

Table S1 The genes related to inherited metabolic liver disorders

AARS2	AASS	ABCA1	ABCB11	ABCB4	ABCC2	ABCD1	ABCD3
ABCG5	ABCG8	ABHD5	ACAD9	ACADM	ACADS	ACADVL	ACAT1
ACOX1	ACOX2	ACVRL1	ADA	ADA2	ADAMTSL2	ADK	AGA
AGL	AGPAT2	AGPS	AGXT	AHCY	AIFM1	AIRE	AKR1D1
AKT2	ALAD	ALAS2	ALDH2	ALDOA	ALDOB	ALG1	ALG11
ALG12	ALG13	ALG2	ALG3	ALG6	ALG8	ALG9	ALMS1
ALPL	AMACR	AMT	ANGPTL3	ANK1	ANKS6	AP1S1	APCS
APOA1	APOA5	APOE	APOPT1	ARG1	ARSA	ARSB	ASAH1
ASL	ASS1	ATP13A2	ATP5A1	ATP6AP1	ATP7B	ATP8B1	ATPAF2
B2M	B4GALT1	BAAT	BCAP31	BCKDHA	BCKDHB	BCS1L	BLVRA
BMP2	BMPER	BOLA3	BRAF	BSCL2	BTD	C12orf65	C15ORF41
C1QBP	CALM1	CALM2	CALM3	CARS2	CASP10	CAT	CAVIN1
CBS	CC2D2A	CCDC115	CCND1	CD40LG	CDAN1	CDKN1C	CEP164
CEP19	CEP41	CEP83	CFAP53	CFC1	CFTR	CIITA	CLDN1
CLN3	CLN5	CLN6	CLN8	COA7	COG1	COG2	COG4
COG5	COG6	COG7	COG8	COQ2	COX10	COX14	COX15
COX20	COX6B1	COX8A	CP	CPOX	CPS1	CPT1A	CPT2
CSPP1	CTC1	CTLA4	CTNS	CTSC	CTSD	CTSF	CYBA
CYC1	CYP27A1	CYP7B1	DBT	DCDC2	DCLRE1C	DDC	DDOST
DGUOK	DHCR7	DHDDS	DHFR	DKC1	DLD	DNAJC5	DOLK
DPAGT1	DPM1	DPM2	DPM3	DPYS	DYNC2H1	DYNC2LI1	EARS2
EIF2AK3	ELAC2	ENG	ENO3	EPHX1	EPM2A	ETFA	ETFB
ETFDH	EXTL3	F8	F9	FADD	FAH	FAM111A	FAN1
FARS2	FAS	FASLG	FASTKD2	FBP1	FBXL4	FCGR2A	FECH
FERMT3	FGA	FGB	FGG	FH	FIG4	FOXRED1	FTH1
FUCA1	FXN	G6PC	G6PC3	G6PD	GAA	GALC	GALE
GALK1	GALNS	GALT	GANAB	GATA6	GBA	GBE1	GCH1
GCSH	GDF1	GDF2	GFM1	GLA	GLB1	GLDC	GLIS2
GLIS3	GLUD1	GM2A	GNE	GNMT	GNPAT	GNPTAB	GNPTG
GPD1	GRN	GSN	GSTZ1	GUCY2D	GUSB	GYG1	GYS1
GYS2	H19	HADH	HADHA	HADHB	HAMP	HBB	HEXA
HEXB	HFE	HFE2	HGD	HGSNAT	HLA-DRB1	HMBS	HMGCL
HNF1B	HNF4A	HPD	HSD17B4	HSD3B7	HYAL1	IARS	IDS
IDUA	IER3IP1	IFT122	IFT140	IFT172	IFT43	IFT80	IFT81
IL21R	IL2RA	IL31RA	IL7R	INVS	ITCH	ITK	JAG1
KCNH1	KCNQ1OT1	KCTD7	KHK	KIAA0586	KRAS	KRT18	KRT8
KYNU	LAMP2	LARS	LARS2	LBR	LDHA	LDHB	LIPA
LIPF	LIPI	LIPT1	LMNA	LPL	LRPPRC	LYRM4	LYRM7
LYZ	LZTR1	MAN2B1	MANBA	MARS	MAT1A	MCEE	MCOLN1
MDH2	MEGF8	MFSD8	MGAT2	MGME1	MKS1	MMAA	MMAB
MMACHC	MMADHC	MMP21	MOGS	MPDU1	MPI	MPV17	MRPL3
MRPL44	MRPS16	MRPS22	MRPS7	MT1B	MTFMT	MTHFD1	MTO1
MTPP	MUC5B	MUT	MVK	MYO5B	NAGA	NAGLU	NAGS
NARS2	NAT2	NBAS	NCF1	NCF2	NDUFA10	NDUFA12	NDUFA4
NDUFA9	NDUFAP2	NDUFAP6	NDUFS3	NDUFS7	NDUFS8	NEK1	NEK8
NEU1	NFE2L2	NGLY1	NHLRC1	NHP2	NOP10	NOTCH2	NPC1
NPC2	NPHP1	NPHP3	NPHP4	NR1H4	NSMCE2	OCLN	OFD1
OSMR	OTC	PAH	PC	PCCA	PCCB	PCK1	PDHA1
PET100	PEX1	PEX10	PEX11B	PEX12	PEX13	PEX14	PEX16
PEX19	PEX2	PEX26	PEX3	PEX5	PEX6	PEX7	PFKM
PGAM2	PGK1	PGM1	PHKA1	PHKA2	PHKB	PHKG1	PHKG2
PHYH	PIBF1	PIEZO1	PIGA	PKD1	PKD2	PKHD1	PKLR
PMM2	PNPLA2	PNPT1	POLD1	POLG	POLG2	POMC	PPARG
PPT1	PRDX1	PRF1	PRKAG2	PRKCSH	PRODH	PSAP	PSMB8
PTF1A	PTPN11	PTPRC	PTS	PYGL	PYGM	RAF1	RAG1
RAG2	RBCK1	RFT1	RFX5	RFX6	RFXANK	RFXAP	RHAG
RIT1	RMND1	RNASEH2A	RPGRIP1L	RRM2B	SAMHD1	SAR1B	SC5D
SCN9A	SCO1	SCP2	SCYL1	SDHA	SDHAF1	SDHD	SEC63
SERAC1	SERPINA1	SFTPA1	SFTPA2	SFXN4	SGSH	SH2D1A	SHANK3
SKIV2L	SLC10A1	SLC10A2	SLC11A2	SLC17A5	SLC22A5	SLC25A13	SLC25A15
SLC25A20	SLC25A4	SLC27A5	SLC29A3	SLC2A2	SLC30A10	SLC35A1	SLC35A2
SLC35C1	SLC37A4	SLC39A8	SLC40A1	SLC52A3	SLC6A19	SLC7A7	SLCO1B1
SLCO1B3	SMPD1	SOS1	SOS2	SP110	SPRNTN	SRD5A3	ST3GAL5
STN1	STT3A	STT3B	STX11	STXBP2	SUCLA2	SUCLG1	SUMF1
SURF1	SYNJ1	TACO1	TALDO1	TARS2	TAT	TAZ	TCIRG1
TCTEX1D2	TERC	TERT	TF	TFAM	TFR2	TGFB1	TJP2
TK2	TMEM107	TMEM165	TMEM199	TMEM216	TMEM67	TPP1	TRAF3IP1
TRAPPC11	TREX1	TRIM37	TRMT10C	TRMU	TFSM	TTC21B	TTC37
TTPA	TTR	TUFM	TWINK	UBR1	UGT1A1	UNC13D	UPB1
UQC2	UQCRB	UQCRC2	UQCRCQ	UROC1	UROD	UROS	USP18
UTP4	VARS2	VHL	VIL1	VIPAS39	VPS33B	WDR19	WDR34
WDR35	WDR60	XPNPEP3	YARS2	ZNF423			

Table S2 The biochemical results during follow-up

No.	Time, yyyy. mm.dd	TBA, μmol/L	ALT, U/L	AST, U/L	GGT, U/L	TB, μmol/L	DB, μmol/L	BU, μmol/L	ALB, g/L	TG, μmol/L	TC, μmol/L	VD, ng/mL	NH3, μmol/L
P1	2018.08.25	170.0	34	47	37	38.5	12.8	25.7	44.9				
	2018.10.09	90.3	43	54	23	22.5	7.2	15.3	46.6				
	2018.11.19	108.0	43	62	18	13.4	4.6	8.8	51.8				
	2018.12.20	105.9	37	64	14	17.1	5.0	12.1	54.8				
	2018.12.26	104.2	30	43	12	11.9	4.4	7.5	45.3	0.79	4.15	36.8	13.0
	2019.01.20	103.7	32	59	13	9.4	3.8	5.6	50.8				
	2019.03.26	96.7	32	52	15	13.1	4.2	8.9	52.1				
	2020.09.09	120.5	25	39	9	8.8	3.8	5.0	44.6				
P2	2016.07.12	107.6	13	35	9	8.9	4.3	4.6	45.2				
	2016.08.29	128.7	9	29	9	16.5	7.9	8.6	45.4				
	2019.02.25	151.6	16	33	8	19.0	7.0	12.0	43.5				
	2019.03.07	-	10	24	9	9.3	3.8	5.5	41.8	0.7	2.7		24
	2019.03.08	148.1											
	2019.05.23	256.4	8	26	9	11.8	4.3	7.5	42.9				
	2019.06.27	71.8	9	26	7	26.1	9.0	17.1	43.1				
	2019.08.02	159.3	6	23	11	17.1	6.8	10.3	44.2				
	2020.04.19	90.4	8	29	8	27.1	8.4	18.7	47.1				
	P3	2018.08.12	69.4	30	42	23	29.5	9.3	20.2	41.7			
2018.12.12		158.7	29	51	11	10.5	4.5	6.0	48.8				
2019.01.16		104.8	13	39	11	10.8	3.4	7.4	47.3				
2019.02.22		21.2	19	45	8	12.1	4.4	7.7	47.8				
2019.03.20		24.2	17	39	12	7.0	1.4	5.6	45.2				
2019.04.19		49.4	16	43	10	8.3	2.6	5.7	48.8				
2019.04.23		41.7	13	41	9	5.5	2.3	3.2	47.6				48
2019.08.22		79.2	26	44	10	8.7	3.3	5.4	47.0				
2021.01.09		29.7	11	37	12	10.1	2.5	7.6	54				
P4	2019.04.25	180	75	112	249	79.6		21.6	33.6			<8.0	49
	2019.05.03	212.9	37	68	316	39.1	31.0	8.1	34.4				
	2019.05.25	-	15	32	95	11.9		4.9	40.3			22.5	47
P5	2020.02.26	297.6	36	65	-	81.2	5.4	75.8	-				
	2020.03.04	162.4	29	36	-	41.4	2.4	39.0	42.2				
	2020.04.03	228.8	17	37	-	28.6	7.7	20.9	42.2				
P6	2019.01.07	57.5	64	82	25	12.9	5.2	7.7	54.0				
	2019.02.27	42.2	28	41	18	8.3	3.1	5.2	47.3				
	2019.03.26	66.9	28	47	13	5.2	2.1	3.1	46.4				
	2019.04.28	35.3	15	39	16	3.5	1.6	1.9	42.5				
	2019.05.28	24.5	38	66	16	9.3	2.9	6.4	46.8				
	2019.06.27	29.7	23	39	12	10.7	3.4	7.3	43.3				
	2019.07.25	32.5	19	47	10	7.3	2.1	5.2	44.4				
	2021.01.09	6.1	20	46	13	7.1	0.01	7.09	45.5			27.26	
P7	2018.12.29	74.1	26	43	90	30.8	13.1	17.7	35.4				
	2019.03.01	123.1	35	49	24	12.7	4.8	7.9	49.1				
	2019.04.14	76.0	33	45	15	6.6	2.9	3.7	42.9				
	2019.06.04	31.2	64	65	17	7.9	2.6	5.3	47.3				
	2019.08.12	49.6	19	40	<6	7.6	2.8	4.8	41.9				
P8	2019.09.24	93.3	10	26	<6	8.0	2.4	5.6	43.0				
	2020.09.29	47.9	12	31	9	13.6	2.5	11.1	43.9				
P9	2019.07.07	82.6	39	53	26	11.1	3.3	7.8	40.1				
	2019.08.15	60.4	37	53	13	9.2	2.8	6.4	43.8				
	2019.09.19	85.8	42	60	11	7.1	2.6	4.5	46.5				
	2019.10.20	117.3	34	57	13	8.7	3.1	5.6	51.7				
	2020.08.28	-	19	45	7	9.5	2.7	6.8	49.0				
P10	2019.12.27	43.1	21	37	16	11.5	5.3	6.2	44.5	0.77	2.73		36.5
	2021.01.05	97.99	19.7	41.5	11.6	12.1	4.9	7.2	42.3			28.86	
P11	2018.09.19	107.6	18	44	15	7.3	2.0	5.3	46.6				
	2020.03.18	86.3	10	29	8	4.4	1.3	3.1	35.4	1.16	3.66	27.3	
P12	2020.04.10	26.5	31	45	9	11.2	3.0	8.2	43.8				
	2020.04.20	75.1	25	43	7	7.3	2.3	5.0	45.4				
	2020.05.22	51.2	22	44	10	8.1	2.8	5.3	45.8				
	2020.07.17	80.3	44	54	17	10.6	3.3	7.3	47.6				
	2020.07.21	71.9	23	42	12	6.0	1.7	4.3	46.7			33.7	