

Supplementary Material

IVS I-5 (G>C) is associated with changes to RBC membrane lipidome in response to Hydroxyurea treatment in β -thalassemia patients

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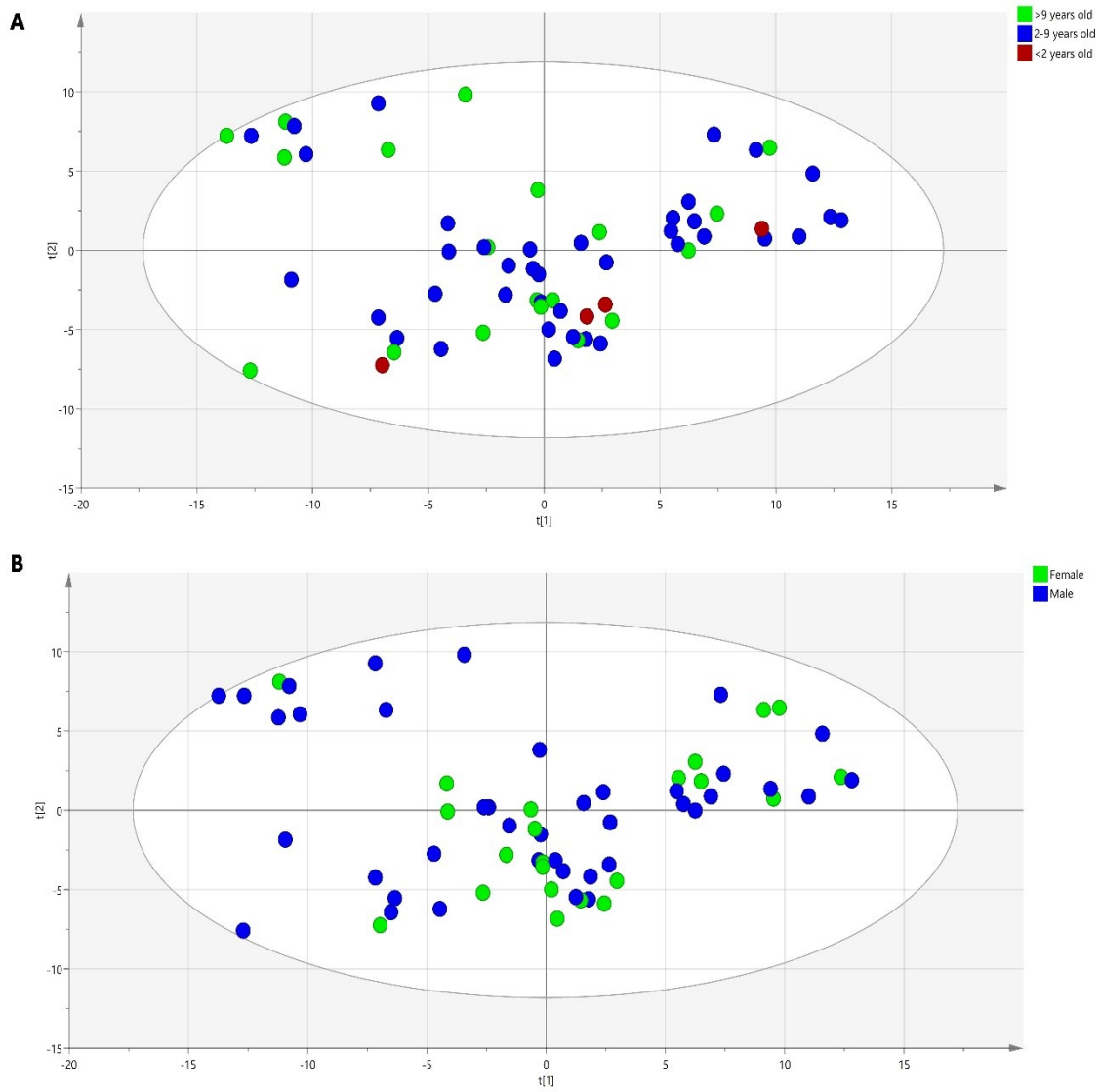
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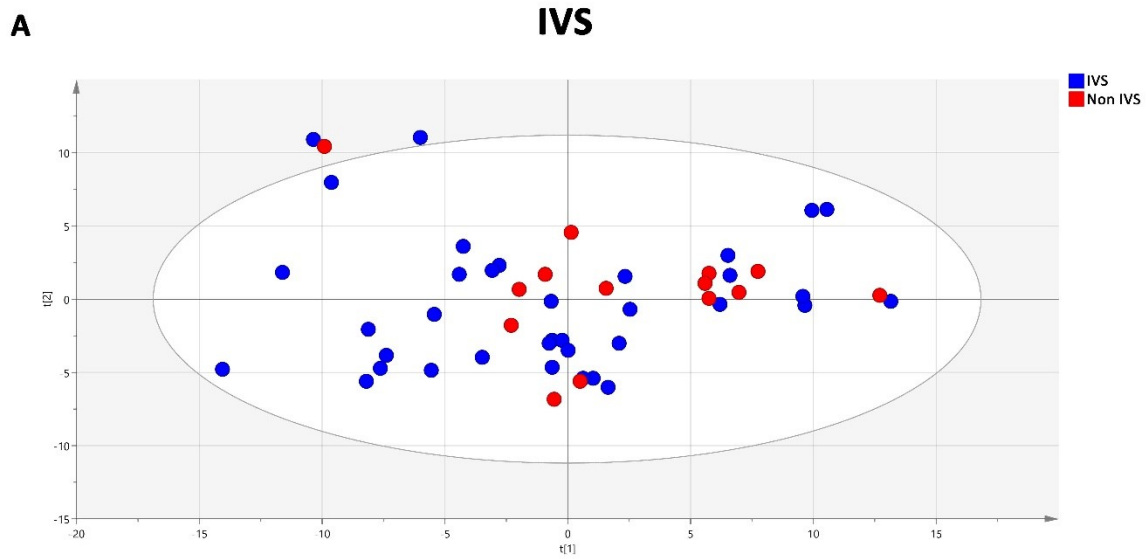
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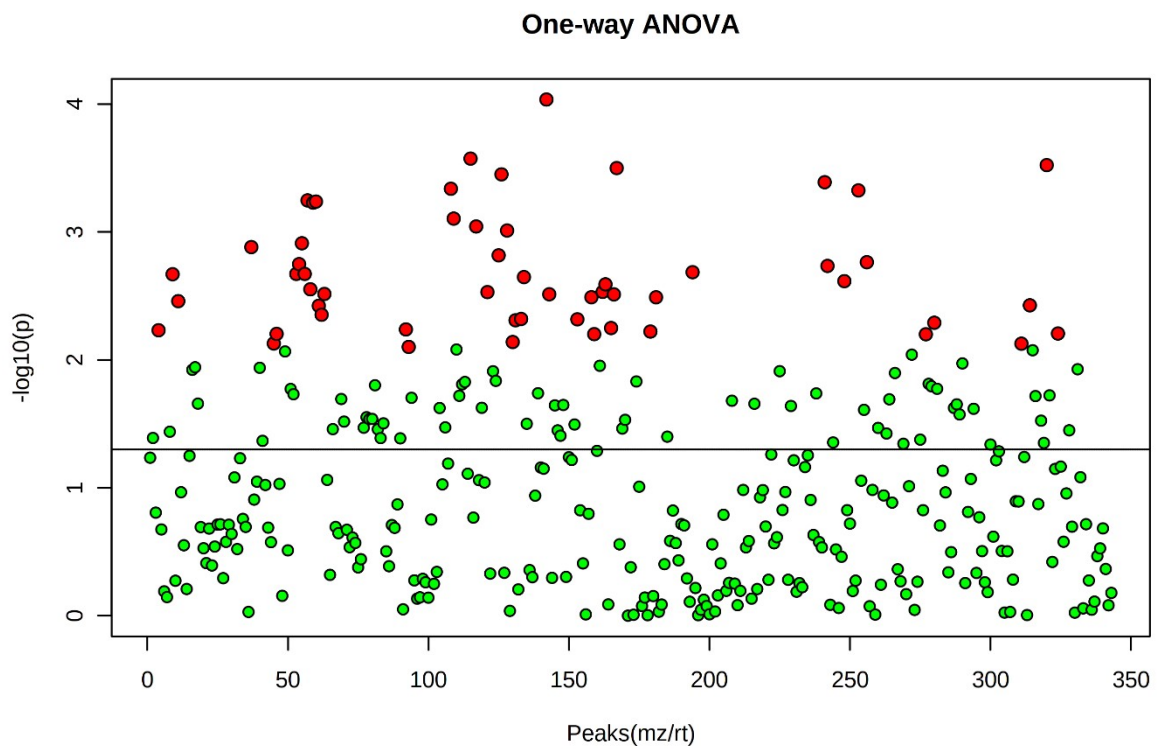
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Supplementary Figure 1. PCA score plots based on (A) age brackets and (B) Gender. The plots do not show any prominent changes based on the gender and age of the patients.



Supplementary Figure 2 PCA score plots of IVS and Non IVS patients showing variability among the samples.



Supplementary Figure 3: Analysis of variance (ANOVA) of patients grouped into four groups (IVS+HU, IVS+non-HU, non-IVS+HU, non-IVS+non-HU).

Supplementary Table 1: Sequence of primers used for the detection of β -thalassemia mutation in multiplex ARMS (MARMS). Common C is the forward primer for all the mentioned Sequences, except for the 619 mutation (Both F and R seq. are mentioned in table). The internal control primers were A and B which amplify an 861 bp fragment from the 3' end of the β -globin gene.

Common Primers	Sequence (5' → 3')	Product Size
Control A	CAA TGT ATC ATG CCT CTT TGC ACC	861
Control B	GAG TCA AGG CTG AGA GAT GCA GGA TA	
Common C	TCA CTT AGA CCT CAC CCT GTG GAG CCA C	493
Mutant		
Primers	Sequence (5' → 3')	Product Size
IVSI-5 (G-C)	CTC CTT AAA CCT GTC TTG TAA CCT TGA TAG	319
FSC 8-9	CCT TGC CCC ACA GGG CAG TAA CGG CAC ACC	250
Cap site + 1 (A-C)	AAA AGT CAG GGC AGA GCC ATC TAT TGG TTC	281
Cd 41/42	GAG TGG ACA GAT CCC CAA AGG ACC AAC CT	476
257:619r	TTT GGA TCC TTA TGG TGT AAG ACA AGG GTC TGA	594
579:619f	CAC AGT CTG CCT AGT ACA T	
Fr41-42 (-TCTT)	GAG TGG ACA GAT CCC CAA AGG ACT CAA CCT	439
IVSI-1(G-T)	TTA AAC CTG TCT TGT AAC CTT GAT ACG AAA	315
IVSI-1(G-A)	TTA AAC CTG TCT TGT AAC CTT GAT ACC AAT	305
Cd 15 Mt	CAC CAA CTT CAT CCA CGT TCA CCT TGG CCT	276

Supplementary Table 2: Significantly altered lipids in patients grouped on the basis of homozygous and heterozygous mutation.

Lipid	p.value	m/z	ppm	Exact Mass
N-eicosanoyl-ethanolamine	0.000116	338.3417	0	355.345
Undecenoic acid; C11:1	0.000126	202.1801	0.494608	184.1463
DG(20:4_22:1)	0.000212	699.5922	3.573498	698.5849
PG(O-18:0/12:0)	0.000449	698.533	10.30721	680.4992
Tetranor-PGE1	0.00058	316.2118	0	298.178
PA(O-20:0_0:0)	0.000901	435.3234	-4.82402	452.3267
N-stearoyl valine	0.001169	384.3472	0.520363	383.3399
PS(P-16:0/18:0)	0.001457	748.5487	-3.74059	747.5414
LPG(O-18:0)	0.001646	521.3214	-11.893	498.3322
LysoSM(d17:1)	0.002642	473.3115	13.09902	450.3223