

Supplementary Table 1. Glossary

ABCB1	ATP Binding Cassette Subfamily B Member 1
ACPA	Anti-Citrullinated Protein Antibodies
AI	Artificial Intelligence
ANN	Artificial Neural Networks
ANOVA	Analysis Of Variance
Anti-CarP	Anti-Carbamylated Protein
AUC	Area Under The Curve
C1QA	Complement C1q A Subunit
C1QB	Complement C1q B Subunit
C2CD4B	C2 Calcium Dependent Domain Containing 4b
C3	Complement 3
C4	Complement 4
CART	Classification And Regression Tree
CCR7	C-C Motif Chemokine Receptor 7
CD177	Cluster Of Differentiation 177
CD247	Cluster Of Differentiation 247
CMC4	C-X9-C Motif Containing 4
CMPK2	Cytidine Monophosphate Kinase 2
CMTM4	CKLF Like Marvel Transmembrane Domain Containing 4
CNN	Convolutional Neural Networks
CREB5	Camp Responsive Element Binding Protein 5
CX3CR1	C-X3-C Motif Chemokine Receptor 1
CXCL10	C-X-C Motif Chemokine Ligand 10
CXCL8	C-X-C Motif Chemokine Ligand 8
DEFA4	Defensin Alpha 4
DSC1	Desmocollin 1
ECPAS	Epithelial Cell Proliferation-Associated, Snf2
eGFR	Estimated Glomerular Filtration Rate
EIF2AK2	Eukaryotic Translation Initiation Factor 2 Alpha Kinase 2
EKG	Electrocardiogram
ELM	Extreme Learning Machine
EMR	Electronic Medical Records
EULAR	European League Against Rheumatism
FOXP3	Forkhead Box P3
GAN	Generative Adversarial Networks
GLM	Generalized Linear Model
GOT2	Glutamic-Oxaloacetic Transaminase 2
GRU	Gated Recurrent Unit
HERC5	HECT And RLD Domain Containing E3 Ubiquitin Protein Ligase 5

HLA-DQA	Human Leukocyte Antigen-Dq Alpha
HLA-DQB	Human Leukocyte Antigen-Dq Beta
HLA-DRB	Human Leukocyte Antigen-Dr Beta
HMGB1	High Mobility Group Box 1
ICD	International Classification Of Disease
IFI16	Interferon Gamma Inducible Protein 16
IFI27	Interferon Alpha-Inducible Protein 27
IFI35	Interferon-Induced Protein 35
IFIT3	Interferon-Induced Protein With Tetratricopeptide Repeats 3
IFN	Interferon
IFNa2	Interferon Alpha 2
IFNy	Interferon Gamma
IgG	Immunoglobulin
IGS	Interferon Gene Signature
IL	Interleukin
IL12	Interleukin 12
IL1a	Interleukin 1 Alpha
IL6	Interleukin 6
IL8	Interleukin 8
IRF7	Interferon Regulatory Factor 7
ITGB2	Integrin Subunit Beta 2
KIR2DL3	Killer Cell Immunoglobulin-Like Receptor, Two Domains Long Cytoplasmic Tail 3
KNN	K-Nearest Neighbour
L-selectin	Lymphocyte Selectin
LASSO	Least Absolute Shrinkage And Selection Operator
LCK	Lck Proto-Oncogene, Src Family Tyrosine Kinase
LDA	Linear Discriminant Analysis
LE	Lupus Erythematosus
LGB	Light Gradient-Boosting Machine
LLM	Large Language Models
LN	Lupus Nephritis
LPAR4	Lysophosphatidic Acid Receptor 4
LR	Logistic Regression
LSTM	Long Short-Term Memory
MAP2K1	Mitogen-Activated Protein Kinase Kinase 1
MCP1	Monocyte Chemoattractant Protein 1
MESH	Medical Subject Heading
MICE	Multiple Imputation By Chained Equations
ML	Machine Learning

MMP9	Matrix Metalloproteinase 9
MNDA	Myeloid Cell Nuclear Differentiation Antigen
MRI	Magnetic Resonance Imaging
MX1	MX Dynamin-Like Gtpase 1
MX2	MX Dynamin-Like Gtpase 2
NPSLE	Neuropsychiatric SLE
NRAD1	Nadph-Dependent Reductase Domain 1
OAS1	2'-5'-Oligoadenylate Synthetase 1
OAS3	2'-5'-Oligoadenylate Synthetase 3
PBMC	Peripheral Blood Mononuclear Cells
PCA	Principal Component Analysis
PHACTR2	Phosphatase And Actin Regulator 2
PLSCR1	Phospholipid Scramblase 1
PLS-DA	Partial Least Squares Discriminant Analysis
RF	Random Forest
RFE	Recursive Feature Elimination
RNASE2	Ribonuclease A Family Member 2
RNASE3	Ribonuclease A Family Member 3
RNN	Recurrent Neural Networks
ROC	Receiver Operating Characteristic
RORC	Rar-Related Orphan Receptor C
scRNAseq	Single Cell RNA Sequencing
SEZ6	Seizure Related 6 Homolog
SHAP	SHapley Additive exPlanations
SLAMF	Signaling Lymphocytic Activation Molecule Family
SLE	Systemic Lupus Erythematosus
SLERPI	Sle Risk Probability Index
SLICC	Systemic Lupus International Collaborating Clinics
SMOTE	Synthetic Minority Oversampling Technique
SPI1	Spi-1 Proto-Oncogene
SRA1	Steroid Receptor Rna Activator 1
ST8SIA4	St8 Alpha-N-Acetyl-Neuraminide Alpha-2,8-Sialyltransferase 4
STAT1	Signal Transducer And Activator Of Transcription 1
STAT2	Signal Transducer And Activator Of Transcription 2
SVM	Support Vector Machines
t-SNE	T-Distributed Stochastic Neighbor Embedding
TNF	Tumor Necrosis Factor
TNFSF13B	TNF Superfamily Member 13b
TOMM40	Translocase Of Outer Mitochondrial Membrane 40

TRIPOD	Transparent Reporting Of A Multivariable Prediction Model For Individual Prognosis Or Diagnosis
UMAP	Uniform Manifold Approximation And Projection
VSIG4	V-Set Immunoglobulin Domain-Containing Protein 4
VTE	Venous Thromboembolism
XGBoost	Extreme Gradient Boosting