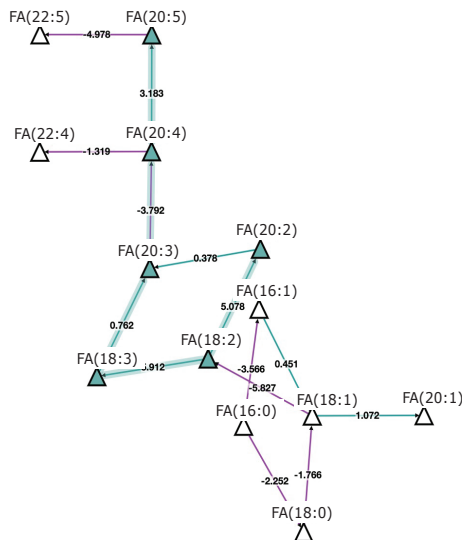


A

The most active and suppressed reactions among FA between MAFLD-HCC and CTRL

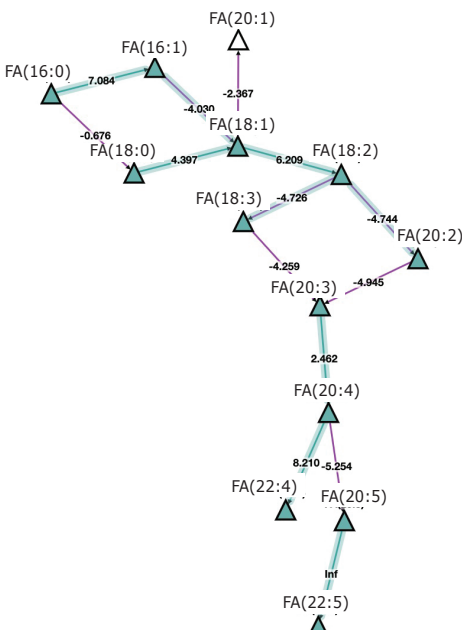


FFA most active reaction (MAFLD-HCC vs CTRL)		
Reactions chains	Z-score	Predicted genes
FA(20:4)->FA(20:5)	3.183	FADS1
FA(18:2)->FA(18:3)->FA(20:3)->FA(20:4)->FA(20:5)	3.032	FADS2, ELOVL5, ELOVL7, FADS1, FADS1

FFA most suppressed reaction (MAFLD-HCC vs CTRL)		
Reactions chains	Z-score	Predicted genes
FA(18:1)->FA(18:2)	5.827	FADS2
FA(18:0)->FA(18:1)->FA(18:2)	5.369	SCD1, FADS2
FA(20:5)->FA(22:5)	4.978	ELOVL5, ELOVL2
FA(20:3)->FA(20:4)->FA(22:4)	3.614	FADS1, ELOVL5, ELOVL2
FA(16:0)->FA(16:1)->FA(18:1)->FA(18:2)->FA(20:2)	1.932	SCD3, ELOVL5, ELOVL6, FADS2, ELOVL5

B

The most active and suppressed reactions among FA between MAFLD-HCC and OB-MAFLD

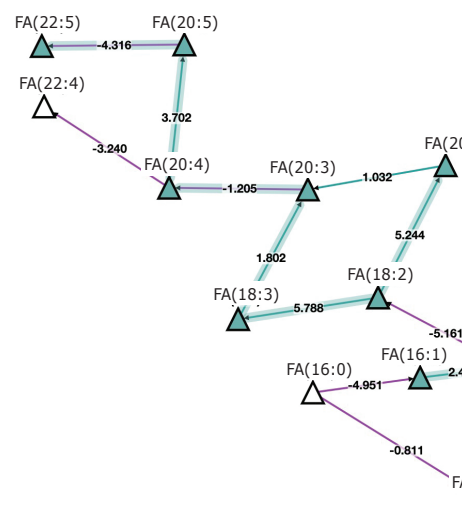


FFA most active reaction (MAFLD-HCC vs MAFLD)		
Reactions chains	Z-score	Predicted genes
FA(20:4)->FA(20:5)	5.254	FADS1
FA(18:2)->FA(18:3)	4.726	FADS2
FA(16:1)->FA(18:1)->FA(20:1)	4.523	ELOVL5, ELOVL6, ELOVL3
FA(20:2)->FA(20:3)->FA(20:4)->FA(20:5)	4.467	FADS1, FADS1, FADS1
FA(18:3)->FA(20:3)	4.259	ELOVL5, ELOVL7
FA(18:1)->FA(20:1)	2.367	ELOVL3

FFA most suppressed reaction (MAFLD-HCC vs MAFLD)		
Reactions chains	Z-score	Predicted genes
FA(20:5)->FA(22:5)	Inf	ELOVL5, ELOVL2
FA(20:4)->FA(22:4)	8.21	ELOVL5, ELOVL2
FA(20:3)->FA(20:4)->FA(22:4)	7.546	FADS1, ELOVL5, ELOVL2
FA(18:1)->FA(18:2)	6.209	FADS2
FA(18:0)->FA(18:1)->FA(18:2)->FA(20:2)	3.384	SCD1, FADS2, ELOVL5
FA(16:0)->FA(16:1)->FA(18:1)->FA(18:2)->FA(20:2)	2.259	SCD3, ELOVL5, ELOVL6, FADS2, ELOVL5

C

The most active and suppressed reactions among FA between MAFLD-HCC and AV-HCC



FFA most active reaction (MAFLD-HCC vs AV-HCC)		
Reactions chains	Z-score	Predicted genes
FA(20:4)->FA(20:5)	3.702	FADS1
FA(18:2)->FA(18:3)->FA(20:3)->FA(20:4)->FA(20:5)->FA(22:5)	2.581	FADS2, ELOVL5, ELOVL7, FADS1, FADS1, ELOVL5, ELOVL2
FA(16:1)->FA(18:1)	2.471	ELOVL5, ELOVL6
FA(18:3)->FA(20:3)	1.802	ELOVL5, ELOVL7

FFA most suppressed reaction (MAFLD-HCC vs AV-HCC)		
Reactions chains	Z-score	Predicted genes
FA(18:1)->FA(18:2)	5.161	FADS2
FA(20:5)->FA(22:5)	4.316	ELOVL5, ELOVL2
FA(20:4)->FA(22:4)	3.24	ELOVL5, ELOVL2
FA(18:0)->FA(18:1)->FA(18:2)->FA(20:2)	1.695	SCD1, FADS2, ELOVL5
FA(16:0)->FA(16:1)->FA(18:1)->FA(20:1)	1.662	SCD3, ELOVL5, ELOVL6, ELOVL3

Nodes shape

Glycerolipids and Glycerophospholipids

Fatty acids

Sphingolipids

Nodes color

No status

Active/suppressed status

Edges color

Negative Z-score

Positive Z-score

Negative Z-score implied in an active/suppressed status

Positive Z-score implied in an active/suppressed status