

SG10K_Health approved studies- updated as of 19 Apr 2026

No.	Title of research	Lead Investigator	Institution	Date of	Study status
1	Rare variant-based machine learning models for diabetic nephropathy classification in two Singaporean ethnic groups	Petretto Enrico Giuseppe	Duke-NUS Medical School, Singapore	15 Dec 2025	Active
2	Mitochondrial genome and genome wide analysis of Fuchs endothelial corneal dystrophy in a Singapore Population	Chiea Chuen Khor	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	15 Dec 2025	Active
3	Integrating Ancestry-Specific Adjustments to Enhance Risk Prediction in Singapore's Multi-Ethnic Cohorts	Joanne Ngeow	Lee Kong Chian School of Medicine, Nanyang Technological University	15 Dec 2025	Active
4	Identification of Asian enriched variants in lipid transporters	David Silver	Duke-NUS Medical School, Singapore	15 Oct 2025	Active
5	An update of the SG10K_Health imputation panel	Joanna Tan Hui Juan	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	15 Jul 2025	Active
6	Development of DNA Microarrays for the Inference of Extended Blood Types	Jiahai Shi	National University of Singapore, Singapore	15 Jun 2025	Active
7	DNA methylation surrogates and biomarkers of age-related disease in Asian population	Feng Lei	National University of Singapore, Singapore	15 Jun 2025	Active
8	Benchmarking a quantum transformer using Asian population genomes and epigenomes	Petretto Enrico Giuseppe	Duke-NUS Medical School, Singapore	15 Jun 2025	Active
9	Development of HLA and EBV risk variant-based assays and model for Nasopharyngeal Carcinoma risk prediction in Southeast Asia	Jianjun Liu	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	15 Jun 2025	Active
10	Translation clinical research in Stroke, Parkinson's disease and other neurodegenerative and	Eng King Tan	National Neuroscience Institute	21 Apr 2025	Active
11	Ancestry matched imputation of Singapore Immuno-Oncology Pharmacogenomics Project (SIOPP) GWAS dataset	Yiqing Huang	National University Cancer Institute, Singapore	15 Apr 2025	Active

12	Enhancing GWAS Data Imputation with Foundation Models	Hengtong Li	Department of Ophthalmology, Centre for Innovation and Precision Eye Health,	15 Oct 2024	Active
13	Functional characterisation of haplotype blocks containing cardiac-specific cis-regulatory regions in a multi-ethnic South-East	Roger Foo	Cardiovascular Metabolic Translational Research Program, Yong Loo Lin School of Medicine,	15 Jul 2024	Active
14	Analysing the prevalence of severe paediatric and highly penetrant genomic variants in the Singaporean population	Yasmin Bylstra	SingHealth Duke-NUS Institute of Precision Medicine, Singapore	15 May 2024	Active
16	Investigating potential disease-related rare genetic variants in Parkinson's disease patients of South East Asian ancestry in	Azlina Ahmad Annuar	University of Malaya	26 Feb 2024	Active
17	Identifying the Functional Consequences of Genetic Variation in Type 2 Diabetes Mellitus Susceptibility in Asia	John Greally	Albert Einstein College of Medicine, USA	26 Jan 2024	Active
19	Improved identification of pathogenic missense variants using state-of-the-art computational predictors and deep mutational	Joanne Ngeow	Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore	16 Dec 2022	Active
20	Role of Genomics in Covid-19 Pandemic	Kelvin Bryan Tan	Programme for Research in Epidemic Preparedness and REsponse (PREPARE), MOH	15 Nov 2022	Active
21	Application of Artificial Intelligence (AI) tools for the prediction of the effect of genetic variants in SG10K_Health	Weng Khong Lim	1) SingHealth Duke-NUS Institute of Precision Medicine (PRISM) 2) Cancer & Stem Cell Biology Program, Duke-NUS Medical School,	15 Oct 2022	Active
22	Health and Economic Impact of Next Generation Sequencing in Primary Glomerular Diseases in Singapore	Kar Hui Ng	Department of Paediatrics, Yong Loo Lin School of Medicine, National University of Singapore	16 Aug 2022	Active
23	Understanding the genomic modifiers of cancer risk in Singapore	Joanne Ngeow	Lee Kong Chian School of Medicine, Nanyang Technological University	19 May 2022	Active

24	Re-imputation of Southeast Asian samples using SG10K Health reference panel	Jingmei Li	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	18 Apr 2022	Active
25	Evaluating the use of the SG10K_Health dataset to increase statistical power of disease-based association studies in Singapore.	Zheng Li	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	22 Mar 2022	Active
26	Genetic variants and methylation signatures of neurocognitive diseases in Singapore: From discovery to clinical applications	Kok Pin Ng	National Neuroscience Institute	7 Mar 2022	Active
15	ALDH2 Polymorphism in NAFLD-HCC	Hui Min Tan	Institute of Molecular and Cell Biology, Agency for Science, Technology and Research (A*STAR),	19 Apr 2024	Closed
18	CHORUS 3.0 - SG10K_Health federated aggregated variant browser webservice	Nicolas Bertin	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	4 Dec 2023	Closed
27	Ethnic-Specific Systems Ageing Heterogeneity	Ives Lim Yubin	Bioinformatics Institute, Agency for Science, Technology and Research (A*STAR), Singapore	15 Oct 2024	Closed
28	Cancer cell clonal tracing in CML using long-read single-cell sequencing	Elaine Cao Yiqun	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	22 Nov 2024	Closed
29	Prevalence of Genetic Variants Predicting Disease Onset in our Singapore Population	Mien Lin Justina Tan	SingHealth Duke-NUS Institute, Singapore	16 Dec 2022	Closed
30	The genetic basis of autosomal recessive inherited retinal diseases in Singapore	Beau Fenner	Singapore National Eye Centre, Singapore	15 Nov 2022	Closed
31	Evaluation of HLA haplotype frequency of Singapore population for iPSC biobanking	Jonathan Yui-Han LOH	Institute of Molecular and Cell Biology, Agency for Science, Technology and Research (A*STAR),	15 Nov 2022	Closed
32	Identification of novel genetic variants in Singaporean patients with Autism Spectrum Disorders	Jinyue Liu	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	15 Oct 2022	Closed

33	Construction of an Asian STR database using the SG10K WGS dataset	Jian Jun Liu	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	16 Sept 2022	Closed
34	Imputation of large-scale local GWAS datasets with ancestry matched SG10K Health reference panels	Rajkumar Dorajoo	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	15 Sept 2022	Closed
35	Imputation of PRS markers using a multi-ethnic reference panel derived from the Singapore population	Nicolas Bertin	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	25 Jul 2022	Closed
36	Candidate gene analysis of Fuch's endothelial corneal dystrophy in a Singapore Population	Chiea Chuen Khor	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	25 Jul 2022	Closed
37	Whole-genome Sequencing Based Blood Group Antigen Automated Typing	Jiahai Shi	Synthetic Biology Translational Research Program, Yong Loo Lin School of Medicine, National University of Singapore	21 Jun 2022	Closed
38	Variant Landscape of CYP2D6 Pharmacogene in a Multi-Ethnic Population in Singapore	Nicolas Bertin	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	18 Apr 2022	Closed
39	Design, Development, Validation and Implementation of a Robust, Comprehensive and Adequately Customized Clinical Pharmacogenomics Testing Panel in	Folefac Aminkeng	DEPARTMENT OF MEDICINE, NATIONAL UNIVERSITY OF SINGAPORE	6 Aug 2021	Closed
40	Natural splicing variations in Singaporeans: from human genomics to disease susceptibility	Francesc XAVIER ROCA Castella	School of Biological Sciences (SBS) / Nanyang Technological University (NTU) Singapore	20 Jun 2021	Closed
41	Performance of Polygenic Score in SG10K_Health	Marie Loh	Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore	24 May 2021	Closed

42	CHORUS SG10K_Health aggregated variant query webservices	Nicolas Bertin	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	24 May 2021	Closed
43	SNPdrug3D web service	Chandra Verma	Bioinformatics Institute, Agency for Science, Technology and Research (A*STAR), Singapore	24 May 2021	Closed
44	Imputation web service for the National Precision Medicine Program (Phase 1A)	Richard Tai Ling Chait	Institute of High Performing Coomputation, Agency for Science, Technology and Research (A*STAR),	24 May 2021	Closed
45	Exploring genetics and non-genetics relationships of methylation in SG10K_Health	John Chambers	Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore	19 Apr 2021	Closed
46	NPM Phase II- Pre-competitive Industry Consortium (PCC) Teaser sandbox	Nicolas Bertin	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	19 Apr 2021	Closed
47	Resource Utilisation Study on the use of Next Generation Sequencing (NGS) Technologies in Familial Hypercholesterolemia (FH)	Wee Hwee Lin	Saw Swee Hock School of Public Health. National University of Singapore	19 Apr 2021	Closed
48	Generating phenotypes from electronic health records to enable accurate clinical variant classification in Singaporeans	Weng Khong Lim	Duke-NUS Medical School, Singapore	19 Apr 2021	Closed
49	Polygenic risk scores and lifestyle choices on chronic disease risk	Marie Loh	Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore	19 Apr 2021	Closed
50	SNPdrug3D – variant annotation with 3D structure drug proximity	Chandra Verma	Bioinformatics Institute, Agency for Science, Technology and Research (A*STAR), Singapore	16 Mar 2021	Closed
51	CHORUS variant browser to assist aggregated SG10K_Health variants frequency query	Eleanor Wong	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	16 Mar 2021	Closed

52	Trusted Research/ Real world-data Utilisation and Sharing Tech (“TRUST”) Platform Phase 1 development	Mingshi Koh	Chief Health Scientist Office, Ministry of Health Singapore	26 Feb 2021	Closed
53	Ageing in Asians	Brian Kennedy	NUS Medicine Healthy Longevity Research Programme, National University of Singapore, Singapore	16 Oct 2020	Closed
54	Annotation of unmapped reads from the SG10K dataset	Jian Jun Liu	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	16 Oct 2020	Closed
55	Microbial signatures in blood from WGS data for SG10K	Niranjan Nagarajan	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	16 Oct 2020	Closed
56	To evaluate various algorithms for calling Short Tandem Repeat (STR) markers using the SG10K data	Jian Jun Liu	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	13 Aug 2020	Closed
57	Post-call quality control and population structure in SG10K_Health for downstream analyses	Xueling Sim	Epidemiology, Saw Swee Hock Sch of Public Health, National University of Singapore, Singapore	29 May 2020	Closed
58	SV landscape in the three diverse Asian populations	Nicolas Bertin	c-BIG / Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR),	26 May 2020	Closed
59	The Asian Clinical Variome	Weng Khong Lim	1) SingHealth Duke-NUS Institute of Precision Medicine (PRISM), Duke-NUS Medical School 2) Cancer & Stem Cell Biology Program, Duke-NUS Medical School,	26 May 2020	Closed