

SlgN affiliated publications by Anand ANDIAPPAN

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2023

Lee WWL, Puan KJ, Lee B, Chua C, Koh SM, Yusof N, Tan KP, Luis BS, Ong J, Merid SK, Ang R, Chan XY, Hui LJ, Terenzani E, Lum J, Foo S, Zolezzi F, Yan ATS, Melen E, Yi SJ, Rotzschke O, Andiappan AK. Eosinophilic allergic rhinitis is strongly associated with the CD45RBlo subset of CD161+ Th2 cells that secretes IL-2, IL-3, IL-4, IL-5, IL-9, and IL-13. *Allergy*. 2023 Aug 7

von Richthofen HJ, Westerlaken GHA, Gollnast D, Besteman S, Delemarre EM, Rodenburg K, Moerer P, Stapels DAC, Andiappan AK, Röttschke O, Nierkens S, Leavis HL, Bont LJ, Rooijackers SHM, Meyaard L. Soluble Signal Inhibitory Receptor on Leukocytes-1 Is Released from Activated Neutrophils by Proteinase 3 Cleavage. *J Immunol*. 2023 Feb 15;210(4):389-397.

2022

Lee B, Cyrill SL, Lee W, Melchiotti R, Andiappan AK, Poidinger M, Röttschke O. Analysis of archaic human haplotypes suggests that 5hmC acts as an epigenetic guide for NCO recombination. *BMC Biol*. 2022 Aug 4;20(1):173.

Andiappan AK, Puan KJ, Sio YY, Ally F, Lee B, Matta SA, Yusof N, Larbi A, Wang Y, Chew FT, Rotzschke O. Functional CTLA-4 variants associate to both allergic asthma and rhinitis potentially by modulating naïve regulatory T cells. *Allergy*. 2022 May 24. [Epub ahead of print]

Ong HH, Andiappan AK, Duan K, Lum J, Liu J, Tan KS, Howland S, Lee B, Ong YK, Thong M, Chow VT, Wang DY. Transcriptomics of rhinovirus persistence reveals sustained expression of RIG-I and interferon-stimulated genes in nasal epithelial cells in vitro. *Allergy*. 2022 Mar 10. [Epub ahead of print]

2021

Andiappan AK, Asad M, Chua C, Sehanobish E, Ren Z, Chan XY, Lum J, Ang N, Duan K, Gersten A, Abuzeid WM, Akbar N, Gibber M, Howland S, Lee B, Rotzschke O, Porcelli SA, Jerschow E. Neutrophilic inflammation and epithelial barrier disruption in nasal polyps characterize NSAID-exacerbated respiratory disease. *Allergy*. 2021 Dec 18. [Epub ahead of print]

Lim J, Puan KJ, Wang LW, Teng KWW, Loh CY, Tan KP, Carissimo G, Chan YH, Poh CM, Lee CY, Fong SW, Yeo NK, Chee RS, Amrun SN, Chang ZW, Tay MZ, Torres-Ruesta A, Leo Fernandez N, How W, Andiappan AK, Lee W, Duan K, Tan SY, Yan G, Kalimuddin S, Lye DC, Leo YS, Ong SWX, Young BE, Renia L, Ng LFP, Lee B, Röttschke O. Data-Driven Analysis of COVID-19 Reveals Persistent Immune Abnormalities in Convalescent Severe Individuals. *Front Immunol*. 2021 Nov 19;12:710217.

Vösa U, Claringbould A, Westra HJ, Bonder MJ, Deelen P, Zeng B, Kirsten H, Saha A, Kreuzhuber R, Yazar S, Brugge H, Oelen R, de Vries DH, van der Wijst MGP, Kasela S, Pervjakova N, Alves I, Favé MJ, Agbessi M, Christiansen MW, Jansen R, Seppälä I, Tong L, Teumer A, Schramm K, Hemani G, Verlouw J, Yaghootkar H, Sönmez Flitman R, Brown A, Kukushkina V, Kalnapekšis A, Rüeger S, Porcu E, Kronberg J, Kettunen J, Lee B, Zhang F, Qi T, Hernandez JA, Arindrarto W, Beutner F; BIOS Consortium; i2QTL Consortium, Dmitrieva J, Elansary M, Fairfax BP, Georges M, Heijmans BT, Hewitt AW, Kähönen M, Kim Y, Knight JC, Kovacs P, Krohn K, Li S, Loeffler M, Marigorta UM, Mei H, Momozawa Y, Müller-Nurasyid M, Nauck M, Nivard MG, Penninx BWJH, Pritchard JK, Raitakari OT,

Rotzschke O, Slagboom EP, Stehouwer CDA, Stumvoll M, Sullivan P, 't Hoen PAC, Thiery J, Tönjes A, van Dongen J, van Iterson M, Veldink JH, Völker U, Warmerdam R, Wijmenga C, Swertz M, Andiappan A, Montgomery GW, Ripatti S, Perola M, Kutalik Z, Dermitzakis E, Bergmann S, Frayling T, van Meurs J, Prokisch H, Ahsan H, Pierce BL, Lehtimäki T, Boomsma DI, Psaty BM, Gharib SA, Awadalla P, Milani L, Ouwehand WH, Downes K, Stegle O, Battle A, Visscher PM, Yang J, Scholz M, Powell J, Gibson G, Esko T, Franke L. Large-scale cis- and trans-eQTL analyses identify thousands of genetic loci and polygenic scores that regulate blood gene expression. *Nat Genet.* 2021 Sep;53(9):1300-1310.

Puan KJ, San Luis B, Yusof N, Kumar D, Andiappan AK, Lee W, Cajic S, Vuckovic D, Chan J, Döllner T, Hou HW, Jiang Y, Tian C; 23andMe Research Team, Rapp E, Poidinger M, Wang Y, Soranzo N, Lee B, Röttschke O. FUT6 deficiency compromises basophil function by selectively abrogating their sialyl-Lewis x expression. *Commun Biol.* 2021 Jul 2;4(1):832.

Slob EMA, Richards LB, Vijverberg SJH, Longo C, Koppelman GH, Pijnenburg MWH, Bel EHD, Neerincx AH, Herrera Luis E, Perez-Garcia J, Chew FT, Sio YY, Andiappan AK, Turner SW, Mukhopadhyay S, Palmer CNA, Hawcutt D, Jorgensen AL, Burchard EG, Hernandez-Pacheco N, Pino-Yanes M, Maitland-van der Zee AH. Genome-wide association studies of exacerbations in children using long-acting beta2-agonists. *Pediatr Allergy Immunol.* 2021 Mar 11. [Epub ahead of print]

2020

Gamage AM, Tan KS, Chan WOY, Liu J, Tan CW, Ong YK, Thong M, Andiappan AK, Anderson DE, Wang Y, Wang LF. Infection of human Nasal Epithelial Cells with SARS-CoV-2 and a 382-nt deletion isolate lacking ORF8 reveals similar viral kinetics and host transcriptional profiles. *PLoS Pathog.* 2020 Dec 7;16(12):e1009130.

Andiappan AK, Puan KJ, Lee B, Yeow PT, Yusof N, Meid SK, Kumar D, Lum J, Foo S, Koh G, Poidinger M, Zolezzi F; eQTLGen Consortium, BIOS consortium, Wang Y, Melén E, Rotzschke O. Inversed association of FCER1A allergy variant in monocytes and plasmacytoid dendritic cells. *J Allergy Clin Immunol.* 2020 Nov 5:S0091-6749(20)31562-1.

Carissimo G, Xu W, Kwok I, Abdad MY, Chan YH, Fong SW, Puan KJ, Lee CY, Yeo NK, Amrun SN, Chee RS, How W, Chan S, Fan BE, Andiappan AK, Lee B, Röttschke O, Young BE, Leo YS, Lye DC, Renia L, Ng LG, Larbi A, Ng LF. Whole blood immunophenotyping uncovers immature neutrophil-to-VD2 T-cell ratio as an early marker for severe COVID-19. *Nat Commun.* 2020 Oct 16;11(1):5243.

Tay ASL, Li C, Nandi T, Chng KR, Andiappan AK, Mettu VS, de Cevins C, Ravikrishnan A, Dutertre CA, Wong XFCC, Qi Ng AH, Matta SA, Ginhoux F, Röttschke O, Chew FT, Tang MBY, Yew YW, Nagarajan N, Common JEA. Atopic dermatitis microbiomes stratify into ecological dermatotypes enabling microbial virulence and disease severity. *J Allergy Clin Immunol.* 2020 Oct 8:S0091-6749(20)31399-3.

2019

Peng Y, Zi XX, Teng TF, Lee B, Lum J, Tang SA, Tan KS, Qiu QH, Ye J, Shi L, Guan WJ, Andiappan AK, Wang Y. Whole-transcriptome sequencing reveals heightened inflammation and defective host-defense responses in chronic rhinosinusitis with nasal polyps. *Eur Respir J.* 2019 Nov 14;54(5):1900732.

Thompson DJ, Genovese G, Halvardson J, Ulirsch JC, Wright DJ, Terao C, Davidsson OB, Day FR, Sulem P, Jiang Y, Danielsson M, Davies H, Dennis J, Dunlop MG, Easton DF, Fisher VA, Zink F,

Houlston RS, Ingelsson M, Kar S, Kerrison ND, Kinnnersley B, Kristjansson RP, Law PJ, Li R, Loveday C, Mattisson J, McCarroll SA, Murakami Y, Murray A, Olszewski P, Rychlicka-Buniowska E, Scott RA, Thorsteinsdottir U, Tomlinson I, Moghadam BT, Turnbull C, Wareham NJ, Gudbjartsson DF; International Lung Cancer Consortium (INTEGRAL-ILCCO); Breast Cancer Association Consortium; Consortium of Investigators of Modifiers of BRCA1/2; Endometrial Cancer Association Consortium; Ovarian Cancer Association Consortium; Prostate Cancer Association Group to Investigate Cancer Associated Alterations in the Genome (PRACTICAL) Consortium; Kidney Cancer GWAS Meta-Analysis Project; eQTLGen Consortium; Biobank-based Integrative Omics Study (BIOS) Consortium; 23andMe Research Team, Kamatani Y, Hoffmann ER, Jackson SP, Stefansson K, Auton A, Ong KK, Machiela MJ, Loh PR, Dumanski JP, Chanock SJ, Forsberg LA, Perry JRB. Genetic predisposition to mosaic Y chromosome loss in blood. *Nature*. 2019 Nov;575(7784):652-657.

Kumar D, Lee B, Puan KJ, Lee W, Luis BS, Yusof N, Andiappan AK, Del Rosario R, Poschmann J, Kumar P, DeLibero G, Singhal A, Prabhakar S, De Yun W, Poidinger M, Röttschke O. Resistin expression in human monocytes is controlled by two linked promoter SNPs mediating NFkB p50/p50 binding and C-methylation. *Sci Rep*. 2019 Oct 23;9(1):15245.

Tan KS, Andiappan AK, Lee B, Yan Y, Liu J, Tang SA, Lum J, He TT, Ong YK, Thong M, Lim HF, Choi HW, Rotzschke O, Chow VT, Wang Y. RNA Sequencing of H3N2 Influenza Virus-Infected Human Nasal Epithelial Cells from Multiple Subjects Reveals Molecular Pathways Associated with Tissue Injury and Complications. *Cells*. 2019 Aug 27;8(9).

Peng Y, Guan WJ, Zhu ZC, Tan KS, Chen Z, Hong HY, Zi XX, Andiappan AK, Shi L, Yang QT, Wang DY, Qiu QH. Microarray Assay Reveals Ciliary Abnormalities of the Allergic Nasal Mucosa. *Am J Rhinol Allergy*. 2019 Aug 26:1945892419871795.

Xue A, Wu Y, Zhu Z, Zhang F, Kemper KE, Zheng Z, Yengo L, Lloyd-Jones LR, Sidorenko J, Wu Y1, eQTLGen Consortium, McRae AF, Visscher PM, Zeng J, Yang J. Genome-wide association analyses identify 143 risk variants and putative regulatory mechanisms for type 2 diabetes. *Nat Commun*. 2018 Jul 27;9(1):2941.

Porcu E, Rüeger S, Lepik K; eQTLGen Consortium; BIOS Consortium, Santoni FA, Reymond A, Kutalik Z. Mendelian randomization integrating GWAS and eQTL data reveals genetic determinants of complex and clinical traits. *Nat Commun*. 2019 Jul 24;10(1):3300.

Stahl EA, Breen G, Forstner AJ, McQuillin A, Ripke S, Trubetskoy V, Mattheisen M, Wang Y, Coleman JRI, Gaspar HA, de Leeuw CA, Steinberg S, Pavlides JMW, Trzaskowski M, Byrne EM, Pers TH, Holmans PA, Richards AL, Abbott L, Agerbo E, Akil H, Albani D, Alliey-Rodriguez N, Als TD, Anjorin A, Antilla V, Awasthi S, Badner JA, Bækvad-Hansen M, Barchas JD, Bass N, Bauer M, Belliveau R, Bergen SE, Pedersen CB, Bøen E, Boks MP, Boocock J, Budde M, Bunney W, Burmeister M, Bybjerg-Grauholm J, Byerley W, Casas M, Cerrato F, Cervantes P, Chambert K, Charney AW, Chen D, Churchhouse C, Clarke TK, Coryell W, Craig DW, Cruceanu C, Curtis D, Czerski PM, Dale AM, de Jong S, Degenhardt F, Del-Favero J, DePaulo JR, Djurovic S, Dobbyn AL, Dumont A, Elvsåshagen T, Escott-Price V, Fan CC, Fischer SB, Flickinger M, Foroud TM, Forty L, Frank J, Fraser C, Freimer NB, Frisén L, Gade K, Gage D, Garnham J, Giambartolomei C, Pedersen MG, Goldstein J, Gordon SD, Gordon-Smith K, Green EK, Green MJ, Greenwood TA, Grove J, Guan W, Guzman-Parra J, Hamshere ML, Hautzinger M, Heilbronner U, Herms S, Hipolito M, Hoffmann P, Holland D, Huckins L, Jamain S, Johnson JS, Juréus A, Kandaswamy R, Karlsson R, Kennedy JL, Kittel-Schneider S, Knowles JA, Kogevinas M, Koller AC, Kupka R, Lavebratt C, Lawrence J, Lawson WB, Leber M, Lee PH, Levy SE, Li JZ, Liu C, Lucae S, Maaser A, MacIntyre DJ, Mahon PB, Maier W, Martinsson L, McCarroll S, McGuffin P, McInnis MG, McKay JD, Medeiros H, Medland SE, Meng F, Milani L, Montgomery GW, Morris DW, Mühleisen TW,

Mullins N, Nguyen H, Nievergelt CM, Adolfsson AN, Nwulia EA, O'Donovan C, Loohuis LMO, Ori APS, Oruc L, Ösby U, Perlis RH, Perry A, Pfennig A, Potash JB, Purcell SM, Regeer EJ, Reif A, Reinbold CS, Rice JP, Rivas F, Rivera M, Roussos P, Ruderfer DM, Ryu E, Sánchez-Mora C, Schatzberg AF, Scheftner WA, Schork NJ, Shannon Weickert C, Shekhtman T, Shilling PD, Sigurdsson E, Slaney C, Smeland OB, Sobell JL, Sørensen Hansen C, Spijker AT, St Clair D, Steffens M, Strauss JS, Streit F, Strohmaier J, Szelinger S, Thompson RC, Thorgeirsson TE, Treutlein J, Vedder H, Wang W, Watson SJ, Weickert TW, Witt SH, Xi S, Xu W, Young AH, Zandi P, Zhang P, Zöllner S; eQTLGen Consortium; BIOS Consortium, Adolfsson R, Agartz I, Alda M, Backlund L, Baune BT, Bellivier F, Berrettini WH, Biernacka JM, Blackwood DHR, Boehnke M, Børklum AD, Corvin A, Craddock N, Daly MJ, Dannlowski U, Esko T, Etain B, Frye M, Fullerton JM, Gershon ES, Gill M, Goes F, Grigoriu-Serbanescu M, Hauser J, Hougaard DM, Hultman CM, Jones I, Jones LA, Kahn RS, Kirov G, Landén M, Leboyer M, Lewis CM, Li QS, Lissowska J, Martin NG, Mayoral F, McElroy SL, McIntosh AM, McMahon FJ, Melle I, Metspalu A, Mitchell PB, Morken G, Mors O, Mortensen PB, Müller-Myhsok B, Myers RM, Neale BM, Nimgaonkar V, Nordentoft M, Nöthen MM, O'Donovan MC, Oedegaard KJ, Owen MJ, Paciga SA, Pato C, Pato MT, Posthuma D, Ramos-Quiroga JA, Ribasés M, Rietschel M, Rouleau GA, Schalling M, Schofield PR, Schulze TG, Serretti A, Smoller JW, Stefansson H, Stefansson K, Stordal E, Sullivan PF, Turecki G, Vaaler AE, Vieta E, Vincent JB, Werge T, Nurnberger JI, Wray NR, Di Florio A, Edenberg HJ, Cichon S, Ophoff RA, Scott LJ, Andreassen OA, Kelsoe J, Sklar P; Bipolar Disorder Working Group of the Psychiatric Genomics Consortium. Genome-wide association study identifies 30 loci associated with bipolar disorder. *Nat Genet.* 2019 May;51(5):793-803.

Ferreira MAR, Mathur R, Vonk JM, Sz wajda A, Brumpton B, Granell R, Brew BK, Ulleamar V, Lu Y, Jiang Y; 23andMe Research Team; eQTLGen Consortium; BIOS Consortium, Magnusson PKE, Karlsson R, Hinds DA, Paternoster L, Koppelman GH, Almqvist C. Genetic Architectures of Childhood- and Adult-Onset Asthma Are Partly Distinct. *Am J Hum Genet.* 2019 Apr 4;104(4):665-684.

Lu Y, Monaco G, Camous X, Andiappan AK, Rotzschke O, Ng TP, Larbi A. Biomarker Signatures Predicting 10-Year All-Cause and Disease-Specific Mortality. *J Gerontol A Biol Sci Med Sci.* 2019 Mar 14;74(4):469-479.

Karlsson Linnér R, Biroli P, Kong E, Meddens SFW, Wedow R, Fontana MA, Lebreton M, Tino SP, Abdellaoui A, Hammerschlag AR, Nivard MG, Okbay A, Rietveld CA, Timshel PN, Trzaskowski M, Vlaming R, Zünd CL, Bao Y, Buzdugan L, Caplin AH, Chen CY, Eibich P, Fontanillas P, Gonzalez JR, Joshi PK, Karhunen V, Kleinman A, Levin RZ, Lill CM, Meddens GA, Muntané G, Sanchez-Roige S, Rooij FJV, Taskesen E, Wu Y, Zhang F, 23and Me Research Team, eQTLgen Consortium, International Cannabis Consortium, Social Science Genetic Association Consortium, Auton A, Boardman JD, Clark DW, Conlin A, Dolan CC, Fischbacher U, Groenen PJF, Harris KM, Hasler G, Hofman A, Ikram MA, Jain S, Karlsson R, Kessler RC, Kooyman M, MacKillop J, Männikkö M, Morcillo-Suarez C, McQueen MB, Schmidt KM, Smart MC, Sutter M, Thurik AR, Uitterlinden AG, White J, Wit H, Yang J, Bertram L, Boomsma DI, Esko T, Fehr E, Hinds DA, Johannesson M, Kumari M, Laibson D, Magnusson PKE, Meyer MN, Navarro A, Palmer AA, Pers TH, Posthuma D, Schunk D, Stein MB, Svento R, Tiemeier H, Timmers PRHJ, Turley P, Ursano RJ, Wagner GG, Wilson JF, Gratten J, Lee JJ, Cesarini D, Benjamin DJ, Koellinger PD, Beauchamp JP. Genome-wide association analyses of risk tolerance and risky behaviors in over 1 million individuals identify hundreds of loci and shared genetic influences. *Nat Genet.* 2019 Feb;51(2):245-257.

Matta SA, Blanchet-Rethore S, Sio YY, Suri BK, Andiappan AK, Anantharaman R, Piketty C, Bourdes V, Chew FT. Different phenotypes and factors associated with atopic dermatitis in the young adult Singaporean Chinese population: A cross-sectional study. *World Allergy Org.* 2019 Jan 26;12(1):100008.

Timmers PR, Mounier N, Lall K, Fischer K, Ning Z, Feng X, Bretherick AD, Clark DW; eQTLGen Consortium, Agbessi M, Ahsan H, Alves I, Andiappan A, Awadalla P, Battle A, Bonder MJ, Boomsma D, Christiansen M, Claringbould A, Deelen P, van Dongen J, Esko T, Favé M, Franke L, Frayling T, Gharib SA, Gibson G, Hemani G, Jansen R, Kalnapenkis A, Kasela S, Kettunen J, Kim Y, Kirsten H, Kovacs P, Krohn K, Kronberg-Guzman J, Kukushkina V, Kutalik Z, Kähönen M, Lee B, Lehtimäki T, Loeffler M, Marigorta U, Metspalu A, van Meurs J, Milani L, Müller-Nurasyid M, Nauck M, Nivard M, Penninx B, Perola M, Pervjakova N, Pierce B, Powell J, Prokisch H, Psaty BM, Raitakari O, Ring S, Ripatti S, Rotzschke O, Ruëger S, Saha A, Scholz M, Schramm K, Seppälä I, Stumvoll M, Sullivan P, Teumer A, Thiery J, Tong L, Tönjes A, Verlouw J, Visscher PM, Vösa U, Völker U, Yaghootkar H, Yang J, Zeng B, Zhang F, Shen X, Esko T, Kutalik Z, Wilson JF, Joshi PK. Genomics of 1 million parent lifespans implicates novel pathways and common diseases and distinguishes survival chances. *Elife*. 2019 Jan 15;8.

2018

Liu J, Li Y, Andiappan AK, Yan Y, Kai Sen T, Ong HH, Thong KT, Ong YK, Yu FG, Low HB, Zhang YL, Shi L, Wang Y. Role of IL-13R α 2 in modulating IL-13 induced MUC5AC and ciliary changes in healthy and CRSwNP mucosa. *Allergy*. 2018 Aug;73(8):1673-1685.

Qi T, Wu Y, Zeng J, Zhang F1, Xue A, Jiang L, Zhu Z, Kemper K, Yengo L, Zheng Z, eQTLGen Consortium, Marioni RE, Montgomery GW, Deary IJ, Wray NR, Visscher PM, McRae AF, Yang J. Identifying gene targets for brain-related traits using transcriptomic and methylomic data from blood. *Nat Commun*. 2018 Jun 11;9(1):2282.

Wray NR, Ripke S, Mattheisen M, Trzaskowski M, Byrne EM, Abdellaoui A, Adams MJ, Agerbo E, Air TM, Andlauer TMF, Bacanu SA, Bækvad-Hansen M, Beekman AFT, Bigdeli TB, Binder EB, Blackwood DRH, Bryois J, Buttenschøn HN, Bybjerg-Grauholm J, Cai N, Castelao E, Christensen JH, Clarke TK, Coleman JIR, Colodro-Conde L, Couvy-Duchesne B, Craddock N, Crawford GE, Crowley CA, Dashti HS, Davies G, Deary IJ, Degenhardt F, Derks EM, Direk N, Dolan CV, Dunn EC, Eley TC, Eriksson N, Escott-Price V, Kiadeh FHF, Finucane HK, Forstner AJ, Frank J, Gaspar HA, Gill M, Giusti-Rodríguez P, Goes FS, Gordon SD, Grove J, Hall LS, Hannon E, Hansen CS, Hansen TF, Herms S, Hickie IB, Hoffmann P, Homuth G, Horn C, Hottenga JJ, Hougaard DM, Hu M, Hyde CL, Ising M, Jansen R, Jin F, Jorgenson E, Knowles JA, Kohane IS, Kraft J, Kretschmar WW, Krogh J, Kutalik Z, Lane JM, Li Y, Li Y, Lind PA, Liu X, Lu L, MacIntyre DJ, MacKinnon DF, Maier RM, Maier W, Marchini J, Mbarek H, McGrath P, McGuffin P, Medland SE, Mehta D, Middeldorp CM, Mihailov E, Milaneschi Y, Milani L, Mill J, Mondimore FM, Montgomery GW, Mostafavi S, Mullins N, Nauck M, Ng B, Nivard MG, Nyholt DR, O'Reilly PF, Oskarsson H, Owen MJ, Painter JN, Pedersen CB, Pedersen MG, Peterson RE, Pettersson E, Peyrot WJ, Pistis G, Posthuma D, Purcell SM, Quiroz JA, Qvist P, Rice JP, Riley BP, Rivera M, Saeed Mirza S, Saxena R, Schoevers R, Schulte EC, Shen L, Shi J, Shyn SI, Sigurdsson E, Sinnamón GBC, Smit JH, Smith DJ, Stefansson H, Steinberg S, Stockmeier CA, Streit F, Strohmaier J, Tansey KE, Teismann H, Teumer A, Thompson W, Thomson PA, Thorgeirsson TE, Tian C, Traylor M, Treutlein J, Trubetskoy V, Uitterlinden AG, Umbricht D, Van der Auwera S, van Hemert AM, Viktorin A, Visscher PM, Wang Y, Webb BT, Weinsheimer SM, Wellmann J, Willemsen G, Witt SH, Wu Y, Xi HS, Yang J, Zhang F; eQTLGen; 23andMe, Arolt V, Baune BT, Berger K, Boomsma DI, Cichon S, Dannlowski U, de Geus ECJ, DePaulo JR, Domenici E, Domschke K, Esko T, Grabe HJ, Hamilton SP, Hayward C, Heath AC, Hinds DA, Kendler KS, Kloiber S, Lewis G, Li QS, Lucae S, Madden PFA, Magnusson PK, Martin NG, McIntosh AM, Metspalu A, Mors O, Mortensen PB, Müller-Myhsok B, Nordentoft M, Nöthen MM, O'Donovan MC, Paciga SA, Pedersen NL, Penninx BWJH, Perlis RH, Porteous DJ, Potash JB, Preisig M, Rietschel M, Schaefer C, Schulze TG, Smoller JW, Stefansson K, Tiemeier H, Uher R, Völzke H, Weissman MM, Werge T, Winslow AR, Lewis CM, Levinson DF, Breen G, Børglum AD, Sullivan PF; Major Depressive Disorder Working Group of the Psychiatric Genomics Consortium. Genome-wide association

analyses identify 44 risk variants and refine the genetic architecture of major depression. *Nat Genet.* 2018 May;50(5):668-681.

2017

Liu H, Wang Z, Li Y, Yu G, Fu X, Wang C, Liu W, Yu Y, Bao F, Irwanto A, Liu J, Chu T, Andiappan AK, Maurer-Stroh S, Limvipuvadh V, Wang H, Mi Z, Sun Y, Sun L, Wang L, Wang C, You J, Li J, Foo JN, Liany H, Meah WY, Niu G, Yue Z, Zhao Q, Wang N, Yu M, Yu W, Cheng X, Khor CC, Sim KS, Aung T, Wang N, Wang D, Shi L, Ning Y, Zheng Z, Yang R, Li J, Yang J, Yan L, Shen J, Zhang G, Chen S, Liu J, Zhang F. Genome-wide Analysis of Protein-Coding Variants in Leprosy. *J Invest Dermatol.* 2017 Dec;137(12):2544-2551.

Lepik K, Annilo T, Kukuškina V; eQTLGen Consortium, Kisand K, Kutalik Z, Peterson P, Peterson H. C-reactive protein upregulates the whole blood expression of CD59 - an integrative analysis. *PLoS Comput Biol.* 2017 Sep 18;13(9):e1005766.

Farzan N, Vijverberg SJ, Andiappan AK, Arianto L, Berce V, Blanca-López N, Bisgaard H, Bønnelykke K, Burchard EG, Campo P, Canino G, Carleton B, Celedón JC, Chew FT, Chiang WC, Cloutier MM, Daley D, Den Dekker HT, Dijk NF, Duijts L, Flores C, Forno E, Hawcutt DB, Hernandez-Pacheco N, de Jongste JC, Kabesch M, Koppelman GH, Manolopoulos VG, Melén E, Mukhopadhyay S, Nilsson S, Palmer CN, Pino-Yanes M, Pirmohamed M, Potočnik U, Raaijmakers JA, Repnik K, Schieck M, Sio YY, Smyth RL, Szalai C, Tantisira KG, Turner S, van der Schee MP, Verhamme KM, Maitland-van der Zee AH. Rationale and design of the multiethnic Pharmacogenomics in Childhood Asthma consortium. *Pharmacogenomics.* 2017 Jul;18(10):931-943.

Obeidat M, Nie Y, Chen V, Shannon CP, Andiappan AK, Lee B, Rotzschke O, Castaldi PJ, Hersh CP, Fishbane N, Ng RT, McManus B, Miller BE, Rennard S, Paré PD, Sin DD. Network-based analysis reveals novel gene signatures in peripheral blood of patients with chronic obstructive pulmonary disease. *Respir Res.* 2017 Apr 24;18(1):72.

Puan KJ, Andiappan AK, Lee B, Kumar D, Lai TS, Yeo G, Bercin D, Starke M, Haase D, Lum J, Chew FT, Connolly J, Wong SC, Zolezzi F, Poidinger M, Wang Y, Röttschke O. Systematic characterization of basophil anergy. *Allergy.* 2017 Mar;72(3):373-384.

Kumar D, Puan KJ, Andiappan AK, Lee B, Westerlaken GH, Haase D, Melchiotti R, Li Z, Yusof N, Lum J, Koh G, Foo S, Yeong J, Alves AC, Pekkanen J, Sun LD, Irwanto A, Fairfax BP, Naranbhai V, Common JE, Tang M, Chuang CK, Jarvelin MR, Knight JC, Zhang X, Chew FT, Prabhakar S, Jianjun L, Wang Y, Zolezzi F, Poidinger M, Lane EB, Meygaard L, Röttschke O. A functional SNP associated with atopic dermatitis controls cell type-specific methylation of the VSTM1 gene locus. *Genome Med.* 2017 Feb 20;9(1):18.

2016

Lee WW, Teo TH, Lum FM, Andiappan AK, Amrun SN, Rénia L, Röttschke O, Ng LF. Virus infection drives IL-2 antibody complexes into pro-inflammatory agonists in mice. *Sci Rep.* 2016 Nov 25;6:37603.

Lu Y, Andiappan AK, Lee B, Ho R, Lim TK, Kuan WS, Goh DY, Mahadevan M, Sim TB, Wang Y, Van Bever HP, Rotzschke O, Larbi A, Ng TP. Neuropeptide Y associated with asthma in young adults. *Neuropeptides.* 2016 Oct;59:117-121.

Sun Y, Irwanto A, Toyo-Oka L, Hong M, Liu H, Andiappan AK, Choi H, Hitomi Y, Yu G, Yu Y, Bao F, Wang C, Fu X, Yue Z, Wang H, Zhang H, Kawashima M, Kojima K, Nagasaki M, Nakamura M, Yang SK, Ye BD, Denise Y, Rotzschke O, Song K, Tokunaga K, Zhang F, Liu J. Fine-mapping analysis revealed complex pleiotropic effect and tissue-specific regulatory mechanism of TNFSF15 in primary biliary cholangitis, Crohn's disease and leprosy. *Sci Rep*. 2016 Aug 10;6:31429.

Andiappan AK, Sio YY, Lee B, Suri BK, Matta SA, Lum J, Foo S, Koh G, Liu J, Zolezzi F, Poidinger M, Wang Y, Rotzschke O, Chew FT. Functional variants of 17q12-21 are associated with allergic asthma but not allergic rhinitis. *J Allergy Clin Immunol*. 2016 Mar;137(3):758-66.e3.

2015

Andiappan AK, Melchiotti R, Poh TY, Nah M, Puan KJ, Vigano E, Haase D, Yusof N, San Luis B, Lum J, Kumar D, Foo S, Zhuang L, Vasudev A, Irwanto A, Lee B, Nardin A, Liu H, Zhang F, Connolly J, Liu J, Mortellaro A, Wang de Y, Poidinger M, Larbi A, Zolezzi F, Rotzschke O. Genome-wide analysis of the genetic regulation of gene expression in human neutrophils. *Nat Commun*. 2015 Aug 10;6:7971.

Li M, Foo JN, Wang JQ, Low HQ, Tang XQ, Toh KY, Yin PR, Khor CC, Goh YF, Irwan ID, Xu RC, Andiappan AK, Bei JX, Rotzschke O, Chen MH, Cheng CY, Sun LD, Jiang GR, Wong TY, Lin HL, Aung T, Liao YH, Saw SM, Ye K, Epstein RP, Chen QK, Shi W, Chew SH, Chen J, Zhang FR, Li SP, Xu G, Shyong Tai E, Wang L, Chen N, Zhang XJ, Zeng YX, Zhang H, Liu ZH, Yu XQ, Liu JJ. Identification of new susceptibility loci for IgA nephropathy in Han Chinese. *Nat Commun*. 2015 Jun 1;6:7270.

Jin P, Andiappan AK, Quek JM, Lee B, Au B, Sio YY, Irwanto A, Schurmann C, Grabe HJ, Suri BK, Matta SA, Westra HJ, Franke L, Esko T, Sun L, Zhang X, Liu H, Zhang F, Larbi A, Xu X, Poidinger M, Liu J, Chew FT, Rotzschke O, Shi L, Wang Y. A functional brain-derived neurotrophic factor (BDNF) gene variant increases the risk of moderate-to-severe allergic rhinitis. *J Allergy Clin Immunol*. 2015 Jun;135(6):1486-1493.e8.

Westra HJ, Arends D, Esko T, Peters MJ, Schurmann C, Schramm K, Kettunen J, Yaghootkar H, Fairfax BP, Andiappan AK, Li Y, Fu J, Karjalainen J, Platteel M, Visschedijk M, Weersma RK, Kasela S, Milani L, Tserel L, Peterson P, Reinmaa E, Hofman A, Uitterlinden AG, Rivadeneira F, Homuth G, Petersmann A, Lorbeer R, Prokisch H, Meitinger T, Herder C, Roden M, Grallert H, Ripatti S, Perola M, Wood AR, Melzer D, Ferrucci L, Singleton AB, Hernandez DG, Knight JC, Melchiotti R, Lee B, Poidinger M, Zolezzi F, Larbi A, Wang Y, van den Berg LH, Veldink JH, Rotzschke O, Makino S, Salomaa V, Strauch K, Völker U, van Meurs JB, Metspalu A, Wijmenga C, Jansen RC, Franke L. Cell Specific eQTL Analysis without Sorting Cells. *PLoS Genet*. 2015 May 8;11(5):e1005223.

Liu H, Irwanto A, Fu X, Yu G, Yu Y, Sun Y, Wang C, Wang Z, Okada Y, Low H, Li Y, Liany H, Chen M, Bao F, Li J, You J, Zhang Q, Liu J, Chu T, Andiappan AK, Wang N, Niu G, Liu D, Yu X, Zhang L, Tian H, Zhou G, Rotzschke O, Chen S, Zhang X, Liu J, Zhang F. Discovery of six new susceptibility loci and analysis of pleiotropic effects in leprosy. *Nat Genet*. 2015 Mar;47(3):267-71.

Santosa A, Andiappan AK, Rotzschke O, Wong HC, Chang A, Bigliardi-Qi M, Wang DY, Bigliardi PL. Evaluation of the applicability of the Immuno-solid-phase allergen chip (ISAC) assay in atopic patients in Singapore. *Clin Transl Allergy*. 2015 Feb 27;5:9.

Andiappan AK, Narayanan S, Myers RA, Lee B, Nieuwenhuis MA, Nardin A, Park CS5, Shin HD, Kim JH, Westra HJ, Franke L7, Esko T, Metspalu A, Teo YY, Saw SM, Chuen KC, Jianjun L, Koppelman GH, Postma DS, Poidinger M, Connolly JE, Wang DY, Rotzschke O, Curotto de Lafaille MA, Chew FT.

Genetic variants of inducible costimulator are associated with allergic asthma susceptibility. *J Allergy Clin Immunol*. 2015 Feb;135(2):556-8.

2014

Her Z, Teng TS, Tan JJ, Teo TH, Kam YW, Lum FM, Lee WW, Gabriel C, Melchiotti R, Andiappan AK, Lulla V, Lulla A, Win MK, Chow A, Biswas SK, Leo YS, Lecuit M, Merits A, Rénia L, Ng LF. Loss of TLR3 aggravates CHIKV replication and pathology due to an altered virus-specific neutralizing antibody response. *EMBO Mol Med*. 2014 Dec 1;7(1):24-41.

Vasudev A, Tan Tze Ying C, Ayyadhury S, Joo Puan K, Kumar Andiappan A, Shwe Zin Nyunt M, Binte Shadan N, Mustafa S, Low I, Rotzschke O, Fulop T, Pin Ng T, Larbi A. γ/δ T cell subsets in human aging using the classical α/β T cell model. *J Leukoc Biol*. 2014 Oct;96(4):647-55.

Melchiotti R, Puan KJ, Andiappan AK, Poh TY, Starke M, Zhuang L, Petsch K, Lai TS, Chew FT, Larbi A, Wang DY, Poidinger M, Rotzschke O. Genetic analysis of an allergic rhinitis cohort reveals an intercellular epistasis between FAM134B and CD39. *BMC Med Genet*. 2014 Jun 27;15(1):73.

Sun Y, Zuo X, Zheng X, Zhou F, Liang B, Liu H, Chang R, Gao J, Sheng Y, Cui H, Wang W, Andiappan AK, Rotzschke O, Yang S, Sun L, Zhang F, Zhang X, Ren Y, Liu J. A comprehensive association analysis confirms ZMIZ1 to be a susceptibility gene for vitiligo in Chinese population. *J Med Genet*. 2014 May;51(5):345-53.

Andiappan AK, Puan KJ, Lee B, Nardin A, Poidinger M, Connolly J, Chew FT, Wang DY, Rotzschke O. Allergic airway diseases in a tropical urban environment are driven by dominant mono-specific sensitization against house dust mites. *Allergy*. 2014 Apr;69(4):501-9.

2013

Andiappan AK, Rotzschke O, Wang DY, Chew FT. Association of Interleukin-13 SNP rs20541 (Arg>Gln) to allergic rhinitis in an Asian population of ethnic Chinese in Singapore. *Gene*. 2013 Oct 25;529(2):357-8.

Andiappan AK, Nilsson D, Halldén C, De Yun W, Säll T, Cardell LO, Tim CF. Investigating highly replicated asthma genes as candidate genes for allergic rhinitis. *BMC Med Genet*. 2013 May 10;14:51.

Andiappan AK, Wang DY, Anantharaman R, Suri BK, Lee BTK, Rotzschke O, Liu J, Chew FT. Replication of genome-wide association study loci for allergic rhinitis and house dust mite sensitization in an Asian population of ethnic Chinese in Singapore. *J Allergy Clin Immunol*. 2013 May;131(5):1431-3.

Nilsson D, Andiappan AK, Halldén C, Tim CF, Säll T, Wang DY, Cardell LO. (2013) Poor Reproducibility of Allergic Rhinitis SNP Associations. *PLoS One*. 2013;8(1):e53975.