

6. Literatur

1. Haschberger B, Waterkamp A, Heiden M, Seitz R. Bericht zur Meldung nach § 21 TFG für die Jahre 2001 und 2002. Bundesgesundheitsblatt-Gesundheitsforschung-Gesundheitsschutz 2005; 48: 99-119
2. Müller N. Transfusionsgesetz in Deutschland – eine Bilanz. Zentralbl Chir 2003; 128: 459-461
3. Biscopig J, Bein G. Kritische Indikationsstellung beim Einsatz von Blutprodukten im klinischen Alltag. Deutsches Ärzteblatt 2003, 100: A929-A932
4. Richtlinien zur Gewinnung von Blut und Blutbestandteilen und zur Anwendung von Blutprodukten (Hämotherapie), Deutscher Ärzte-Verlag, Köln, 2005; S.3
5. Richtlinien zur Gewinnung von Blut und Blutbestandteilen und zur Anwendung von Blutprodukten (Hämotherapie), Deutscher Ärzte-Verlag, Köln, 2005; S.7
6. Leal-Noval SR, Jara-Lopez I, Garcia-Garmendia JL, Marin-Niebla A, Herruzo-Aviles A, Camacho-Larana P, Loscertales J. Influence of erythrocyte concentrate storage time on postsurgical morbidity in cardiac surgery patients. Anesthesiology. 2003; 98: 815-22
7. Vamvakas EC, Carven JH. Transfusion and postoperative pneumonia in coronary artery bypass graft surgery: effect of the length of storage of transfused red cells. Transfusion 1999; 39: 70-10
8. Silliman CC, Boshkov LK, Mehdizadehkashi Z, Elzi DJ, Dickey WO, Podlosky L, Clarke G, Ambruso DR. Transfusion-related acute lung injury: epidemiology and a prospective analysis of etiologic factors. Blood. 2003; 101:454-62
9. Silliman CC, Voelkel NF, Allard JD, Elzi DJ, Tuder RM, Johnson JL, Ambruso DR. Plasma and lipids from stored packed red blood cells cause acute lung injury in an animal model. J Clin Invest. 1998; 101:1458-67
10. Silliman CC, Dickey WO, Paterson AJ, Thurman GW, Clay KL, Johnson CA, Ambruso DR. Analysis of the priming activity of lipids generated during routine storage of platelet concentrates. Transfusion. 1996; 36:133-9
11. Silliman CC, Clay KL, Thurmann GW, Johnson CA, Ambruso DR. Partial characterization of lipids that develop during the routine storage of blood and prime the neutrophil NADPH oxidase. J Lab Clin Med. 1994; 124: 684-94

12. Gu YJ, de Vries AJ, Boonstra PW, van Oeveren W. Leukocyte depletion results in improved lung function and reduced inflammatory response after cardiac surgery. *J Thorac Cardiovasc Surg.* 1996; 112: 494-500
13. Olivencia-Yurvati AH, Ferrara CA, Tiemey N, Wallace N, Mallet RT. Strategic leukocyte depletion reduces pulmonary microvascular pressure and improves pulmonary status post-cardiopulmonary bypass. *Perfusion.* 2003; 18 Suppl 1:23-31
14. Robert Koch Institut: *Epidemiologisches Bulletin* Nr. 40 (2005): 365-367
15. McClelland DB, Philipps P. Errors in blood transfusion in Britain: survey of hospital haematology departments. *B M J* 1994;308:1205-1206
16. Williamson LW, Lowe S, Love EM, Cohen H, Soldan K, McClelland DB, Skacel P, Barbara JA. Serious hazards of transfusion (SHOT) initiative: analysis of the first two annual reports. *BMJ.* 1999 Jul 3; 319(7201):16-9
17. Richtlinien zur Gewinnung von Blut und Blutbestandteilen und zur Anwendung von Blutprodukten (Hämotherapie), Deutscher Ärzte-Verlag, Köln, 2005; S.57
18. Junck H, Kretschmer V. Problems In Blood Supply - Experiences Of A Small Transfusion Service. *Infus Ther Transfus Med* 2002;29:(Sonderheft 1):17
19. Redhead CS. CRS report to Congress-blood safety and availability: managing supply to meet growing demand. Library of Congress, Feb 3, 2000
20. Novis DA, Renner S, Friedberg R, Walsh MK, Saladino AJ. Quality indicators of blood utilization: three College of American Pathologists Q-Probes studies of 12,288,404 red blood cell units in 1639 hospitals. *Arch Pathol Lab Med.* 2002; 126:150-6
21. Richtlinien zur Gewinnung von Blut und Blutbestandteilen und zur Anwendung von Blutprodukten (Hämotherapie), Deutscher Ärzte-Verlag, Köln, 2005; S.49
22. Ben-Tal O, Zwang E, Eichel R, et al. Vitamin K-dependent coagulation factors and fibrinogen levels in FFP remain stable upon repeated freezing and thawing. *Transfusion.* 2003; 43:873-7
23. Heger A, Romisch J, Svae TE. Stability of solvent/detergent-treated plasma and single-donor fresh-frozen plasma during 48h after thawing. *Transfus Apher Sci* 2005; 33:257-7
24. Nifong TP, Light J, Wenk RE. Coagulant stability and sterility of thawed S/D-treated plasma. *Transfusion* 2002; 42:1581-4

25. Dietrich W, Lüth JU, Kormann J, Wick S, Kaiser W, Eberle B, Karliczek F, Junger A, Gille A, Schwerdt M, Leftheriadis S, Jaschik M. Intraoperative blood requirements and allogeneic blood transfusion in cardioanesthesia. Data analysis of 7729 patients in 12 cardiac surgical clinics. *Anaesthesist*. 1999; 48:876-83
26. Kastrup M, Markewitz A, Spies C, Carl M, Erb J, Grosse J, Schirmer U. Current practice of hemodynamic monitoring and vasopressor and inotropic therapy in post-operative cardiac surgery patients in Germany: results from a postal survey. *Acta Anaesthesiol Scand*. 2007; 51: 347-58
27. Johnson RG, Thurer RL, Kruskall MS, Sirois C, Gervino EV, Critchlow J, Weintraub RM. Comparison of two transfusion strategies after elective operations for myocardial revascularization. *J Thorac Cardiovasc Surg* 1992; 104:307-14
28. Use of blood products for elective surgery in 43 European hospitals. The Sanguis Study Group. *Transfus Med*. 1994; 4:251-68
29. Stover EP, Siegel LC, Parks R, Levin J, Body SC, Maddi R, D'Ambra N, Mangano DT, Spiess BD. Variability in transfusion practice for coronary artery bypass surgery persists despite national consensus guidelines: a 24-institution study. Institutions of the Multicenter Study of Perioperative Ischemia Research Group. *Anesthesiology*. 1998; 88:327-33
30. Hutton B, Ferguson D, Tinmouth A, McIntyre L, Kmetz A, Hebert PC. Transfusion rates vary significantly amongst Canadian medical centres. *Can J Anaesth*. 2005; 52:581-90.
31. Engoren MC, Habib RH, Zacharias A, Schwann TA, Riordan CJ, Durham SJ. Effect of blood transfusion on long-term survival after cardiac operation. *Ann Thorac Surg*. 2002; 74:1180-6
32. Koch CG, Khandwala F, Li L, Estafanous FG, Loop FD, Blackstone EH. Persistent effect of red cell transfusion on health-related quality of life after cardiac surgery. *Ann Thorac Surg*. 2006; 82:13-20
33. Bucerius J, Gummert JF, Borger MA, Walther T, Doll N, Onnasc JF, Metz S, Falk V, Mohr FW. Stroke after cardiac surgery: a risk factor analysis of 16,184 consecutive adult patients. *Ann Thorac Surg*. 2003; 75:472-8
34. Michalopoulos A, Geroulanos S, Rosmarakis ES, Falagas ME. Frequency, characteristics, and predictors of microbiologically documented nosocomial infections after cardiac surgery. *Eur J Cardiothorac Surg*. 2006; 29:456-60

35. Koch CG, Li L, van Wagoner DR, Duncan AI, Gillinov AM, Blackstone EH. Red cell transfusion is associated with an increased risk for postoperative atrial fibrillation. *Ann Thorac Surg.* 2006; 82:1747-56
36. Yusuf S, Zhao F, Mehta SR, Chrolavicius S, Tognoni G, Fox KK. Clopidogrel in Unstable Angina to Prevent Recurrent Events Trial Investigators. Effects of clopidogrel in addition to aspirin in patients with acute coronary syndromes without ST-segment elevation. *N Engl J Med.* 2001; 345:494-502
37. Yende S, Wunderink RG. Effect of clopidogrel on bleeding after coronary artery bypass surgery. *Crit Care Med.* 2001; 29:2271-5
38. Hongo RH, Ley J, Dick SE, Yee RR. The effect of clopidogrel in combination with aspirin when given before coronary artery bypass grafting. *J Am Coll Cardiol.* 2002; 40:231-7
39. MacFadden EP, Stabile E, Regar E, Cheneau E, Ong AT, Kinnaird T, Suddath WO, Weissman NJ, Torguson R, Kent KM, Picahrd AD, Satler LF, Waksman R, Serruys PW. Late thrombosis in drug-eluting coronary stents after discontinuation of antiplatelet therapy. *Lancet.* 2004; 364(9444): 1519-21
40. Cooley DA, Beall AC, Grondin P. Open-heart operations with disposable oxygenators, 5 per cent dextrose prime, and normothermia. *Surgery* 1962, 52:713-9
41. Habib RH, Zacharias A, Schwann TA, Riordan CJ, Engoren M, Durham SJ, Shah A. Role of hemodilutional anemia and transfusion during cardiopulmonary bypass in renal injury after coronary revascularization: implications on operative outcome. *Crit Care Med* 2005;33:1749-1756
42. Cook DJ, Oliver WC Jr, Orszulak TA, Daly RC, Bryce RD. Cardiopulmonary bypass temperature, hematocrit, and cerebral oxygen delivery in humans. *Ann Thorac Surg* 1995; 60:1671-1677
43. Shibutani K, Komatsu T, Kubal K, Sanchala V, Kumar V, Bizzarri DV. Critical level of oxygen delivery in anesthetized man. *Crit Care Med* 1983,11:640-643
44. Mathru M, Kleinman B, Blakeman B, Sullivan H, Kumar P, Dries DJ. Myocardial metabolism and adaptation during extreme hemodilution in humans after coronary revascularization. *Crit Care Med* 1992;20:1420-1425
45. Spiess BD, Ley C, Body SC, Siegel LC, Stover EP, Maddi R, D'Ambra M, Jain U, Liu F, Herskowitz A, Mangano DT, Levin J. Hematocrit value on intensive care unit entry influences the frequency of Q-wave myocardial

- infarction after coronary artery bypass grafting. The Institutions of the Multicenter Study of Perioperative Ischemia (McSPI) Research Group. *J Thorac Cardiovasc Surg* 1998;116:460-467
46. Swaminathan M, Phillips-Bute BG, Conlon PJ, Smith PK, Newman MF, Stafford-Smith M. The association of lowest hematocrit during cardiopulmonary bypass with acute renal injury after coronary artery bypass surgery. *Ann Thorac Surg* 2003;76:784-791
 47. Karkouti K, Beattie WS, Wijeyesundera DN, Rao V, Chan C, Dattilo KM, Djajani G, Ivanov J, Karski J, David TE. Hemodilution during cardiopulmonary bypass is an independent risk factor for acute renal failure in adult cardiac surgery. *J Thorac Cardiovasc Surg* 2005; 129:391-400
 48. DeFoe GR, Ross CS, Olmstead EM, Surgenor SD, Fillinger MP, Groom RC, Forest RJ, Pieroni JW, Warren CS, Bogosian ME, Krumholz CF, Clark C, Clough RA, Weldner PW, Lahey SJ, Leavitt BJ, Marrin CA, Charlesworth DC, Marshall P, O'Connor GT. Lowest hematocrit on bypass and adverse outcomes associated with coronary artery bypass grafting. Northern New England Cardiovascular Disease Study Group. *Ann Thorac Surg* 2001; 71:769-776
 49. Fang WC, Helm RE, Krieger KH, Rosengart TK, DuBois WJ, Sason C, Lesser ML, Isom OW, Gold JP. Impact of minimum hematocrit during cardiopulmonary bypass on mortality in patients undergoing coronary artery surgery. *Circulation* 1997; 96(9 Suppl):II-194-199
 50. The Warm Heart Investigators. Randomised trial of normothermic versus hypothermic coronary bypass surgery. *Lancet* 1994; 343:559-563
 51. Nathan HJ, Parlea L, Dupuis JY, Hendry P, Williams KA, Rubens FD, Wells GA. Safety of deliberate intraoperative and postoperative hypothermia for patients undergoing coronary artery surgery: a randomized trial. *J Thorac Cardiovasc Surg* 2004; 127:1270-1275
 52. Moulton MJ, Creswell LL, Mackey MA, Cox JL, Rosenbloom M. Reexploration for bleeding is a risk factor for adverse outcomes after cardiac operations. *J Thorac Cardiovasc Surg*. 1996; 111: 1037-46
 53. Dacey LJ, Munoz JJ, Baribeau YR, Johnson ER, Lahey SJ, Leavitt BJ, Quinn RD, Nugent WC, Birkmeyer JD, O'Connor GT. Reexploration for hemorrhage following coronary artery bypass grafting: incidence and risk factors. Northern New England Cardiovascular Disease Study Group. *Arch Surg*. 1998; 133: 442-7

54. Cohn LH, Rosborough D, Fernandez J. Reducing costs and length of stay and improving efficiency and quality of care in cardiac surgery. *Ann Thorac Surg.* 1997; 64(6 Suppl):S58-60
55. Carless PA, Moxey AJ, Stokes BJ, Henry DA. Are antifibrinolytic drugs equivalent in reducing blood loss and transfusion in cardiac surgery? A meta-analysis of randomized head-to-head trials. *BMC Cardiovasc Disord.* 2005; 5: 19
56. Levi M, Cromheecke ME, de Jonge E, Prins MH, de Mol BJ, Briet E, Buller HR. Pharmacological strategies to decrease excessive blood loss in cardiac surgery: a meta-analysis of clinically relevant endpoints. *Lancet.* 1999; 354:1940-7
57. Karthik S, Grayson AD, McCarron EE, Pullan DM, Desmond MJ. Reexploration for bleeding after coronary artery bypass surgery: risk factors, outcomes, and the effect of time delay. *Ann Thorac Surg.* 2004; 78: 527-34
58. von Heymann C, Spies C, Grubitzsch H, Schönfeld H, Sander M, Volk T. Bleeding after cardiac surgery: the role of recombinant factor VIIa. *Hamostaseologie.* 2006; 26(3 Suppl 1): S77-87
59. Hoffman M, Monroe DM 3rd. A cell-based model of hemostasis. *Thromb Haemost.* 2001; 85: 958-65
60. Richtlinien zur Gewinnung von Blut und Blutbestandteilen und zur Anwendung von Blutprodukten (Hämotherapie), Deutscher Ärzte-Verlag, Köln, 2005; S.4
61. Kraus M. Fibrinmonomer, in. *Labor und Diagnose*, Hrsg. Thomas L, Th Books Verlagsgesellschaft Frankfurt 2000; S. 646
62. Richtlinien zur Gewinnung von Blut und Blutbestandteilen und zur Anwendung von Blutprodukten (Hämotherapie), Deutscher Ärzte-Verlag, Köln, 2005; S.62
63. Stainsby D, Jones H, Asher D, Atterbury C, Boncinelli A, Brant L, Chapman C, Davison K, Gerrard R, Gray A, Knowles S, Love E, Milkins C, McClelland B, Norfolk D, Soldan K, Taylor C, Revill J, Williamson L, Cohen H. Serious Hazards of Transfusion. *Transfus med Rev* 2006; 20: 273-282
64. Richtlinien zur Gewinnung von Blut und Blutbestandteilen und zur Anwendung von Blutprodukten (Hämotherapie), Deutscher Ärzte-Verlag, Köln, 2005; S.62

65. Bekanntmachung des Paul-Ehrlich-Institutes. Bericht zur Meldung nach § 21 TFG für die Jahre 1999 und 2000. Bundesgesundheitsbl Gesundheitsforsch Gesundheitsschutz 2003; 46: 1016-1032
66. Clark JA, Ayoub MM. Blood and component wastage report. A quality assurance function of the hospital transfusion committee. Transfusion 1989; 29: 139-42
67. Richtlinien zur Gewinnung von Blut und Blutbestandteilen und zur Anwendung von Blutprodukten (Hämotherapie), Deutscher Ärzte-Verlag, Köln, 2005; S.62
68. Richtlinien zur Gewinnung von Blut und Blutbestandteilen und zur Anwendung von Blutprodukten (Hämotherapie), Deutscher Ärzte-Verlag, Köln, 2005; S.62
69. Klein HG ed. Standards for blood banks and transfusion services. 17th ed. Bethesda: American Association of Blood Banks, 1996
70. Dzik WH, Riibner MA, Linehan SK. Refreezing previously thawed fresh frozen plasma. Stability of coagulation factors V and VIII:C. Transfusion 1989;29:600-4
71. O'Neill EM, Rowley J, Hanson-Wicher M, et al. Effect of 24-hour whole blood storage on plasma clotting factors. Transfusion 1999; 39:488-91
72. Downes KA, Yomtovian R, Sarode R. Serial measurement of clotting factors in thawed plasma stored for 5 days. Transfusion 2001; 41:570
73. Metz J, McGrath KM, Copperchini ML, Haeusler M, Haysom HE, Gibson PR, Millar RJ, Babarczy A, Ferris L, Grigg AP. Appropriateness of transfusions of red cells, platelets and fresh frozen plasma. An audit in a tertiary care teaching hospital. Med J Aust 1995; 162:572-3,576-7
74. Seligsohn U, Zivelin A, Bar-Shani S. Cold-promoted activation of factor VII: is it a problem under blood bank conditions? Haemostasis 1983; 13:186-91
75. Heiden M, Salge U, Henschler R, Pfeiffer HU, Volkens P, Hesse J, Sireis W, Seitz R. Plasma quality after whole-blood filtration depends on storage temperature and filter type. Transfus Med 2004; 14:297-304
76. Saw J, Topol EJ, Steinhubl SR, Brennan D, Berger PB, Moliterno DJ; CREDO Investigators. Comparison of long-term usefulness of clopidogrel therapy after the first percutaneous coronary intervention or coronary artery bypass grafting versus that after the second or repeat intervention. Am J Cardiol. 2004; 94:623-5
77. Dörr G, Schmidt G, Gräfe M, Regitz-Zagrosek V, Fleck E. Effects of combined therapy with clopidogrel and acetylsalicylic acid on platelet

- glycoprotein expression and aggregation. *J Cardiovasc Pharmacol* 2002; 39:523-32
78. Ray JG, Deniz S, Olivieri A, Pollex E, Vermeulen MJ, Alexander KS, Cain DJ, Cybulsky I, Hamielec CM. Increased blood product use among coronary artery bypass patients prescribed preoperative aspirin and clopidogrel. *BMC Cardiovasc Disord.* 2003; 3: 3
 79. Fox KA, Mehta SR, Peters R, Zhao F, Lakkis N, Gersh BJ, Yusuf S. Benefits and Risks of the Combination of Clopidogrel and Aspirin in Patients Undergoing Surgical Revascularization for Non-ST-Elevation Acute Coronary Syndrome. The Clopidogrel in Unstable angina to prevent Recurrent ischemic Events (CURE) Trial. *Circulation.* 2004; 110:1202-8
 80. Pothula S, Sanchala VT, Nagappala B, Inchiosa MA Jr. The effect of preoperative antiplatelet/anticoagulant prophylaxis on postoperative blood loss in cardiac surgery. *Anesth Analg.* 2004; 98:4-10
 81. Pfisterer M, Brunner-LaRocca HP, Buser PT, Rickenbacher P, Hunziker P, Mueller C, Jeger R, Bader F, Osswald S, Kaiser C. BASKET-LATE Investigators. Late clinical effect after clopidogrel discontinuation may limit the benefit of drug-eluting stents: an observational study of the drug-eluting versus the bare-metal stents. *J Am Coll Cardiol* 2006; 48:2584-91
 82. Eisenstein EL, Anstrom KJ, Kong DF, Shaw LK, Tuttle RH, Mark DB, Kramer JM, Harrington RA, Matchar DB, Kandzari DE, Peterson ED, Schulman KA, Califf RM. Clopidogrel use and long-term clinical outcomes after drug-eluting stent implantation. *JAMA* 2007; 297: 159-68
 83. Patrono C. Aspirin as an antiplatelet drug. *N Engl J Med.* 1994; 330:1287-94
 84. Weber AA, Braun M, Hohlfeld T, Schwippert B, Tschöpe D, Schrör K. Recovery of platelet function after discontinuation of clopidogrel treatment in healthy volunteers. *Br J Clin Pharmacol.* 2001; 52:333-6
 85. Wall MH. Con: Hct>25% is better. *J Cardiothorac Vasc Anesth* 2004; 18:238-41
 86. Spiess BD. Transfusion of blood products affects outcome in cardiac surgery. *Semin Cardiothorac Vasc Anesth* 2004; 8:267-81
 87. Ehrlich MP, McCullough JN, Zhang N, Weisz DJ, Juvonen T, Bodian CA, Griep RB. Effect of hypothermia on cerebral blood flow and metabolism in the pig. *Ann Thorac Surg* 2002; 73:191-97

88. Haraphongse M, Fraser RS, Rossall RE, Fisk RL, Basuldo CA, Gelfand ET, Callaghan JC. Myocardial protection during aortic valve replacement: normothermia versus hypothermia. *Can J Surg*,1978,21:101-103
89. Kim YD, Katz NM, Ng L, Nancherla A, Ahmed SW, Wallace RB. Effects of hypothermia and hemodilution on oxygen metabolism and hemodynamics in patients recovering from coronary artery bypass operations. *J Thorac Cardiovasc Surg*, 1989; 97:36-42
90. Ariza M, Gothard JW, Macnaughton P, Hooper J, Morgan CJ, Evans TW. Blood lactate and mixed venous-arterial PCO₂ gradient as indices of poor peripheral perfusion following cardiopulmonary bypass surgery, *Intensive Care Med* 1991;17:320-324
91. Mustafa I, Roth H, Hanafiah A, Hakim T, Anwar M, Siregar E, Leverve XM. Effect of cardiopulmonary bypass on lactate metabolism, *Intensive Care Med* 2003; 29:1279-1285.
92. Braun JP, Schroeder T, Buehner S, Dohmen P, Moshirzadeh M, Grosse J, Streit F, Schlaefke A, Armstrong VW, Oellerich M, Lochs H, Konertz W, Kox WJ, Spies C. Splanchnic oxygen transport, hepatic function and gastrointestinal barrier after normothermic cardiopulmonary bypass, *Acta Anaesthesiol Scand* 2004; 48: 697-703
93. Haisjackl M, Birnbaum J, Redlin M, Schmutzler M, Waldenberger F, Lochs H, Konertz W, Kox W. Splanchnic oxygen transport and lactate metabolism during normothermic cardiopulmonary bypass in humans. *Anesth Analg* 1998; 86: 22-27
94. Shibutani K, Komatsu T, Kubal K, Sanchala V, Kumar V, Bizzarri DV. Critical level of oxygen delivery in anesthetized man. *Crit Care Med* 1983,11:640-643
95. Waxman K, Lazrove S, Shoemaker WC. Physiologic responses to operation in high risk surgical patients. *Surg Gynecol Obstet* 1981,152: 633–638
96. Parolari A, Alamanni F, Juliano G, Polvani G, Roberto M, Veglia F, Fumero A, Carlucci C, Rona P, Brambillasca C, Sisillo E, Biglioli P. Oxygen metabolism during and after cardiac surgery: role of CPB. *Ann Thorac Surg* 2003,76:737-743
97. Mathru M, Kleinman B, Blakeman B, Dries D, Zecca A, Rao T. Cardiovascular adjustments and gas exchange during extreme hemodilution in humans. *Crit Care Med* 1991,19:700-704

98. Mathru M, Kleinman B, Blakeman B, Sullivan H, Kumar P, Dries DJ. Myocardial metabolism and adaptation during extreme hemodilution in humans after coronary revascularization. *Crit Care Med* 1992;20:1420-1425
99. Becker ER, Rahimi A. Disparities in race/ethnicity and gender in in-hospital mortality rates for coronary artery bypass surgery patients. *J Natl Med Assoc* 2006; 98:1729-39
100. Despotis GJ, Avidan MS, Hogue CW Jr. Mechanisms and attenuation of hemostatic activation during extracorporeal circulation. *Ann Thorac Surg*. 2001; 72:S1821-31
101. Karkouti K, Yau TM, Riazi H, Dattilo KM, Wasowicz M, Meineri M, McCluskey SA, Wijeyesundera DN. Determinants of complications with recombinant factor VIIa for refractory blood loss after cardiac surgery. *Can J Anesth* 2006; 52:802-809
102. Karkouti K, Beattie WS, Wijeyesundera DN, Yau TM, McCluskey SA, Ghannam M, Sutton D, van Rensburg A, Karski J. Recombinant factor VIIa for intractable blood loss after cardiac surgery: a propensity score-matched case-control analysis. *Transfusion*. 2005; 45:26-34