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Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Ahmed, A.S., Leheta, O. & Younes, S. (2010) In vitro assessment of platelet storage lesion in leucoreduced random donor platelet concentrates. *Blood Transfusion*. [Online] 8 (1), 28–35. Available from: doi:10.2450/2009.0077-09 [Accessed: 14 June 2016].

Alexandru, N., Popov, D. & Georgescu, A. (2012) Platelet dysfunction in vascular pathologies and how can it be treated. *Thrombosis Research*. [Online] 129 (2), 116–126. Available from: doi:10.1016/j.thromres.2011.09.026.

Ali, S.F. (2011) Platelet Activation in Stored Platelet Concentrates: Comparision of Two Methods Preparation. *Journal of Blood Disorders & Transfusion*. [Online] 02 (02), 2–4. Available from: doi:10.4172/2155-9864.1000107.

American Association of Blood Banks (2013) CIRCULAR OF information. *Circular of Information—for the use of blood and blood components*. [Online] Available from: http://www.aabb.org/tm/coi/Documents/coi1113.pdf.

Arewa, O., Akinola, N. & Salawu, L. (2009) Blood Transfusion Reactions, evaluation of 462 transfusions at a tertiary hospital in Nigeria. *Afr. J. Med. Med. Sci*. 38143–148.

Aye, M.T., Palmer, D.S., Giulivi, A. & Hashemi, S. (1995) Effect of filtration of platelet concentrates on the accumulation of cytokines and platelet release factors during storage. *Transfusion*. [Online] 35 (2), 117–124. Available from: http://www.ncbi.nlm.nih.gov/pubmed/7825206 [Accessed: 14 June 2016].

Balduini, C.L., Salvaneschi, L., Klersy, C., Noris, P., Mazzucco, M., Rizzuto, F., et al. (2001) Factors influencing post-transfusional platelet increment in pediatric patients given hematopoietic stem cell transplantation. *Leukemia*. [Online] 15 (12), 1885–1891. Available from: doi:10.1038/sj.leu.2402307.

UNIVERSITAS
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Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

Baldus, S., Heitzer, T., Eiserich, J.P., Lau, D., Mollnau, H., Ortak, M., et al. (2004) Myeloperoxidase enhances nitric oxide catabolism during myocardial ischemia and reperfusion. *Free radical biology & medicine*. [Online] 37 (6), 902–911. Available from: doi:10.1016/j.freeradbiomed.2004.06.003 [Accessed: 14 June 2016].

Bashir, S., Cookson, P., Wiltshire, M., Hawkins, L., Sonoda, L., Thomas, S., et al. (2013a) Pathogen inactivation of platelets using ultraviolet C light: Effect on in vitro function and recovery and survival of platelets. *Transfusion*. [Online] 53 (5), 990–1000. Available from: doi:10.1111/j.1537-2995.2012.03854.x.

Bashir, S., Nightingale, M.J. & Cardigan, R. (2013b) Ensuring that blood transfusion sets administer an effective dose of functional blood components. *Transfusion Medicine*. [Online] 23 (4), 226–230. Available from: doi:10.1111/tme.12045.

BCSH (2003) Guidelines for the use of platelet transfusions. *Br J Haematol*. 122 (1), 10–23.

BCSH Blood Transfusion Task Force (2013) Guideline on the investigation and management of acute transfusion reactions. *Journal of Chemical Information and Modeling*. [Online] 53 (9), 1689–1699. Available from: doi:10.1017/CBO9781107415324.004.

Bennardello, F., Fidone, C., Spadola, V., Cabibbo, S., Travali, S., Garozzo, G., et al. (2013) The prevention of adverse reactions to transfusions in patients with haemoglobinopathies: A proposed algorithm. *Blood Transfusion*. [Online] 11 (3), 377–384. Available from: doi:10.2450/2013.0017-12.

Bilgin, Y.M., Watering, L.M.G. Van De & Brand, A. (2011) Clinical effects of leucoreduction of blood transfusions. *The Netherlands Journal of Medicine*. 69 (10), 441–450.

Bordin, J.O., Heddle, N.M. & Blajchman, M.A. (1994) Biologic effects of

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
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Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

leukocytes present in transfused cellular blood products. *Blood*. [Online] 84 (6), 1703–1721. Available from: http://www.ncbi.nlm.nih.gov/pubmed/8080981 [Accessed: 14 June 2016].

Brubaker, D.B., Marcus, C. & Holmes, E. (1998) Intravascular and total body platelet equilibrium in healthy volunteers and in thrombocytopenic patients transfused with single donor platelets. *American Journal of Hematology*. [Online] 58 (3), 165–176. Available from: doi:10.1002/(SICI)1096-8652(199807)58:3<165::AID-AJH2>3.0.CO;2-P.

Bruil, A., Beugeling, T., Feijen, J. & van Aken, W.G. (1995) The Mechanisms of Leukocyte Removal by Filtration. *Transfusion medicine reviews*. [Online] 9 (2), 145–166. Available from: http://www.ncbi.nlm.nih.gov/pubmed/7795332 [Accessed: 14 June 2016].

Cardigan, R., Turner, C., Harrison, P. & Service, N.B. (2005) Current methods of assessing platelet function : relevance to transfusion medicine. *Vox Sanguinis*. [Online] 88 (3), 153–163. Available from: doi:10.1111/j.1423-0410.2005.00618.x.

Chavan, P.D., Bhat, V.G., Ojha, S., Kelkar, R.S., Rajadhyaksha, S.B. & Marathe, A.N. (2012) Detection of bacterial growth in blood components using oxygen consumption as a surrogate marker in a tertiary oncology setup. *Indian journal of medical microbiology*. [Online] 30 (2), 212–214. Available from: doi:10.4103/0255-0857.96695.

Costa, E.J., Guimarães, T.M.P.D., de Almeida, N.C. & de Toledo, V.D.P.C.P. (2012) Comparison of cytokine levels and metabolic parameters of stored platelet concentrates of the Fundação Hemominas, Belo Horizonte, Brazil. *Revista brasileira de hematologia e hemoterapia*. [Online] 34 (2), 94–99. Available from: doi:10.5581/1516-8484.20120029.

Dinarello, C.. & Porat, R. (2008) Fever and Hyperthermia. In: Fauci, Braunwald, Kasper, Hauser, et al. (eds.). *Harrison's Principles of Internal Medicine*.

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
TEGUH TRIYONO, DR., M.KES., SP.PK, Prof. dr. Budi Mulyono, SpPK(K), MM.; Prof. Dr. dr. Sutaryo, SpA(K).; Prof.
Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

New York, Mc Graw Hill. pp. 117–121.

Duran, J., Siddique, S. & Cleary, M. (2014) Effects of Leukoreduction and Premedication With Acetaminophen and Diphenhydramine in Minimizing Febrile Nonhemolytic Transfusion Reactions and Allergic Transfusion Reactions During and After Blood Product Administration : A Literature Review With Recomme. *Journal of Pediatric Oncology Nursing*. [Online] 31 (4), 223–229. Available from: doi:10.1177/1043454214532029.

Dzik, W.H. & Szczepiorkowski (2007) Leukocyte-Reduced Products. In: CD Hillyer, LE Silberstein, PM Ness, KC Anderson, et al. (eds.). *Blood Banking and Transfusion*. USA, Churchill Livingstone Elsevier.

Eiserich, J.P., Baldus, S., Brennan, M.-L., Ma, W., Zhang, C., Tousson, A., et al. (2002) Myeloperoxidase, a leukocyte-derived vascular NO oxidase. *Science (New York, N.Y.)*. [Online] 296 (5577), 2391–2394. Available from: doi:10.1126/science.1106830 [Accessed: 14 June 2016].

ElKattan, I., Anderson, J., Yun, J.K., Colton, E. & Yomtovian, R. (1999) Correlation of cytokine elaboration with mononuclear cell adhesion to platelet storage bag plastic polymers: a pilot study. *Clinical and diagnostic laboratory immunology*. [Online] 6 (4), 509–513. Available from: http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=95717&tool=pmcentrez&rendertype=abstract.

Ezidiegwu, C.N., Lauenstein, K.J., Sbb, M.T.A., Rosales, L.G., Kelly, K.C. & Henry, J.B. (2004) Febrile Nonhemolytic Transfusion Reactions Management by Premedication and Cost Implications in Adult Patients. *Arch Pathol Lab Med*. 128991–995.

Faint, R.W. (1992) Platelet-Neutrophil Interactions : Their Significance. *Blood Reviews*. 683–91.

Faraday, N., Scharpf, R.B., Dodd-o, J.M., Martinez, E. a, Rosenfeld, B. a &

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
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Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

Dorman, T. (2001) Leukocytes can enhance platelet-mediated aggregation and thromboxane release via interaction of P-selectin glycoprotein ligand 1 with P-selectin. *Anesthesiology*. [Online] 94 (1), 145–151. Available from: doi:10.1097/00000542-200101000-00025.

Federici, A.B., Vanelli, C. & Arrigoni, L. (2012) PL-11 transfusion issues in cancer patients. *Thrombosis Research*. [Online] 129 (SUPPL. 1), S60–S65. Available from: doi:10.1016/S0049-3848(12)70018-X.

Ferrer, F., Rivera, J., Lozano, M.L., Corral, J. & Vicente, V. (2001) Effect of cold-storage on the accumulation of bioreactive substances in platelet concentrates treated with second messenger effectors. *haematologica*. 86530–536.

Fisk, J.M., Pisciotto, P.T., Snyder, E.L. & Perrotta, P.L. (2007) Chapter 23 – Platelets and Related Products. In: *Blood Banking and Transfusion Medicine*. [Online]. pp. 308–341. Available from: doi:10.1016/B978-0-443-06981-9.50028-4.

Fletcher, C.H., Dombourian, M.G. & Millward, P.A. (2015) Platelet Transfusion for Patients With Cancer. *Cancer Control*. 22 (1), 47–51.

Gasparyan, A.Y., Stavropoulos-Kalinoglou, A., Mikhailidis, D.P., Douglas, K.M.J. & Kitas, G.D. (2011) Platelet function in rheumatoid arthritis: arthritic and cardiovascular implications. *Rheumatology international*. [Online] 31 (2), 153–164. Available from: doi:10.1007/s00296-010-1446-x [Accessed: 14 June 2016].

Gupta, A., Parikh, K. & Pandey, A. (2015) Post-transfusion breathlessness in a patient with acute myeloid leukaemia. *Case Reports*. [Online] 2015 (jun23 1), bcr2015210131–bcr2015210131. Available from: doi:10.1136/bcr-2015-210131 [Accessed: 14 June 2016].

Gutensohn, K., Geidel, K., Brockmann, M., Siemensen, M., Krueger, W.,

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
TEGUH TRIYONO, DR., M.KES., SP.PK, Prof. dr. Budi Mulyono, SpPK(K), MM.; Prof. Dr. dr. Sutaryo, SpA(K).; Prof.
Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

Kroeger, N., et al. (2002) Binding of activated platelets to WBCs in vivo after transfusion. *Transfusion*. [Online] 42 (10), 1373–1380. Available from: http://www.ncbi.nlm.nih.gov/pubmed/12423523.

Heddle, N. & Webert, K.E. (2007) Chapter 50 – Febrile, Allergic, and Other Noninfectious Transfusion Reactions. In: *Blood Banking and Transfusion Medicine*. [Online]. pp. 677–690. Available from: doi:10.1016/B978-0-443-06981-9.50055-7.

Heddle, N.M. (1995) Febrile nonhemolytic transfusion reactions to platelets. *Current opinion in hematology*. [Online] 2 (6), 478–483. Available from: http://www.ncbi.nlm.nih.gov/pubmed/9372039 [Accessed: 17 June 2016].

Heddle, N.M., Klama, L., Joel, S., Richards, C., Fedak, P., Walker, I., et al. (1994) The Role of the Plasma From Platelet Concentrates in Transfusion Reactions. *The New England journal of medicine*. 331 (10), 625–628.

Heddle, N.M., Klama, L., Meyer, R., Walker, I., Boshkov, L., Roberts, R., et al. (1999) A randomized controlled trial comparing plasma removal with white cell reduction to prevent reactions to platelets. *Transfusion*. [Online] 39 (3), 231–238. Available from: http://www.ncbi.nlm.nih.gov/pubmed/10204584.

Hillis, C.M., Shih, A.W. & Heddle, N.M. (2016) Best practices in the differential diagnosis and reporting of acute transfusion reactions. *international journal of clinical transfusion medicine*. 41–14.

Hillyer, K.., Hare, V.. & Eckman, J.R. (2001) Decreased alloimmunization rates in chronically-transfused sickle cell disease patients in a directed donor, red blood cell antigen-matching program entitled ‘partner for life’. *Blood*. 982274.

Hod, E. & Schwartz, J. (2008) Platelet transfusion refractoriness. *British Journal of Haematology*. [Online] 142 (3), 348–360. Available from: doi:10.1111/j.1365-2141.2008.07189.x.

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
TEGUH TRIYONO, DR., M.KES., SP.PK, Prof. dr. Budi Mulyono, SpPK(K), MM.; Prof. Dr. dr. Sutaryo, SpA(K).; Prof.
Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

Hoffbrand, A.., Petit, J.. & Moss, P.A.. (2005) *Kapita Selekta Hematologi*. 4th edition. Jakarta, EGC.

Holme, S., Sweeney, J.D., Sawyer, S. & Elfath, M.D. (1997) The expression of p-selectin during collection, processing, and storage of platelet concentrates: relationship to loss of in vivo viability. *Transfusion*. [Online] 37 (1), 12–17. Available from: doi:10.1046/j.1537-2995.1997.37197176945.x.

Horn, M., Bertling, A., Brodde, M.F., Muller, A., Roth, J., Van Aken, H., et al. (2012) Human neutrophil alpha-defensins induce formation of fibrinogen and thrombospondin-1 amyloid-like structures and activate platelets via glycoprotein IIb/IIIa. *Journal of Thrombosis and Haemostasis*. [Online] 10 (4), 647–661. Available from: doi:10.1111/j.1538-7836.2012.04640.x.

Horvath, M., Eichelberger, B., Koren, D., Böhm, A., Ay, C., Jilma, B., et al. (2010) Function of platelets in apheresis platelet concentrates and in patient blood after transfusion as assessed by Impact-R. *Transfusion*. [Online] 50 (5), 1036–1042. Available from: doi:10.1111/j.1537-2995.2009.02543.x.

Hui, H., Yan-Ping, H., Bai-Ling, W. & Yu-Feng, Y. (2013) Design of a Low-cost Control System of Automatic Blood Component Fractionation Machine based-on MCU. *International Journal of Control and Automation*. 6 (2).

Katus, M.C., Szczepiorkowski, Z.M., Dumont, L.J. & Dunbar, N.M. (2014) Safety of platelet transfusion: Past, present and future. *Vox Sanguinis*. [Online] 107 (2), 103–113. Available from: doi:10.1111/vox.12146.

Kaufman, R.M., Djulbegovic, B., Gernsheimer, T., Kleinman, S., Tinmouth, A.T., Capocelli, K.E., et al. (2015) Platelet transfusion: A clinical practice guideline from the AABB. *Annals of Internal Medicine*. [Online] 162 (3), 205–213. Available from: doi:10.7326/M14-1589.

Kelley, D.L., Mangini, J., Lopez-Plaza, I. & Triulzi, D.J. (2000) The utility of < or =3-day-old whole-blood platelets in reducing the incidence of febrile

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
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Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

nonhemolytic transfusion reactions. *Transfusion*. [Online] 40 (4), 439–442. Available from: http://www.ncbi.nlm.nih.gov/pubmed/10773056 [Accessed: 17 June 2016].

Kemenkes RI (2015) *Laporan Hasil UTD Tahun 2014: Pelayanan Darah di Indonesia*.

Kerkhoffs, J.L.H., Van Putten, W.L.J., Novotny, V.M.J., Te Boekhorst, P.A.W., Schipperus, M.R., Zwaginga, J.J., et al. (2010) Clinical effectiveness of leucoreduced, pooled donor platelet concentrates, stored in plasma or additive solution with and without pathogen reduction. *British Journal of Haematology*. [Online] 150 (2), 209–217. Available from: doi:10.1111/j.1365-2141.2010.08227.x.

Kickler, T.S. (2006) Platelet biology - an overview. *Transfusion Alternatives in Transfusion Medicine*. [Online] 8 (2), 79–85. Available from: doi:10.1111/j.1778-428X.2006.00013.x [Accessed: 14 June 2016].

Kiefel, V. (2008) Reactions Induced by Platelet Transfusions. *Transfusion Medicine and Hemotherapy*. [Online] 35354–358. Available from: doi:10.1159/000151350.

Kilkson, H., Holme, S. & Murphy, S. (1984) Platelet metabolism during storage of platelet concentrates at 22 degrees C. *Blood*. [Online] 64 (2), 406–414. Available from: http://www.ncbi.nlm.nih.gov/pubmed/6430365 [Accessed: 14 June 2016].

Kim, S.W. & Lim, Y.A. (2006) Establishment of reference values for platelet activation markers by flow cytometry. *The Korean journal of laboratory medicine*. [Online] 26 (5), 323–328. Available from: http://www.ncbi.nlm.nih.gov/pubmed/18156745 [Accessed: 17 June 2016].

Kluter, H., Bubel, S., Kirchner, H. & Wilhelm, D. (1999) Febrile and allergic transfusion reactions after the transfusion of white cell-poor platelet

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
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Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

preparations. *Transfusion*. 391179–1184.

Kolarova, H., Klinke, A., Kremserova, S., Adam, M., Pekarova, M., Baldus, S., et al. (2013) Myeloperoxidase induces the priming of platelets. *Free Radical Biology and Medicine*. [Online] 61357–369. Available from: doi:10.1016/j.freeradbiomed.2013.04.014.

Lannan, K.L., Sahler, J., Spinelli, S.L., Phipps, R.P. & Blumberg, N. (2013) Transfusion immunomodulation - the case for leukoreduced and (perhaps) washed transfusions. *Blood Cells, Molecules, and Diseases*. [Online] 50 (1), 61–68. Available from: doi:10.1016/j.bcmd.2012.08.009.

Lee, R. & Pine, J.. (1999) *Wintrobe's Clinical Hematology*. 10th edition. New York, Williams and Walkins Publisher.

Levin, E., Jenkins, C., Culibrk, B., Gyöngyössy-Issa, M.I.C., Serrano, K. & Devine, D. V. (2012) Development of a quality monitoring program for platelet components: A report of the first four years' experience at Canadian Blood Services. *Transfusion*. [Online] 52 (4), 810–818. Available from: doi:10.1111/j.1537-2995.2011.03402.x.

Levin, E., Serrano, K., Devine, D. V. & Biomedical Excellence for Safer Transfusion (BEST) Collaborative (2013) Standardization of CD62P measurement: Results of an international comparative study. *Vox Sanguinis*. [Online] 105 (1), 38–46. Available from: doi:10.1111/vox.12023 [Accessed: 14 June 2016].

Li, C., Li, J., Li, Y., Lang, S., Yougbare, I., Zhu, G., et al. (2012) Crosstalk between platelets and the immune system: Old systems with new discoveries. *Advances in Hematology*. [Online] 2012. Available from: doi:10.1155/2012/384685.

Lim, Y.A., Cho, S.R., Lee, W.G., Park, J.S. & Kim, S.W. (2008) Change of platelet activation markers using flow cytometry in patients with

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
TEGUH TRIYONO, DR., M.KES., SP.PK, Prof. dr. Budi Mulyono, SpPK(K), MM.; Prof. Dr. dr. Sutaryo, SpA(K).; Prof.
Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

hematology/oncology disorders after transfusion. *Platelets*. [Online] 19 (5), 328–334. Available from: doi:10.1080/09537100802129867.

Lin, Y. & Foltz, L.M. (2005) Proposed guidelines for platelet transfusion. *BC Medical Journal*. [Online] 47 (5), 245–248. Available from: doi:10.1016/S0887-7963(03)00018-X.

Liumbruno, G., Bennardello, F., Lattanzio, A., Piccoli, P. & Rossetti, G. (2009) Recommendations for the transfusion of plasma and platelets. *Blood Transfusion*. [Online] 7 (2), 132–150. Available from: doi:10.2450/2009.0005-09.

Lyons, V. & Triulzi, D.J. (1999) Platelet Transfusion Therapy. *Transfusion Medicine Updates*.

Madiyono, B.., Sastroasmoro, S., Budiman, I. & Purwanto, S.. (2010) Perkiraan besar sampel. In: S. Sastroasmoro & S. Ismael (eds.). *Dasar-dasar Metodologi Penelitian Klinis*. Jakarta, Sagung Seto. pp. 302–331.

Marwaha, N. & Sharma, R.R. (2009) Consensus and controversies in platelet transfusion. *Transfusion and Apheresis Science*. [Online] 41 (2), 127–133. Available from: doi:10.1016/j.transci.2009.07.004.

Mazzei, C.A., Popovsky, M. & Kopko, P.M. (2011) Noninfectious Complications of Blood Transfusion. *AABB Technical Manual*. 727–762.

McFadyen, J.D. & Kaplan, Z.S. (2015) Platelets are not just for clots. *Transfusion Medicine Reviews*. [Online] 29 (2), 110–119. Available from: doi:10.1016/j.tmrv.2014.11.006.

McFaul, S.J., Corley, J.B., Mester, C.W. & Nath, J. (2009) Packed blood cells stored in AS-5 become proinflammatory during storage. *Transfusion*. [Online] 49 (7), 1451–1460. Available from: doi:10.1111/j.1537-2995.2009.02158.x.

Mishima, Y., Tsuno, N.H., Matsuhashi, M., Yoshizato, T., Sato, T., Ikeda, T., et

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
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Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

al. (2015) Effects of universal vs bedside leukoreductions on the alloimmunization to platelets and the platelet transfusion refractoriness. *Transfusion and Apheresis Science*. [Online] 52 (1), 112–121. Available from: doi:10.1016/j.transci.2014.11.001.

Mueller, M.M., Hourfar, M.K., Huber, E., Sireis, W., Weichert, W., Seifried, E., et al. (2012) Oxygen measurements in platelet fluids - a new non-invasive method to detect bacterial contaminations in platelets. *Transfusion Medicine*. [Online] 22 (3), 211–216. Available from: doi:10.1111/j.1365-3148.2012.01146.x.

Müller-Steinhardt, M., Kirchner, H. & Klüter, H. (1998) Impact of storage at 22 degrees C and citrate anticoagulation on the cytokine secretion of mononuclear leukocytes. *Vox sanguinis*. [Online] 75 (1), 12–17. Available from: http://www.ncbi.nlm.nih.gov/pubmed/9745148 [Accessed: 14 June 2016].

Murphy, S. & Gardner, F.H. (1971) Platelet Storage at 22 C; Metabolic, Morphologic, and Functional Studies. *The Journal of Clinical Investigation*. [Online] 50370. Available from: doi:10.1172/JCI106504.

Muylle, L., Wouters, E. & Peetermans, M.E. (1996) Febrile reactions to platelet transfusion: the effect of increased interleukin 6 levels in concentrates prepared by the platelet-rich plasma method. *Transfusion*. [Online] 36 (10), 886–890. Available from: http://www.ncbi.nlm.nih.gov/pubmed/8863775 [Accessed: 14 June 2016].

Nagy, B.J., Debreceni, I.B. & Kappelmayer, J. (2012) Flow Cytometry in the Clinical Laboratory F Low Cytometric Investigation of Classical and Alternative Platelet Activation. *The Journal of the International Federation of Clinical Chemistry and Laboratory Medicine*. 23 (4), 1–11.

Nagy, V., Kolozsvari, B., Balogh, Z., Csutak, A., Kasza, M., Nagy, B., et al. (2013) Increased level of platelet P-selectin in nonarteritic anterior ischemic

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
TEGUH TRIYONO, DR., M.KES., SP.PK, Prof. dr. Budi Mulyono, SpPK(K), MM.; Prof. Dr. dr. Sutaryo, SpA(K).; Prof.
Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

optic neuropathy. *Graefe's Archive for Clinical and Experimental Ophthalmology*. [Online] 251 (3), 917–922. Available from: doi:10.1007/s00417-012-2196-0.

Nasiri, S. (2015) an Overview on Leucoreduction in Blood Components. *International Journal of Analytical, Pharmaceutical and Biomedical Sciences*. 4 (7), 46–59.

National Blood Authority Haemovigilance Advisory Committee (2015) Australian Haemovigilance Report. *Statewide Agricultural Land Use Baseline 2015*. [Online]. 1. Available from: doi:10.1017/CBO9781107415324.004.

Nielsen, H.J., Reimert, C.M., Pedersen, A.N., Brünner, N., Edvardsen, L., Dybkjaer, E., et al. (1996) Time-dependent, spontaneous release of white cell- and platelet-derived bioactive substances from stored human blood. *Transfusion*. [Online] 36 (11-12), 960–965. Available from: doi:10.1164/rccm.201209-1718OC.

Nomura, S., Okamae, F., Abe, M., Hosokawa, M., Yamaoka, M., Ohtani, T., et al. (2000) Platelets expressing P-selectin and platelet-derived microparticles in stored platelet concentrates bind to PSGL-1 on filtrated leukocytes. *Clinical and applied thrombosis/hemostasis*. [Online] 6 (4), 213–221. Available from: doi:10.1177/107602960000600406.

Nurden, a & Nurden, P. (2011) Advances in our understanding of the molecular basis of disorders of platelet function. *Journal of thrombosis and haemostasis*. [Online] 9 Suppl 176–91. Available from: doi:10.1111/j.1538-7836.2011.04274.x.

Nurden, A.T. (2011) Platelets, inflammation and tissue regeneration. *Thrombosis and Haemostasis*. [Online] 105 (SUPPL. 1), 13–33. Available from: doi:10.1160/THS10-11-0720.

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
TEGUH TRIYONO, DR., M.KES., SP.PK, Prof. dr. Budi Mulyono, SpPK(K), MM.; Prof. Dr. dr. Sutaryo, SpA(K).; Prof.
Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

Panzer, S. & Jilma, P. (2011) Methods for testing platelet function for transfusion medicine. *Vox Sanguinis*. [Online] 101 (1), 1–9. Available from: doi:10.1111/j.1423-0410.2011.01467.x [Accessed: 14 June 2016].

Passacquale, G. & Ferro, A. (2011) Current concepts of platelet activation: Possibilities for therapeutic modulation of heterotypic vs. homotypic aggregation. *British Journal of Clinical Pharmacology*. [Online] 72 (4), 604–618. Available from: doi:10.1111/j.1365-2125.2011.03906.x.

Perrotta, P.. & Snyder, E.. (2007) Platelet Storage and Transfusion. In: A. D. Michelson (ed.). *Platelets*. 2nd edition. USA, Academic Press.

Pham, H.P. (2011) *Transfusion reaction, febrile nonhemolytic transfusion reaction (FNHTR)*. [Online]. 2011. Pathologyoutlines.com. Available from: http://www.pathologyoutlines.com/topic/transfusionmedfebrilenonhemolytic.html [Accessed: 17 June 2016].

Philip, J. & Dimri, U. (2015) Non Infectious Complications Related to Blood Transfusion : An 11 year Retrospective Analysis in a Tertiary Care Hospital. *Indian Journal of Hematology and Blood Transfusion*. [Online] Available from: doi:10.1007/s12288-015-0565-7.

Plaza, E.M., Cespedes, P., Fernandez, H., Sanchez-Guiu, M.I., Egea, J.M., Vicente, V., et al. (2014) Quality assessment of buffy-coat-derived leucodepleted platelet concentrates in PAS-plasma, prepared by the OrbiSac or TACSI automated system. *Vox Sanguinis*. [Online] 106 (1), 38–44. Available from: doi:10.1111/vox.12072.

Pourmokhtar, M., E, S.M., Abbasi, F. & Zarei, N. (2014) Comparative Study of Four Platelet-Rich Plasma Methods for Preparing Platelet Concentrates. *Iranian Journal of Blood and Cancer*. 6 (3), 103–107.

Qian, X. & Wen-jun, L. (2013) Platelet Changes in Acute Leukemia. *Cell Biochem Biophys*. [Online] 671473–1479. Available from:

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
TEGUH TRIYONO, DR., M.KES., SP.PK, Prof. dr. Budi Mulyono, SpPK(K), MM.; Prof. Dr. dr. Sutaryo, SpA(K).; Prof.
Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

doi:10.1007/s12013-013-9648-y.

Rajesh, K., Harsh, S. & Amarjit, K. (2015) Effects of Prestorage Leukoreduction on the Rate of Febrile Nonhemolytic Transfusion Reactions to Red Blood Cells in a Tertiary Care Hospital. *Annals of medical and health sciences research*. [Online] 5 (3), 185–188. Available from: doi:10.4103/2141-9248.157498 [Accessed: 14 June 2016].

Rank, A., Nieuwland, R., Crispin, A., Grützner, S., Iberer, M., Toth, B., et al. (2011) Clearance of platelet microparticles in vivo. *Platelets*. [Online] 22 (2), 111–116. Available from: doi:10.3109/09537104.2010.520373.

Refaai, M.A., Phipps, R.P., Spinelli, S.L. & Blumberg, N. (2011) Platelet transfusions: Impact on hemostasis, thrombosis, inflammation and clinical outcomes. *Thrombosis Research*. [Online] 127 (4), 287–291. Available from: doi:10.1016/j.thromres.2010.10.012.

Ritchie, J.L., Alexander, H.D. & Rea, I.M. (2000) Flow cytometry analysis of platelet P-selectin expression in whole blood--methodological considerations. *Clinical and laboratory haematology*. [Online] 22 (6), 359–363. Available from: http://www.ncbi.nlm.nih.gov/pubmed/11318803 [Accessed: 14 June 2016].

Roeloffzen, W.W.H., Kluin-Nelemans, H.C., Veeger, N.J.G.M., Bosman, L. & De Wolf, J.T.M. (2010) Transfused stored platelets have the same haemostatic function as circulating native platelets. *Vox Sanguinis*. [Online] 99 (2), 123–130. Available from: doi:10.1111/j.1423-0410.2010.01337.x.

Saboor, M., Moinuddin, M. & Ilyas, S. (2013) New horizons in platelets flow cytometry. *The Malaysian journal of medical sciences*. [Online] 20 (2), 62–66. Available from: http://www.ncbi.nlm.nih.gov/pubmed/23983579 [Accessed: 14 June 2016].

Sahler, J., Grimshaw, K., Spinelli, S.L., Refaai, M.A., Phipps, R.P. & Blumberg,

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
TEGUH TRIYONO, DR., M.KES., SP.PK, Prof. dr. Budi Mulyono, SpPK(K), MM.; Prof. Dr. dr. Sutaryo, SpA(K).; Prof.
Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

N. (2011) Platelet storage and transfusions: New concerns associated with an old therapy. *Drug Discovery Today: Disease Mechanisms*. [Online] 8 (1-2), e9–e14. Available from: doi:10.1016/j.ddmec.2011.06.001.

Sanders, R.P., Maddirala, S.D., Geiger, T.L., Pounds, S., Sandlund, J.T., Raul, C., et al. (2005) Premedication with acetaminophen or diphenhydramine for transfusion with leucoreduced blood products in children. *British Journal of Haematology*. [Online] 4781–787. Available from: doi:10.1111/j.1365-2141.2005.05670.x.

Sandgren, P., Meinke, S., Eckert, E., Douagi, I., Wikman, A. & Hoglund, P. (2014) Random aggregates in newly produced platelet units are associated with platelet activation and release of the immunomodulatory factors sCD40L and RANTES. *Transfusion*. [Online] 54 (3), 602–612. Available from: doi:10.1111/trf.12345.

Sastroasmoro, S. & Ismael, S. (2011) *Dasar-Dasar Metodologi Penelitian Klinis*. Jakarta, Sagung seto.

Schrezenmeier, H. & Seifried, E. (2010) Buffy-coat-derived pooled platelet concentrates and apheresis platelet concentrates: which product type should be preferred? *Vox sanguinis*. [Online] 99 (1), 1–15. Available from: doi:10.1111/j.1423-0410.2009.01295.x [Accessed: 14 June 2016].

Schubert, P., Culibrk, B., Karwal, S., Slichter, S.J. & Devine, D. V. (2012) Optimization of platelet concentrate quality: Application of proteomic technologies to donor management. *Journal of Proteomics*. [Online] 76329–336. Available from: doi:10.1016/j.jprot.2012.06.023.

Semple, J.W., Italiano, J.E. & Freedman, J. (2011) Platelets and the immune continuum. *Nature Reviews Immunology*. [Online] 11 (4), 264–274. Available from: doi:10.1038/nri2956 [Accessed: 14 June 2016].

Sharma, D.C., Rai, S., Gupta, S. & Jain, B. (2014) Universal Leukoreduction

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
TEGUH TRIYONO, DR., M.KES., SP.PK, Prof. dr. Budi Mulyono, SpPK(K), MM.; Prof. Dr. dr. Sutaryo, SpA(K).; Prof.
Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

Decreases the Incidence of Febrile Nonhemolytic Transfusion Reactions to Cellular Blood Components: A 5 Year Study.pdf. *International Blood Research & Reviews*. 2 (6), 279–288.

Shukla, R., Patel, T. & Gupte, S. (2015) Release of cytokines in stored whole blood and red cell concentrate: Effect of leukoreduction. *Asian journal of transfusion science*. [Online] 9 (2), 145–149. Available from: doi:10.4103/0973-6247.162708 [Accessed: 17 June 2016].

Silberman, S. (1999) Platelets Preparations, Transfusion, Modifications, and Substitutes. *Arch Pathol Lab Med*. 123.

Singh, H., Chaudhary, R. & Ray, V. (2003) Evaluation of platelet storage lesions in platelet concentrates stored for seven days. *Indian Journal of Medical Research*. 118 (DEC.), 243–246.

Slichter, S.J., Corson, J., Jones, M.K., Christoffel, T., Pellham, E., Bailey, S.L., et al. (2014) Exploratory studies of extended storage of apheresis platelets in a platelet additive solution (PAS). *Blood*. [Online] 123 (2), 271–280. Available from: doi:10.1182/blood-2013-05-501247.

Slichter, S.J., Davis, K., Enright, H., Braine, H., Gernsheimer, T., Kao, K.J., et al. (2005) Factors affecting posttransfusion platelet increments, platelet refractoriness, and platelet transfusion intervals in thrombocytopenic patients. *Blood*. [Online] 105 (10), 4106–4114. Available from: doi:10.1182/blood-2003-08-2724.

Sysmex (1999) *Haematology Analyzer: Manual Book*. Sysmex.

Tanaka, K.A. (2006) The assessment of platelet function. *Transfusion Alternatives in Transfusion Medicine*. [Online] 8 (2), 95–105. Available from: doi:10.1111/j.1778-428X.2006.00018.x [Accessed: 14 June 2016].

Triulzi, D.J., Assmann, S.F., Strauss, R.G., Ness, P.M., Hess, J.R., Kaufman, R.M., et al. (2012) The impact of platelet transfusion characteristics on

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
TEGUH TRIYONO, DR., M.KES., SP.PK, Prof. dr. Budi Mulyono, SpPK(K), MM.; Prof. Dr. dr. Sutaryo, SpA(K).; Prof.
Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

posttransfusion platelet increments and clinical bleeding in patients with hypoproliferative thrombocytopenia. *Blood*. [Online] 119 (23), 5553–5562. Available from: doi:10.1182/blood-2011-11-393165.

UPTD RSUP Dr. Sardjito (2011) *Laporan Pengeluaran Darah dan Rekapitulasi Pengeluaran Darah*.

UPTD RSUP Dr. Sardjito (2015) *Laporan Pengeluaran Darah dan Rekapitulasi Pengeluaran Darah*.

Vamvakas, E.C. & Blajchman, M.A. (2007) Transfusion-related immunomodulation (TRIM): An update. *Blood Reviews*. [Online] 21 (6), 327–348. Available from: doi:10.1016/j.blre.2007.07.003.

Vassallo, R. & Murphy, S. (2003) Platelet function, kinetics, and metabolism-impact on quality assessment, storage, and clinical use. In: Bruce C, McLeod, Robert Weinstein, & Thomas H Price (eds.). *Apheresis: Principles and Practice*. 2nd edition. Bethesda, American Association of Blood Banks (AABB).

Vetlesen, A., Holme, P.A., Lyberg, T. & Kjeldsen-Kragh, J. (2012) Recovery, survival, and function of transfused platelets and detection of platelet engraftment after allogeneic stem cell transplantation. *Transfusion*. [Online] 52 (6), 1321–1332. Available from: doi:10.1111/j.1537-2995.2011.03442.x.

Vollmer, T., Engemann, J., Kleesiek, K. & Dreier, J. (2011) Bacterial screening by flow cytometry offers potential for extension of platelet storage: results of 14 months of active surveillance. *Transfusion medicine*. [Online] 21 (3), 175–182. Available from: doi:10.1111/j.1365-3148.2011.01070.x [Accessed: 14 June 2016].

Vollmer, T., Hinse, D., Schottstedt, V., Bux, J., Tapernon, K., Sibrowski, W., et al. (2012) Inter-laboratory comparison of different rapid methods for the detection of bacterial contamination in platelet concentrates. *Vox Sanguinis*.

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
TEGUH TRIYONO, DR., M.KES., SP.PK, Prof. dr. Budi Mulyono, SpPK(K), MM.; Prof. Dr. dr. Sutaryo, SpA(K).; Prof.
Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

[Online] 103 (1), 1–9. Available from: doi:10.1111/j.1423-0410.2011.01572.x.

Vucic, M., Tijanic, I., Govedarevic, N., Macukanovic, L. & Pavlovic, Z. (2011) The effect of a leukodepletion model on the activation stage of platelets. *Open Medicine*. [Online] 6 (2), 181–184. Available from: doi:10.2478/s11536-010-0062-1 [Accessed: 14 June 2016].

Wandt, H., Schaefer-Eckart, K., Wendelin, K., Pilz, B., Wilhelm, M., Thalheimer, M., et al. (2012) Therapeutic platelet transfusion versus Routine prophylactic transfusion in patients with haematological malignancies: An open-label, multicentre, randomised study. *The Lancet*. [Online] 380 (9850), 1309–1316. Available from: doi:10.1016/S0140-6736(12)60689-8.

Wang, R.R., Triulzi, D.J. & Qu, L. (2012) Effects of prestorage vs poststorage leukoreduction on the rate of febrile nonhemolytic transfusion reactions to platelets. *American Journal of Clinical Pathology*. [Online] 138 (2), 255–259. Available from: doi:10.1309/AJCP5H7EKZTGGBKZ.

Wang, S.E., Lara, P.N., Lee-ow, A., Reed, J., Wang, L.R., Palmer, P., et al. (2002) Acetaminophen and diphenhydramine as premedication for platelet transfusions: A prospective randomized double-blind placebo-controlled trial. *American Journal of Hematology*. [Online] 70 (3), 191–194. Available from: doi:10.1002/ajh.10119.

World Health Organization (2001) *The Clinical Use of Blood*. Geneva, World Health Organization.

Xie, Z.T., Chen, C., Zhang, S.H., Yang, H.M. & Tao, Z.H. (2015) Effect of leukocyte filtration on the P-selectin expression of apheresis platelets. *Genetics and Molecular Research*. [Online] 14 (2), 5979–5985. Available from: doi:10.4238/2015.June.1.15.

Yamanaka, M. (2000) *Blood Platelets*. Japan, Sysmex Corporation.

UNIVERSITAS
GADJAH MADA
RISIKO DAN EFIKASI TRANSFUSI THROMBOCYTE CONCENTRATE NON-LEKODEPLESI
TEGUH TRIYONO, DR., M.KES., SP.PK, Prof. dr. Budi Mulyono, SpPK(K), MM.; Prof. Dr. dr. Sutaryo, SpA(K).; Prof.
Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

Yeaman, M.R. (2014) Platelets: at the nexus of antimicrobial defence. *Nature Reviews Microbiology*. [Online] 12 (6), 426–437. Available from: doi:10.1038/nrmicro3269 [Accessed: 14 June 2016].

Zhu, M., Xu, W., Wang, B.L. & Su, H. (2014) Hemostatic function and transfusion efficacy of apheresis platelet concentrates treated with gamma irradiation in use for thrombocytopenic patients. *Transfusion Medicine and Hemotherapy*. [Online] 41 (3), 189–196. Available from: doi:10.1159/000363523.