

SG10K_Health approved studies- updated as of 23 Sep 2025

No.	Title of research	Lead Investigator	Institution	Date of approval	Study status
1	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
2	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
3	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
4	Understanding the genomic modifiers of cancer risk in Singapore	Joanne Ngeow	Lee Kong Chian School of Medicine, Nanyang Technological University	19 May 2022	Active
5	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
6	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, Singapore	15 Oct 2022	Active
7	Role of Genomics in Covid-19 Pandemic	Kelvin Bryan Tan	Programme for Research in Epidemic Preparedness and REsponse (PREPARE), MOH	15 Nov 2022	Active
8	Improved identification of pathogenic missense variants using state-of-the-art computational predictors and deep mutational scanning data	Joanne Ngeow	Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore	16 Dec 2022	Active

9	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	Active
10	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
11	Investigating potential disease-related rare genetic variants in Parkinson's disease patients of South East Asian ancestry in Malaysia	Azlina Ahmad Annuar	University of Malaya	26 Feb 2024	Active
12	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
13	ALDH2 Polymorphism in NAFLD-HCC	Hui Min Tan	Institute of Molecular and Cell Biology, Agency for Science, Technology and Research (A*STAR), Singapore	19 Apr 2024	Active
14	Translation clinical research in Stroke, Parkinson's disease and other neurodegenerative and movement disorders.	Eng King Tan	National Neuroscience Institute	21 Apr 2025	Active
15	Functional characterisation of haplotype blocks containing cardiac-specific cis-regulatory regions in a multi-ethnic South-East Asian Cohort	Roger Foo	Cardiovascular Metabolic Translational Research Program, Yong Loo Lin School of Medicine, National University of Singapore	15 Jul 2024	Active
16	Application No: NPM00064 Enhancing GWAS Data Imputation with Foundation Models	Hengtong Li	Department of Ophthalmology, Centre for Innovation and Precision Eye Health, National University of Singapore	15 Oct 2024	Active

17	Ethnic-Specific Systems Ageing Heterogeneity	Ives Lim Yubin	Bioinformatics Institute, Agency for Science, Technology and Research (A*STAR), Singapore	15 Oct 2024	Active
18	Ancestry matched imputation of Singapore Immuno-Oncology Pharmacogenomics Project (SIOPP) GWAS dataset	Yiqing Huang	National University Cancer Institute, Singapore	15 Apr 2025	Active
19	Development of DNA Microarrays for the Inference of Extended Blood Types	Xiangxi Gao	National University of Singapore, Singapore	15 Jun 2025	Active
20	DNA methylation surrogates and biomarkers of age-related disease in Asian population	Feng Lei	National University of Singapore, Singapore	15 Jun 2025	Active
21	Benchmarking a quantum transformer using Asian population genomes and epigenomes	Petretto Enrico Giuseppe	Duke-NUS Medical School, Singapore	15 Jun 2025	Active
22	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
23	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
24	SV landscape in the three diverse Asian populations	Nicolas Bertin	c-BIG / Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	26 May 2020	Closed

25	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, Singapore	26 May 2020	Closed
26	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
27	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
28	Performance of Polygenic Score in SG10K_Health	Marie Loh	Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore	24 May 2021	Closed
29	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
30	Ageing in Asians	Brian Kennedy	NUS Medicine Healthy Longevity Research Programme, National University of Singapore, Singapore	16 Oct 2020	Closed
31	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

32	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
33	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
34	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
35	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
36	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
37	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
38	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
39	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

40	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
41	CHORUS SG10K_Health aggregated variant query webservice	Nicolas Bertin	Genome Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore	24 May 2021	Closed
42	SNPdrug3D web service	Chandra Verma	Bioinformatics Institute, Agency for Science, Technology and Research (A*STAR), Singapore	24 May 2021	Closed
43	Imputation web service for the National Precision Medicine Program (Phase 1A)	Richard Tai Ling Chait	Institute of High Performing Computation, Agency for Science, Technology and Research (A*STAR), Singapore	24 May 2021	Closed
44	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
45	Design, Development, Validation and Implementation of a Robust, Comprehensive and Adequately Customized Clinical Pharmacogenomics Testing Panel in Singapore.	Folefac Aminkeng	DEPARTMENT OF MEDICINE, NATIONAL UNIVERSITY OF SINGAPORE	6 Aug 2021	Closed
46	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
47	Whole-genome Sequencing Based Blood Group Antigen Automated Typing	Jia Hai Shi	Synthetic Biology Translational Research Program, Yong Loo Lin School of Medicine, National University of Singapore	21 Jun 2022	Closed

48	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
49	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
50	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
51	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
52	The genetic basis of autosomal recessive inherited retinal diseases in Singapore	Beau Fenner	Singapore National Eye Centre, Singapore	15 Nov 2022	Closed
53	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), Singapore	15 Nov 2022	Closed
54	Prevalence of Genetic Variants Predicting Disease Onset in our Singapore Population	Mien Lin Justina Tan	SingHealth Duke-NUS Institute, Singapore	16 Dec 2022	Closed
55	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