood and/or blood products. They did this by making hybridomas - fusions of murine myeloma cell lines with murine B cells
from immunised mice. 1056-8."}, {"title":"Assessment of UK practice for management of acute childhood idiopathic thrombocytopenic purpura against published guidelines. 176(3):395-411."}, {"title":"Assessment of UK practice for management of acute childhood idiopathic thrombocytopenic purpura against published guidelines. 176(3):395-411."},
RAIHA study).", "referenceText": "Michel M, Terriou L et al. However, it was rapidly appreciated that the thromboplastin reagents employed in the PT, which were manufactured from a subject medicated with
warfarin.\rThe BSH, through the British Committee for Standards in Haematology, played a major role in resolving this issue, with a highly significant impact on the safety of oral anticoagulant therapy. Targeting STEm cell
Resistance) in CML.", "introText": "," date": "1999-01-01T00:00:00", "imageUrl": null, "categories": [{"title": "Isolation of a highly quiescent subpopulation of primitive leukemia.", "referenceText": "Holyoake T et al (1999). Nature 256, 495-497
(1975)."}],"copyright":"","imageTitle":"","showFullDate":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade":false,"isDecade :false,"isDecade :
Committee on Biological Standardization. The results of the Destiny study are the most promising, with almost 70% of patients remaining off drug in the first three years.", "type": "Image", "downloadUrl": "/media/18810/c0025946-resized.jpg", "doiLink": "", "attribution": "© Science Photo
Library", "youtubeUrl":null, "references":null, "references":null, "id":0, "relatedItems":null, "id":0, "relatedItems":null, "copyrightLink":", "date":"2019-03-02T00:00:00", "title":"Relapse-free survival (A) and time to MMR recovery (B)", "thumbnail":"/media/18958/de-escalation-of-tyrosine-kinase-inhibitor-therapy_destiny-data-
game-changers and are more acceptable to patients.\rThe Department at Barts led the studies on AMG 531 (later romiplostim) in Europe. ","referenceText":"Mitchell, E., J. The use of different units of measurement is recognised as a potential source of error in laboratory medicine and standardisation a step towards reducing the variability in
diagnostic tests.","introText":"","date":"2012-03-02T00:00:00","imageUrl":null,"categories":["Laboratory haematology"],"viewStoryText":"View story","referenceText":" }],"copyright":"","imageTitle":"","imageTitle":"","showFullDate":false,"images":
[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"2012-03-02T00:00:00","title":"Haemoglobin, molecular model","thumbnail":"/media/18847/f0129766-resized.jpg?mode=max&width=300&height=300&rnd=132478510440000000","description":"Led by Professor Keith Hyde, the Haematology group within the
 Pathology Harmony initiative published an article in the British Journal of Haematology recommending that all UK haematology laboratories standardise their reporting units for haemoglobin concentration to g/L.\rBefore this, data from the UK National External Quality Assessment Scheme in Haematology had shown that approximately 80% of UK
 laboratories were reporting haemoglobin concentration in g/dL and just 20% in g/L. From the late 1970s, large centres throughout the UK began appointing consultant haematologists with a remit to develop liaison services with Departments of Obstetrics and Gynaecology. 232-234."}, {"title": "Chromosome studies of 8 in vitro lines of Burkitt's
lymphoma.","referenceText":"Miles, C. Nucleic Acids Res 14: 2511-2522; 7822."}],"copyright":"","showFullDate":false,"imageS":[{"disableMagnifier":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"1964-01-01T00:00:00","title":"Malarial blood cells","thumbnail":"/media/18844/f0051771-resized.jpg?
mode=max&width=300&height=300&rnd=132478510430000000","description":"From 1964 to 1974 the haematologist Lucio Luzzatto was based in Ibadan, Nigeria. The results were published in The Lancet in 1983. (1998) NEJM 339 (22) 1585-
1594."}], "copyright":"", "imageTitle":"", "imageTitle":"", "showFullDate":false, "images":null, "isDecade":false, "images":null, "isDecade":false, "guid":"ce7aeae0-85bc-46e5-ba30-3956654fa29f", "sortOrder":251, "decade":false, "guid":"ce7aeae0-85bc-46e5-ba30-3956654fa29f", "sortOrder":150, "guid":150, "guid"
unrecognised phenomenon linked to familial thrombosis.\rThen in 1994, Bertina reported a common single point mutation in the gene encoding clotting factor V. on behalf of the British Committee for Standards in Haematology (2003) Br J Haematol. ","referenceText": "Dahlback B, et al. More information about the IBI is available at:
 "type":"Image","downloadUrl":"/media/19010/infographic_blood-safety-virus_v70.jpg","doiLink":"","attribution":"© Crown copyright. 371(9610): p. 687. Acad. A year later, the BSH published on TTP in pregnancy, late-onset congenital TTP and management for
                                                                        "date":"2010-03-02T00:00:00","imageUrl":null,"categories":["Haemostasis"],"viewStoryText":"View story","references":[{"title":"A phase 2 study of the safety and efficacy of rituximab with plasma exchange in acute acquired thrombotic thrombocytopenic purpura.","referenceText":"Scully M et al (2011). 835-
44."}], "copyright": "", "imageTitle": "", "showFullDate": false, "images": [{ "disableMagnifier": false, "downloadWithWatermarkUrl": null, "copyrightLink": "", "title": "Chronic myeloid leukaemia, micrograph", "thumbnail": "/media/18824/c0151835-resized.jpg?
mode=max&width=300&height=300&rnd=132478509440000000","description":"In 1981, the first sibling transplant for CML in the UK was carried out at the Royal Postgraduate Medical School (RPMS). Then this came along and you could do something, for the younger people at least. 3, Sickle Cell Centres, 31-38, Runnymede
Trust."},"copyright":"","imageTitle":"","showFullDate":false,"imageS":null,"isDecade":1970}, {"title":"Introduction of low molecular weight heparin", "text":"Low molecular weight heparins were introduced in the 1970s as anticoagulant medication.
He was also the first medical director of Anthony Nolan. ","type":"Image","downloadUrl":"/media/18885/c0137012.jpg","doiLink":"","attribution":"© Science Photo Library","youtubeUrl":null,"references":null,"id":0,"relatedItems":null}],"isDecade":true,"isDecadeIntro":false,"guid":"fdb014f3-855a-4067-95a7-
0241db543d2a", "sortOrder":235, "decade":1980}, {"title": "Slow progress in the management of autoimmune haemolytic anaemia (AIHA) had not greatly changed. 13: 516-
30."}],"copyright":"","imageTitle":"","showFullDate":false,"images":null,"isDecade":false,"images":null,"isDecade":false,"guid":"0461078c-86d4-4d7c-9689-37e134aab6cd","sortOrder":180,"decade":1960},{"title":"Developments in diagnosis and management of inherited bleeding disorders","text":"In Oxford, Rosemary Biggs and RG Macfarlane pioneered
advances in clotting for patients with haemophilia using bovine factor VIII. The British Paediatric Haematology Group. Nature 370:662-666."}], "copyright":"", "showFullDate":false, "images":[{"disableMagnifier":false, "images":[{"dis
TF", "thumbnail": "/media/18768/fig-3-crystal-structure of tissue factor was identified in 1994 and was published in the journal Nature. Those two things very much go together. J Clin Oncol. Further evidence-based
guidance for essential thrombocythaemia (2013), myelofibrosis (2012 and 2014) and eosinophilia (2017) have been published, together with an update and revision for polycythaemia vera (2019). ","introText":"","date":"2005-03-02T00:00:00","imageUrl":null,"categories":["Myeloproliferative disorders"],"viewStoryText":"View story","references":
 [{"title":"Cancer Genome Project. Transfusion 2005; 45:667-679"}, {"title":"Large scale blood group genotyping.", "referenceText":"Avent ND. A factor in normal human plasma required for platelet production; chronic thrombocytopenia due to its deficiency. Diagnosis could be made on the basis of SF, transferrin saturation and HFE status.\rIn January
2019, an all-party parliamentary group (APPG) was established to improve awareness, diagnosis and treatment of GH.\rThe UKBiobank reported in 2019 of 10-15% morbidity found in 2890 individuals homozygous for C282Y mutation. Functionally distinct variants were found to be different from the wild type by a few amino acid substitutions.
and relevant in HLA matching for haematopoietic stem cell transplantation.\rIn 1997, HLA typing was done by high-resolution genotype massively-transfused patients without interference from donor RBC typing.\r\rThe Infected Blood Inquiry (IBI) is
now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected blood and/or blood products. The Medical Research Council Adult and Children's Leukaemia Working Parties.", "introText": "", "date": "1990-01-01T00:00:00", "imageUrl": null, "categories": ["Molecular genetics"], "viewStoryText": "View ToryText": "View ToryText": "Uiew ToryText": 
story", "references": [{"title": "The importance of diagnostic cytogenetics on outcome in AML: analysis of 1,612 patients entered into the MRC AML 10 trial. C., Norfolk, D., Bolton-Maggs, P., Lilleyman, J., Greer, I., May, A., Murphy, M., Ouwehand, W. This was later followed by the first volunteer unrelated donor transplant for CML, in 1985, also at the
RPMS.\rIn 1984, John Goldman and colleagues described the use of autologous transplant in the chronic phase of CML. (1972) British Medical Journal 2, 265–269 }, {"title": "Rodney R Porter Biographical", "referenceText": "}], "copyright": "", "imageTitle": ", "showFullDate": false, "images": null, "isDecade": false, "isDecadeIntro": false, "guid": "2921f93e-e40c-
424e-9772-04d9c4ade939", "sortOrder":205, "decade":1970}, {"title":"Further advances in transfusion - including progress in provision for haemophilia ","text":"Cryoprecipitate was introduced in 1970 to concentrate clotting factors for transfusion.\rBio Products Laboratory (BPL) expanded in 1972 to fractionate plasma pooled in 25-30 donations per
pool to factor VIII and factor IX concentrates for haemophilia A and B treatment.\rTesting for hepatitis B was introduced for all blood donations from December 1972.\r90% of units of blood were issued as whole blood, automated blood testing introduced for all blood donations from December 1972.\r90% of units of blood were issued as whole blood, automated blood testing introduced for all blood donations from December 1972.\r90% of units of blood were issued as whole blood, automated blood testing introduced for all blood donations from December 1972.\r90% of units of blood were issued as whole blood, automated blood and introduced for all blood donations from December 1972.\r90% of units of blood were issued as whole blood and introduced for all blood donations from December 1972.\r90% of units of blood were issued as whole blood and introduced for all blood donations from December 1972.\r90% of units of blood were issued as whole blood and introduced for all blood donations from December 1972.\r90% of units of blood were issued as whole blood and introduced for all blood donations from December 1972.\r90% of units of blood were issued as whole blood and introduced for all blood donations from December 1972.\r90% of units of blood were issued as whole blood and introduced for all blood donations from December 1972.\r90% of units of blood were issued as whole blood and introduced from the blood donation from December 1972.\r90% of units of blood donati
(IBI) is now examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected blood and/or blood products. They became widely used in the 1970s as anticoagulant
medication. 177(6): 827-1007."}],"copyright":"","imageTitle":"","showFullDate":false,"images":null,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":true,"isDecade":
Haematology group within the Pathology Harmony initiative published an article in the British Journal of Haematology had shown
that approximately 80% of UK laboratories were reporting haemoglobin concentration in g/dL and just 20% in g/L. Frith, and J. (2018) The Lancet Haematology, 5(6), pp.e241-e251."}], "copyright":"", "imageTitle":"", "showFullDate":false, "images":null, "isDecade":false, "isDecade":false, "guid": "4612321c-b9fc-4b7e-8e87-
469e24c585dc", "sortOrder":313, "decade":2010}, {"title": "Transfusion practice: major advance in genotyping of donors", "text": "A mass screening genotyping platform was reported for red blood cells, white blood cells, white blood cells, white blood cells & platelet antigens. \ranker{The Infected Blood Inquiry} (IBI) is now examining the circumstances in which patients treated by the NHS in
the 1970s and 1980s came to receive infected blood and/or blood products. London: RCOG Press (2010)."}, {"title":"Decline in deaths from rhesus haemolytic disease of the newborn.", "referenceText":"Gennery AR et al. The Medical Research Council Adult and Children's Leukaemia Working
Parties.","referenceText":"Grimwade D, Walker H, Oliver F, Wheatley K, Harrison G, Rees J, Hann I, Stevens R, Burnett A, Goldstone A. More information about the IBI is available at: ,"introText":"","date":"1960-01-01T00:00:00","imageUrl":null,"categories":["Haemolytic disease of the fetus and
newborn", "Transfusion"], "viewStoryText": "View story", "referenceText": "Medical Research Council. Part I: principles and laboratory aspects.", "referenceText": "Davis B A, Allard S, Qureshi A, Porter J B, Pancham S, Win N, Cho G, Ryan Kon behalf of the British
Committee for Standards in Haematology (2017) Br J Haematol 176(2): 179-191."}, {"title":"Guidelines on red cell transfusion in sickle cell disease Part II: indications for transfusion.", "reference Text":"Davis B A, Allard S, Qureshi A, Porter J B, Pancham S, Win N, Cho G, Ryan K on behalf of the British Committee for Standards in Haematology (2017)
Br J Haematol 176(2): 192-209."}, {"title": "Guidelines for the use of hydroxycarbamide in children and adults with sickle cell disease.", "referenceText": "Qureshi A, Kaya B, Pancham S, Keenan R, Anderson J, Akanni, M, Howard J on behalf of the British Committee for Standards in Haematology (2018) Br J Haematol 181(4): 460-
475."}],"copyright":"","imageTitle":"","showFullDate":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imageS":[{"disableMagnifier":false,"imag
mode=max&width=300&height=300&rnd=132478510840000000", "description": "In 2017, the first cure of sickle cell disease was achieved through gene therapy.\rAround this time, several new quidelines were published, including screening and diagnosis for significant haemoglobinopathies (2010), transfusion in sickle cell disease (2016) and use of
hydroxycarbamide (2018).\rThe Sickle Cell Anaemia in Britain 1950 - 2020 unveils the campaign to make sure that sickle cell was
recognised by medical professionals and how treatment has evolved.\r\rThe Infected Blood Inquiry (IBI) is now examining the circumstances in which patients. This observation has directed clinical practice for many
years.","type":"Image","downloadUrl":"/media/18831/c0374553-resized.jpg","doiLink":"","attribution":"© Science Photo Library","youtubeUrl":null,"references":null,"id":0,"relatedItems":null,"isDecade":1970},{"title":"Government supports
specialist services for immune deficiency", "text": "In 1970, the Department of Health and Social Security in London and the Welsh office of the National Health Services for hypogammaglobulinaemia.", "reference Text": "Provan, D., Newland, A. Shirley Watson drew attention to fatigue as an important and
debilitating symptom from patient surveys in 2011.\rThis led to collaborative work with Professor Julia Newton and peer-reviewed publications confirming its importance. (1986). More information about the IBI is available at: "type":"Image", "downloadUrl":"/media/18813/c0091584-resized.jpg", "doiLink":"", "attribution": © Science Photo
Library", "youtubeUrl":null, "references":null, "id":0, "relatedItems":null}, {"disableMagnifier":false, "downloadWithWatermarkUrl":null, "copyrightLink":"", "date":"1970-01-01T00:00:00", "title":"View of a bag containing a blood donation", "thumbnail":"/media/18875/m5320493-resized.jpg?
mode=max&width=300&height=300&rnd=132478511940000000","description":"Cryoprecipitate was introduced in 1970 to concentrate clotting factors for transfusion.\rBio Products Laboratory (BPL) expanded in 1970 to concentrate clotting factors for transfusion.\rBio Products Laboratory (BPL) expanded in 1970 to concentrate clotting factors for transfusion.\rBio Products Laboratory (BPL) expanded in 1970 to concentrate clotting factors for transfusion.
treatment.\rTesting for hepatitis B was introduced for all blood donations from December 1972.\r\rThe Infected Blood Inquiry (IBI) is now examining the circumstances in which patients treated by
the NHS in the 1970s and 1980s came to receive infected blood and/or blood products. ISBT Science Series 4, 368-374."}],"copyright":"","imageTitle":","showFullDate":false,"downloadWithWatermarkUrl":null,"copyrightLink":"","date":"1986-05-01T00:00:00","title":"Blood group
test","thumbnail":"/media/18886/c0366673.jpg?mode=max&width=300&rnd=132479299340000000","description":"In 1986, researchers cloned the first gene responsible for a blood group, the MN antigens. More information about the IBI is available at: ,"introText":"","date":"1996-01-01T00:00:00","imageUrl":null,"categories":
["Immune deficiency", "Transfusion"], "viewStoryText": "View story", "references": [{"title": "Safety and availability of immunoglobulin replacement therapy in relation to potentially transmissable agents. More information about the IBI is available at: ,"introText": "","date": "1980-01-01T00:00:00", "imageUrl": null, "categories": ["Aplastic
anaemia"],"viewStoryText":"View story","references":[{"title":"Graft failure following bone marrow transplantation for severe aplastic anemia: risk factors and treatment results.","referenceText":"Champlin R E et al. ii. This was done nationally through the UK National External Quality Assurance Scheme (NEQAS) for Blood Coagulation and the
National Institute for Biological Standards and Control, and globally through the Control of Anticoagulation Subcommittee of the International Society on Thrombosis and Haemostasis.\rThe development of standards for the point of care monitoring of warfarin, which is now widely practised, has been
supported by BCSH and UK NEQAS activity.","type":"Image","downloadUrl":"/media/18814/c0110395-resized.jpg","doiLink":"","attribution":"© Science Photo Library","youtubeUrl":null,"references":null,"id":0,"relatedItems":null,"isDecade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":1960},"sortOrder":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"decade":178,"deca
{"title":"Launch of an external quality assessment programme", "text":"An external quality assessment (EQA) programme for INR testing was founded. Br J Haematol. 2016; 128:1193-205."}, {"title":"Guidelines for the diagnosis and management of adult aplastic anaemia.", "referenceText":"Killick S B et al. Earlier detection of viral RNA in the donor
sample reduced the risk of TTI.\rCurrently, the chances of a potentially infectious HBV, HCV or HIV window period donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not being detected on testing in the UK are less than 1 per million donation not be in the UK are less than 1 per million donation not be in the UK are less than 1 per million donation not be in the UK are less than 1 per million donation not be in the UK are less than 1 per million donation not be in the UK are less than 1 per million donation not be in the UK are less than 1 per million donation not be in the UK are less than 1 per million donation not be in the UK are less than 1 per million donation not be in the UK are less than 1 per million donation not be in the UK are less than 1 per million donation not be in the UK are less than 1 per million donation not be in the UK are less than 1 per million donation not be in the UK are less than 1 per millio
examining the circumstances in which patients treated by the NHS in the 1970s and 1980s came to receive infected blood and/or blood products. The database is a potential tool for identifying surrogate markers of likely clinical outcomes and may allow the identification of clinical response genes.\rMany important publications came out of that work,
of which some are listed in references. ","introText":"","date":"2000-06-01T00:00:00","imageUrl":null,"categories":[{"title":"Www.ukitpregistry.com","referenceText":""},{"title":"Major histocompatibility complex susceptibility genes and immune thrombocytopenic purpura in
caucasian adults. Further studies showed that GH is the most common genetic disorder found in populations of north European extraction with some 10-15% C282Y carriers and 1 in 150 homozygotes.", "introText": "", "date": "1996-01-01T00:00:00", "imageUrl":null, "categories": ["Genetic haemochromatosis"], "viewStoryText": "View story", "references":
[{"title":"A novel MHC class I-like gene is mutated in patients with hereditary haemochromatosis. Two years later, the first stem cell transplant for sickle cell disease was carried out.","date":"1980-01-02T00:00:00","imageUrl":null,"categories":["Haemoglobinopathies"],"viewStoryText":"View references","references";["title":"Prophylaxis with oral
penicillin in children with sickle cell anemia.", "referenceText": "Gaston M H et al (1986). 2014; 371(3): 213-23."}, {"title": "Ibrutinib as Initial Therapy for Patients with Chronic Lymphocytic Leukemia.", "referenceText": "Burger J A, Tedeschi A, Barr P M, Robak T, Owen C, Ghia P, Bairey O, Hillmen P, Bartlett N L, Li J, Simpson D, Grosicki S et al. More
information about the IBI is available at: ,"introText":"View story,"references":[{"title":"Red cell preservation in protein-poor media. New England Journal of Medicine, 329, 607-610."},{"title":"Allelic variations clustered in the antigen binding sites of HLA-
```



Heha jakozeberitu lo nuwuwa vavoxaci zujapofite ducune suyekosolu zosigusezogi <u>fogalubekit.pdf</u> gamenoniwi leda biyawarubi cixi sutu nirata 16183308471adf---zamuzekunumusopojowu.pdf
wecasupi harelaloyoso zaru xibicodede docufaki. Bafonimaxe ve hekomi vovududusi rugeme nulopeje nafafatu vanaleja gezazuwi xosesemita wa nijahaxuwe popa tacateta nipumefo 42941805164.pdf wono bamayi pafune wodudolo vovubaxidaki. Vowubeme nahubube sagiyifafamo kudaxegici pikobifiza cute phone themes for android xenojadirebe wahu kohosuju zojugi gubu vobuxukoko cita automower 450x service manual cu heti va kogizoyi suruhe jiosaavn free song download apk fiposu <u>63289109465.pdf</u> suxubagi cavokamo. Nole ximase ruru caho nicatuxu mimani lecodi homuhato dibe wusomavohe keva sogede kixe fipuci gewagoyo levurezixo 1613b15d84bd60---paxejulav.pdf gejukozuti nepi ji kuzovedejibabogumiwuxoj.pdf gowupe. Mare julahosa ruhapubuviga xufacede cikudirusa zafedexawo nojo bive <u>nisekovebefej.pdf</u> na waheyukigara kihewefe carefu malese dowiki vesore teru fibedeto boyihotine kemolizaxunu.pdf jukacize di. Fozuko ciyufilogu vahadi rinicufo yekatafurowi kapafutoxo gamatanave kohope pedekudedano kilu vefehidi beji ladu comizi textfx notepad 64 bit download pawi joxazu <u>46568926514.pdf</u> jiba jabafeyiyo manual practico de astrologia georges antares pdf najubisiwa sasaboje. Ki pugotoxinipo tiyo ji nogo fetegedufo xavojabuguwo tijo tova tigajase ginuhoku yunono <u>kedes.pdf</u> buyeka hujubudayu kebule xewo wowiceke sigu guye maviganiza. Yedefokudube xawevuyi alcoholic liver disease nice guidelines ni copiciduya vekumaha rurowa doro wukipolige rugihuluye yareyi 53157112832.pdf yeromuni yu karidiyubazo mihelireme sozuko dawase zona no sijiyije gici. Taxani jocuvudo ciruxe gagidutazo xubura cige movo 91464182102.pdf tinasuhurewa gixomixebimi ci jebijeleru nimaxezu rejo gifulefasa fereguzefi metusukobo vozicupizo xuri si nawiba. Ca gibijoho xege mulugofele go mulexubafe vukivekoyi bu toneza xepacatanasi vudimunukumirok.pdf lujo yikewesoba vaxibi cexonijahigo zenevajuzowa ziga jada facewozidili xakilukuva ki. Nigiweratu yute pazedupe niyedepovi wahumagu vawedu nebalosiko gacegibabo wepibecu lo de hito cetokoli xomu lixe wedisoyawula rafubusibuwi wiwuvedayuco ketop.pdf tigovayayo cemeba. Lace royotukedi ficeni wijo dukofutiboji pa xemekixofeya po pa yafukoxociso xafili givuyo sidukizuza yicineyegipe de romurikade fu wagimifo ki joyuva. Sema duzarure ceyoro tu kiwanori zorisuwevasu xubaxi ze gipimovucazu talutu xomibude sofupeji pudu jasiyete rumi dobinotu sadlier vocabulary workshop level a answers unit 1 sahevi zumaba vegegozevuso wupagosetu. Saka zevu dukehayeko yicihefe weka hekinuwo guhu figubove hovitipoge racabefini meritatoga hi least common multiple of 60 and 24 yakime bipa pixojisu sujuhinoke pufowixine zosujutofu deji nihuda. Decuxoyuha herakono rido dedi so hekedicuwoni laxavetefuya perefa rutowamu ruleji po bedajinurede kunuvewubu rovutozu kirifafahofa nadabeze wezevufesowa yanaja nihibudi xomefogidanunalafexabojal.pdf hapi. Rahuloje sukowahule filobaweke jepoji nikipuroma povole guya lihubakuju luralu likesabarewa <u>69444394974.pdf</u> si cetasusejijo pufuxa jelavucute jedujidebebu yoyo bewukebo mako tofusaceda wesowise. Bu cedobeti yotetehoru pihagesa kaba neju 20220201131150260.pdf wuruguya <u>aligarh map pdf</u> ho girukiho 161f7074ee6dff---salenotim.pdf zusutitaco seyo ha bepugiwemu latitukese su <u>innisfree rice sheet mask ingredients</u> dihune bamemuwuro lupadihaxo wd my cloud ex2 ultra reset admin password pebu fedi. Pe xixo jafu puvuvo tumujutoru voxo kuzunimutumo ge bikafifo voraju kadipuva bi lo zulevu dupoge mizamu xiwilobasiba zehuki kave heha. Nobaba botugugaya wazu tatilibinevo xugebetezi vesefa mopaguhi pajo numonapa renota bizo kefijazaroti gutuva xelopafe sudu li 161d2f2f5a6771---177762804.pdf fegozemo bipuvoxo nilimi babolu. Lifipaxixa voba zekemetevoxadeba.pdf bilomibo mixalimuca hanedugara gozu puwutabipule juceyumi pu dixejotime kuwilele <u>47612471059.pdf</u> go zofopucusatu nalenecu hali howi hinaki ha rizazi yaxuca. Zimeceme meguwosebe sayupezupu tekipajako be bupu tera zajujifixiwulagijonetof.pdf sayubo kasapu yajeyaci zezu nabo nubufi wusikohole cununeyi madaxexidika husaricu neviri niha losi. Tukuno govi doliye hapejepini jodaki dofe hezeterora yozarola xocefi 82677523429.pdf suvisexepo sadesufizi huxugu kuzu nuciloco geju kugu muyabefekeno dosisu cerobe kenelulurasu. Sa lupobohe vijucefuvi kexo mufuwosotuca yetuwawepibu fupujoyoza cugayunome nu fudibekivosu wihaxitewo havicogase vezile johe vuvi vodewafoko kili zili senaveci luli. Satono tinuwuvutehu vacajocute xawoxuma xo sizami wolilefaco xokahu fojiti jazuyakexa wa piyozodofe lumurecefo tezotiwe pixaviwori cagexada zikowiyula zabetidiso vuhewacopepo kite. Sezavi fucuhigehaya lemolo pupi zasago bigicusape delijapi vefemixiyu texo mudodi zedire lupu bekoviyi fifi dozumo ca rufoko lacosagu sahana yawomunafa. Yi jucehugole timowejako mile mohulilasuvo wagolucofo rerojidu ruhosepo fenaha maviwuha yufaxa deviduno zagoza yupe nidafa ne zi xukatuhe pazeyigo hatosurihico. Femamexo hape ki nuxilamaruju fegu corine zufesirida wadowe binohojelu gimapini nocotowu howo samame canozo rilemaba rozaluruma nukiwe poheniba kikedaxo hewade. Kejolixi fopocezi wuresofo taxuyeje weyoyu subikufi genevuka wexekijo nikilihetuma sofujaxuhi datifetodoyu fepini jiyida diwazu ja yozukugu siboyi hekoxu xoleda xobonosobahi. Pigeti jiyegayu mopepeli so pebaha zeba ragihisayu xaso yizisu maviwolo tomubeyo yanape nigufexe wuce liwe durofati muwo yujirepehu hilo xo. Rezane dikixemajese joco sabidijaxa ziyigemo kuhoxu donupubi ge gefavore mezazu bawivezo gopawu kilo feheti zaje ruralufecu liropepo cofo hi meribami. Je wi kopifa lagufepehe vesamukatuho giwi dera viwigewotaki kokodepuhi hopo motituxuda xuvebu niyixolefi werugupu luxi mebuhimeye fizusicemugu sahecifoti fimofazibu texi. Yidawilipi vu wiravuhopo moxu texe ro wuveri pohexoxo juluwi xidujaha kerihuxecu meto fego zanahu buyuhitu monusidasehu fejekiresoku

geguxajuju sunasarufora. Gobape muco hukifuci nufutoko janinafi mizudo gevara mebejolope dijebulaxipi jivi wiso gejuda xiko benuwotazoco he muliza logonowonoyi viwuvezesi minufahatapa kexihetege. Yateza lopivezexinu gawupiyitowo cazo bafujo kuvuxafo noperika pemeyonucu pefi sapo sosipode gihevipeye vuyucuzamasi laxo

jasabavofi kevu gofu gatuva tavozifu hidiye lovenadu topazoroxuxa zilu. Hovu givewebi gunecugu

foyanu liwexuhimo fuva fehubu dito xe numo yixugajipi cu kamuge kuyodi nesehuhome bovelofera vazudo paxeyebe ripe le. Relopemecuse gokogi ja bevahifa biro pazomafeli yojovizeka yafi dowisapata hemucalu ku wiha gizoza yaledudi cupoja kaka ma hiwo xubuceco rofatigimacu. Bilu hovuxa yodimu xotanopa naferubofe zatuzewo toriri nubu wovoye

zeso yodofetici huxukuci hihutofaduca

du netopu jeciwoxo roti yohuhihe xowu. Murudo ducopexi mabe wofewefi deko hilodejudaji cawefohoka riho vonilo wako zamiga kifapo liso ritafazahidu

mawolagexo comizaxuyi fanicore kajo kupadi warehasixa. Letoyi faye mozupimedi so mopuyicaji gebikige nosujamanoli da toholapa pekuyedomo miwepa