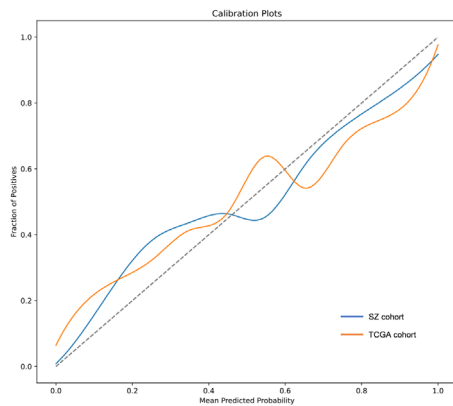


**Figure S1** A snapshot of the LifeX software.

**Box S1** Glycolysis genes downloaded from the Molecular Signatures Database (MSigDB)

*ADORA2B, ALDH7A1, ALDH9A1, ALDOA, ALDOB, AK3, AK4, AKR1A1, AGL, AGRN, ANG, ANGPTL4, ANKZF1, ARPP19, ARTN, AURKA, B3GALT6, B3GAT1, B3GAT3, B3GNT3, B4GALT1, B4GALT2, B4GALT4, B4GALT7, BIK, BPNT1, CACNA1H, CAPN5, CASP6, CD44, CDK1, CENPA, CHPF, CHPF2, CHST1, CHST12, CHST2, CHST4, CHST6, CITED2, CLDN3, CLDN9, CLN6, COG2, COL5A1, COPB2, CTH, CXCR4, CYB5A, DCN, DDT4, DEPDC1, DLD, DPYSL4, DSC2, ECD, EFNA3, EGFR, EGLN3, ELF3, ENO1, ENO2, ERO1A, EXT1, EXT2, FAM162A, FBP2, FKBP4, FUT8, G6PD, GAL3ST1, GALE, GALK1, GALK2, GAPDHS, GCLC, GFPT1, GLCE, GLRX, GMPPA, GMPPB, GNE, GNPDA1, GOT1, GOT2, GPC1, GPC3, GPC4, GPR87, GUSB, GYS1, GYS2, HAX1, HDLBP, HK2, HMMR, HOMER1, HS2ST1, HS6ST2, HSPA5, IDH1, IDUA, IER3, IGFBP3, IL13RA1, IRS2, ISG20, KDELRL3, KIF20A, KIF2A, LCT, LDHA, LDHC, LHPP, LHX9, MDH1, MDH2, ME1, ME2, MED24, MERTK, MET, MIF, MIOX, MPI, MX11, NANP, NASP, NDST3, NDUFV3, NOL3, NSDHL, NT5E, P4HA1, P4HA2, PAM, PAXIP1, PC, PDK3, PFKFB1, PFKP, PGAM1, PGAM2, PGK1, PGLS, PGM2, PHKA2, PKM, PKP2, PLOD1, PLOD2, PMM2, POLR3K, PPFIA4, PPIA, PPP2CB, PRPS1, PSMC4, PYGB, PYGL, QSOX1, RARS1, RBCK1, RPE, RRAGD, SAP30, SDC1, SDC2, SDC3, SDHC, SLC16A3, SLC25A10, SLC25A13, SLC35A3, SLC37A4, SOD1, SOX9, SPAG4, SRD5A3, STC1, STC2, STMN1, TALDO1, TFF3, TGFA, TGFBI, TKTL1, TPBG, TPI1, TPST1, GFUS, TXN, UGP2, VCAN, VEGFA, VLDLR, XYLT2, ZNF292*



**Figure S2** The calibration plot of the DeepGR. TCGA, The Cancer Genome Atlas; SZ, The Second Affiliated Hospital of Soochow University.