

Table S1: SNPs associated with immunosuppressive therapy (R = number of recipients, * = pediatric patients included ^a = these SNPs are in strong linkage disequilibrium, $r^2 = 1$ in Europeans)

Gene	rsID	R	Phenotype	P value	Reference	Article
<i>ABCB1</i>	rs1045642	41	Cyclosporin levels	<0.05	1	Jordan De Luna 2011
<i>ABCB1</i>	rs1128503	41	Cyclosporin levels	<0.05	1	Jordan De Luna 2011
<i>ABCB1</i>	rs2032582	41	Cyclosporin levels	<0.05	1	Jordan De Luna 2011
<i>ABCB1</i>	rs2235013 ^a	41	Cyclosporin levels up to 4 months	<0.01	1	Jordan De Luna 2011
<i>ABCB1</i>	rs2235033 ^a	41	Cyclosporin levels up to 4 months	<0.01	1	Jordan De Luna 2011
<i>ABCB1</i>	C3435T	70	Steroid dependency at year 1	0.021	2	Zheng 2004 *
<i>ABCB1</i>	C3435T	69	Steroid weaning	0.04	3	Zheng 2002 *
<i>ABCB1</i>	C3435T	65	Tacrolimus blood level / dose 6 months	0.028	4	Zheng 2003 *
<i>ABCB1</i>	C3435T	65	Tacrolimus blood level / dose 12 months	0.033	4	Zheng 2003 *
<i>ABCB1</i>	G2677T	65	Tacrolimus blood level / dose 6 months	0.017	4	Zheng 2003 *
<i>ABCB1</i>	G2677T	65	Tacrolimus blood level / dose 12 months	0.014	4	Zheng 2003 *
<i>CYP3A4/CYP3A5</i>	rs35599367/rs776746	76	Tacrolimus dose-adjusted through concentration	0.001	5	Deiniger 2016
<i>CYP3A5</i>	rs776746	76	Tacrolimus dose-adjusted through concentration	<0.001	5	Deiniger 2016
<i>CYP3A5</i>	rs776746	65	Tacrolimus blood level / dose 3 months	0.014	4	Zheng 2003 *
<i>CYP3A5</i>	rs776746	65	Tacrolimus blood level / dose 6 months	0.017	4	Zheng 2003 *
<i>CYP3A5</i>	rs776746	65	Tacrolimus blood level / dose 12 months	0.015	4	Zheng 2003 *
<i>CYP3A5</i>	rs776746	15	Tacrolimus dose	<0.05	6	Kniepeiss 2011
<i>CYP3A5</i>	rs776746	65	Tacrolimus dose 12 months	<0.01	7	Diaz-Molina 2012 *
<i>CYP3A5</i>	rs776746	65	Tacrolimus normalized dose 6 months	0.045	7	Diaz-Molina 2012 *
<i>CYP3A5</i>	rs776746	65	Tacrolimus normalized dose 12 months	0.005	7	Diaz-Molina 2012 *
<i>CYP3A5</i>	rs776746	65	Tacrolimus clearance	0.0003	8	Uno 2018
<i>CYP3A5</i>	rs776746	65	Dose/weight to reach tacrolimus trough concentration	0.0002	8	Uno 2018
<i>UGT2B7</i>	rs73823859	32	Mycophenolic acid pharmacogenetics	0.0221	9	Ting 2010

Gene	rsID	R	Phenotype	P value	Reference	Article
<i>UGT2B7</i>	rs7439366	32	Mycophenolic acid pharmacogenetics	0.0065	⁹	Ting 2010
<i>TPMT</i>	rs1142345/rs1800460	30	Azathioprine-induced myelosuppression	<0.05	¹⁰	Sebbag 2000

Table S2: SNPs associated with rejection and survival (R = Recipient, D = Donor, C= Control (n), * = pediatric patients included)

Gene	rsID	R	D	C	Phenotype	P value	Reference	Article
Acute rejection								
<i>ABCB1</i>	G2677	170	0	0	Acute rejection (> grade 2R)	0.048	¹¹	Barnard 2006
<i>ABCB1</i>	C3435T	170	0	0	Acute rejection (> grade 2R)	0.034	¹¹	Barnard 2006
<i>ABCB1</i>	G2677/C3435T	170	0	0	Acute rejection (> grade 2R)	0.022	¹¹	Barnard 2006
<i>ABCB1</i>	rs2066844	60	0	0	Graft rejection	0.05	¹²	Sánchez-Lázaro 2015
<i>CCR5/RANTES</i>	E/-403A	158	0	0	Acute rejection (> grade 2R) 4-12 months posttransplant	0.002	¹³	Simeoni 2005
<i>CX3CR1/CCR5</i>	249I/No-E	158	0	0	Acute rejection (> grade 2R) 0-3 months posttransplant	0.001	¹³	Simeoni 2005
<i>IL2</i>	(CA) _m (CT) _n repeat in 3'-flanking region	290	0	101	Acute rejection (> grade 2R)	0.02	¹⁴	Holweg 2002
<i>IL4</i>	IL4 -590	70	61	36	Acute rejection (> grade 2R), donor SNP	0.034	¹⁵	Bijlsma 2002
<i>IL4</i>	IL4 -590	70	61	36	Acute rejection (> grade 2R), donor and recipient SNP	0.027	¹⁵	Bijlsma 2002
<i>IL6</i>	rs1800795	116	0	519	Acute rejection	0.035	¹⁶	Densem 2005
<i>IL10</i>	rs1800896	93	29	0	Acute rejection (> grade 1R)	0.011	¹⁷	Awad 2001*
<i>IL10</i>	rs1800896	65	0	77	Acute rejection	<0.01	¹⁸	McDaniel 2004
<i>TGFB1</i>	rs1800471	109	0	0	Acute rejection (resulting in treatment or treatment changes)	<0.01	¹⁹	Benza 2009
<i>TNFA</i>	rs1800629	90	61	0	Acute rejection (> grade 2R)	0.03	²⁰	Bruggink 2008
<i>TNFA/IL10</i>	rs1800629/rs1800896	115	0	0	Acute rejection	<0.005	²¹	Turner 1997
<i>TNFB</i>	rs70990257	62	0	0	Acute rejection (>grade 2R)	0.027	²²	Abdallah 1999
<i>UGT2B7</i>	rs73823859	32	0	0	Acute rejection (> grade 0)	0.020	⁹	Ting 2010
<i>UGT2B7</i>	rs7668282	32	0	0	Acute rejection (> grade 0)	0.0001	⁹	Ting 2010
Chronic rejection								
<i>ACE</i>	rs1799752/rs4340/rs13447447/rs4646994	146	0	0	Transplant associated coronary artery disease	0.015	²³	Pethig 2000
<i>ACE</i>	rs1799752/rs4340/rs13447447/rs4646995	80	80	0	Transplant associated coronary artery disease	<0.01	²⁴	Cunningham 1998
<i>CD16</i>	rs396991	103	0	0	Cardiac allograft vasculopathy	0.0317	²⁵	Paul 2017

Gene	rsID	R	D	C	Phenotype	P value	Reference	Article
<i>CTGF</i>	rs6918698	72	0	0	Cardiac allograft vasculopathy (CAG, IVUS)	0.014	²⁶	Pantou 2012
<i>HMOX1</i>	(GT) _n repeats in gene promotor	344	0	0	Time to cardiac allograft vasculopathy	0.0316	²⁷	Freystaetter 2017 *
<i>ICAM1</i>	rs5498	82	96	101	Transplant associated coronary artery disease (CAD donor vs non-CAD donor)	0.042	²⁸	Borozdenkova 2001
<i>ICAM1</i>	rs5498	82	96	101	Transplant associated coronary artery disease (non-CAD donor vs controls)	0.04	²⁸	Borozdenkova 2001
<i>IL1RN</i>	rs71941886	128	0	0	Graft loss due to histologically confirmed chronic rejection	0.025	²⁹	Vamvakopoulos 2001
<i>IL6</i>	rs1800795	116	0	519	Coronary vasculopathy	0.014	¹⁶	Densem 2005
<i>IL6</i>	rs1800795	116	0	519	Time to coronary vasculopathy	0.035	¹⁶	Densem 2005
<i>ATP6</i>	rs9645429	450	248	206	Cardiac allograft vasculopathy	0.042	³⁰	Gallardo 2012
<i>PDGFB</i>	rs1800818	70	0	0	Cardiac allograft vasculopathy (CAG)	0.026	³¹	Tambur 2006
<i>TGFB1</i>	rs1800471	175	0	0	Cardiac allograft vasculopathy	0.001	³²	Aziz 2000
<i>TGFB1</i>	rs1800471	111	0	0	Coronary artery disease	0.03	³³	Di Filippo 2006*
<i>TGFB1</i>	rs1800471	129	0	0	Coronary vasculopathy	0.0361	³⁴	Densem 2000
<i>TGFB1</i>	rs1800471	147	134	0	Transplant associated coronary artery disease	0.03	³⁵	Densem 2004
<i>TGFB1</i>	rs1800470	236	213	0	Accelerated graft vascular disease	0.03	³⁶	Holweg 2001
<i>TNFA/TNFB</i>	rs1800629/rs909253	70	0	0	Freedom from CAV at 3 years	0.043	³⁷	Ternstrom 2005
<i>VEGF</i>	rs1570360	70	0	0	Cardiac allograft vasculopathy	0.027	³¹	Tambur 2006
<i>VEGF</i>	rs699947	70	0	0	Cardiac allograft vasculopathy	0.01	³¹	Tambur 2006
Other types of rejections								
<i>CFP</i>	rs1048118	46	0		Antibody mediated rejection	0.02	³⁸	Marrón-Liñares 2017
<i>MBL2</i>	rs1800450	46	0		Antibody mediated rejection	0.03	³⁸	Marrón-Liñares 2017
<i>IL4R</i>	rs1805010	0	28		Antibody mediated rejection	0.002	³⁹	Marrón-Liñares 2018
<i>TGFB1</i>	rs1800471	111	0		All rejection (chronic and acute)	0.026	³³	Di Filippo 2006 *
<i>ACE</i>	rs1799752	532	0		Rejection with hemodynamic compromise	0.02	⁴⁰	Girnitá 2011 *
<i>FAS</i>	rs1800682	532	0		Rejection with hemodynamic compromise	0.002	⁴⁰	Girnitá 2011 *
<i>IL10</i>	rs1800896	532	0		Rejection with hemodynamic compromise	0.031	⁴⁰	Girnitá 2011 *

Gene	rsID	R	D	C	Phenotype	P value	Reference	Article
Survival								
<i>AMPD1</i>	rs17602729	190	262		1-year survival, all cause	<0.001	⁴¹	Taegtmeyer 2009
<i>AMPD1</i>	rs17602729	190	262		1-year survival, death due to early graft dysfunction	0.0001	⁴¹	Taegtmeyer 2009
<i>CCR5</i>	rs333	178	178		Survival after cardiac transplantation (nonischemic condition)	0.0014	⁴²	Fildes 2005
<i>TNFA</i>	rs1800629	119	0		Death due to rejection	<0.0001	⁴³	Azzawi 2001
<i>TNFA/TNFB</i>	rs1800629/rs909253	70	0		Survival during follow-up	0.006	³⁷	Ternstrom 2005
<i>TNFA/TNFB</i>	rs1800629/rs909253	70	0		Survival at 3 years posttransplantation	0.003	³⁷	Ternstrom 2005

Table S3: SNPs associated with cardiac function (R = Recipient, D = Donor)

Gene	rsID	R	D	Phenotype	P value	Reference	Article
<i>AMPD1</i>	rs17602729	190	262	Requirement for inotropic support	0.03	⁴¹	Taegtmeyer 2009
<i>B1-AR</i>	rs1801252	20	0	Maximum workload during exercise test	0.03	⁴⁴	Tang 2007
<i>B1-AR</i>	rs1801252	20	0	Resting heart rate	0.04	⁴⁴	Tang 2007
<i>B1-AR</i>	rs1801252	20	0	Improved lusitropic capacity septum in rest	0.03	⁴⁴	Tang 2007
<i>B1-AR</i>	rs1801252	20	0	Lusitropic capacity septum after lowest dose of dobutamine	0.04	⁴⁴	Tang 2007
<i>B1-AR</i>	rs1801252	20	0	Pulmonary capillary wedge in rest	<0.05	⁴⁴	Tang 2007
<i>B1-AR</i>	rs1801252	0	1407	LVW motion abnormalities	0.046	⁴⁵	Khush 2012
<i>B2-AR</i>	rs1042713	0	1407	Left ventricle ejection fraction	0.012	⁴⁵	Khush 2012
<i>B2-AR</i>	rs1042713	0	1407	Peak dopamine	0.026	⁴⁵	Khush 2012

Table S4: SNPs associated with renal function (R = Recipient, D = Donor, C = Control, * = pediatric patients included)

Gene	rsID	R	D	C	Phenotype	P value	Reference	Article
<i>ABCB1</i>	rs9282564	60	0	0	Renal function	0.003	¹²	Sánchez-Lázaro 2015
<i>CYP3A5</i>	rs776746	160	0	0	Renal function (eGFR)	0.0002	⁴⁶	de Denus 2010
<i>PDGFB</i>	rs1800818	175	0	268	Progression of renal insufficiency (serum creatinin)	<0.01	⁴⁷	Lacha 2001
<i>PRKCB</i>	rs11074606	158	0	0	Renal dysfunction (eGFR)	0.00049	⁴⁸	Lachance 2012
<i>TGFB1</i>	rs1800471	402	0	0	End stage renal failure (need for renal replacement therapy)	0.002	⁴⁹	van de Wetering 2006
<i>TGFB1</i>	rs1800471	88	0	0	Renal function (CrCl one year)	0.03	⁵⁰	Di Filippo 2005*
<i>TGFB1</i>	rs1800471	88	0	0	Renal function (CrCl latest follow up)	0.04	⁵⁰	Di Filippo 2005*
<i>TGFB1</i>	rs1800470	168	0	0	Renal dysfunction (serum creatinin)	0.017	⁵¹	Baan 2000

Table S5: SNPs associated with lipids (R = Recipient, D = Donor, LDL = Low Density Lipoprotein, HDL = High Density Lipoprotein, * = pediatric patients included)

Gene	rsID	R	D	Phenotype	P value	Reference	Article
<i>APOAI</i>	rs670	103	0	Hyperlipidemia	<0.001	52	Gonzalez-Amieva 2003
<i>APOAI</i>	rs670	103	0	LDL cholesterol rise	<0.05	52	Gonzalez-Amieva 2003
<i>APOE</i>	rs429358/rs7412	103	0	Triglyceride levels 3 months	<0.001	53	Gonzalez-Amieva 2000
<i>APOE</i>	rs429358/rs7412	103	0	Triglyceride levels 1 year	<0.05	53	Gonzalez-Amieva 2000
<i>SLCO1B1</i>	rs4149015	12	0	Pravastatin (maximum concentration)	<0.001	54	Hedman 2006 *
<i>SLCO1B1</i>	rs4149015	12	0	Pravastatin (area under the curve)	<0.0001	54	Hedman 2006 *
<i>SLCO1B1</i>	rs4149015	12	0	HDL levels	0.0002	54	Hedman 2006 *
<i>SLCO1B1</i>	rs4149056	12	0	Pravastatin (half-time)	0.015	54	Hedman 2006 *
<i>SLCO1B1</i>	rs4149056	12	0	Total cholesterol levels	0.031	54	Hedman 2006 *
<i>SLCO1B1</i>	rs4149056	12	0	LDL levels	0.011	54	Hedman 2006 *
<i>SLCO1B1</i>	rs4149056	12	0	HDL levels	0.026	54	Hedman 2006 *

Table S6: SNPs associated with other outcomes (R = Recipient, D = Donor, * = pediatric patients included)

Gene	rsID	R	D	Phenotype	P value	Reference	Article
<i>ABCB1</i>	rs1128503	60	0	Infections	0.012	12	Sánchez-Lázaro 2015
<i>IL10</i>	rs1800896	71	0	Quilty lesions	0.027	55	Plaza 2003*
<i>MTHFR</i>	rs1801133	57	0	Hyperhomocysteinemia	0.005 (multivariate)	56	Potena 2001

References

1. Jordan de Luna C, Herrero Cervera MJ, Sanchez Lazaro I, Almenar Bonet L, Poveda Andres JL, Alino Pellicer SF. Pharmacogenetic study of ABCB1 and CYP3A5 genes during the first year following heart transplantation regarding tacrolimus or cyclosporine levels. *Transplant Proc.* 2011;43:2241-2243.
2. Zheng HX, Webber SA, Zeevi A, et al. The impact of pharmacogenomic factors on steroid dependency in pediatric heart transplant patients using logistic regression analysis. *Pediatr Transplant.* 2004;8:551-557.
3. Zheng H, Webber S, Zeevi A, et al. The MDR1 polymorphisms at exons 21 and 26 predict steroid weaning in pediatric heart transplant patients. *Hum Immunol.* 2002;63:765-770.
4. Zheng H, Webber S, Zeevi A, et al. Tacrolimus dosing in pediatric heart transplant patients is related to CYP3A5 and MDR1 gene polymorphisms. *Am J Transplant.* 2003;3:477-483.
5. Deininger KM, Vu A, Page RL 2nd, Ambardekar AV, Lindenfeld J, Aquilante CL. CYP3A pharmacogenetics and tacrolimus disposition in adult heart transplant recipients. *Clin Transplant.* 2016;30:1074-1081.
6. Kniepeiss D, Renner W, Trummer O, et al. The role of CYP3A5 genotypes in dose requirements of tacrolimus and everolimus after heart transplantation. *Clin Transplant.* 2011;25:146-150.
7. Diaz-Molina B, Tavira B, Lambert JL, Bernardo MJ, Alvarez V, Coto E. Effect of CYP3A5, CYP3A4, and ABCB1 genotypes as determinants of tacrolimus dose and clinical outcomes after heart transplantation. *Transplant Proc.* 2012;44:2635-2638.
8. Uno T, Wada K, Matsuda S, et al. Impact of the CYP3A5*1 Allele on the Pharmacokinetics of Tacrolimus in Japanese Heart Transplant Patients. *Eur J Drug Metab Pharmacokinet.* 2018;43:665-673.
9. Ting LS, Benoit-Biancamano MO, Bernard O, Riggs KW, Guillemette C, Ensom MH. Pharmacogenetic impact of UDP-glucuronosyltransferase metabolic pathway and multidrug resistance-associated protein 2 transport pathway on mycophenolic acid in thoracic transplant recipients: an exploratory study. *Pharmacotherapy.* 2010;30:1097-1108.
10. Sebbag L, Boucher P, Davelu P, et al. Thiopurine S-methyltransferase gene polymorphism is predictive of azathioprine-induced myelosuppression in heart transplant recipients. *Transplantation.* 2000;69:1524-1527.
11. Barnard JB, Richardson S, Sheldon S, et al. The MDR1/ABCB1 gene, a high-impact risk factor for cardiac transplant rejection. *Transplantation.* 2006;82:1677-1682.
12. Sanchez-Lazaro I, Herrero MJ, Jordan-De Luna C, et al. Association of SNPs with the efficacy and safety of immunosuppressant therapy after heart transplantation. *Pharmacogenomics.* 2015;16:971-979.
13. Simeoni E, Vassalli G, Seydoux C, et al. CCR5, RANTES and CX3CR1 polymorphisms: possible genetic links with acute heart rejection. *Transplantation.* 2005;80:1309-1315.
14. Holweg CT, Peeters AM, Balk AH, et al. Effect of HLA-DR matching on acute rejection after clinical heart transplantation might be influenced by an IL-2 gene polymorphism. *Transplantation.* 2002;73:1353-1356.
15. Bijlsma FJ, vanKuik J, Tilanus MG, et al. Donor interleukin-4 promoter gene polymorphism influences allograft rejection after heart transplantation. *J Heart Lung Transplant.* 2002;21:340-346.
16. Densem CG, Ray M, Hutchinson IV, Yonan N, Brooks NH. Interleukin-6 polymorphism: a genetic risk factor for cardiac transplant related coronary vasculopathy? *J Heart Lung Transplant.* 2005;24:559-565.

17. Awad MR, Webber S, Boyle G, et al. The effect of cytokine gene polymorphisms on pediatric heart allograft outcome. *J Heart Lung Transplant.* 2001;20:625-630.
18. McDaniel O, Perrin Roten D, Yamout SZ, et al. Cytokine Gene Polymorphism Might Affect the Outcome of Clinical Rejection in Cardiac Transplantation. *J Apply Res.* 2004;4:68-80.
19. Benza RL, Coffey CS, Pekarek DM, et al. Transforming growth factor-beta polymorphisms and cardiac allograft rejection. *J Heart Lung Transplant.* 2009;28:1057-1062.
20. Bruggink AH, van Oosterhout MF, De Jonge N, Gmelig-Meyling FH, De Weger RA. TNFalpha in patients with end-stage heart failure on medical therapy or supported by a left ventricular assist device. *Transpl Immunol.* 2008;19:64-68.
21. Turner D, Grant SC, Yonan N, et al. Cytokine gene polymorphism and heart transplant rejection. *Transplantation.* 1997;64:776-779.
22. Abdallah AN, Cucchi-Mouillot P, Biteau N, Cassaigne A, Haras D, Iron A. Analysis of the polymorphism of the tumour necrosis factor (TNF) gene and promoter and of circulating TNF-alpha levels in heart-transplant patients suffering or not suffering from severe rejection. *Eur J Immunogenet.* 1999;26:249-255.
23. Pethig K, Heublein B, Hoffmann A, Borlak J, Wahlers T, Haverich A. ACE-gene polymorphism is associated with the development of allograft vascular disease in heart transplant recipients. *J Heart Lung Transplant.* 2000;19:1175-1182.
24. Cunningham DA, Crisp SJ, Barbir M, Lazem F, Dunn MJ, Yacoub MH. Donor ACE gene polymorphism: a genetic risk factor for accelerated coronary sclerosis following cardiac transplantation. *Eur Heart J.* 1998;19:319-325.
25. Paul P, Picard C, Sampol E, et al. Genetic and Functional Profiling of CD16-Dependent Natural Killer Activation Identifies Patients at Higher Risk of Cardiac Allograft Vasculopathy. *Circulation.* 2017;137:1049-1059.
26. Pantou MP, Manginas A, Alivizatos PA, Degiannis D. Connective tissue growth factor (CTGF/CCN2): a protagonist in cardiac allograft vasculopathy development? *J Heart Lung Transplant.* 2012;31:881-887.
27. Freystaetter K, Andreas M, Bilban M, et al. The recipient's heme oxygenase-1 promoter region polymorphism is associated with cardiac allograft vasculopathy. *Transpl Int.* 2017;30:510-518.
28. Borozdenkova S, Smith J, Marshall S, Yacoub M, Rose M. Identification of ICAM-1 polymorphism that is associated with protection from transplant associated vasculopathy after cardiac transplantation. *Hum Immunol.* 2001;62:247-255.
29. Vamvakopoulos JE, Taylor CJ, Green C, et al. Interleukin 1 and chronic rejection: possible genetic links in human heart allografts. *Am J Transplant.* 2002;2:76-83.
30. Gallardo ME, Garcia-Pavia P, Chamorro R, et al. Mitochondrial haplogroups associated with end-stage heart failure and coronary allograft vasculopathy in heart transplant patients. *Eur Heart J.* 2012;33:346-353.
31. Tambur AR, Pamboukian S, Costanzo MR, Heroux A. Genetic polymorphism in platelet-derived growth factor and vascular endothelial growth factor are significantly associated with cardiac allograft vasculopathy. *J Heart Lung Transplant.* 2006;25:690-698.
32. Aziz T, Hasleton P, Hann AW, Yonan N, Deiraniya A, Hutchinson IV. Transforming growth factor beta in relation to cardiac allograft vasculopathy after heart transplantation. *J Thorac Cardiovasc Surg.* 2000;119:700-708.

33. Di Filippo S, Zeevi A, McDade KK, Bastien O, Webber SA. Impact of TGFbeta1 gene polymorphisms on acute and chronic rejection in pediatric heart transplant allografts. *Transplantation*. 2006;81:934-939.
34. Densem CG, Hutchinson IV, Cooper A, Yonan N, Brooks NH. Polymorphism of the transforming growth factor-beta 1 gene correlates with the development of coronary vasculopathy following cardiac transplantation. *J Heart Lung Transplant*. 2000;19:551-556.
35. Densem CG, Hutchinson IV, Yonan N, Brooks NH. Donor and recipient-transforming growth factor-beta 1 polymorphism and cardiac transplant-related coronary artery disease. *Transpl Immunol*. 2004;13:211-217.
36. Holweg CT, Baan CC, Balk AH, et al. The transforming growth factor-beta1 codon 10 gene polymorphism and accelerated graft vascular disease after clinical heart transplantation. *Transplantation*. 2001;71:1463-1467.
37. Ternstrom L, Jeppsson A, Ricksten A, Nilsson F. Tumor necrosis factor gene polymorphism and cardiac allograft vasculopathy. *J Heart Lung Transplant*. 2005;24:433-438.
38. Marron-Linares GM, Nunez L, Crespo-Leiro MG, et al. Polymorphisms in genes related to the complement system and antibody-mediated cardiac allograft rejection. *J Heart Lung Transplant*. 2018;37:477-485.
39. Marron-Linares GM, Nunez L, Crespo-Leiro MG, et al. Donor Polymorphisms in Genes Related to B-Cell Biology Associated With Antibody-Mediated Rejection After Heart Transplantation. *Circ J*. 2018;82:1351-1359.
40. Girnita DM, Ohmann EL, Brooks MM, et al. Gene polymorphisms impact the risk of rejection with hemodynamic compromise: a multicenter study. *Transplantation*. 2011;91:1326-1332.
41. Taegtmeier AB, Breen JB, Rogers P, et al. Effect of adenosine monophosphate deaminase-1 C34T allele on the requirement for donor inotropic support and on the incidence of early graft dysfunction after cardiac transplantation. *Am J Cardiol*. 2009;103:1457-1462.
42. Fildes JE, Walker AH, Howlett R, et al. Donor CCR5 Delta32 polymorphism and outcome following cardiac transplantation. *Transplant Proc*. 2005;37:2247-2249.
43. Azzawi M, Hasleton PS, Turner DM, et al. Tumor necrosis factor-alpha gene polymorphism and death due to acute cellular rejection in a subgroup of heart transplant recipients. *Hum Immunol*. 2001;62:140-142.
44. Scharin Tang M, Lindberg E, Gruner Svealv B, Magnusson Y, Andersson B. Cardiac reserve in the transplanted heart: effect of a graft polymorphism in the beta1-adrenoceptor. *J Heart Lung Transplant*. 2007;26:915-920.
45. Khush KK, Pawlikowska L, Menza RL, et al. Beta-adrenergic receptor polymorphisms and cardiac graft function in potential organ donors. *Am J Transplant*. 2012;12:3377-3386.
46. de Denus S, Zakrzewski M, Barhdadi A, et al. Association between renal function and CYP3A5 genotype in heart transplant recipients treated with calcineurin inhibitors. *J Heart Lung Transplant*. 2011;30:326-331.
47. Lacha J, Hubacek JA, Viklicky O, Malek I, Hutchinson I, Vitko S. TGF-beta1 gene polymorphism is a risk factor for renal dysfunction in heart transplant recipients. *Transplant Proc*. 2001;33:1567-1569.
48. Lachance K, Barhdadi A, Mongrain I, et al. PRKCB is associated with calcineurin inhibitor-induced renal dysfunction in heart transplant recipients. *Pharmacogenet Genomics*. 2012;22:336-343.
49. van de Wetering J, Weimar CH, Balk AH, et al. The impact of transforming growth factor-beta1 gene polymorphism on end-stage renal failure after heart transplantation. *Transplantation*. 2006;82:1744-1748.

50. Di Filippo S, Zeevi A, McDade KK, et al. Impact of TGFbeta1 gene polymorphisms on late renal function in pediatric heart transplantation. *Hum Immunol.* 2005;66:133-139.
51. Baan CC, Balk AH, Holweg CT, et al. Renal failure after clinical heart transplantation is associated with the TGF-beta 1 codon 10 gene polymorphism. *J Heart Lung Transplant.* 2000;19:866-872.
52. Gonzalez-Amieva A, Lopez-Miranda J, Marin C, et al. The apo A-I gene promoter region polymorphism determines the severity of hyperlipidemia after heart transplantation. *Clin Transplant.* 2003;17:56-62.
53. Gonzalez-Amieva A, Lopez-Miranda J, Fuentes F, et al. Genetic variations of the apolipoprotein E gene determine the plasma triglyceride levels after heart transplantation. *J Heart Lung Transplant.* 2000;19:765-770.
54. Hedman M, Antikainen M, Holmberg C, et al. Pharmacokinetics and response to pravastatin in paediatric patients with familial hypercholesterolaemia and in paediatric cardiac transplant recipients in relation to polymorphisms of the SLCO1B1 and ABCB1 genes. *Br J Clin Pharmacol.* 2006;61:706-715.
55. Plaza DM, Fernandez D, Builes M, Villegas A, Garcia LF. Cytokine gene polymorphisms in heart transplantation: association of low IL-10 production genotype with Quilty effect. *J Heart Lung Transplant.* 2003;22:851-856.
56. Potena L, Grigioni F, Viggiani M, et al. Interplay between methylenetetrahydrofolate reductase gene polymorphism 677C-->T and serum folate levels in determining hyperhomocysteinemia in heart transplant recipients. *J Heart Lung Transplant.* 2001;20:1245-1251.