

Research Achievements and Results / 成果・業績

paper's publication year	Department	Theme・Title	Author	Abstract	Journal	DOI	Keyword
2026	Infectious Disease Research Department	A Transfusion-Transmitted Chronic Hepatitis E Virus Infection After Allogeneic Bone Marrow Transplantation with Viral Clearance Following Immunosuppression Tapering	Keijiro Sato, Hiroko Kazumoto, <a href="#">Ami Tanaka</a> , <a href="#">Hidekatsu Sakata</a> , Shunya Sunohara, Shintaro Kazama, Hiroko Kaiume, Hiromitsu Mori, Toshimitsu Ueki	<a href="#">Abstract</a>	Internal Medicine. 2026 Mar 3.	<a href="https://doi.org/10.2169/internalmedicine.6903-25">https://doi.org/10.2169/internalmedicine.6903-25</a>	hepatitis E virus, hepatitis E, transfusion, hematopoietic stem cell transplantation
2025	Research and Development Department	Effects of the quantity and size of macroscopic aggregates in platelet concentrates on their in vitro characteristics and functions	<a href="#">Masato Tokukura</a> , Toshiyasu Koike, <a href="#">Hidekazu Onodera</a> , <a href="#">Kanae Fukuda</a> , <a href="#">Junichi Hirayama</a> , <a href="#">Rikizo Taira</a> , <a href="#">Shigeki Miyata</a> , <a href="#">Masahiro Satake</a> , <a href="#">Yoshihiko Tani</a>	<a href="#">Abstract</a>	Transfusion. 2025 Dec;65(12):2379-2388.	<a href="https://doi.org/10.1111/trf.18448">https://doi.org/10.1111/trf.18448</a>	in vitro functions, macroscopic aggregates, microscopic aggregates, platelet concentrate, transfusion filter
2025	Infectious Disease Research Department	The first case of transfusion-transmitted hepatitis B virus genotype I in Japan	<a href="#">Naoji Yamagishi</a> , <a href="#">Naoko Ando</a> , <a href="#">Takashi Yoshimasa</a> , <a href="#">Shizuho Toda</a> , <a href="#">Rieko Sobata</a> , <a href="#">Naoko Goto</a> , <a href="#">Keiji Matsubayashi</a> , <a href="#">Masahiro Satake</a> , <a href="#">Yoshihiko Tani</a>	<a href="#">Abstract</a>	Transfusion. 2025 Apr;65(4):773-778.	<a href="https://doi.org/10.1111/trf.18186">https://doi.org/10.1111/trf.18186</a>	hepatitis, transfusion, transmitted disease
2025	Infectious Disease Research Department	Transfusion-transmitted bacterial infection risk due to the proliferation of psychrotrophic bacterial species in RBCs and their difficulty in detection	<a href="#">Moe Kozakai</a> , <a href="#">Hidetō Nagumo</a> , <a href="#">Rika A Furuta</a> , <a href="#">Keiji Matsubayashi</a> , <a href="#">Masahiro Satake</a> , <a href="#">Yoshihiko Tani</a>	<a href="#">Abstract</a>	Transfusion. 2025 Feb;65(2):297-309.	<a href="https://doi.org/10.1111/trf.18127">https://doi.org/10.1111/trf.18127</a>	psychrotrophic bacteria; red blood cells; transfusion-transmitted bacterial infections
2025	Infectious Disease Research Department	Procleix UltrioPlex E導入後のスクリーニングNAT陽性かつ識別NAT陰性の献血血液の解析	加茂功行, 高倉明子, 蕎麦田理英子, 松林圭二, 佐竹正博, 谷慶彦	<a href="#">Abstract</a>	血液事業 2025; 47: 739-746	—	Nucleic acid Amplification Test, discriminatory NAT, NAT non-discriminated reactive, HBV DNA
2025	Infectious Disease Research Department	Development of a novel multiplex digital PCR-based method for the detection of HTLV-1 proviral deletion.	Kou Hiraga, Kenta Tezuka, Koh Nagata, Ki-Ryang Koh, Hitomi Nakamura, Yasuko Sagara, Rieko Sobata, <a href="#">Masahiro Satake</a> , Michikazu Tanio, Hiroo Hasegawa, Masumichi Saito, Kiyonori Miura, Takuo Mizukami, Isao Hamaguchi, Madoka Kuramitsu	<a href="#">Abstract</a>	Journal of Virological Methods. 2025 Feb;332:115071. Epub 2024 Nov 21.	<a href="https://doi.org/10.1016/j.jviromet.2024.115071">https://doi.org/10.1016/j.jviromet.2024.115071</a>	Digital PCR; HTLV-1; Defective provirus
2024	Infectious Disease Research Department	International review of blood donation screening for anti-HBc and occult hepatitis B virus infection.	Michael X Fu, Helen M Faddy, Daniel Candotti, Jamel Groves, Paula Saa, Claire Styles, Opeyemi Adesina, Jose Perez Carrillo, Axel Seltsam, Marijke Weber-Schehl, Sheila F O'Brien, Steven J Drews, Nana Benyin Aidoo, Angel Luis Pajares, Laura Navarro Perez, Xuelian Deng, Thijs van de Laar, Syria Laperche, Riikka Lehtisalo, Soner Yilmaz, Wai-Chiu Tsoi, David Juhl, Christoph Niederhauser, Nahid Chenarsabz, Niamh O'Flaherty, <a href="#">Naoko Goto</a> , <a href="#">Masahiro Satake</a> , Christian Renaud, Antoine Lewin, Marc Cloutier, Salam Sawadogo, Claire Reynolds, Eugene Zhiburt, An Muylaert, Veronique Van Gaever, Michel-Andres Garcia-Otalaria, Lisa Jarvis, Marion Vermeulen, Michael Busch, Stuart Blackmore, Ann Jones, Su Brailsford, William L Irving, Monique Andersson, Peter Simmonds, Heli Harvala	<a href="#">Abstract</a>	Transfusion. 2024 Nov;64(11):2144-2156.	<a href="https://doi.org/10.1111/trf.18018">https://doi.org/10.1111/trf.18018</a>	anti-HBc testing; blood transfusion; HBV screening; NAT; safety
2024	Infectious Disease Research Department	International Forum on Donor- and Recipient-triggered Lookback for Traditional Transfusion-transmitted Infections: Summary.	Ryanne Lieshout-Krikke, Veronica Hoad, Sze Sze Chua, Grace Kam, <a href="#">Masahiro Satake</a> , <a href="#">Ikuo Hino</a> , Susan L Stramer, Jamel A Groves, Virginie de La Taille, Syria Laperche, Anthea Cheng, Kathryn Goodison, Wai-Chiu Tsoi, Cheuk-Kwong Lee, Daniele Prati, Ilaria Pati, Steven J Drews, Mark Bigham, Georg Gratz, Christof Jungbauer, Richard Charlewood, Meredith Smith, Niamh O'Flaherty, Aoife Raftery, Salvador Oyonarte, Knut Gubbe, Juergen Luhm, Solomuzi Ngcobo, Ed Slot, Katy Davison, Su Brailsford, Nancy Dunbar	<a href="#">Abstract</a>	Vox Sang. 2024 Nov 14. Epub ahead of print.	<a href="https://doi.org/10.1111/vox.13763">https://doi.org/10.1111/vox.13763</a>	—
2024	Infectious Disease Research Department	International Forum on Donor- and Recipient-triggered Lookback for Traditional Transfusion-transmitted Infections: Responses.	Ryanne Lieshout-Krikke, Veronica Hoad, Sze Sze Chua, Grace Kam, <a href="#">Masahiro Satake</a> , <a href="#">Ikuo Hino</a> , Susan L Stramer, Jamel A Groves, Virginie de La Taille, Syria Laperche, Anthea Cheng, Kathryn Goodison, Wai-Chiu Tsoi, Cheuk-Kwong Lee, Daniele Prati, Ilaria Pati, Steven J Drews, Mark Bigham, Georg Gratz, Christof Jungbauer, Richard Charlewood, Meredith Smith, Niamh O'Flaherty, Aoife Raftery, Salvador Oyonarte, Knut Gubbe, Juergen Luhm, Solomuzi Ngcobo, Ed Slot, Katy Davison, Su Brailsford, Nancy Dunbar	<a href="#">Abstract</a>	Vox Sang. 2024 Nov 14. Epub ahead of print.	<a href="https://doi.org/10.1111/vox.13764">https://doi.org/10.1111/vox.13764</a>	—
2024	Infectious Disease Research Department	An international review of the characteristics of viral nucleic acid-amplification testing (NAT) reveals a trend towards the use of smaller pool sizes and individual donation NAT.	Helen M Faddy, Carla Osiowy, Brian Custer, Michael Busch, Susan L Stramer, Melinda M Dean, Jessika Acutt, Elvina Viennet, Thijs van de Laar, Wai-Chiu Tsoi, Claire Styles, Phil Kiely, Angelo Margaritis, So-Yong Kwon, Yan Qiu, Xuelian Deng, Antoine Lewin, Signe Winther Jorgensen, Christian Erikstrup, David Juhl, Silvia Saulea, Bernardo Armando Camacho Rodriguez, Lisbeth Jennifer Catherine Soto Coral, Paula Andrea Gaviria Garcia, Sineenart Oota, Sheila F O'Brien, Silvano Wendel, Emma Castro, Laura Navarro Perez, Heli Harvala, Katy Davison, Claire Reynolds, Lisa Jarvis, Piotr Grabarczyk, Aneta Kopacz, Magdalena Letowska, Niamh O'Flaherty, Fiona Young, Pdraig Williams, Lisa Burke, Sze Sze Chua, An Muylaert, Isabel Page, Ann Jones, Christoph Niederhauser, Marion Vermeulen, Syria Laperche, Pierre Gallian, <a href="#">Masahiro Satake</a> , Marcelo Addas-Carvalho, Sebastian Blanco, Sandra V Gallego, Axel Seltsam, Marijke Weber-Schehl, Arwa Z Al-Riyami, Khuloud Al Maamari, Fatma Ba Alawi, Hem Chandra Pandey, Rochele Azevedo Franca, Richard Charlewood	<a href="#">Abstract</a>	Vox Sang. 2024 Jul;119(7):745-751.	<a href="https://doi.org/10.1111/vox.13617">https://doi.org/10.1111/vox.13617</a>	NAT; transfusion safety; virus

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2024	Infectious Disease Research Department	Characterization of transfusion-relevant bacteria reference strains in a lyophilized format.	Marcel Prax, Carl P McDonald, Isabelle Bekerredjian-Ding, Marc Cloutier, Ute Gravemann, Anna Grothaus, Oleg Krut, Xoliswa Mpumlwana, Niamh O'Flaherty, <a href="#">Masahiro Satake</a> , Bianca Stafford, Susanne Suessner, Tanja Vollmer, Sandra Ramirez-Arcos	<a href="#">Abstract</a>	Vox Sang. 2024 Aug;119(8):834-841.	<a href="https://doi.org/10.1111/vox.13654">https://doi.org/10.1111/vox.13654</a>	bacteria; bacterial screening; blood safety; contamination; platelets; validation
2024	Infectious Disease Research Department	Incidences of new hepatitis B infection and anti-hepatitis B core-negative occult hepatitis B infection among Japanese blood donors in relation to anti-hepatitis B surface antigen levels.	<a href="#">Masahiro Satake</a> , Masaya Sugiyama, Masashi Mizokami, Junko Tanaka	<a href="#">Abstract</a>	J Med Virol. 2024 Jul;96(7):e29823.	<a href="https://doi.org/10.1002/jmv.29823">https://doi.org/10.1002/jmv.29823</a>	anti-HBc; anti-HBs; conversion; occult infection; secondary response; vaccination
2024	Infectious Disease Research Department	International review of blood donation nucleic acid amplification testing.	Helen M. Faddy, Carla Osioy, Brian Custer, Michael Busch, Susan L. Stramer, Opeyemi Adesina, Thijs van de Laar, Wai-Chiu Tsoi, Claire Styles, Phil Kiely, Angelo Margaritis, So-Yong Kwon, Yan Qiu, Xuelian Deng, Antoine Lewin, Signe Winther Jorgensen, Christian Erikstrup, David Juhl, Silvia Saulea, Bernardo Armando Camacho Rodriguez, Lisbeth Jennifer Catherine Soto Coral, Paula Andrea Gavia Garcia, Sineenart Oota, Sheila F. O'Brien, Silvano Wendel, Emma Castro, Laura Navarro Perez, Heli Harvala, Katy Davison, Claire Reynolds, Lisa Jarvis, Piotr Grabarczyk, Aneta Kopacz, Magdalena Letowska, Niamh O'Flaherty, Fiona Young, Pdraig Williams, Lisa Burke, Sze Sze Chua, An Muylaert, Isabel Page, Ann Jones, Christoph Niederhauser, Marion Vermeulen, Syria Laperche, Pierre Gallian, Salam Sawadogo, <a href="#">Masahiro Satake</a> , Ahmad Gharehbaghian, Marcelo Addas-Carvalho, Sebastian Blanco, Sandra V. Gallego, Axel Seltsam, Marijke Weber-Schehl, Arwa Z. Al-Riyami, Khuloud Al Maamari, Fatma Ba Alawi, Hem Chandra Pandey, Dora Mbanya, Rochele Azevedo Franca, Richard Charlewood	<a href="#">Abstract</a>	Vox Sang. 2024 Apr;119(4):315-325.	<a href="https://doi.org/10.1111/vox.13592">https://doi.org/10.1111/vox.13592</a>	blood; NAT; safety; transfusion; TTI ; virus
2024	Infectious Disease Research Department	Universal nucleic acid donor screening revealed epidemiological features of hepatitis E and prevented transfusion-transmitted infection in Japan.	<a href="#">Ami Tanaka</a> , <a href="#">Keiji Matsubayashi</a> , <a href="#">Takeshi Odajima</a> , <a href="#">Hidekatsu Sakata</a> , <a href="#">Juri Iida</a> , <a href="#">Kazuhiro Kai</a> , <a href="#">Naoko Goto</a> , <a href="#">Masahiro Satake</a>	<a href="#">Abstract</a>	Transfusion. 2024 Feb;64(2):335-347	<a href="https://doi.org/10.1111/trf.17696">https://doi.org/10.1111/trf.17696</a>	hepatitis E virus; individual donation nucleic acid amplification testing; transfusion-transmitted hepatitis E virus infection; lookback study; window period
2024	Infectious Disease Research Department	Risk of transfusion-transmitted infection with severe acute respiratory syndrome coronavirus 2 from blood donors in Japan.	<a href="#">Naoya Shinohara</a> , <a href="#">Mai Ito</a> , <a href="#">Kazuhiro Kai</a> , <a href="#">Noriyuki Kamo</a> , <a href="#">Takashi Owada</a> , <a href="#">Rieko Sobata</a> , <a href="#">Naoji Yamagishi</a> , <a href="#">Hideyuki Takahashi</a> , <a href="#">Yohei Ikeda</a> , <a href="#">Hiromi Sawai</a> , <a href="#">Rika A Furuta</a> , <a href="#">Keiji Matsubayashi</a> , <a href="#">Ikuo Hino</a> , <a href="#">Naoko Goto</a> , <a href="#">Masahiro Satake</a>	<a href="#">Abstract</a>	Transfusion. 2024 Jan;64(1):116-123.	<a href="https://doi.org/10.1111/trf.17622">https://doi.org/10.1111/trf.17622</a>	SARS-CoV-2; COVID-19; transfusion
2023	Infectious Disease Research Department	新興再興感染症と血液製剤の安全性	<a href="#">古田 里佳</a>	<a href="#">Abstract</a>	日本輸血細胞治療学会誌 2023 69(6):617-623.	<a href="https://doi.org/10.3925/jtjc.69.617">https://doi.org/10.3925/jtjc.69.617</a>	新興再興感染症; 輸血感染症; 新型コロナウイルス; plasma virome; メタゲノム解析
2023	Infectious Disease Research Department	Performance evaluation of Espline HTLV-I/II, a newly developed rapid immunochromatographic antibody test for different diagnostic situations.	Madoka Kuramitsu, Haruka Momose, Yuichiro Uchida, Kenji Ishitsuka, Ryuji Kubota, Masahito Tokunaga, Aatae Utsunomiya, Kunihiko Umekita, Yuuki Hashikura, Kisato Nosaka, Ki-Ryang Koh, <a href="#">Hitomi Nakamura</a> , <a href="#">Yasuko Sagara</a> , <a href="#">Rieko Sobata</a> , <a href="#">Masahiro Satake</a> , Koh Nagata, Yuri Hasegawa, Daisuke Sasaki, Hiroo Hasegawa, Tomoo Sato, Yoshihisa Yamano, Kou Hiraga, Kenta Tezuka, Emi Ikebe, Sahoko Matsuoka, Kazu Okuma, Toshiki Watanabe, Kiyonori Miura, Isao Hamaguchi	<a href="#">Abstract</a>	Microbiol Spectr. 2023 Dec 12;11(6):e0207823.	<a href="https://doi.org/10.1128/spectrum.02078-23">https://doi.org/10.1128/spectrum.02078-23</a>	HTLV-1; immunochromatographic antibody test; point-of-care test; sensitivity; specificity.
2023	Research and Development Department	Decreased rate of blood donors with high ABO antibody titers in Japan and the underlying factors: Comparisons between 2010 and 2021.	<a href="#">Masamichi Mikame</a> , <a href="#">Nelson Hirokazu Tsuno</a> , <a href="#">Yoshino Miura</a> , <a href="#">Hideaki Kitazaki</a> , <a href="#">Daisuke Uchimura</a> , <a href="#">Toru Miyazaki</a> , <a href="#">Toru Miyagi</a> , <a href="#">Takayuki Onodera</a> , <a href="#">Wataru Ohashi</a> , <a href="#">Takahiro Kameda</a> , <a href="#">Ryunosuke Ohkawa</a> , <a href="#">Shuichi Kino</a> , <a href="#">Kazuo Muroi</a>	<a href="#">Abstract</a>	Transfus Apher Sci. 2023 Dec; 62(6):103812.	<a href="https://doi.org/10.1016/j.transci.2023.103812">https://doi.org/10.1016/j.transci.2023.103812</a>	Age; Anti-A/B; antibody titers; BMI; Environmental factors; Gender
2023	Research and Development Department	Anti-A and anti-B titers, age, gender, biochemical parameters, and body mass index in Japanese blood donors	<a href="#">M Mikame</a> , <a href="#">N H Tsuno</a> , <a href="#">Y Miura</a> , <a href="#">H Kitazaki</a> , <a href="#">D Uchimura</a> , <a href="#">T Miyagi</a> , <a href="#">T Miyazaki</a> , <a href="#">T Onodera</a> , <a href="#">W Ohashi</a> , <a href="#">T Kameda</a> , <a href="#">R Ohkawa</a> , <a href="#">S Kino</a> , <a href="#">K Muroi</a>	<a href="#">Abstract</a>	Immunohematology. 2023 Dec 29;39(4):155-165.	<a href="https://doi.org/10.2478/immunohematology-2023-023">https://doi.org/10.2478/immunohematology-2023-023</a>	BMI; GGT; age; anti-A/anti-B; gender; titration; total cholesterol.
2023	Infectious Disease Research Department	Marked reduction in the incidence of transfusion-transmitted hepatitis B virus infection after the introduction of antibody to hepatitis B core antigen and individual donation nucleic acid amplification screening in Japan.	<a href="#">Ami Tanaka</a> , <a href="#">Naoji Yamagishi</a> , <a href="#">Takashi Hasegawa</a> , <a href="#">Keiko Miyakawa</a> , <a href="#">Naoko Goto</a> , <a href="#">Keiji Matsubayashi</a> , <a href="#">Masahiro Satake</a>	<a href="#">Abstract</a>	Transfusion. 2023 Nov;63(11):2083-2097.	<a href="https://doi.org/10.1111/trf.17546">https://doi.org/10.1111/trf.17546</a>	antibody to hepatitis B core antigen; hepatitis B virus; individual donation nucleic acid amplification testing; lookback study; occult HBV infection; sexually transmitted disease; transfusion-transmitted hepatitis B virus infection; window period
2023	Infectious Disease Research Department	Detection of early phase human T-cell leukemia virus type 1 and 2 infection with an improved confirmatory test.	<a href="#">Yasuko Sagara</a> , <a href="#">Hitomi Nakamura</a> , <a href="#">Masahiro Satake</a> , <a href="#">Koji Matsuzaki</a>	<a href="#">Abstract</a>	J Clin Virol. 2023 Nov;168:105598.	<a href="https://doi.org/10.1016/j.jcv.2023.105598">https://doi.org/10.1016/j.jcv.2023.105598</a>	Blood donor; HTLV-1; HTLV-2; Indeterminate; Seroconversion.
2023	Research and Development Department	Successful allogeneic hematopoietic stem cell transplantation in a patient with type I CD36 deficiency: a case study and literature review.	Shuhei Okuyama, Masahiko Sumi, Ryuto Ishikawa, Tsutomu Shishido, Daisuke Koyama, Toshimitsu Ueki, <a href="#">Daisuke Takahashi</a> , <a href="#">Hironori Kobayashi</a> , Hikaru Kobayashi, <a href="#">Nelson Hirokazu Tsuno</a>	<a href="#">Abstract</a>	Int J Hematol. 2023 Nov;118(5):656-660	<a href="https://doi.org/10.1007/s12185-023-03637-4">https://doi.org/10.1007/s12185-023-03637-4</a>	CD36 deficiency・Anti-CD36・Platelet transfusion refractoriness・Patient blood management・Hematopoietic stem cell

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2023	Research and Development Department	Trends in massive transfusion practice for trauma in Japan from 2011–2020: A nationwide inpatient database study.	Hiroyuki Ohbe, Takashi Tagami, Akira Endo, Shigeki Miyata, Hiroki Matsui, Kiyohide Fushimi, Shigeki Kushimoto, Hideo Yasunaga	<a href="#">Abstract</a>	J Intensive Care. 2023 Oct 18;11(1):46	<a href="https://doi.org/10.1186/s40560-023-00685-0">https://doi.org/10.1186/s40560-023-00685-0</a>	Administrative database; Massive transfusion; Transfusion ratio; Trauma; Trend.
2023	Research and Development Department	抗KEL26 (TOU) と考えられる抗体が検出された1症例	米元めぐみ, 紺谷圭奈美, 岡島さやか, 伊佐和美, 常山初江, 宮崎孔, 渡邊理香, 藤川奈央, 中邑幸伸, 平田康司, 川田明志, 本田豊彦, 小林正夫	<a href="#">Abstract</a>	日本輸血細胞治療学会誌, 2023, 69(5), 599-604	<a href="https://doi.org/10.3925/jjtc.69.599">https://doi.org/10.3925/jjtc.69.599</a>	Kell 血液型; 抗 KEL26 (TOU) ; KEL 遺伝子
2023	Research and Development Department	A novel reagent for the screening of haptoglobin-deficient blood donors.	Naoko Watanabe-Okochi, Ayaka Sato, Akira Okuyama, Go Tomiyoshi, Yumi Suzuki, Yukiko Watanabe, Kaori Kitsukawa, Masako Anazawa, Takashige Shimoyamada, Daisuke Takahashi, Takayuki Onodera, Makoto Uchikawa, Nelson-Hirokazu Tsuno, Kazuo Muroi	<a href="#">Abstract</a>	Vox Sang. 2023 Oct 5	<a href="https://doi.org/10.1111/vox.13543">https://doi.org/10.1111/vox.13543</a>	—
2023	Infectious Disease Research Department	Efficacy of convalescent plasma therapy for COVID-19 in Japan: An open-label, randomized, controlled trial	Sho Saito, Satoshi Kutsuna, Imamura Akifumi, Ryota Hase, Rentaro Oda, Junko Terada, Yosuke Shimizu, Yukari Uemura, Yuki Takamatsu, Akemi Yasuhara, Katsuyuki Shiratori, Masahiro Satake, Naoya Sakamoto, Yasunari Miyazaki, Hidefumi Shimizu, Tomiteru Togano, Akihiro Matsunaga, Kazu Okuma, Isao Hamaguchi, Kyoko Fujisawa, Maki Nagashima, Shinobu Ashida, Mari Terada, Akiko Kimura, Shinichiro Morioka, Keiji Matsubayashi, Nelson Hirokazu Tsuno, Makiko Kojima, Madoka Kuramitsu, Kenta Tezuka, Emi Ikebe, Yukihito Ishizaka, Maeda Kenji, Akira Hangaishi, Ayako Mikami, Wataru Sugiura, Norio Ohmagari, Hiroaki Mitsuya	<a href="#">Abstract</a>	J Infect Chemother. 2023; 29: 869-874.	<a href="https://doi.org/10.1016/j.jiac.2023.05.012">https://doi.org/10.1016/j.jiac.2023.05.012</a>	Convalescent plasma; Efficacy; Japan; SARS-CoV-2; Viral load.
2023	Research and Development Department	Four-Factor Prothrombin Complex Concentrate for Patients With Trauma.	Tomohiko Sato, Kotaro Kida, Shigeki Miyata	<a href="#">Abstract</a>	JAMA. 2023 Sep 5;330(9):875-876.	<a href="https://doi.org/10.1001/jama.2023.11668">https://doi.org/10.1001/jama.2023.11668</a>	—
2023	Research and Development Department	World human neutrophil antigens investigation survey.	Behnaz Bayat, Jonas Lowack, Marie Audrain, Laure Croisille, Brian Curtis, Rebecca Dangerfield, Behnaz Esmaeili, Claudia Grabowski, Margaret Keller, Hyungsuk Kim, Hartmut Kroll, Marjeta Macek Kvanka, Janette Kwok, Elyse Moritz, Oytip Nathalang, Derrick Nelson, Kaspar Rene Nielsen, Gail Pahn, Anthony Poles, Leendert Porcelijn, Ulrich J Sachs, Marlies Schonbacher, Gunther F Kormoczi, Pawinee Kupatawintu, Daisuke Takahashi, Malgorzata Uhrzynowska, Brigitte Flesch, Yoke-Lin Fung	<a href="#">Abstract</a>	Vox Sang. 2023;Sep;118(9):763-774	<a href="https://doi.org/10.1111/vox.13500">https://doi.org/10.1111/vox.13500</a>	alloantibody; autoantibody; autoimmune; HNA; neutropenia; neutrophil; TRALI
2023	Research and Development Department	ABO遺伝子の転写調節から見た、血液型に関わる現象の分子基盤	小湊慶彦, 佐野利恵, 早川輝, 高橋遥一郎, 小笠原健一	<a href="#">Abstract</a>	日本輸血細胞治療学会誌, 2023, 69(4), 513-522	<a href="https://doi.org/10.3925/jjtc.69.513">https://doi.org/10.3925/jjtc.69.513</a>	ABO 血液型; 転写調節; プロモーター; エンハンサー; 亜型
2023	Infectious Disease Research Department	Two cases of Streptococcus dysgalactiae subspecies equisimilis infection transmitted through transfusion of platelet concentrate derived from separate blood donations by the same donor.	Moe Kozakai, Mami Matsumoto, Akiko Takakura, Rika A Furuta, Keiji Matsubayashi, Naoko Goto, Masahiro Satake	<a href="#">Abstract</a>	Vox Sang. 2023 Jul;118(7):582-586.	<a href="https://doi.org/10.1111/vox.13472">https://doi.org/10.1111/vox.13472</a>	bacterial infection; blood donors; blood safety; platelet transfusion; washed platelet.
2023	Infectious Disease Research Department	血小板製剤の細菌検査としての細菌16SrDNAリアルタイムPCR法の評価	吉政隆, 松本真実, 池田洋平, 蕎麦田理英子, 小島牧子, 松林圭二, 佐竹正博	<a href="#">Abstract</a>	日本輸血細胞治療学会誌 2023 69(3):434-441.	<a href="https://doi.org/10.3925/jjtc.69.434">https://doi.org/10.3925/jjtc.69.434</a>	細菌スクリーニング検査; 16S rRNA; Real-time PCR; BacT/ALERT VIRTUO
2023	Infectious Disease Research Department	Evaluation of human T-cell leukemia virus in vitro diagnostics using plasma specimens collected in Japan.	Shigeru Kusagawa, Ai Kawana-Tachikawa, Keiji Matsubayashi, Rieko Sobata, Isao Hamaguchi	<a href="#">Abstract</a>	BMC Infect Dis. 2023 Jun 20;23(1):418.	<a href="https://doi.org/10.1186/s12879-023-08402-w">https://doi.org/10.1186/s12879-023-08402-w</a>	HTLV IVDs; New generation products; Sensitivity; Specificity.
2023	Infectious Disease Research Department	Transfusion-transmitted HBV infection with isolated anti-HBs-positive blood.	Masahiro Satake, Naoji Yamagishi, Ami Tanaka, Naoko Goto, Tomohiko Sakamoto, Yusuke Yanagino, Rika A Furuta, Keiji Matsubayashi	<a href="#">Abstract</a>	Transfusion. 2023 Jun;63(6):1250-1254.	<a href="https://doi.org/10.1111/trf.17390">https://doi.org/10.1111/trf.17390</a>	NAT; OBI; anti-HBc; anti-HBs; vaccination.
2023	Infectious Disease Research Department	Development of a recombinant hepatitis B immunoglobulin derived from B cells collected from healthy individuals administered with hepatitis B virus vaccines: A feasibility study.	Rika A Furuta, Teruhito Yasui, Takeharu Minamitani, Hiroki Akiba, Chizu Toyoda, Ryutaro Tobita, Kazuta Yasui, Ryota Aminaka, Mikako Masaki, Masahiro Satake	<a href="#">Abstract</a>	Transfusion. 2023 Jun;63(6):1204-1214.	<a href="https://doi.org/10.1111/trf.17382">https://doi.org/10.1111/trf.17382</a>	antibody drug; hepatitis B virus; human monoclonal antibody; neutralizing antibody
2023	Research and Development Department	Irradiation is not sufficient to eradicate residual immortalized erythroid cells in in vitro-generated red blood cell products.	Suyeon Kim, Kyeong Won Jo, Ju Mi Park, Arim Shin, Ryo Kurita, Yukio Nakamura, Soonho Kweon, Eun Jung Baek	<a href="#">Abstract</a>	Transfusion. 2023 Jun;63(6):1122-1128.	<a href="https://doi.org/10.1111/trf.17394">https://doi.org/10.1111/trf.17394</a>	—
2023	Infectious Disease Research Department	Performance evaluation of in vitro diagnostic kits for hepatitis B virus infection using the regional reference panel of Japan.	Haruka Momose, Asako Murayama, Norie Yamada, Keiji Matsubayashi, Sahoko Matsuoka, Emi Ikebe, Madoka Kuramitsu, Masamichi Muramatsu, Takanobu Kato, Isao Hamaguchi	<a href="#">Abstract</a>	Virol J. 2023 May 10;20(1):93.	<a href="https://doi.org/10.1186/s12985-023-02054-7">https://doi.org/10.1186/s12985-023-02054-7</a>	HBV DNA; HBsAg; In vitro diagnostics; Performance evaluation; Reference panel.

# Research Achievements and Results / 成果・業績

paper's publication year	Department	Theme・Title	Author	Abstract	Journal	DOI	Keyword
2023	Research and Development Department	Two new JK silencing alleles identified by single molecule sequencing with 20-Kb long-reads	Kazumi Isa, Shinnosuke Takada, Hiromi Takeda, Hatsue Tsuneyama, Kenichi Ogasawara, Daisuke Takahashi, Toru Miyazaki, Shigeki Miyata, Masahiro Satake	<a href="#">Abstract</a>	Transfusion 2023, 63, 1441-1446	<a href="https://doi.org/10.1111/trf.17397">https://doi.org/10.1111/trf.17397</a>	Kidd blood group; SLC14A1/JK gene; single molecule sequencing
2023	Infectious Disease Research Department	Lower prevalence of anti-HTLV-1 as expected by previous models among first-time blood donors in Japan.	Masahiro Satake, Yasuko Sagara, Isao Hamaguchi	<a href="#">Abstract</a>	J Med Virol. 2023 Mar;95(3):e28606.	<a href="https://doi.org/10.1002/jmv.28606">https://doi.org/10.1002/jmv.28606</a>	anti-HTLV-1; blood donor; horizontal infection; prevalence.
2023	Research and Development Department	DSLK and Kg: Antithetical antigens in the RHAG blood group system, and characterization of anti-DSLK antibody	Toru Miyazaki, Kazumi Isa, Ryo Kurita, Wataru Ohashi, Yuichi Tone, Kenichi Ogasawara, Shigeki Miyata, Masahiro Satake	<a href="#">Abstract</a>	Vox Sanguinis 2023, 118, 392-397	<a href="https://doi.org/10.1111/vox.13425">https://doi.org/10.1111/vox.13425</a>	antithetical antigens; DSLK antigen; Kg antigen; RHAG blood group /RHAG gene
2023	Research and Development Department	High-efficiency editing in hematopoietic stem cells and the HUDEP-2 cell line based on <i>in vitro</i> mRNA synthesis.	Nikoletta Y Papaioannou, Petros Patsali, Basma Naisseh, Panayiota L Papasavva, Lola Koniali, Ryo Kurita, Yukio Nakamura, Soteroula Christou, Maria Sitarou, Claudio Mussolino, Toni Cathomen, Marina Kleanthous, Carsten W Lederer	<a href="#">Abstract</a>	Front Genome Ed. 2023 Mar 8;5:1141618.	<a href="https://doi.org/10.3389/fgeed.2023.1141618">https://doi.org/10.3389/fgeed.2023.1141618</a>	—
2023	Research and Development Department	Long-term effects of Pfizer-BioNTech COVID-19 vaccinations on platelets.	Yuqi Zhou, Masako Nishikawa, Hiroshi Kanno, Ruoxi Yang, Yuma Ibayashi, Ting-Hui Xiao, Walker Peterson, Maik Herbig, Nao Nitta, Shigeki Miyata, Yogendra Kanthi, Gustavo K Rohde, Kyoji Moriya, Yutaka Yatomi, Keisuke Goda	<a href="#">Abstract</a>	Cytometry A. 2023 Feb;103(2):162-167.	<a href="https://doi.org/10.1002/cyto.a.24677">https://doi.org/10.1002/cyto.a.24677</a>	COVID-19; mRNA vaccine; platelet aggregation; thrombosis.
2023	Infectious Disease Research Department	Seroepidemiology of hepatitis A virus infection in Japan: An area of very low endemicity.	Tomoko Kiyohara, Koji Ishii, Masahiro Satake, Keiji Matsubayashi, Ryosuke Suzuki, Ryuichi Sugiyama, Tomimasa Sunagawa, Masamichi Muramatsu	<a href="#">Abstract</a>	Microbiol Immunol. 2023 Jan;67(1):14-21.	<a href="https://doi.org/10.1111/1348-0421.13035">https://doi.org/10.1111/1348-0421.13035</a>	AMPI; Japan; hepatitis A; seroepidemiology; viral infection.
2023	Research and Development Department	P2Y12 Reaction Units and Clinical Outcomes in Acute Large Artery Atherosclerotic Stroke: A Multicenter Prospective Study.	Kazuki Fukuma, Hiroshi Yamagami, Masafumi Ihara, Tomotaka Tanaka, Toshiyuki Miyata, Shigeki Miyata, Koichi Kokame, Kunihiro Nishimura, Yuriko Nakaoku, Haruko Yamamoto, Mikito Hayakawa, Kenji Kamiyama, Yukiko Enomoto, Ryo Itabashi, Eisuke Furui, Yasuhiro Manabe, Masayuki Ezura, Kenichi Todo, Kazuo Hashikawa, Shinichiro Uchiyama, Kazunori Toyoda, Kazuyuki Nagatsuka	<a href="#">Abstract</a>	J Atheroscler Thromb. 2023 Jan 1;30(1):39-55.	<a href="https://doi.org/10.5551/jat.63369">https://doi.org/10.5551/jat.63369</a>	Atherosclerosis; CYP2C19; Clopidogrel; Platelet aggregation.
2023	Research Planning Department	Adverse events caused by cord blood infusion in Japan during a 5-year period	Shiho Hashimoto, Koji Kato, Shunro Kai, Tatsuya Sekimoto, Mutsuko Minemoto, Hiroyuki Ishii, Tetsuo Mori, Fumihiro Azuma, Fumihiko Ishimaru, Takafumi Kimura, Shigeki Miyata, Masahiro Satake, Minoko Takanashi	<a href="#">Abstract</a>	Vox Sanguinis 2023, 118, 84-92	<a href="https://doi.org/10.1111/vox.13379">https://doi.org/10.1111/vox.13379</a>	classification of adverse event; haematopoietic stem cells; infection; umbilical cord blood transplantation
2023	Research and Development Department	スイス連邦の血液製剤製造に関する調査-病原体低減化、プール製剤、自己血清点眼液の製造-	徳倉将人, 秋野光明, 川手華与, 永井正, 中島一格	<a href="#">Abstract</a>	血液事業 2023;45 (4) 707-715	—	pathogenreduction; pooled product; transfusion transmitted infection; autologous serum eye drops
2022	Infectious Disease Research Department	Increasing horizontal transmission of human T-cell leukemia virus type 1 in adolescents and young adults in Japan.	Yasuko Sagara, Hitomi Nakamura, Masahiro Satake, Toshiki Watanabe, Isao Hamaguchi	<a href="#">Abstract</a>	J Clin Virol. 2022 Dec;157:105324.	<a href="https://doi.org/10.1016/j.jcv.2022.105324">https://doi.org/10.1016/j.jcv.2022.105324</a>	Blood donor; HTLV-1; Novel infection; Seroconverter.
2022	Research and Development Department	Alpha-HIT assay: A new assay for heparin-induced thrombocytopenia antibody detection using FcγRIIIa-coated beads and Alpha technology.	Keiko Maruyama, Shigeki Miyata, koichi Kokame	<a href="#">Abstract</a>	Res Pract Thromb Haemost. 2022 Dec 27;6(7):e12818.	<a href="https://doi.org/10.1002/rth2.12818">https://doi.org/10.1002/rth2.12818</a>	heparin; platelet factor 4; platelets; thrombocytopenia.
2022	Research and Development Department	The KANNO blood group system	H Ohto, M Uchikawa, S Ito, I Wada, K E Nollet, Y Omae, K Ogasawara, K Tokunaga	<a href="#">Abstract</a>	Immunohematology, 2022, 38, 119-122	<a href="https://doi.org/10.21307/immunohematology-2022-053">https://doi.org/10.21307/immunohematology-2022-053</a>	—
2022	Research and Development Department	Efficient and error-free correction of sickle mutation in human erythroid cells using prime editor-2.	Anila George, Nithin Sam Ravi, Kirti Prasad, Lokesh Panigrahi, Sanya Koikkara, Vignesh Rajendiran, Nivedhitha Devaraju, Joshua Paul, Aswin Anand Pai, Yukio Nakamura, Ryo Kurita, Poonkuzhali Balasubramanian, Saravanabhavan Thangavel, Srujan Marepally, Shaji R Velayudhan, Alok Srivastava, Kumarasampet M Mohankumar	<a href="#">Abstract</a>	Front Genome Ed. 2022 Dec 20;4:1085111.	<a href="https://doi.org/10.3389/fgeed.2022.1085111">https://doi.org/10.3389/fgeed.2022.1085111</a>	—
2022	Research and Development Department	Deficiency of ribosomal protein S26, which is mutated in a subset of patients with Diamond Blackfan anemia, impairs erythroid differentiation.	Noemy Piantanida, Marta La Vecchia, Marika Sculco, Maria Talmon, Gioele Palattella, Ryo Kurita, Yukio Nakamura, Antonella Ellena Ronchi, Irma Dianzani, Steven R Ellis, Luigia Grazia Fresu, Anna Aspesi	<a href="#">Abstract</a>	Front Genet. 2022 Dec 12;13:1045236.	<a href="https://doi.org/10.3389/fgene.2022.1045236">https://doi.org/10.3389/fgene.2022.1045236</a>	—

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paper's publication year	Department	Theme・Title	Author	Abstract	Journal	DOI	Keyword
2022	Research and Development Department	iPLAT1: the first-in-human clinical trial of iPSC-derived platelets as a phase 1 autologous transfusion study.	Naoshi Sugimoto, Junya Kanda, Sou Nakamura, Toshiyuki Kitano, Masakatsu Hishizawa, Tadakazu Kondo, Shin Shimizu, Akiko Shigemasa, Hideyo Hirai, Yasuyuki Arai, Manabu Minami, Harue Tada, Dai Momose, Ki-Ryang Koh, Masayuki Nogawa, Naohide Watanabe, Shinichiro Okamoto, Makoto Handa, Akira Sawaguchi, Nobuki Matsuyama, Mitsunobu Tanaka, Tomoya Hayashi, Akihiro Fuchizaki, Yoshihiko Tani, Akifumi Takaori-Kondo, Koji Eto	<a href="#">Abstract</a>	Blood 2022, 140, 2398-2402	<a href="https://doi.org/10.1182/blood.2022017296">https://doi.org/10.1182/blood.2022017296</a>	Clonical trials; Induced pluripotent stem cells; Platelet transfusion
2022	Research and Development Department	Production and nonclinical evaluation of an autologous iPSC-derived platelet product for the iPLAT1 clinical trial.	Naoshi Sugimoto, Sou Nakamura, Shin Shimizu, Akiko Shigemasa, Junya Kanda, Nobuki Matsuyama, Mitsunobu Tanaka, Tomoya Hayashi, Akihiro Fuchizaki, Masayuki Nogawa, Naohide Watanabe, Shinichiro Okamoto, Makoto Handa, Akira Sawaguchi, Dai Momose, Ki-Ryang Koh, Yoshihiko Tani, Akifumi Takaori-Kondo, Koji Eto	<a href="#">Abstract</a>	Blood Adv 2022, 6, 6056-6069	<a href="https://doi.org/10.1182/bloodadvances.2022008512">https://doi.org/10.1182/bloodadvances.2022008512</a>	Clonical trials; Animal models; Induced pluripotent stem cells; Platelet transfusion
2022	Infectious Disease Research Department	Calibrating Hepatitis E Virus Serological Assays Using Asymptomatic Specimens Obtained in Japan.	Kazutaka Terahara, Tian-Cheng Li, Keiji Matsubayashi, Hidekatsu Sakata, Takanobu Kato, Atsushi Naganuma, Koji Ogawa, Koichi Honda, Jun Itakura, Noriyuki Akutsu, Hiroshi Tobita, Masaaki Korenaga, Tatsuya Kanto, Ryuichi Sugiyama, Ryosuke Suzuki, Isao Hamaguchi, Masanori Isogawa, Yoshimasa Takahashi	<a href="#">Abstract</a>	Microbiol Spectr. 2022 Oct 26;10(5):e0214622.	<a href="https://doi.org/10.1128/spectrum.02146-22">https://doi.org/10.1128/spectrum.02146-22</a>	ELISA; HEV; IgA; IgM; immunoserology.
2022	Research and Development Department	Association of Trauma Severity with Antibody Seroconversion in Heparin-induced Thrombocytopenia: A Multicenter, Prospective Observational Study.	Motoo Fujita, Takuma Maeda, Shigeki Miyata, Asumi Mizugaki, Mineji Hayakawa, Noriko Miyagawa, Noritaka Ushio, Atsushi Shiraishi, Takayuki Ogura, Shiho Irino, Kazuhiko Sekine, Yoshihisa Fujinami, Kazutaka Kiridume, Toru Hifumi, Shigeki Kushimoto	<a href="#">Abstract</a>	J Trauma Acute Care Surg. 2022 Sep 1;93(3):402-408.	<a href="https://doi.org/10.1097/TA.0000000000003603">https://doi.org/10.1097/TA.0000000000003603</a>	—
2022	Research and Development Department	Genetic background of anti-Xg <sup>a</sup> producers in Japanese blood donors	Naoko Watanabe-Okochi, Makoto Uchikawa, Hatsue Tsuneyama, Kenichi Ogasawara, Risako Shiraishi, Atsuko Masuno, Takayuki Onodera, Nelson-Hirokazu Tsuno, Kazuo Muroi	<a href="#">Abstract</a>	Vox Sanguinis 2022, 117, 1235–1239	<a href="https://doi.org/10.1111/vox.13342">https://doi.org/10.1111/vox.13342</a>	anti-Xga; esv2662319; rs311103; XG deficient
2022	Research and Development Department	免疫学的機序による血小板輸血不応	高橋大輔	<a href="#">Abstract</a>	臨床検査 2022,66: 1068-1074,	<a href="https://doi.org/10.11477/mf.1542203100">https://doi.org/10.11477/mf.1542203100</a>	血小板輸血不応; HLA抗体; Luminex; 蛍光ビーズ法; 蛍光強度
2022	Research and Development Department	Hemostatic function of cold-stored platelets in a thrombocytopenic rabbit bleeding model.	Masayuki Nogawa, Naohide Watanabe, Toshiyasu Koike, Kanae Fukuda, Mariko Ishiguro, Hitomi Fujino, Junichi Hirayama, Masayuki Shiba, Makoto Handa, Takehiko Mori, Shinichiro Okamoto, Shigeki Miyata, Masahiro Satake	<a href="#">Abstract</a>	Transfusion 2022, 62, 2304-2313	<a href="https://doi.org/10.1111/trf.17128">https://doi.org/10.1111/trf.17128</a>	Animal models; Cold stored platelet; Platelet transfusion; Hemostasis
2022	Research and Development Department	骨髓濃縮により同種骨髓移植を施行し得た抗IgA抗体を有するIgA非欠損例	新山侑生, 澤山靖, 藤岡真知子, 加藤文晴, 糸永英弘, 佐藤信也, 安東恒史, 今泉芳孝, 新野大介, 木下克美, 渡辺嘉久, 長井一浩, 宮崎泰司	<a href="#">Abstract</a>	日本輸血細胞治療学会誌 2022年68巻4号 p. 491-495	<a href="https://doi.org/10.3925/jjtc.68.491">https://doi.org/10.3925/jjtc.68.491</a>	抗IgA抗体; IgA非欠損; 非血縁者間同種造血幹細胞移植; 骨髓濃縮; 洗浄血液製剤
2021	Research and Development Department	Frequencies of glycoprotein variants and alloantibodies against HIL and MINY antigens in Japanese	Sayaka Kaito, Yumi Suzuki, Atsuko Masuno, Kazumi Isa, Chizu Toyoda, Takayuki Onodera, Kenichi Ogasawara, Makoto Uchikawa, Nelson-Hirokazu Tsuno, Masahiro Satake	<a href="#">Abstract</a>	Vox Sanguinis 2022, 117, 94–98	<a href="https://doi.org/10.1111/vox.13121">https://doi.org/10.1111/vox.13121</a>	glycophorin gene; glycophorin variant; Miltenberger phenotype; MNS blood group
2022	Infectious Disease Research Department	A Multi-Center, Open-Label, Randomized Controlled Trial to Evaluate the Efficacy of Convalescent Plasma Therapy for Coronavirus Disease 2019: A Trial Protocol (COVIPLA-RCT).	Noriko Tomita, Sho Saito, Junko Terada-Hirashima, Ayako Mikami, Yukari Uemura, Satoshi Kutsuna, Hidetoshi Nomoto, Kyoko Fujisawa, Maki Nagashima, Mari Terada, Shinobu Ashida, Shinichiro Morioka, Masahiro Satake, Akira Hangaishi, Tomiteru Togano, Katsuyuki Shiratori, Yuki Takamatsu, Kenji Maeda, Norio Ohmagari, Wataru Sugiura, Hiroaki Mitsuya	<a href="#">Abstract</a>	Life (Basel). 2022 Jun 8;12(6):856.	<a href="https://doi.org/10.3390/life12060856">https://doi.org/10.3390/life12060856</a>	COVID-19; SARS-CoV-2; coronavirus disease 2019; plasma therapy; viral load.
2022	Research and Development Department	A novel swab storage gel is superior to dry swab DNA collection, and enables long-range high resolution next generation sequencing HLA typing from buccal cell samples.	Marie Shimizu, Daisuke Takahashi, Shingo Suzuki, Atsuko Shigenari, Sayaka Ito, Shigeki Miyata, Masahiro Satake, Mika Matsuhashi, Jerzy K Kulski, Makoto Murata, Fumihiko Azuma, Takashi Shiina	<a href="#">Abstract</a>	HLA. 2022. Jun;99(6):590-606.	<a href="https://doi.org/10.1111/tan.14611">https://doi.org/10.1111/tan.14611</a>	DNA quality; HLA DNA typing; HLA; long-range PCR; next generation sequencing—NGS
2022	Infectious Disease Research Department	No evidence of bovine leukemia virus proviral DNA and antibodies in human specimens from Japan.	Meripet Polat Yamanaka, Susumu Saito, Yukiko Hara, Ryosuke Matsuura, Shin-Nosuke Takeshima, Kazuyoshi Hosomichi, Yasunobu Matsumoto, Rika A Furuta, Masami Takei, Yoko Aida	<a href="#">Abstract</a>	Retrovirology. 2022 May 18;19(1):7.	<a href="https://doi.org/10.1186/s12977-022-00592-6">https://doi.org/10.1186/s12977-022-00592-6</a>	Bovine leukemia virus (BLV); Japanese human blood; Japanese breast cancers; Japanese human sera; PCR; Antibody detection
2022	Research and Development Department	International Forum on the Management of Major Haemorrhage: Summary.	Laura Green, Simon Stanworth, Zoe McQuilten, Victor Lin, Harriet Tucker, Bryon Jackson, Maha Badawi, Salwa Hindawi, Rahul Chaurasia, Gopal Patidar, Hem Chandra Pandey, Foluke Fasola, Shigeki Miyata, Masanori Matsumoto, Tadashi Matsushita, Naomi Rahimi-Levene, Victoria Peer, Katerina Pavenski, Jeannie Callum, Troy Thompson, Michael Murphy, Julie Staves, Marc Maegele, Chathuri Abeyakoon, Kylie Rushford, Erica Wood, Maria Antonieta Nuñez, Sandra Mellado, Edgardo Saa, Teguh Triyono, Bhirowo Pratomo, Torunn Oveland Apelsest, Nancy Dunbar	<a href="#">Abstract</a>	Vox Sang. 2022 May;117(5):746-753.	<a href="https://doi.org/10.1111/vox.13244">https://doi.org/10.1111/vox.13244</a>	—

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paper's publication year	Department	Theme・Title	Author	Abstract	Journal	DOI	Keyword
2022	Research and Development Department	International Forum on the Management of Major Haemorrhage: Responses.	Laura Green, Simon Stanworth, Zoe McQuilten, Victor Lin, Harriet Tucker, Bryon Jackson, Maha Badawi, Salwa Hindawi, Rahul Chaurasia, Gopal Patidar, Hem Chandra Pandey, Foluke Fasola, Shigeki Miyata, Masanori Matsumoto, Tadashi Matsushita, Naomi Rahimi-Levene, Victoria Peer, Katerina Pavenski, Jeannie Callum, Troy Thompson, Michael Murphy, Julie Staves, Marc Maegle, Chathuri Abeyakoon, Kylie Rushford, Erica Wood, Maria Antonieta Nuñez, Sandra Mellado, Edgardo Saa, Teguh Triyono, Bhirowo Pratomo, Torunn Oveland Apelseith, Nancy Dunbar	<a href="#">Abstract</a>	Vox Sang. 2022 May;117(5):E58-E74.	<a href="https://doi.org/10.1111/vox.13243">https://doi.org/10.1111/vox.13243</a>	—
2022	Research and Development Department	Decoding the pathogenesis of Diamond-Blackfan anemia using single-cell RNA-seq.	Bingrui Wang, Chenchen Wang, Yang Wan, Jie Gao, Yige Ma, Yingnan Zhang, Jingyuan Tong, Yingchi Zhang, Jinhua Liu, Lixian Chang, Changlu Xu, Biao Shen, Yumei Chen, Erle Jiang, Ryo Kurita, Yukio Nakamura, Kim-Chew Lim, James Douglas Engel, Jiaxi Zhou, Tao Cheng, Xiaofan Zhu, Ping Zhu, Lihong Shi	<a href="#">Abstract</a>	Cell Discov. 2022 May 10;8(1):41.	<a href="https://doi.org/10.1038/s41421-022-00389-z">https://doi.org/10.1038/s41421-022-00389-z</a>	—
2022	Research and Development Department	HMGB1-mediated restriction of EPO signaling contributes to anemia of inflammation.	Brian M Dulmovits, Yuefeng Tang, Julien Papoin, Mingzhu He, Jianhua Li, Huan Yang, Meghan E Addorisio, Lauren Kennedy, Mushran Khan, Elena Brindley, Ryan J Ashley, Cheryl Ackert-Bicknell, John Hale, Ryo Kurita, Yukio Nakamura, Betty Diamond, Betsy J Barnes, Olivier Hermine, Patrick G Gallagher, Laurie A Steiner, Jeffrey M Lipton, Naomi Taylor, Narla Mohandas, Ulf Andersson, Yousef Al-Abed, Kevin J Tracey, Lionel Blanc	<a href="#">Abstract</a>	Blood. 2022 May 26;139(21):3181-3193.	<a href="https://doi.org/10.1182/blood.2021012048">https://doi.org/10.1182/blood.2021012048</a>	—
2022	Infectious Disease Research Department	Association of Staphylococcus aureus in platelet concentrates with skin diseases in blood donors: Limitations of cultural bacterial screening.	Mami Matsumoto, Moe Kozakai, Rika A Furuta, Keiji Matsubayashi, Masahiro Satake	<a href="#">Abstract</a>	Transfusion. 2022 Mar;62(3):621-632.	<a href="https://doi.org/10.1111/trf.16804">https://doi.org/10.1111/trf.16804</a>	atopic dermatitis; automated blood culture; platelet concentrates; screening; transfusion-transmitted bacterial infection.
2022	Research and Development Department	CRISPR/Cas9-based multiplex genome editing of BCL11A and HBG efficiently induces fetal hemoglobin expression.	Yuanyuan Han, Xiaoyu Tan, Tingting Jin, Siqi Zhao, Li Hu, Wei Zhang, Ryo Kurita, Yukio Nakamura, Juan Liu, Di Li, Zhaojun Zhang, Xiangdong Fang, Shengwen Huang	<a href="#">Abstract</a>	Eur J Pharmacol. 2022 Mar 5;918:174788.	<a href="https://doi.org/10.1016/j.ejphar.2022.174788">https://doi.org/10.1016/j.ejphar.2022.174788</a>	—
2022	Infectious Disease Research Department	Performance Evaluation of <i>In Vitro</i> Screening and Diagnostic Kits for Hepatitis C Virus Infection.	Asako Murayama, Haruka Momose, Norie Yamada, Keiji Matsubayashi, Masamichi Muramatsu, Isao Hamaguchi, Takanobu Kato	<a href="#">Abstract</a>	Front Cell Infect Microbiol. 2022 Feb 3;11:793472.	<a href="https://doi.org/10.3389/fcimb.2021.793472">https://doi.org/10.3389/fcimb.2021.793472</a>	HCV; RNA; antibody; antigen; diagnostics.
2022	Infectious Disease Research Department	Broadly Reactive Real-Time RT-PCR Assay for the Detection of Hepatitis E Virus and Simultaneous Genotyping by Single Nucleotide Polymorphism Analysis.	Setsuko Ishida, Shima Yoshizumi, Hidekatsu Sakata, Keiji Matsubayashi	<a href="#">Abstract</a>	Microbiol Spectr. 2022 Feb 23;10(1):e0191221.	<a href="https://doi.org/10.1128/spectrum.01912-21">https://doi.org/10.1128/spectrum.01912-21</a>	HEV; genotype; hepatitis; hepatitis E virus.
2022	Research and Development Department	Identification of novel HPFH-like mutations by CRISPR base editing that elevate the expression of fetal hemoglobin.	Nithin Sam Ravi, Beeke Wiernert, Stacia K Wyman, Henry William Bell, Anila George, Gokulnath Mahalingam, Jonathan T Vu, Kirti Prasad, Bhanu Prasad Bandlamudi, Nivedhitha Devaraju, Vignesh Rajendiran, Nazar Syedbasha, Aswin Anand Pai, Yukio Nakamura, Ryo Kurita, Muthuraman Narayanasamy, Poonkuzhali Balasubramanian, Saravanabhavan Thangavel, Srujan Marepally, Shaji R Velayudhan, Alok Srivastava, Mark A DeWitt, Merlin Crossley, Jacob E Corn, Kumarasampet M Mohankumar	<a href="#">Abstract</a>	Elife. 2022 Feb 11;11:e65421.	<a href="https://doi.org/10.7554/eLife.65421">https://doi.org/10.7554/eLife.65421</a>	—
2022	Research and Development Department	Establishment of an immortalized human erythroid cell line sustaining differentiation potential without inducible gene expression system.	Svetlana Soboleva, Ryo Kurita, Naoko Kajitani, Hugo Akerstrand, Kenichi Miharada	<a href="#">Abstract</a>	Hum Cell. 2022 Jan;35(1):408-417.	<a href="https://doi.org/10.1007/s13577-021-00652-7">https://doi.org/10.1007/s13577-021-00652-7</a>	—
2022	Research and Development Department	CRISPR Editing Enables Consequential Tag-Activated MicroRNA-Mediated Endogene Deactivation.	Panayiota L Pappasavva, Petros Patsali, Constantinos C Loucari, Ryo Kurita, Yukio Nakamura, Marina Kleanthous, Carsten W Lederer	<a href="#">Abstract</a>	Int J Mol Sci. 2022 Jan 19;23(3):1082.	<a href="https://doi.org/10.3390/ijms23031082">https://doi.org/10.3390/ijms23031082</a>	—
2021	Infectious Disease Research Department	Nucleotide Sequence of HIV-1-Positive Specimen Reference Panel for Evaluation of HIV In Vitro Diagnostics in Japan.	Shigeru Kusagawa, Masashi Tatsumi, Yuko Sakamoto-Umeki, Naho Takekawa, Keiji Matsubayashi, Ken Ishimaru, Ai Kawana-Tachikawa	<a href="#">Abstract</a>	AIDS Res Hum Retroviruses. 2021 Dec;37(12):994-997.	<a href="https://doi.org/10.1089/aid.2021.0160">https://doi.org/10.1089/aid.2021.0160</a>	CRF; HIV-1 reference panel; IVD evaluation; URF; subtype.
2021	Infectious Disease Research Department	Trends in hepatitis E virus infection: Analyses of the long-term screening of blood donors in Hokkaido, Japan, 2005-2019.	Hidekatsu Sakata, Keiji Matsubayashi, Juri Iida, Kenta Nakauchi, Shinichi Kishimoto, Shinichiro Sato, Katsuya Ikuta, Masahiro Satake, Shuichi Kino	<a href="#">Abstract</a>	Transfusion. 2021 Dec;61(12):3390-3401.	<a href="https://doi.org/10.1111/trf.16700">https://doi.org/10.1111/trf.16700</a>	blood donor; genotype; hepatitis E virus; nucleic acid amplification test; transfusion-transmitted hepatitis E.
2021	Infectious Disease Research Department	Improvement of the understanding of blood donors with human T-cell leukaemia virus type 1 using a new information booklet.	Hitomi Nakamura, Yasuko Sagara, Midori Yamamoto, Atee Utsunomiya, Toshiki Watanabe, Masahiro Satake, Kazuo Irita	<a href="#">Abstract</a>	Transfus Med. 2021 Dec;31(6):481-487.	<a href="https://doi.org/10.1111/tme.12821">https://doi.org/10.1111/tme.12821</a>	HTLV-1; blood donors; blood safety; education; information booklet; notification.

# Research Achievements and Results / 成果・業績

paper's publication year	Department	Theme・Title	Author	Abstract	Journal	DOI	Keyword
2021	Research and Development Department	Massive image-based single-cell profiling reveals high levels of circulating platelet aggregates in patients with COVID-19.	Masako Nishikawa, Hiroshi Kanno, Yuqi Zhou, Ting-Hui Xiao, Takuma Suzuki, Yuma Ibayashi, Jeffrey Harmon, Shigekazu Takizawa, Kotaro Hiramatsu, Nao Nitta, Risako Kameyama, Walker Peterson, Jun Takiguchi, Mohammad Shifat-E-Rabbi, Yan Zhuang, Xuwang Yin, Abu Hasnat Mohammad Rubaiyat, Yunjie Deng, Hongqian Zhang, Shigeki Miyata, Gustavo K Rohde, Wataru Iwasaki, Yutaka Yatomi, Keisuke Goda	<a href="#">Abstract</a>	Nat Commun. 2021 Dec 9;12(1):7135.	<a href="https://doi.org/10.1038/s41467-021-27378-2">https://doi.org/10.1038/s41467-021-27378-2</a>	—
2021	Infectious Disease Research Department	Combination of a SARS-CoV-2 IgG Assay and RT-PCR for Improved COVID-19 Diagnosis.	Kotaro Aoki, Kunitomo Takai, Tatsuya Nagasawa, Katsuhito Kashiwagi, Nobuaki Mori, Keiji Matsubayashi, Masahiro Satake, Ippei Tanaka, Nanae Kodama, Takahiro Shimodaira, Yoshikazu Ishii, Taito Miyazaki, Toshiaki Ishii, Toshiyuki Morita, Toru Yoshimura, Kazuhiro Tateda	<a href="#">Abstract</a>	Ann Lab Med. 2021 Nov 1;41(6):568-576.	<a href="https://doi.org/10.3343/alm.2021.41.6.568">https://doi.org/10.3343/alm.2021.41.6.568</a>	ARCHITECT; COVID-19; Immunoassay; Reverse transcription (RT)-PCR; SARS-CoV-2 IgG; Sensitivity; Specificity.
2021	Research and Development Department	SEC23A rescues SEC23B-deficient congenital dyserythropoietic anemia type II	Richard King, Zesen Lin, Ginette Balbin-Cuesta, Gregg Myers, Ann Friedman, Guojing Zhu, Beth McGee, Thomas L Saunders, Ryo Kurita, Yukio Nakamura, James Douglas Engel, Pavan Reddy, Rami Khoriaty	<a href="#">Abstract</a>	Sci Adv. 2021 Nov 26;7(48):eabj5293.	<a href="https://doi.org/10.1126/sciadv.abj5293">https://doi.org/10.1126/sciadv.abj5293</a>	—
2021	Research and Development Department	細菌スクリーニングを考慮した長期保存血小板製剤の品質評価-成分採血装置TrimaAccel由来高単位分割調製用血小板原料からの調製製剤を用いた検討-	小池敏晴, 福田香苗, 徳倉将人, 遠藤希美加, 岩間輝, 佐藤英哉, 平力造, 平山順一, 五十嵐滋, 宮田茂樹, 佐竹正博	<a href="#">Abstract</a>	血液事業 2021; 44: 435-440	—	platelet concentrates; bacterial screening; Trima accel
2021	Infectious Disease Research Department	E型肝炎ウイルスの遺伝子型3および4型株迅速鑑別のためのマルチプレックスreal-time RT-PCR法における検出試薬の比較検討	小林悠, 飯田樹里, 坂田秀勝, 松林圭二, 佐藤進一郎, 生田克哉, 紀野修一	<a href="#">Abstract</a>	医学検査 2021;70(4):740-747	<a href="https://doi.org/10.14932/jamt.21-40">https://doi.org/10.14932/jamt.21-40</a>	E型肝炎ウイルス; 遺伝子型; マルチプレックスreal-time RT-PCR; PCR効率; 検出感度
2021	Infectious Disease Research Department	Epidemiology of viral hepatitis C: Road to elimination in Japan	Ko Ko, Tomoyuki Akita, Masahiro Satake, Junko Tanaka	<a href="#">Abstract</a>	Glob Health Med. 2021; 3: 262-269.	<a href="https://doi.org/10.35772/ghm.2021.01069">https://doi.org/10.35772/ghm.2021.01069</a>	Japan; countermeasure; disease burden; elimination.
2021	Research and Development Department	GP.MOT: A novel glycoprotein variant identified in a Japanese blood donor	Akira Oda, Yumi Suzuki, Kazumi Isa, Kenichi Ogasawara, Ryuichi Yabe, Takafumi Kimura, Makoto Uchikawa, Nelson Hirokazu Tsuno	<a href="#">Abstract</a>	Transfusion 2021, 61, 2825–2829	<a href="https://doi.org/10.1111/trf.16535">https://doi.org/10.1111/trf.16535</a>	glycophorin A (GPA); glycoprotein B (GPB); glycoprotein variant; MNS blood groups
2021	Research and Development Department	新生児・小児輸血用の分割血小板製剤の品質—小容量バッグ内のエアが血小板の品質に及ぼす影響-	金子祐次, 平山順一, 柴雅之, 宮田茂樹, 佐竹正博	<a href="#">Abstract</a>	血液事業 2021; 44: 31-40	—	platelet concentrates; small-volume container; air bubbles; platelet aggregates
2021	Infectious Disease Research Department	Prolonged incubation period of hepatitis B in a recipient of a nucleic acid amplification test-negative hepatitis B virus window donation.	Takahiro Matsuno, Hideaki Matsuura, Sumie Fujii, Ami Tanaka, Masahiro Satake, Tomohiro Kinoshita, Akihiro Tomita, Yusuke Matsui, Yukari Sugiura, Yasuo Miura	<a href="#">Abstract</a>	Transfusion. 2021 Sep;61(9):2782-2787.	<a href="https://doi.org/10.1111/trf.16557">https://doi.org/10.1111/trf.16557</a>	hepatitis B virus; incubation period; transfusion-transmitted infection.
2021	Research and Development Department	Influence of Renal Impairment and Genetic Subtypes on Warfarin Control in Japanese Patients.	Tomotaka Tanaka, Masafumi Ihara, Kazuki Fukuma, Haruko Yamamoto, Kazuo Washida, Shunsuke Kimura, Akiko Kada, Shigeki Miyata, Toshiyuki Miyata, Kazuyuki Nagatsuka	<a href="#">Abstract</a>	Genes (Basel). 2021 Sep 28;12(10):1537.	<a href="https://doi.org/10.3390/genes12101537">https://doi.org/10.3390/genes12101537</a>	—
2021	Research and Development Department	A practical and effective strategy in East Asia to prevent anti-D alloimmunization in patients by C/c phenotyping of serologic RhD-negative blood donors	Shoichi Ito, Hitoshi Ohto, Yoshiko Ogiyama, Michiyo Irino, Susumu Omokawa, Itaru Shibasaki, Kenichi Ogasawara, Makoto Uchikawa, Kenneth E Nollet, Willy A Flegel	<a href="#">Abstract</a>	EJHaem. 2021, 2(4), 750–756	<a href="https://doi.org/10.1002/jha2.292">https://doi.org/10.1002/jha2.292</a>	alloimmunization; anti-D; DEL; red cell transfusion; RhD-negative
2021	Research and Development Department	Transcriptional silencing of fetal hemoglobin expression by NonO.	Xinyu Li, Mengxia Chen, Biru Liu, Peifen Lu, Xiang Lv, Xiang Zhao, Shuaiying Cui, Peipei Xu, Yukio Nakamura, Ryo Kurita, Bing Chen, David C S Huang, De-Pei Liu, Ming Liu, Quan Zhao	<a href="#">Abstract</a>	Nucleic Acids Res. 2021 Sep 27;49(17):9711-9723.	<a href="https://doi.org/10.1093/nar/gkab671">https://doi.org/10.1093/nar/gkab671</a>	—
2021	Research and Development Department	3'HS1 CTCF binding site in human $\beta$ -globin locus regulates fetal hemoglobin expression.	Pamela Himadewi, Xue Qing David Wang, Fan Feng, Haley Gore, Yushuai Liu, Lei Yu, Ryo Kurita, Yukio Nakamura, Gerd P Pfeifer, Jie Liu, Xiaotian Zhang	<a href="#">Abstract</a>	Elife. 2021 Sep 29;10:e70557.	<a href="https://doi.org/10.7554/eLife.70557">https://doi.org/10.7554/eLife.70557</a>	—
2021	Research and Development Department	Establishment of a novel cell-based assay using HLA-transfected cells to detect HLA antibodies.	Manabu Nakano, Daisuke Takahashi, Toru Miyazaki, Shinichiro Sato, Katsuya Ikuta, Hisami Ikeda, Shuichi Kino	<a href="#">Abstract</a>	J Immunol Methods. 2021 Aug;495:113074	<a href="https://doi.org/10.1016/j.jim.2021.113074">https://doi.org/10.1016/j.jim.2021.113074</a>	—

**Research Achievements and Results / 成果・業績**

paper's publication year	Department	Theme・Title	Author	Abstract	Journal	DOI	Keyword
2021	Infectious Disease Research Department	How we secured a COVID-19 convalescent plasma procurement scheme in Japan.	Mari Terada, Satoshi Kutsuna, Tomiteru Togano, Sho Saito, Noriko Kinoshita, Yumiko Shimanishi, Tetsuya Suzuki, Yusuke Miyazato, Makoto Inada, Takahito Nakamoto, Hidetoshi Nomoto, Satoshi Ide, Mitsuhiro Sato, Kenji Maeda, Akihiro Matsunaga, Masahiro Satake, Keiji Matsubayashi, Hirokazu Tsuno, Makiko Kojima, Madoka Kuramistu, Kenta Tezuka, Emi Ikebe, Kazu Okuma, Isao Hamaguchi, Katsuyuki Shiratori, Motohiko Sato, Yuiko Kawakami, Kumi Inaba, Saori Igarashi, Reina Yamauchi, Mina Matsumura, Keiko Ishimaru, Bijuan Zhang, Chika Kuge, Maiko Ishihara, Miho Gouda, Keiko Tanaka, Yukihito Ishizaka, Norio Ohmagari	<a href="#">Abstract</a>	Transfusion. 2021 Jul;61(7):1998-2007.	<a href="https://doi.org/10.1111/trf.16541">https://doi.org/10.1111/trf.16541</a>	COVID-19; SARS-CoV-2; antibody; blood donation; convalescent plasma; plasmapheresis.
2021	Infectious Disease Research Department	Estimation of the window period of human T-cell leukemia virus type 1 and 2 tests by a lookback study of seroconverters among Japanese voluntary blood donors.	Yasuko Sagara, Hitomi Nakamura, Midori Yamamoto, Toshinobu Ezaki, Tomohide Koga, Masuhiro Shimamura, Masahiro Satake, Kazuo Irita	<a href="#">Abstract</a>	Transfusion. 2021 Jul;61(7):1998-2007.	<a href="https://doi.org/10.1111/trf.16213">https://doi.org/10.1111/trf.16213</a>	HTLV-1/2 tests; blood donors; seroconverter; window period.
2021	Infectious Disease Research Department	個別核酸増幅検査スクリーニングにおいて検査不能であった献血者検体2事例の解析	平塚結大, 中内健太, 坂田秀勝, 岸本信一, 松林圭二, 佐藤進一郎, 生田克哉, 紀野修一	<a href="#">Abstract</a>	日本輸血細胞治療学会誌 2021; 67(3):425-431	<a href="https://doi.org/10.3925/jjtc.67.425">https://doi.org/10.3925/jjtc.67.425</a>	M蛋白; 核酸増幅検査 (NAT); 生化学検査; 凝集物
2021	Infectious Disease Research Department	血小板製剤の細菌検査におけるBacT/ALERT VIRTUOの評価	松本真実, 池田洋平, 蕎麦田理英子, 古田里佳, 松林圭二, 佐竹正博	<a href="#">Abstract</a>	日本輸血細胞治療学会誌 2021; 67(3):432-439.	<a href="https://doi.org/10.3925/jjtc.67.432">https://doi.org/10.3925/jjtc.67.432</a>	細菌スクリーニング検査; BacT/ALERT VIRTUO; 輸血後細菌感染
2021	Infectious Disease Research Department	Evaluation of Geenius HIV-1/2 Confirmatory Assay for the confirmatory and differential diagnosis of HIV-1/HIV-2 in Japan and reliability of the Geenius Reader in the diagnosis of HIV-2.	Shigeru Kusagawa, Ai Kawana-Tachikawa, Keiji Matsubayashi, Yuji Hoshi, Ken Ishimaru, Isao Hamaguchi	<a href="#">Abstract</a>	BMC Infect Dis. 2021 Jun 14;21(1):569.	<a href="https://doi.org/10.1186/s12879-021-06291-5">https://doi.org/10.1186/s12879-021-06291-5</a>	Cross-reactivity; HIV confirmatory test; HIV-1/HIV-2 differentiation test; Sensitivity.
2021	Infectious Disease Research Department	Novel neutralizing human monoclonal antibodies against tetanus neurotoxin.	Takeharu Minamitani, Karin Kiyose, Ryota Otsubo, Toshihiro Ito, Hiroki Akiba, Rika A Furuta, Tsuyoshi Inoue, Kouhei Tsumoto, Masahiro Satake, Teruhito Yasui	<a href="#">Abstract</a>	Sci Rep. 2021 Jun 9;11(1):12134.	<a href="https://doi.org/10.1038/s41598-021-91597-2">https://doi.org/10.1038/s41598-021-91597-2</a>	—
2021	Research and Development Department	Reproducible immortalization of erythroblasts from multiple stem cell sources provides approach for sustainable RBC therapeutics.	Deborah E Daniels, Daniel C J Ferguson, Rebecca E Griffiths, Kongtana Trakamsanga, Nicola Cogan, Katherine A MacInnes, Kathryn E Mordue, Tatyana Andrienko, Ivan Ferrer-Vicens, Daniel Ramos Jimenez, Phillip A Lewis, Marieangela C Wilson, Maurice A Canham, Ryo Kurita, Yukio Nakamura, David J Anstee, Jan Frayne	<a href="#">Abstract</a>	Mol Ther Methods Clin Dev. 2021 Jun 12;22:26-39.	<a href="https://doi.org/10.1016/j.omtm.2021.06.002">https://doi.org/10.1016/j.omtm.2021.06.002</a>	—
2021	Research and Development Department	Identification of potential chemical compounds enhancing generation of enucleated cells from immortalized human erythroid cell lines.	Svetlana Soboleva, Ryo Kurita, Fredrik Ek, Hugo Akerstrand, Rita Silverio-Alves, Roger Olsson, Yukio Nakamura, Kenichi Miharada	<a href="#">Abstract</a>	Commun Biol. 2021 Jun 3;4(1):677.	<a href="https://doi.org/10.1038/s42003-021-02202-1">https://doi.org/10.1038/s42003-021-02202-1</a>	—
2021	Research and Development Department	GATA zinc finger domain-containing protein 2A (GATAD2A) deficiency reactivates fetal haemoglobin in patients with $\beta$ -thalassaemia through impaired formation of methyl-binding domain protein 2 (MBD2)-containing nucleosome remodelling and deacetylation (NuRD) complex	Yunhao Liang, Xinhua Zhang, Yongqiong Liu, Liren Wang, Yuhua Ye, Xuemei Tan, Jiajie Pu, Qianqian Zhang, Xiuqin Bao, Xiaofeng Wei, Dongzhi Li, Ryo Kurita, Yukio Nakamura, Dali Li, Xiangmin Xu	<a href="#">Abstract</a>	British Journal of Haematology, 2021 Jun;193(6):1220-1227.	<a href="https://doi.org/10.1111/bjh.17511">https://doi.org/10.1111/bjh.17511</a>	—
2021	Infectious Disease Research Department	UV light-emitting diode (UV-LED) at 265 nm as a potential light source for disinfecting human platelet concentrates.	Tomoya Hayashi, Kumiko Oguma, Yoshihiro Fujimura, Rika A Furuta, Mitsunobu Tanaka, Mikako Masaki, Yasuhito Shinbata, Takafumi Kimura, Yoshihiko Tani, Fumiya Hirayama, Yoshihiro Takihara, Koki Takahashi	<a href="#">Abstract</a>	PLoS One. 2021 May 20;16(5):e0251650.	<a href="https://doi.org/10.1371/journal.pone.0251650">https://doi.org/10.1371/journal.pone.0251650</a>	—
2021	Research and Development Department	Long noncoding RNA HBBP1 enhances $\gamma$ -globin expression through the ETS transcription factor ELK1.	Shuang-Ping Ma, Hai-Rui Xi, Xu-Xia Gao, Jing-Min Yang, Ryo Kurita, Yukio Nakamura, Xian-Min Song, Hong-Yan Chen, Da-Ru Lu	<a href="#">Abstract</a>	Biochem Biophys Res Commun. 2021 May 7;552:157-163.	<a href="https://doi.org/10.1016/j.bbrc.2021.03.051">https://doi.org/10.1016/j.bbrc.2021.03.051</a>	—
2021	Research and Development Department	Molecular analysis of the erythroid phenotype of a patient with BCL11A haploinsufficiency.	Marja W Wessels, Marjon H Cnossen, Tamar B van Dijk, Nynke Gillemans, K L Juliette Schmidt, Kirsten van Lom, Divya S Vinjamur, Steven Coyne, Ryo Kurita, Yukio Nakamura, Stella A de Man, Rolph Pfundt, Zakia Azmani, Rutger W W Brouwer, Daniel E Bauer, Mirjam C G N van den Hout, Wilfred F J van IJcken, Sjaak Philipsen	<a href="#">Abstract</a>	Blood Adv. 2021 May 11;5(9):2339-2349.	<a href="https://doi.org/10.1182/bloodadvances.2020003753">https://doi.org/10.1182/bloodadvances.2020003753</a>	—
2021	Research and Development Department	Identification of characteristic proteins at late-stage erythroid differentiation in vitro	Koji Funato, Takaaki Abe, Ryo Kurita, Yoshihisa Watanabe, Yukio Nakamura, Shigeki Miyata, Yusuke Furukawa, Masahiro Satake	<a href="#">Abstract</a>	Hum Cell. 2021 May;34(3):745-749.	<a href="https://doi.org/10.1007/s13577-021-00503-5">https://doi.org/10.1007/s13577-021-00503-5</a>	—

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paper's publication year	Department	Theme・Title	Author	Abstract	Journal	DOI	Keyword
2021	Research and Development Department	Epigenetic inactivation of ERF reactivates $\gamma$ -globin expression in $\beta$ -thalassemia	Xiuqin Bao, Xinhua Zhang, Liren Wang, Zhongju Wang, Jin Huang, Qianqian Zhang, Yuhua Ye, Yongqiong Liu, Diyu Chen, Yangjin Zuo, Qifa Liu, Peng Xu, Binbin Huang, Jianpei Fang, Jinquan Lao, Xiaoqin Feng, Yafeng Li, Ryo Kurita, Yukio Nakamura, Weiwei Yu, Cunxiang Ju, Chunbo Huang, Naria Mohandas, Dali Li, Cunyou Zhao, Xiangmin Xu	<a href="#">Abstract</a>	Am J Hum Genet. 2021 Apr 1;108(4):709-721.	<a href="https://doi.org/10.1016/j.ajhg.2021.03.005">https://doi.org/10.1016/j.ajhg.2021.03.005</a>	—
2021	Infectious Disease Research Department	献血者における化学発光免疫測定法を用いた新ヒトパルボウイルスB19抗原スクリーニングの遺伝子型検出に関する性能評価	岸本信一, 小林悠, 坂田秀勝, 松林圭二, 佐藤進一郎, 生田克哉, 紀野修一	<a href="#">Abstract</a>	日本輸血細胞治療学会誌 2021; 67(1):21-26	<a href="https://doi.org/10.3925/jjtc.67.21">https://doi.org/10.3925/jjtc.67.21</a>	ヒトパルボウイルスB19; 遺伝子型; 化学発光免疫測定法; real-time PCR
2021	Infectious Disease Research Department	Establishment of transfusion-relevant bacteria reference strains for red blood cells.	Marcel Prax, Eva Spindler-Raffel, Carl Peter McDonald, Jennifer Bearne, Masahiro Satake, Moe Kozakai, Julieta Rojo, Kay-Martin O Hanschmann, Bernd Lambrecht, Udo Grundmann, Niamh O'Flaherty, Agata Klimek, Isabelle Bekeredjian-Ding, Birgit S Gathof, Melanie Stormer, Susanne Susner, Claudia Renke, Cheuk-Kwong Lee, Cornelius Knabbe, Tanja Vollmer, Shawn D Keil, Marley E Shippes, Stephen J Wagner, Ute Jentsch, Xoliswa Mpumlwana, Marc Cloutier, Peter Bringmann, Thea Lu, Sandra Ramirez-Arcos, Yuntong Kou, Oleg Krut	<a href="#">Abstract</a>	Transfusion. 2021 Feb;61(2):484-493.	<a href="https://doi.org/10.1111/vox.13057">https://doi.org/10.1111/vox.13057</a>	bacteria; blood safety; contamination; red blood cells; reference material; sepsis; validation.
2021	Research and Development Department	Genome-wide analysis of pseudogenes reveals HBBP1's human-specific essentiality in erythropoiesis and implication in $\beta$ -thalassemia.	Yanni Ma, Sigi Liu, Jie Gao, Chunyan Chen, Xin Zhang, Hao Yuan, Zhongyang Chen, Xiaolin Yin, Chenguang Sun, Yanan Mao, Fanqi Zhou, Yi Shao, Qian Liu, Jiayue Xu, Li Cheng, Daqi Yu, Pingping Li, Ping Yi, Jiahuan He, Guangfeng Geng, Qing Guo, Yanmin Si, Hualu Zhao, Haipeng Li, Graham L Banes, He Liu, Yukio Nakamura, Ryo Kurita, Yue Huang, Xiaoshuang Wang, Fang Wang, Gang Fang, James Douglas Engel, Lihong Shi, Yong E Zhang, Jia Yu	<a href="#">Abstract</a>	Dev Cell. 2021 Feb 22;56(4):478-493.e11.	<a href="https://doi.org/10.1016/j.devcel.2020.12.019">https://doi.org/10.1016/j.devcel.2020.12.019</a>	—
2021	Research and Development Department	PLGA-Nanoparticles for Intracellular Delivery of the CRISPR-Complex to Elevate Fetal Globin Expression in Erythroid Cells.	Luis J Cruz, Thamar van Dijk, Olena Vepris, Tracy M W Y Li, Timo Schomann, Fabio Baldazzi, Ryo Kurita, Yukio Nakamura, Frank Grosveld, Sjaak Philipsen, Christina Eich	<a href="#">Abstract</a>	Biomaterials. 2021 Jan;268:120580.	<a href="https://doi.org/10.1016/j.biomaterials.2020.120580">https://doi.org/10.1016/j.biomaterials.2020.120580</a>	—
2021	Research and Development Department	In vitro thrombus formation and in vivo hemostasis mediated by platelets irradiated with bactericidal ultraviolet C from xenon flash under flow conditions.	Hideki Abe, Kimika Endo, Masayuki Nogawa, Masayuki Shiba, Shigeki Miyata, Masahiro Satake	<a href="#">Abstract</a>	Transfusion 2021; 61: 191-201.	<a href="https://doi.org/10.1111/trf.16138">https://doi.org/10.1111/trf.16138</a>	collagen beads; platelets; rabbit hemostasis; thrombus formation; ultraviolet C; xenon flash
2020	Research and Development Department	The Kg-antigen, RhAG with a Lys164Gln mutation, gives rise to haemolytic disease of the newborn	Mitsunobu Tanaka, Takaaki Abe, Takeharu Minamitani, Hiroki Akiba, Toshihiro Horikawa, Ryutarō Tobita, Kazumi Isa, Kenichi Ogasawara, Hideo Takahashi, Hidemi Tateyama, Satomi Tone, Kouhei Tsumoto, Teruhito Yasui, Takafumi Kimura, Yoshihiro Fujimura, Fumiya Hirayama, Yoshihiko Tani, Yoshihiro Takihara	<a href="#">Abstract</a>	British Journal of Haematology, 2020, 191, 920–926	<a href="https://doi.org/10.1111/bjh.16955">https://doi.org/10.1111/bjh.16955</a>	—
2020	Research and Development Department	Contribution of long-chain fatty acid to induction of myeloid-derived suppressor cell (MDSC)-like cells - induction of MDSC by lipid vesicles (liposome).	Yoichiro Yoshida, Tsunehisa Nagamori, Emi Ishibazawa, Hiroya Kobayashi, Tomoko Kure, Hiromi Sakai, Daisuke Takahashi, Mitsuhiro Fujihara, Hiroshi Azuma	<a href="#">Abstract</a>	Immunopharmacol Immunotoxicol. 2020 Dec;42(6):614-624	<a href="https://doi.org/10.1080/08923973.2020.1837866">https://doi.org/10.1080/08923973.2020.1837866</a>	B7-H3; iNOS; macrophages; microvesicle; NFkB
2020	Research and Development Department	Novel hybrid genes and a splice site mutation encoding the St <sup>a</sup> antigen among Japanese blood donors	Naoko Watanabe-Okochi, Hatsue Tsuneyama, Kazumi Isa, Kana Sasaki, Yumi Suzuki, Ryuichi Yabe, Nelson-Hirokazu Tsuno, Kazunori Nakajima, Kenichi Ogasawara, Makoto Uchikawa	<a href="#">Abstract</a>	Vox Sanguinis 2020, 115, 756–766	<a href="https://doi.org/10.1111/vox.12921">https://doi.org/10.1111/vox.12921</a>	glycophorin A; glycophorin B; glycophorin E; MNS blood group; Sta
2020	Research and Development Department	Codanin-1 mutations engineered in human erythroid cells demonstrate role of CDAN1 in terminal erythroid maturation.	Zachary C Murphy, Michael R Getman, Jaquelyn A Myers, Kimberly N Burgos Villar, Emily Leshen, Ryo Kurita, Yukio Nakamura, Laurie A Steiner	<a href="#">Abstract</a>	Exp Hematol. 2020 Nov;91:32-38.e6.	<a href="https://doi.org/10.1016/j.exphem.2020.09.201">https://doi.org/10.1016/j.exphem.2020.09.201</a>	—
2020	Research and Development Department	輸血後のアナフィラキシーショックを契機に発見された先天性ハプログロビン欠損症の小児例	金澤剛二, 谷ヶ崎博, 平井麻衣子, 渡邊直樹, 渡辺嘉久, 陳基明, 森岡一朗	<a href="#">Abstract</a>	日本小児血液・がん学会雑誌 2020年 57巻 3号 p. 314-317	<a href="https://doi.org/10.11412/jspso.57.314">https://doi.org/10.11412/jspso.57.314</a>	先天性ハプトグロビン欠損症; 輸血副作用; アナフィラキシーショック; 神経芽腫
2020	Research and Development Department	An unusual variant glycophorin expressing protease-resistant M antigen encoded by the <i>GYPB-E(2-4)-B</i> hybrid gene	Hatsue Tsuneyama, Kazumi Isa, Naoko Watanabe-Okochi, Kenichi Ogasawara, Makoto Uchikawa, Masahiro Satake	<a href="#">Abstract</a>	Vox Sanguinis 2020, 115, 579–585	<a href="https://doi.org/10.1111/vox.12918">https://doi.org/10.1111/vox.12918</a>	GYP gene; M antigen; MNS blood group; protease-resistant antigen.
2020	Research and Development Department	Generation of an immortalised erythroid cell line from haematopoietic stem cells of a haemoglobin E/ $\beta$ -thalassemia patient.	Kongtana Trakarnsanga, Chartsiam Tippomut, Chanatip Metheetrarut, Methichit Wattapanitch, Archrob Khuapinant, Saiphon Poldee, Ryo Kurita, Yukio Nakamura, Chatchawan Srisawat, Jan Frayne	<a href="#">Abstract</a>	Sci Rep. 2020 Oct 8;10(1):16798.	<a href="https://doi.org/10.1038/s41598-020-73991-4">https://doi.org/10.1038/s41598-020-73991-4</a>	—

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paper's publication year	Department	Theme・Title	Author	Abstract	Journal	DOI	Keyword
2020	Infectious Disease Research Department	Meta-regression Analysis of Sex- and Birth Year-Specific Prevalence of HBsAg and Anti-HCV Among Un-diagnosed Japanese: Data From the First-time Blood Donors, Periodical Health Checkup, and the Comprehensive Health Checkup With Lifestyle Education (Ningen Dock).	Tomoyuki Akita, Junko Tanaka, Masahiro Satake, Yingsong Lin, Takashi Wada, Kiminori Kato, Manami Inoue	<a href="#">Abstract</a>	J Epidemiol. 2020 Sep 5;30(9):420-425.	<a href="https://doi.org/10.2188/jea.je20190055">https://doi.org/10.2188/jea.je20190055</a>	Japan; hepatitis B; hepatitis C; large scale cohort; undiagnosed.
2020	Infectious Disease Research Department	10%ポビドンヨードエタノールの皮膚消毒効果は1%クロルヘキシジンと同等である	松本真実, 名雲英人, 小堺萌, 金野久実, 天野美里, 佐竹正博	<a href="#">Abstract</a>	血液事業 2020;43(2):253-263	—	ポビドンヨード/クロルヘキシジン/皮膚消毒/細菌感染
2020	Infectious Disease Research Department	Establishment of a novel diagnostic test algorithm for human T-cell leukemia virus type 1 infection with line immunoassay replacement of western blotting: a collaborative study for performance evaluation of diagnostic assays in Japan.	Kazu Okuma, Madoka Kuramitsu, Toshihiro Niwa, Tomokuni Taniguchi, Yumiko Masaki, Gohzoh Ueda, Chieko Matsumoto, Rieko Sobata, Yasuko Sagara, Hitomi Nakamura, Masahiro Satake, Kiyonori Miura, Naoki Fuchi, Hideaki Masuzaki, Akihiko Okayama, Kazumi Umeki, Yoshihisa Yamano, Tomoo Sato, Masako Iwanaga, Kaoru Uchimaru, Makoto Nakashima, Atae Utsunomiya, Ryuji Kubota, Kenji Ishitsuka, Hiroo Hasegawa, Daisuke Sasaki, Ki-Ryang Koh, Mai Taki, Kisato Nosaka, Masao Ogata, Isao Naruse, Noriaki Kaneko, Sara Okajima, Kenta Tezuka, Emi Ikebe, Sahoko Matsuoka, Kazuo Itabashi, Shigeru Saito, Toshiki Watanabe, Isao Hamaguchi	<a href="#">Abstract</a>	Retrovirology. 2020 Aug 24;17(1):26.	<a href="https://doi.org/10.1186/s12977-020-00534-0">https://doi.org/10.1186/s12977-020-00534-0</a>	Confirmatory test; Diagnostic algorithm; HTLV-1 antibody; HTLV-1 infection; LIA; PCR; WB.
2020	Research and Development Department	Comparing the two leading erythroid lines BEL-A and HUDEP-2	Deborah E Daniels, Damien J Downes, Ivan Ferrer-Vicens, Daniel C J Ferguson, Belinda K Singleton, Marieangela C Wilson, Kongtana Trakarnsanga, Ryo Kurita, Yukio Nakamura, David J Anstee, Jan Frayne	<a href="#">Abstract</a>	Haematologica. 2020 Aug;105(8):e389-e394.	<a href="https://doi.org/10.3324/haematol.2019.229211">https://doi.org/10.3324/haematol.2019.229211</a>	—
2020	Infectious Disease Research Department	Different growth kinetics in blood components and genetic analysis of Lactococcus garvieae isolated from platelet concentrates.	Moe Kozakai, Chieko Matsumoto, Mami Matsumoto, Akiko Takakura, Keiji Matsubayashi, Masahiro Satake	<a href="#">Abstract</a>	Transfusion. 2020 Jul;60(7):1492-1499.	<a href="https://doi.org/10.1111/trf.15836">https://doi.org/10.1111/trf.15836</a>	—
2020	Research and Development Department	Dual base editor catalyzes both cytosine and adenine base conversions in human cells.	Xiaohui Zhang, Biyun Zhu, Liang Chen, Ling Xie, Weishi Yu, Ying Wang, Linxi Li, Shuming Yin, Lei Yang, Handan Hu, Honghui Han, Yongmei Li, Liren Wang, Geng Chen, Xueyun Ma, Hongquan Geng, Wanfeng Huang, Xiufeng Pang, Zuozhen Yang, Yuxuan Wu, Stefan Siwko, Ryo Kurita, Yukio Nakamura, Li Yang, Mingyao Liu, Dali Li	<a href="#">Abstract</a>	Nat Biotechnol. 2020 Jul;38(7):856-860.	<a href="https://doi.org/10.1038/s41587-020-0527-y">https://doi.org/10.1038/s41587-020-0527-y</a>	—
2020	Research and Development Department	Acquired amegakaryocytic thrombocytopenic purpura possibly induced by anti-PD-1 antibody.	Satoshi Iyama, K Takada, M Yoshida, D Takahashi, M Kobune	<a href="#">Abstract</a>	Ann Hematol. 2020 Jul;99(7):1669-1670	<a href="https://doi.org/10.1007/s00277-020-04053-y">https://doi.org/10.1007/s00277-020-04053-y</a>	—
2020	Research Planning Department	Implications of HLA diversity among regions for bone marrow donor searches in Japan	Shiho Hashimoto, Fumiaki Nakajima, Tadashi Imanishi, Yosuke Kawai, Kazue Kato, Takafumi Kimura, Shigeki Miyata, Minojo Takahashi, Miwako Nishio, Katushi Tokunaga, Masahiro Satake	<a href="#">Abstract</a>	HLA. 2020;96:24-42	<a href="https://doi.org/10.1111/tan.13881">https://doi.org/10.1111/tan.13881</a>	allele frequency; haplotype frequency; HLA; Japanese population
2020	Infectious Disease Research Department	本邦におけるE型肝炎ウイルス輸血感染の現状	田中亜美, 星友二, 長谷川隆, 坂田秀勝, 古居保美, 後藤直子, 平力造, 松林圭二, 佐竹正博	<a href="#">Abstract</a>	日本輸血細胞治療学会誌 2020;66(3): 531-537	<a href="https://doi.org/10.3925/jjtc.66.531">https://doi.org/10.3925/jjtc.66.531</a>	E型肝炎ウイルス; 輸血感染症; 人獣共通感染症; 核酸増幅検査
2020	Research and Development Department	A new antigen SUM1 carried on glycoprotein A encoded by the GYPA* <i>M</i> with c.91A>C (p.Thr31Pro) belongs to the MNS blood group system	Shoichi Ito, Sayaka Kaito, Toru Miyazaki, Go Kikuchi, Kazumi Isa, Hatsue Tsuneyama, Ryo Kurita, Kenichi Ogasawara, Makoto Uchikawa, Masahiro Satake	<a href="#">Abstract</a>	Transfusion 2020, 60, 1287-1293	<a href="https://doi.org/10.1111/trf.15828">https://doi.org/10.1111/trf.15828</a>	—
2020	Research and Development Department	A new HLA-C allele with an alternative splice site in exon 3: HLA-C*03:23N.	Marie Shimizu, Yukari Kuroda, Miyuki Uchida, Shinnosuke Takada, Hiromi Kamada, Daisuke Takahashi, Fumiaki Nakajima, Shigeki Miyata, Shigeru Igarashi, Masahiro Satake	<a href="#">Abstract</a>	HLA. 2020 Jun;95(6):555-560	<a href="https://doi.org/10.1111/tan.13832">https://doi.org/10.1111/tan.13832</a>	HLA expression variants; HLA-C gene; HLA-C*03:23N; point mutation; splice site
2020	Research and Development Department	冷蔵保存した血小板保存液置換血小板の品質に対する保存期間中の一時的室温暴露の影響	福田香苗, 小池敏靖, 平山順一, 宮田茂樹, 柴雅之, 五十嵐滋, 永井正, 佐竹正博	<a href="#">Abstract</a>	日本輸血細胞治療学会誌, 2020, 66(3), 545-552	<a href="https://doi.org/10.3925/jjtc.66.545">https://doi.org/10.3925/jjtc.66.545</a>	冷蔵保存血小板; 血小板保存液; 室温暴露; 血小板活性化; CD62P
2020	Infectious Disease Research Department	Hepatitis A virus and hepatitis E virus prevalence relates to human immunodeficiency virus infection in Japanese male blood donors.	Naoya Shinohara, Takashi Owada, Ami Tanaka, Keiji Matsubayashi, Tadashi Nagai, Masahiro Satake	<a href="#">Abstract</a>	Microbiol Immunol. 2020 May;64(5):392-395.	<a href="https://doi.org/10.1111/1348-0421.12780">https://doi.org/10.1111/1348-0421.12780</a>	HAV; HEV; HIV; MSM; blood donors in Japan; seroprevalence.
2020	Infectious Disease Research Department	Platelet safety strategies in Japan: impact of short shelf life on the incidence of septic reactions.	Masahiro Satake, Moe Kozakai, Mami Matsumoto, Keiji Matsubayashi, Rikizo Taira, Naoko Goto	<a href="#">Abstract</a>	Transfusion. 2020 Apr;60(4):731-738.	<a href="https://doi.org/10.1111/trf.15733">https://doi.org/10.1111/trf.15733</a>	—

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paper's publication year	Department	Theme・Title	Author	Abstract	Journal	DOI	Keyword
2020	Infectious Disease Research Department	The spontaneous clearance of hepatitis E virus (HEV) and emergence of HEV antibodies in a transfusion-transmitted chronic hepatitis E case after completion of chemotherapy for acute myeloid leukemia.	Hiroshi Okano, Tatsunori Nakano, Ryugo Ito, Ami Tanaka, Yuji Hoshi, Keiji Matsubayashi, Hiroki Asakawa, Kenji Nose, Satomi Tsuruga, Tomomasa Tochio, Hiroaki Kumazawa, Yoshiaki Isono, Hiroki Tanaka, Shimpei Matsusaki, Tomohiro Sase, Tomonori Saito, Katsumi Mukai, Akira Nishimura, Keiki Kawakami, Shigeo Nagashima, Masaharu Takahashi, Hiroaki Okamoto	<a href="#">Abstract</a>	Clin J Gastroenterol. 2020 Apr;13(2):252-259.	<a href="https://doi.org/10.1007/s12328-019-01024-3">https://doi.org/10.1007/s12328-019-01024-3</a>	Chemotherapy; Hematological malignancy; Hepatitis E; Immunosuppression; Transfusion.
2020	Research and Development Department	Human ABO gene transcriptional regulation	Yoshihiko Kominato, Rie Sano, Yoichiro Takahashi, Akira Hayakawa, Kenichi Ogasawara	<a href="#">Abstract</a>	Transfusion 2020, 60, 860–869	<a href="https://doi.org/10.1111/trf.15760">https://doi.org/10.1111/trf.15760</a>	—
2020	Research and Development Department	RUNX3 levels in human hematopoietic progenitors are regulated by aging and dictate erythroid-myeloid balance.	Peter Balogh, Emmalee R Adelman, John V Pluvineau, Brian J Capaldo, Katie C Freeman, Sandeep Singh, Kamaleldin E Elagib, Yukio Nakamura, Ryo Kurita, Goro Sashida, Eli R Zunder, Hui Li, Alejandro A Gru, Elizabeth A Price, Stanley L Schrier, Irving L Weissman, Maria E Figueroa, Wendy W Pang, Adam N Goldfarb	<a href="#">Abstract</a>	Haematologica. 2020 Apr;105(4):905-913.	<a href="https://doi.org/10.3324/haematol.2018.208918">https://doi.org/10.3324/haematol.2018.208918</a>	—
2020	Research and Development Department	Reactivation of $\gamma$ -globin expression through Cas9 or base editor to treat $\beta$ -hemoglobinopathies.	Liren Wang, Linxi Li, Yanlin Ma, Handan Hu, Qi Li, Yang Yang, Wenbang Liu, Shuming Yin, Wei Li, Bin Fu, Ryo Kurita, Yukio Nakamura, Mingyao Liu, Yongrong Lai, Dali Li	<a href="#">Abstract</a>	Cell Res. 2020 Mar;30(3):276-278.	<a href="https://doi.org/10.1038/s41422-019-0267-z">https://doi.org/10.1038/s41422-019-0267-z</a>	—
2020	Research and Development Department	Flow path system of ultraviolet C irradiation from xenon flash to reduce bacteria survival in platelet products containing a platelet additive solution.	Hideki Abe, Kimika Endo, Masayuki Shiba, Yoshiyuki Niibe, Shigeki Miyata, Masahiro Satake	<a href="#">Abstract</a>	Transfusion 2020; 60: 1050-9.	<a href="https://doi.org/10.1111/trf.15757">https://doi.org/10.1111/trf.15757</a>	bacterial inactivation; Bacillus cereus spore; flow path-irradiation; platelet concentrates; xenon flash; ultraviolet C
2020	Research and Development Department	High level of fetal-globin reactivation by designed transcriptional activator-like effector.	Jun Zhan, Maria Johnson Irudayam, Yukio Nakamura, Ryo Kurita, Arthur W Nienhuis	<a href="#">Abstract</a>	Blood Adv. 2020 Feb 25;4(4):687-695.	<a href="https://doi.org/10.1182/bloodadvances.2019000482">https://doi.org/10.1182/bloodadvances.2019000482</a>	—
2020	Research and Development Department	Correlation between platelet thrombus formation on collagen-coated beads and platelet aggregation induced by ADP.	Hideki Abe, Kimika Endo, Masayuki Shiba, Masahiro Satake	<a href="#">Abstract</a>	Transfus Apher Sci 2020; 59: 102560.	<a href="https://doi.org/10.1016/j.transci.2019.06.001">https://doi.org/10.1016/j.transci.2019.06.001</a>	ADP aggregation; collagen-coated beads; platelets; thrombus formation
2020	Infectious Disease Research Department	IFN- $\lambda$ 3 as a host immune response in acute hepatitis E virus infection.	Kazumoto Murata, Jong-Hon Kang, Shigeo Nagashima, Takeshi Matsui, Yoshiyasu Karino, Yoshiya Yamamoto, Tomofumi Atarashi, Masatsugu Oohara, Minoru Uebayashi, Hidekatsu Sakata, Keiji Matsubayashi, Kazuaki Takahashi, Masahiro Arai, Shunji Mishiro, Masaya Sugiyama, Masashi Mizokami, Hiroaki Okamoto	<a href="#">Abstract</a>	Cytokine. 2020 Jan;125:154816.	<a href="https://doi.org/10.1016/j.cyto.2019.154816">https://doi.org/10.1016/j.cyto.2019.154816</a>	Acute hepatitis E; Innate immunity; Interferon- $\lambda$ 3.
2020	Research and Development Department	<i>RUNX1</i> mutation in a patient with myelodysplastic syndrome and decreased erythrocyte expression of blood group A antigen	Akira Hayakawa, Rie Sano, Yoichiro Takahashi, Rieko Kubo, Megumi Harada, Masato Omata, Akihiko Yokohama, Hiroshi Handa, Junichi Tsukada, Haruo Takeshita, Hatsue Tsuneyama, Kenichi Ogasawara, Yoshihiko Kominato	<a href="#">Abstract</a>	Transfusion 2020, 60, 184–196	<a href="https://doi.org/10.1111/trf.15628">https://doi.org/10.1111/trf.15628</a>	—
2020	Research and Development Department	Non-transmissible MV Vector with Segmented RNA Genome Establishes Different Types of iPSCs from Hematopoietic Cells.	Takafumi Hiramoto, Maino Tahara, Jiyuan Liao, Yasushi Soda, Yoshie Miura, Ryo Kurita, Hiroshi Hamana, Kota Inoue, Hiroshi Kohara, Shohei Miyamoto, Yasuki Hijikata, Shinji Okano, Yoshiyuki Yamaguchi, Yoshinao Oda, Kenji Ichiyanagi, Hidehiro Toh, Hiroyuki Sasaki, Hiroyuki Kishi, Akihide Ryo, Atsushi Muraguchi, Makoto Takeda, Kenzaburo Tani	<a href="#">Abstract</a>	Mol Ther. 2020 Jan 8;28(1):129-141.	<a href="https://doi.org/10.1016/j.ymthe.2019.09.007">https://doi.org/10.1016/j.ymthe.2019.09.007</a>	—
2020	Infectious Disease Research Department	E型肝炎ウイルスの遺伝子型3型および4型株迅速鑑別検査法の開発	飯田樹里, 小林悠, 坂田秀勝, 松林 圭二, 佐藤 進一郎, 生田 克哉, 紀野 修一	<a href="#">Abstract</a>	日本輸血細胞治療学会誌 2019;65(6):858-864	<a href="https://doi.org/10.3925/jjtc.65.858">https://doi.org/10.3925/jjtc.65.858</a>	E型肝炎ウイルス; E型肝炎; 遺伝子型; マルチプレックスreal-time RT-PCR; 分子系統樹解析
2019	Infectious Disease Research Department	Development of a World Health Organization International Reference Panel for different genotypes of hepatitis E virus for nucleic acid amplification testing	Sally A Baylis, Kay-Martin O Hanschmann, Keiji Matsubayashi, Hidekatsu Sakata, Anne-Marie Roque-Afonso, Marco Kaiser, Victor M Corman, Saleem Kamili, Rakesh Aggarwal, Nirupma Trehanpati, Thomas Gartner, Emma C Thomson, Christopher A Davis, Ana da Silva Filipe, Tamer T Abdelrahman, Johannes Blumel, Eriko Terao	<a href="#">Abstract</a>	J Clin Virol. 2019 Oct;119:60-67.	<a href="https://doi.org/10.1016/j.jcv.2019.05.006">https://doi.org/10.1016/j.jcv.2019.05.006</a>	Genotype; HEV; Hepatitis E virus; NAAT; NAT; Standardization; World Health Organization.
2019	Infectious Disease Research Department	Countermeasures against viral hepatitis B and C in Japan: An epidemiological point of view.	Junko Tanaka, Tomoyuki Akita, Ko Ko, Yoshihiko Miura, Masahiro Satake	<a href="#">Abstract</a>	Hepatol Res. 2019 Sep;49(9):990-1002.	<a href="https://doi.org/10.1111/hepr.13417">https://doi.org/10.1111/hepr.13417</a>	Japan; countermeasure; epidemiology; hepatitis B virus; hepatitis C virus.
2019	Research and Development Department	Generation of an immortalized erythroid progenitor cell line from peripheral blood: A model system for the functional analysis of Plasmodium spp. invasion.	Erik J Scully, Estela Shabani, Gabriel W Rangel, Christof Gruning, Usheer Kanjee, Martha A Clark, Mudit Chaand, Ryo Kurita, Yukio Nakamura, Marcelo U Ferreira, Manoj T Duraisingh	<a href="#">Abstract</a>	Am J Hematol. 2019 Sep;94(9):963-974.	<a href="https://doi.org/10.1002/ajh.25543">https://doi.org/10.1002/ajh.25543</a>	—

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paper's publication year	Department	Theme・Title	Author	Abstract	Journal	DOI	Keyword
2019	Infectious Disease Research Department	Optimal titer of anti-HBs in blood components derived from donors with anti-HBc.	Yuji Hoshi, Takashi Hasegawa, Naoji Yamagishi, Masashi Mizokami, Masaya Sugiyama, Keiji Matsubayashi, Shigeharu Uchida, Tadashi Nagai, Masahiro Satake	<a href="#">Abstract</a>	Transfusion. 2019 Aug;59(8):2602-2611.	<a href="https://doi.org/10.1111/trf.15393">https://doi.org/10.1111/trf.15393</a>	—
2019	Research and Development Department	Rh <sub>null</sub> phenotype caused by a novel RHAG mutation, c.945+1G>A, in the Japanese population	Takashi Ushiki, Hatsue Tsuneyama, Masayoshi Masuko, Takashi Kozakai, Takuya Kasami, Tomoyuki Tanaka, Makoto Uchikawa, Toshiki Kitajima, Emiko Kasai, Tae Komata, Takayuki Katagiri, Masami Kamimura, Kenji Sato, Ichiro Fuse, Kenichi Ogasawara, Koh Nakata	<a href="#">Abstract</a>	Transfusion 2019, 59, 2519–2522	<a href="https://doi.org/10.1111/trf.15312">https://doi.org/10.1111/trf.15312</a>	—
2019	Research and Development Department	Characterization of supported liquid extraction as a sample pretreatment method for eicosanoids and related metabolites in biological fluids	Takahiro Kohira, Yoshihiro Kita, Suzumi M Tokuoka, Masayuki Shiba, Masahiro Satake, Takao Shimizu	<a href="#">Abstract</a>	Journal of Chromatography B 2019; 1124: 298-307	<a href="https://doi.org/10.1016/j.jchromb.2019.06.016">https://doi.org/10.1016/j.jchromb.2019.06.016</a>	Lipidomics; Lipid mediator; Sample pretreatment; Quantification; Liquid chromatography-mass spectrometry
2019	Research and Development Department	Rational targeting of a NuRD subcomplex guided by comprehensive in situ mutagenesis.	Falak Sher, Mir Hossain, Davide Seruggia, Vivien A C Schoonenberg, Qiuming Yao, Paolo Cifani, Laura M K Dassama, Mitchel A Cole, Chunyan Ren, Divya S Vinjamur, Claudio Macias-Trevino, Kevin Luk, Connor McGuckin, Patrick G Schupp, Matthew C Canver, Ryo Kurita, Yukio Nakamura, Yuko Fujiwara, Scot A Wolfe, Luca Pinello, Takahiro Maeda, Alex Kentsis, Stuart H Orkin, Daniel E Bauer	<a href="#">Abstract</a>	Nat Genet. 2019 Jul;51(7):1149-1159.	<a href="https://doi.org/10.1038/s41588-019-0453-4">https://doi.org/10.1038/s41588-019-0453-4</a>	—
2019	Research and Development Department	48-hour interruption of agitation: effect on quality of washed PLT suspended in BRS-A	Yuji Kaneko, Junichi Hirayama, Kanae Fukuda, Masayuki Shiba, Tadashi Nagai, Masahiro Satake	<a href="#">Abstract</a>	Transfusion 2019; 59: 2477.	<a href="https://doi.org/10.1111/trf.15299">https://doi.org/10.1111/trf.15299</a>	—
2019	Research and Development Department	Integrative genome analysis identified the KANNO blood group antigen as prion protein	Yosuke Omae, Shoichi Ito, Mayumi Takeuchi, Kazumi Isa, Kenichi Ogasawara, Kinuyo Kawabata, Akira Oda, Sayaka Kaito, Hatsue Tsuneyama, Makoto Uchikawa, Ikuo Wada, Hitoshi Ohto, Katsushi Tokunaga	<a href="#">Abstract</a>	Transfusion 2019, 59, 2429–2435	<a href="https://doi.org/10.1111/trf.15319">https://doi.org/10.1111/trf.15319</a>	—
2019	Research and Development Department	Altered activation of integrin αIIbβ3 on platelets irradiated with ultraviolet C from pathogen-reducing xenon flash.	Hideki Abe, Masayuki Shiba, Masahiro Satake	<a href="#">Abstract</a>	Transfus Apher Sci 2019; 58: 337-40.	<a href="https://doi.org/10.1016/j.transci.2019.05.001">https://doi.org/10.1016/j.transci.2019.05.001</a>	fibrinogen; integrin αIIbβ3; ultraviolet C; xenon flash
2019	Research and Development Department	膜型血漿分離器を用い短時間かつ簡便に新鮮凍結血漿中のフィブリノゲンおよびFXIIIなどを濃縮する方法	小野寺秀一, 金子祐次, 小池敏晴, 福田香苗, 阿部高秋, 平山順一, 柴雅之, 五十嵐滋, 永井正, 佐竹正博, 田所憲治	<a href="#">Abstract</a>	日本輸血細胞治療学会雑誌 2019; 65: 568-576	<a href="https://doi.org/10.3925/jtc.65.568">https://doi.org/10.3925/jtc.65.568</a>	大量出血; クリオプレシビテート; フィブリノゲン; 膜型血漿分離器; 濃縮
2019	Infectious Disease Research Department	International Forum on Occult hepatitis B infection and transfusion safety.	Clive R Seed, Jean-Pierre Allain, Miquel Lozano, Syria Laperche, Pierre Gallian, Sylvie Gross, So-Yong Kwon, E Y Oh, J N Kim, Sze Sze Chua, Sally Lam, Ai Leen Ang, Wai-Chiu Tsoi, Patricia E Hewitt, Katy L Davison, Kate Tettmar, Niamh O'Flaherty, Fiona Boland, Pdraig Williams, Louise Pomeroy, Silvano Wendel, Roberta Fachini, Patricia Scuracchio, Patricia Carminato, Margaret Fearon, Sheila F O'Brien, Gilles Delage, Philip Kiely, Veronica Hoad, Keiji Matsubayashi, Masahiro Satake, Rikizo Taira, Susan L Stramer, Silvia Saulea, Marta Bes, Maria Piron, Magdy El Ekiaby, Marion Vermeulen, Snezna Levicnik Stezinar, Polona Nogrsek, Lisa M Jarvis, Juraj Petrik, Richard Charlewood, Peter Flanagan, Piotr Grabarczyk, Aneta Kopacz, Magdalena Letowska, Erhard Seifried, Michael Schmidt	<a href="#">Abstract</a>	Vox Sang. 2019 May;114(4):397-406.	<a href="https://doi.org/10.1111/vox.12743">https://doi.org/10.1111/vox.12743</a>	—
2019	Research and Development Department	KLF1 mutation E325K induces cell cycle arrest in erythroid cells differentiated from congenital dyserythropoietic anemia patient-specific induced pluripotent stem cells	Hiroshi Kohara, Taiju Utsugisawa, Chika Sakamoto, Lisa Hirose, Yoshie Ogawa, Hiromi Ogura, Ai Sugawara, Jiyuan Liao, Takako Aoki, Takuya Iwasaki, Takayoshi Asai, Sayoko Doisaki, Yusuke Okuno, Hideki Muramatsu, Takaaki Abe, Ryo Kurita, Shohei Miyamoto, Tetsushi Sakuma, Masayuki Shiba, Takashi Yamamoto, Shouichi Ohga, Kenichi Yoshida, Seishi Ogawa, Etsuro Ito, Seiji Kojima, Hitoshi Kanno, Kenzaburo Tani	<a href="#">Abstract</a>	Exp Hematol. 2019 May;73:25-37.e8.	<a href="https://doi.org/10.1016/j.exphem.2019.03.001">https://doi.org/10.1016/j.exphem.2019.03.001</a>	—
2019	Research and Development Department	Production of RBC autoantibody mimicking anti-D specificity following transfusion in a patient with weak D Type 15	Chikako Takeuchi-Baba, Shoichi Ito, Rie Kinjo, Hitomi Miyagi, Hiroyasu Yasuda, Kenichi Ogasawara, Hitoshi Ohto	<a href="#">Abstract</a>	Transfusion 2019, 59, 1190–1195	<a href="https://doi.org/10.1111/trf.15207">https://doi.org/10.1111/trf.15207</a>	—
2019	Infectious Disease Research Department	Recipient sepsis caused by Lactococcus garvieae contamination of platelets from a donor with colon cancer.	Shuichi Nakamura, Kenji Nakai, Momoko Sakata, Yoshio Nagaoka, Kozue Yoshida, Uichiro Katsumata, Toshimi Chiba, Keiji Matsubayashi	<a href="#">Abstract</a>	Vox Sang. 2019 Feb;114(2):182-184.	<a href="https://doi.org/10.1111/vox.12740">https://doi.org/10.1111/vox.12740</a>	bacterial contamination; blood safety; donor health; platelet transfusion.
2019	Research and Development Department	A novel c.166A>T (p.Thr56Ser) mutation in GYPB*S accounting for unusual S antigen expression	Yumi Suzuki, Kazumi Isa, Kenichi Ogasawara, Yuika Kikuchi, Ryuichi Yabe, Nelson-Hirokazu Tsuno, Makoto Uchikawa, Masahiro Satake	<a href="#">Abstract</a>	Vox Sanguinis 2019, 114, 171–173	<a href="https://doi.org/10.1111/vox.12737">https://doi.org/10.1111/vox.12737</a>	GYPB gene; MNS blood group; partial S; S antigen

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paper's publication year	Department	Theme・Title	Author	Abstract	Journal	DOI	Keyword
2019	Research and Development Department	A natural regulatory mutation in the proximal promoter elevates fetal <i>globin</i> expression by creating a de novo GATA1 site.	Gabriella E Martyn, Beeke Wienert, Ryo Kurita, Yukio Nakamura, Kate G R Quinlan, Merlin Crossley	<a href="#">Abstract</a>	Blood. 2019 Feb 21;133(8):852-856.	<a href="https://doi.org/10.1182/blood-2018-07-863951">https://doi.org/10.1182/blood-2018-07-863951</a>	—
2019	Infectious Disease Research Department	E型肝炎届出基準検査法についての検討	石田勢津子, 吉澄志磨, 松林圭二, 坂田秀勝, 長野秀樹	<a href="#">Abstract</a>	肝臓 2019 60(1):23-30	<a href="https://doi.org/10.2957/kanzo.60.23">https://doi.org/10.2957/kanzo.60.23</a>	E型肝炎; E型肝炎ウイルス; 遺伝子型; 抗HEV-IgMクラス抗体; 抗HEV-IgAクラス抗体
2019	Infectious Disease Research Department	Seroprevalence of Trypanosoma cruzi infection among at-risk blood donors in Japan.	Yusuke Sayama, Yasumi Furui, Akiko Takakura, Masazumi Ishinoda, Chieko Matsumoto, Rikizo Taira, Shigeru Igarashi, Shun'ya Momose, Keiji Matsubayashi, Shigeharu Uchida, Satoru Hino, Tadashi Nagai, Masahiro Satake	<a href="#">Abstract</a>	Transfusion. 2019 Jan;59(1):287-294.	<a href="https://doi.org/10.1111/trf.14999">https://doi.org/10.1111/trf.14999</a>	—
2019	Research and Development Department	Establishment and characterization of immortalized erythroid progenitor cell lines derived from a common cell source	Ryo Kurita, Koji Funato, Takaaki Abe, Yoshihisa Watanabe, Masayuki Shiba, Kenji Tadokoro, Yukio Nakamura, Tadashi Nagai, Masahiro Satake	<a href="#">Abstract</a>	Exp Hematol. 2019 Jan;69:11-16	<a href="https://doi.org/10.1016/j.exphem.2018.10.005">https://doi.org/10.1016/j.exphem.2018.10.005</a>	—
2018	Research and Development Department	血漿を血小板保存液に置換した血小板製剤の冷蔵保存時の品質	小池敏靖, 福田香苗, 平山順一, 柴雅之, 永井正, 佐竹正博	<a href="#">Abstract</a>	日本輸血細胞治療学会誌 2018, 64(6), 726-732.	<a href="https://doi.org/10.3925/jjtc.64.726">https://doi.org/10.3925/jjtc.64.726</a>	冷蔵保存; 血小板保存液; T-PAS+; PAS血小板; 冷蔵後加温
2018	Research and Development Department	Application of immortalized human erythroid progenitor cell line in serologic tests to detect red blood cell alloantibodies.	Go Kikuchi, Ryo Kurita, Kenichi Ogasawara, Kazumi Isa, Hatsue Tsuneyama, Yukio Nakamura, Ryuichi Yabe, Masayuki Shiba, Kenji Tadokoro, Tadashi Nagai, Masahiro Satake	<a href="#">Abstract</a>	Transfusion. 2018 Nov;58(11):2675-2682.	<a href="https://doi.org/10.1111/trf.14840">https://doi.org/10.1111/trf.14840</a>	—
2018	Research and Development Department	成分採血装置TrimaAccelで採取した血小板保存液 (PAS) 置換血小板にみられる凝集塊の除去および凝集塊除去後の血小板製剤の性状と品質	小野寺秀一, 金子祐次, 小池敏靖, 福田香苗, 宮島晴子, 森山理恵, 平山順一, 西谷祐三子, 柴田玲子, 柴雅之, 永井正, 佐竹正博, 田所憲治	<a href="#">Abstract</a>	血液事業 2018; 41: 705-713	—	PAS置換血小板; 可視凝集塊; 凝集塊除去; 輸血フィルター
2018	Infectious Disease Research Department	Development of reference material with assigned value for human T-cell leukemia virus type 1 quantitative PCR in Japan.	Madoka Kuramitsu, Kazu Okuma, Makoto Nakashima, Tomoo Sato, Daisuke Sasaki, Hiroo Hasegawa, Kazumi Umeki, Ryuji Kubota, Keiko Sasada, Rieko Sobata, Chieko Matsumoto, Noriaki Kaneko, Kenta Tezuka, Sahoko Matsuoka, Atee Utsunomiya, Ki-Ryang Koh, Masao Ogata, Kenji Ishitsuka, Mai Taki, Kisato Nosaka, Kaoru Uchimarui, Masako Iwanaga, Yasuko Sagara, Yoshihisa Yamano, Akihiko Okayama, Kiyonori Miura, Masahiro Satake, Shigeru Saito, Toshiki Watanabe, Isao Hamaguchi	<a href="#">Abstract</a>	Microbiol Immunol. 2018 Oct;62(10):673-676.	<a href="https://doi.org/10.1111/1348-0421.12644">https://doi.org/10.1111/1348-0421.12644</a>	human T-cell leukemia virus type 1; proviral load; quantitative PCR; standard
2018	Research and Development Department	Long non-coding RNA-dependent mechanism to regulate heme biosynthesis and erythrocyte development.	Jinhua Liu, Yapu Li, Jingyuan Tong, Jie Gao, Qing Guo, Lingling Zhang, Bingrui Wang, Hui Zhao, Hongtao Wang, Erlie Jiang, Ryo Kurita, Yukio Nakamura, Osamu Tanabe, James Douglas Engel, Emery H Bresnick, Jiayi Zhou, Lihong Shi	<a href="#">Abstract</a>	Nat Commun. 2018 Oct 22;9(1):4386.	<a href="https://doi.org/10.1038/s41467-018-06883-x">https://doi.org/10.1038/s41467-018-06883-x</a>	—
2018	Research and Development Department	Human leukocyte antigen antibody detection technologies in platelet transfusion refractoriness, with special emphasis on functional test	Daisuke Takahashi, Fumiaki Nakajima, Nelson Hirokazu Tsuno	<a href="#">Abstract</a>	Ann Blood 2018;3:4	<a href="https://doi.org/10.21037/aob.2018.10.01">https://doi.org/10.21037/aob.2018.10.01</a>	HLA antibody; platelet transfusion refractoriness (PTR); platelet phagocytosis assay
2018	Infectious Disease Research Department	Evaluation of in vitro screening and diagnostic kits for hepatitis C virus infection.	Haruka Momose, Sahoko Matsuoka, Asako Murayama, Norie Yamada, Kazu Okuma, Emi Ikebe, Yuji Hoshi, Masamichi Muramatsu, Takaji Wakita, Kuro Toyota, Takanobu Kato, Isao Hamaguchi	<a href="#">Abstract</a>	J Clin Virol. 2018 Aug;105:97-102.	<a href="https://doi.org/10.1016/j.jcv.2018.06.008">https://doi.org/10.1016/j.jcv.2018.06.008</a>	HCV; core antigen; Diagnostics; Quantification; Genotype
2018	Research and Development Department	Robust CRISPR/Cas9 Genome Editing of the HUDEP-2 Erythroid Precursor Line Using Plasmids and Single-Stranded Oligonucleotide Donors.	Gemma Moir-Meyer, Pak Leng Cheong, Aude-Anais Olijnik, Jill Brown, Samantha Knight, Andrew King, Ryo Kurita, Yukio Nakamura, Richard J Gibbons, Douglas R Higgs, Veronica J Buckle, Christian Babbs	<a href="#">Abstract</a>	Methods Protoc. 2018 Jul 30;1(3):28.	<a href="https://doi.org/10.3390/mps1030028">https://doi.org/10.3390/mps1030028</a>	—
2018	Research and Development Department	Turbulence Activates Platelet Biogenesis to Enable Clinical Scale Ex Vivo Production.	Yukitaka Ito, Sou Nakamura, Naoshi Sugimoto, Tomohiro Shigemori, Yoshikazu Kato, Mikiko Ohno, Shinya Sakuma, Keitaro Ito, Hiroki Kumon, Hidenori Hirose, Haruki Okamoto, Masayuki Nogawa, Mio Iwasaki, Shunsuke Kihara, Kosuke Fujio, Takuya Matsumoto, Natsumi Higashi, Kazuya Hashimoto, Akira Sawaguchi, Ken-Ichi Harimoto, Masato Nakagawa, Takuya Yamamoto, Makoto Handa, Naohide Watanabe, Eiichiro Nishi, Fumihito Arai, Satoshi Nishimura, Koji Eto	<a href="#">Abstract</a>	Cell 2018, 174, 636-648.e18	<a href="https://doi.org/10.1016/j.cell.2018.06.011">https://doi.org/10.1016/j.cell.2018.06.011</a>	IGFBP2; MIF; Nardilysin; bioreactor; iPSC; megakaryocyte; platelet; regenerative medicine; shear stress; turbulence.
2018	Infectious Disease Research Department	Analysis of evolutionary rate of HIV-1 subtype B using blood donor samples in Japan.	Naoya Shinohara, Chieko Matsumoto, Keiji Matsubayashi, Tadashi Nagai, Masahiro Satake	<a href="#">Abstract</a>	Virus Genes. 2018 Jun;54(3):457-460.	<a href="https://doi.org/10.1007/s11262-018-1548-1">https://doi.org/10.1007/s11262-018-1548-1</a>	—

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paper's publication year	Department	Theme・Title	Author	Abstract	Journal	DOI	Keyword
2018	Research and Development Department	成分採血装置TrimaAccelで採取した分割対象血小板原料血液由来の血小板製剤の品質	小池敏靖, 淵崎昌弘, 一杉芽美, 小野寺秀一, 金子祐次, 岩間輝, 平山順一, 柴雅之, 宮島晴子, 林宣亭, 有澤史倫, 布施久恵, 内藤祐, 若本志乃舞, 藤原満博, 茶谷真, 栗原勝彦, 森純平, 寺田あかね, 大橋祥朗, 永井正, 佐竹正博	<a href="#">Abstract</a>	日本輸血細胞治療学会誌 2018, 64(3), 490-495	<a href="https://doi.org/10.3925/jtc.64.490">https://doi.org/10.3925/jtc.64.490</a>	分割対象血小板原料血液; 分割時期; ポリ塩化ビニル; ポリオレフィン
2018	Infectious Disease Research Department	Analysis of antigen-antibody cross-reactivity among lineages and sublineages of Babesia microti parasites using human babesiosis specimens.	Sayama Y, Zamoto-Niikura A, Matsumoto C, Saijo M, Ishihara C, Matsubayashi K, Nagai T, Satake M	<a href="#">Abstract</a>	Transfusion. 2018 May;58(5):1234-1244.	<a href="https://doi.org/10.1111/trf.14558">https://doi.org/10.1111/trf.14558</a>	—
2018	Research and Development Department	Restored response to ADP downstream of purinergic P2Y(12) receptor in apheresis platelets after pathogen-reducing xenon flash treatment.	Abe H, Abe T, Shiba M, Satake M	<a href="#">Abstract</a>	Transfusion 2018; 58: 1117-25.	<a href="https://doi.org/10.1111/trf.14578">https://doi.org/10.1111/trf.14578</a>	ADP; purinergic receptor; Akt phosphorylation; xenon flash
2018	Infectious Disease Research Department	Investigation of antibody to severe fever with thrombocytopenia syndrome virus (SFTSV) in blood samples donated in a SFTS-endemic area in Japan.	Matsumoto C, Shinohara N, Furuta RA, Tanishige N, Shimojima M, Matsubayashi K, Nagai T, Tsubaki K, Satake M	<a href="#">Abstract</a>	Vox Sang. 2018 Apr;113(3):297-299.	<a href="https://doi.org/10.1111/vox.12629">https://doi.org/10.1111/vox.12629</a>	blood donor; Japan; SFTS
2018	Research and Development Department	Natural regulatory mutations elevate the fetal globin gene via disruption of BCL11A or ZBTB7A binding.	Martyn GE, Wienert B, Yang L, Shah M, Norton LJ, Burdach J, Kurita R, Nakamura Y, Pearson RCM, Funnell APW, Quinlan KGR, Crossley M	<a href="#">Abstract</a>	Nat Genet. 2018 Apr;50(4):498-503.	<a href="https://doi.org/10.1038/s41588-018-0085-0">https://doi.org/10.1038/s41588-018-0085-0</a>	—
2018	Research and Development Department	A long noncoding RNA from the HBS1L-MYB intergenic region on chr6q23 regulates human fetal hemoglobin expression.	Morrison TA, Wilcox I, Luo HY, Farrell JJ, Kurita R, Nakamura Y, Murphy GJ, Cui S, Steinberg MH, Chui DHK	<a href="#">Abstract</a>	Blood Cells Mol Dis. 2018 Mar;69:1-9.	<a href="https://doi.org/10.1016/j.bcmd.2017.11.003">https://doi.org/10.1016/j.bcmd.2017.11.003</a>	—
2018	Research and Development Department	Preceding haemorrhagic shock as a detrimental risk factor for respiratory distress after excessive allogeneic blood transfusion	Masuda R, Iijima T, Kondo R, Itoda Y, Matsuhashi M, Hashimoto S, Kohira T, Kobayashi N, Okazaki H	<a href="#">Abstract</a>	Vox Sanguinis 2018, 113, 51-59	<a href="https://doi.org/10.1111/vox.12560">https://doi.org/10.1111/vox.12560</a>	allogenic blood; crystalloid; haemorrhagic shock; hydroxyethylstarch transfusion-associated circulatory overload
2017	Research and Development Department	T-PAS+またはピカネイト輸液を血小板保存液 (PAS) として成分採血装置TrimaAccelで採取したPAS置換血小板の品質の比較	小野寺秀一, 金子祐次, 小池敏靖, 宮島晴子, 森山理恵, 茶谷真, 西谷祐三子, 平山順一, 柴田玲子, 柴雅之, 永井正, 佐竹正博, 田所憲治	<a href="#">Abstract</a>	日本輸血細胞治療学会雑誌 2017; 63: 780-787	<a href="https://doi.org/10.3925/jtc.63.780">https://doi.org/10.3925/jtc.63.780</a>	PAS置換血小板; PAS; T-PAS+; ピカネイト輸液
2017	Research and Development Department	複数回洗浄した洗浄赤血球製剤の品質	金子祐次, 平山順一, 小野寺秀一, 小池敏靖, 岩間輝, 茶谷真, 柴雅之, 永井正, 佐竹正博, 田所憲治	<a href="#">Abstract</a>	日本輸血細胞治療学会雑誌 2017; 63: 757-762	<a href="https://doi.org/10.3925/jtc.63.757">https://doi.org/10.3925/jtc.63.757</a>	洗浄赤血球; 複数回洗浄; 輸血副作用
2017	Infectious Disease Research Department	Proviral Features of Human T Cell Leukemia Virus Type 1 in Carriers with Indeterminate Western Blot Analysis Results.	Madoka Kuramitsu, Tsuyoshi Sekizuka, Tadanori Yamochi, Sanaz Firouzi, Tomoo Sato, Kazumi Umeki, Daisuke Sasaki, Hiroo Hasegawa, Ryuji Kubota, Rieko Sobata, Chieko Matsumoto, Noriaki Kaneko, Haruka Momose, Kumiko Araki, Masumichi Saito, Kisato Nosaka, Atae Utsunomiya, Ki-Ryang Koh, Masao Ogata, Kaoru Uchimarui, Masako Iwanaga, Yasuko Sagara, Yoshihisa Yamano, Akihiko Okayama, Kiyonori Miura, Masahiro Satake, Shigeru Saito, Kazuo Itabashi, Kazunari Yamaguchi, Makoto Kuroda, Toshiki Watanabe, Kazu Okuma, Isao Hamaguchi	<a href="#">Abstract</a>	J Clin Microbiol. 2017 Sep;55(9):2838-2849.	<a href="https://doi.org/10.1128/jcm.00659-17">https://doi.org/10.1128/jcm.00659-17</a>	nonsense mutation; nucleotide substitution; proviral load; provirus; Western blot indeterminate; human T cell leukemia virus; nucleic acid technology
2017	Infectious Disease Research Department	Evaluation of the protective ability of plasma from Japanese individuals against mosquito-borne viral infections.	Shinohara N, Owada T, Matsumoto C, Uchida S, Nagai T, Satake M, Tadokoro K	<a href="#">Abstract</a>	Trans R Soc Trop Med Hyg. 2017 Sep 1;111(9):393-401.	<a href="https://doi.org/10.1093/trstmh/trx071">https://doi.org/10.1093/trstmh/trx071</a>	Antibody-dependent enhancement; Dengue virus; Intravenous immunoglobulin; Japanese encephalitis vaccine; Japanese encephalitis virus; West Nile virus
2017	Infectious Disease Research Department	Analysis of HTLV-1 proviral load (PVL) and antibody detected with various kinds of tests in Japanese blood donors to understand the relationship between PVL and antibody level and to gain insights toward better antibody testing.	Matsumoto C, Sagara Y, Sobata R, Inoue Y, Morita M, Uchida S, Kiyokawa H, Satake M, Tadokoro K	<a href="#">Abstract</a>	J Med Virol. 2017 Aug;89(8):1469-1476.	<a href="https://doi.org/10.1002/jmv.24802">https://doi.org/10.1002/jmv.24802</a>	antibody titer; HTLV-1; Japanese blood donors; proviral DNA load
2017	Research and Development Department	Flow cytometric quantitation of platelet phagocytosis by monocytes using a pH-sensitive dye, pHrodo-SE.	Takahashi D, Fujihara M, Miyazaki T, Matsubayashi K, Sato S, Azuma H, Kato T, Kino S, Ikeda H, Takamoto S, Sato N, Torigoe T	<a href="#">Abstract</a>	J Immunol Methods. 2017 Aug;447:57-64.	<a href="https://doi.org/10.1016/j.jim.2017.04.009">https://doi.org/10.1016/j.jim.2017.04.009</a>	—
2017	Research and Development Department	Refined methods to evaluate the in vivo hemostatic function and viability of transfused human platelets in rabbit models.	Watanabe N, Nogawa M, Ishiguro M, Maruyama H, Shiba M, Satake M, Eto K, Handa M	<a href="#">Abstract</a>	Transfusion. 2017, 57,2035-2044	<a href="https://doi.org/10.1111/trf.14189">https://doi.org/10.1111/trf.14189</a>	Animal models; Platelet transfusion; Hemostasis; cell survival
2017	Infectious Disease Research Department	Persistent symptomatic parvovirus B19 infection with severe thrombocytopenia transmitted by red blood cell transfusion containing low parvovirus B19 DNA levels.	Nagaharu K, Sugimoto Y, Hoshi Y, Yamaguchi T, Ito R, Matsubayashi K, Kawakami K, Ohishi K	<a href="#">Abstract</a>	Transfusion. 2017 Jun;57(6):1414-1418.	<a href="https://doi.org/10.1111/trf.14088">https://doi.org/10.1111/trf.14088</a>	—

**Research Achievements and Results / 成果・業績**

paper's publication year	Department	Theme・Title	Author	Abstract	Journal	DOI	Keyword
2017	Research and Development Department	Liposomal microparticle injection can induce myeloid-derived suppressor cells (MDSC)-like cells in vivo.	Azuma H, Yoshida Y, Takahashi H, Ishibazawa E, Kobayashi H, Sakai H, Takahashi D, Fujihara M	<a href="#">Abstract</a>	Immunopharmacol Immunotoxicol. 2017 Jun;39(3):140-147	<a href="https://doi.org/10.1080/08923973.2017.1306867">https://doi.org/10.1080/08923973.2017.1306867</a>	Liposo; memicrovesicle; exosome; exosome; MDSC; iNOS; nitric oxide
2017	Research and Development Department	Pulsed xenon flash treatment inactivates bacteria in apheresis platelet concentrates while preserving in vitro quality and functionality.	Abe H, Shiba M, Niibe Y, Tadokoro K, Satake M	<a href="#">Abstract</a>	Transfusion 2017; 57: 989-96.	<a href="https://doi.org/10.1111/trf.13984">https://doi.org/10.1111/trf.13984</a>	bacterial inactivation; platelet concentrates; pulsed xenon flash; UVC
2017	Research and Development Department	Comparison between in vitro properties of washed platelet concentrates suspended in M-sol and those in BRS-A, both of which were prepared with an automated cell processor	Iwama A, Hirayama J, Nogawa M, Shiba M, Satake M, Takamoto S, Tadokoro K	<a href="#">Abstract</a>	Transfusion and Apheresis Science 2017, 56, 241-244	<a href="https://doi.org/10.1016/j.transci.2017.01.007">https://doi.org/10.1016/j.transci.2017.01.007</a>	Additive solution; Automated cell processor; BRS-A; M-sol; Platelet storage; Platelet washing
2017	Infectious Disease Research Department	Genetic Analysis of HIV-1 in Japan: a Comprehensive Analysis of Donated Blood.	Matsumoto C, Shinohara N, Sobata R, Uchida S, Satake M, Tadokoro K	<a href="#">Abstract</a>	Jpn J Infect Dis. 2017 Mar 24;70(2):136-142.	<a href="https://doi.org/10.7883/yoken.JJID.2015.504">https://doi.org/10.7883/yoken.JJID.2015.504</a>	—
2017	Infectious Disease Research Department	Unique clinical courses of transfusion-transmitted hepatitis E in patients with immunosuppression.	Satake M, Matsubayashi K, Hoshi Y, Taira R, Furui Y, Kokudo N, Akamatsu N, Yoshizumi T, Ohkohchi N, Okamoto H, Miyoshi M, Tamura A, Fuse K, Tadokoro K	<a href="#">Abstract</a>	Transfusion. 2017 Feb;57(2):280-288.	<a href="https://doi.org/10.1111/trf.13994">https://doi.org/10.1111/trf.13994</a>	—
2016	Infectious Disease Research Department	First report of the isolation of Lactococcus garvieae from a platelet concentrate in Japan.	Kozakai M, Matsumoto M, Matsumoto C, Uchida S, Nagai T, Satake M, Tadokoro K	<a href="#">Abstract</a>	ransfusion. 2016 Oct;56(10):2602-2606.	<a href="https://doi.org/10.1111/trf.13752">https://doi.org/10.1111/trf.13752</a>	—
2016	Research and Development Department	血小板輸血不応におけるHLA抗体の臨床的意義	高橋大輔	<a href="#">Abstract</a>	日本組織適合性学会誌 2016年23巻2号 p. 96-107	<a href="https://doi.org/10.12667/mhc.23.96">https://doi.org/10.12667/mhc.23.96</a>	HLA抗体; 血小板輸血不応; 血小板貪食試験
2016	Research and Development Department	Reduction of bacteria and human immunodeficiency virus Type 1 infectivity of platelet suspension in plasma using xenon flash-pulse light in a bench-scale trial.	Abe H, Shiba M, Niibe Y, Tadokoro K, Satake M	<a href="#">Abstract</a>	Transfusion 2016; 56: 2256-66.	<a href="https://doi.org/10.1111/trf.13685">https://doi.org/10.1111/trf.13685</a>	bacterial inactivation; platelet concentrates; xenon flash pulse light; ultraviolet
2016	Research and Development Department	市販の膜型血漿分離器EC-4A10により調製した洗浄血小板の品質	小野寺秀一、金子祐次、淵崎昌弘、一杉芽美、栗原勝彦、百瀬俊也、松崎浩史、中島一格	<a href="#">Abstract</a>	日本輸血細胞治療学会雑誌 2016; 62: 592-600	<a href="https://doi.org/10.3925/jjtc.62.592">https://doi.org/10.3925/jjtc.62.592</a>	洗浄血小板; 中空糸膜; 膜型血漿分離器; EC-4A10
2016	Infectious Disease Research Department	Sequence analysis of two variable cytomegalovirus genes for distinction between transfusion- and breast milk-transmitted infections in a very-low-birthweight infant.	Yamagishi N, Furui Y, Koshinami S, Ichijo K, Shimizu Y, Hoshi Y, Gotanda Y, Miyakawa K, Uchida S, Tadokoro K, Nagai T, Satake M	<a href="#">Abstract</a>	Transfusion. 2016 Jun;56(6):1305-1310.	<a href="https://doi.org/10.1111/trf.13547">https://doi.org/10.1111/trf.13547</a>	—