Supplementary Materials

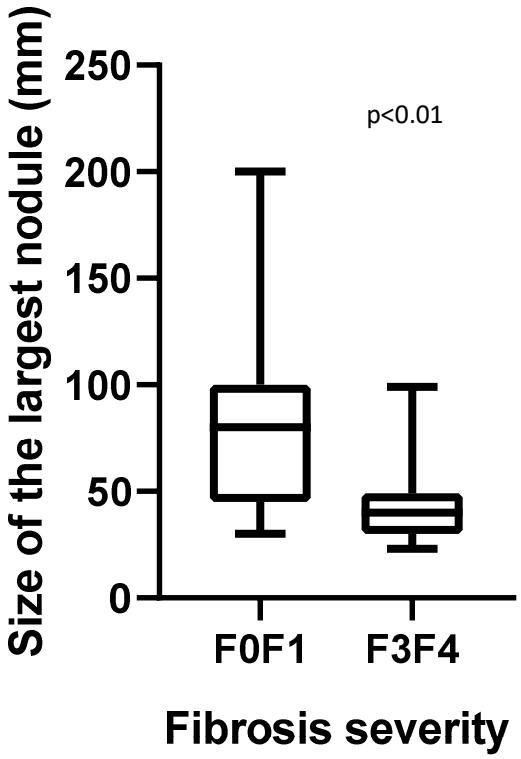


Figure S1. Distribution of the size of the largest nodule according to the severity of fibrosis (n=52).

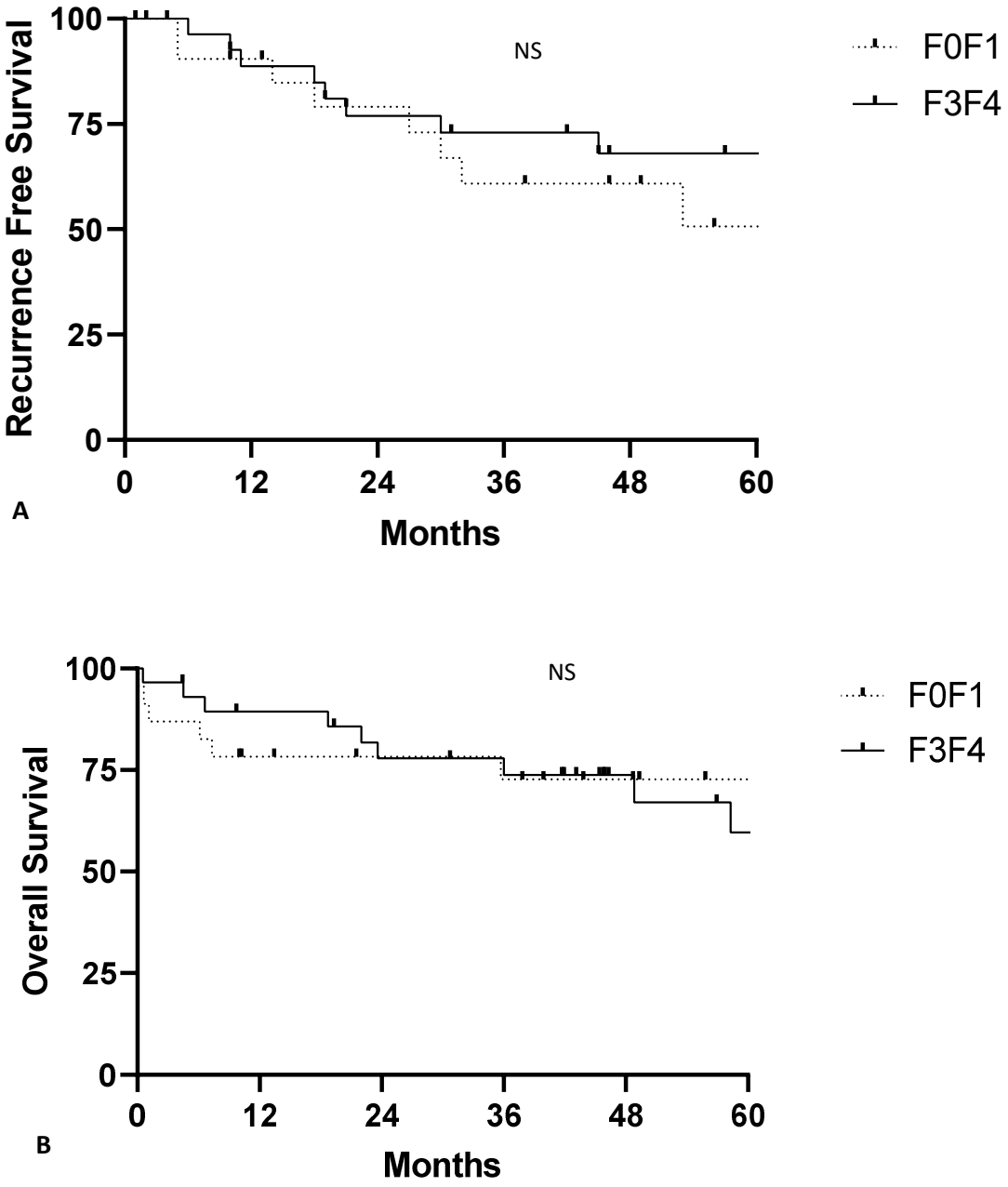
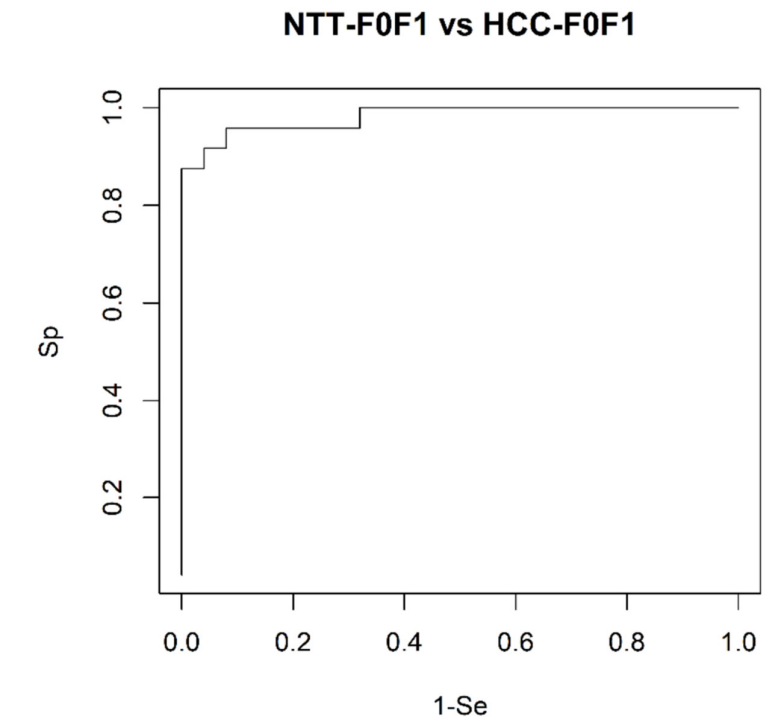


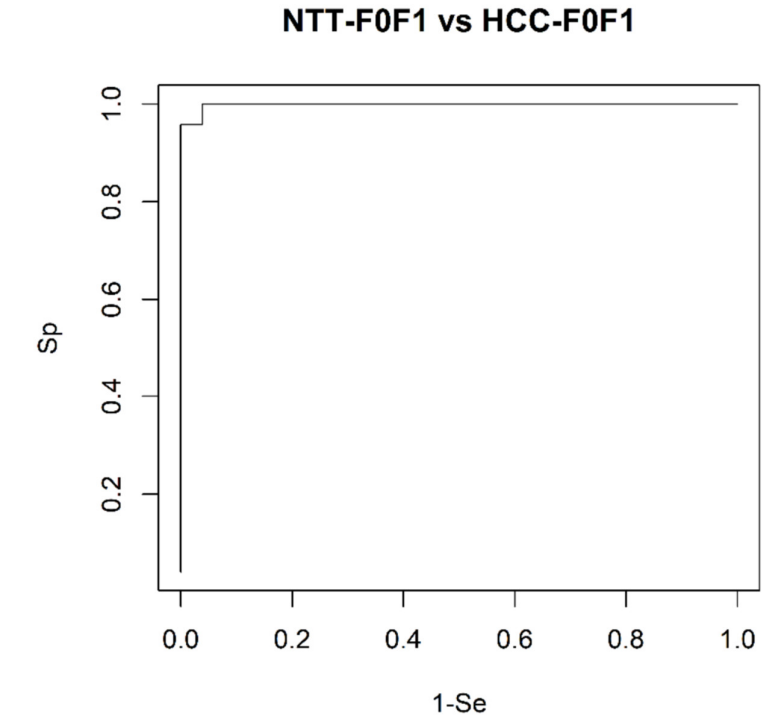
Figure S2. Recurrence free survival (**A**) and overall survival (**B**) according to the severity of fibrosis (n=52).

Table 1. Discriminant metabolites between HCC-F0F1 *versus* NTT-F0F1 according to the number of selections in the aqueous and lipid phases. Upregulated (red) and down-regulated (blue) metabolites in tumors.

Chemical shift (ppm)	Metabolites	Selections
Aqueous Phase (threshold: >47 selections)		
1.31	Lactate	441
2.14	Glutamine	79
2.43		53
2.56	Glutathione	72
3.22	Phosphocholine	48
3.62	Choline Derivatives	82
3.65		76
3.66		488
3.67		60
3.68		70
4.50	Ascorbic Acid	57
7.11	Histidine	54
7.85		49
3.42	Glucose	50
5.43	Glycogen	104
Lipid Phase (threshold: >39 selections)		
1.52-1.54	Total Cholesterol	81
2.25		111
3.49		67
2.05	MUFA $-CH_2CH=$	1339



A

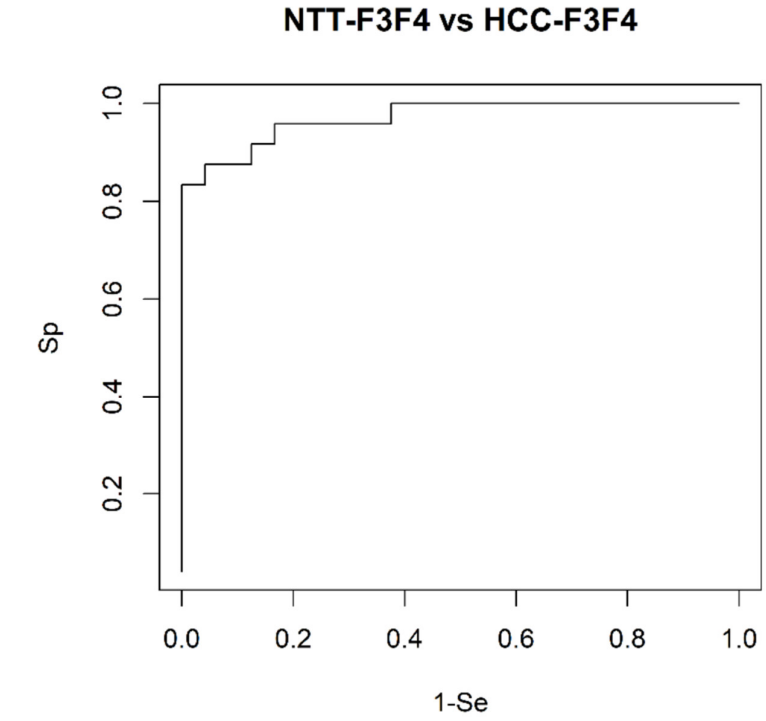


B

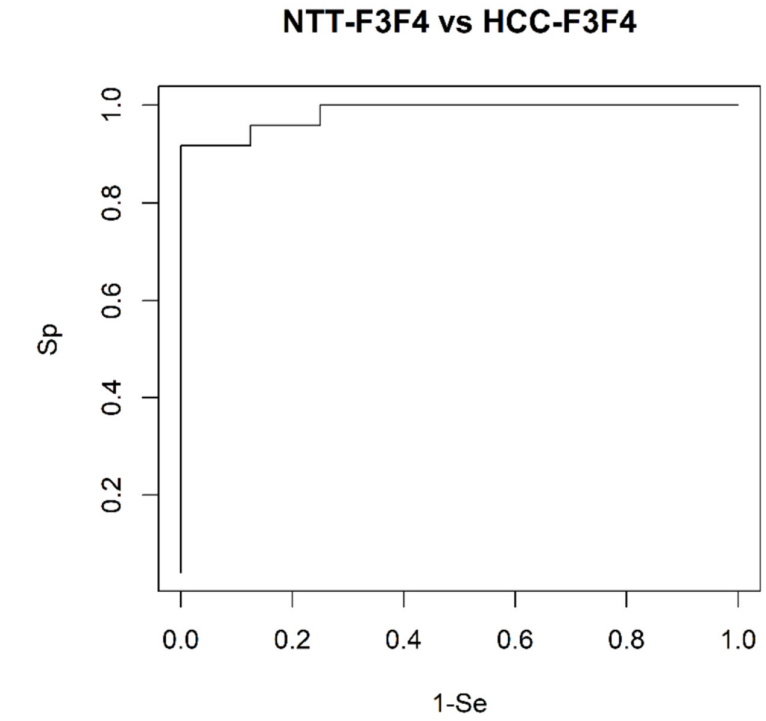
Figure S3. ROC curves of each subset of significant metabolites identified in aqueous (**A**) and lipid phases (**B**) for the discrimination of HCC from NTT in F0F1 fibrosis.

Table S2. Discriminant metabolites between HCC-F3F4 *versus* NTT-F3F4 according to the number of selections in the aqueous and lipid phases. Upregulated (red) and down-regulated (blue) metabolites in tumors.

Chemical shift (ppm)	Metabolites	Selections
Aqueous Phase (threshold: >45 selections)		
0.97	BCAA	49
1.02		46
1.31-1.32	Lactate	94
4.10-4.11		71
2.06-2.07	Glutamate	50
2.38		48
2.12-2.14	Glutamine	89
2.42-2.43		48
2.73	Sarcosine	91
3.63		106
8.20	Hypoxanthine	87
9.33	NAD	67
3.67	Choline derivatives	51
3.82	Glucose	56
4.60		49
6.98	Histidine	64
7.10		124
Lipid Phase (threshold: >21 selections)		
1.41-1.43	SFA $(CH_2)n$	606
1.83	Total Cholesterol	98
2.22	Free Cholesterol	84
2.06	MUFA $–CH_2CH=$	151



A

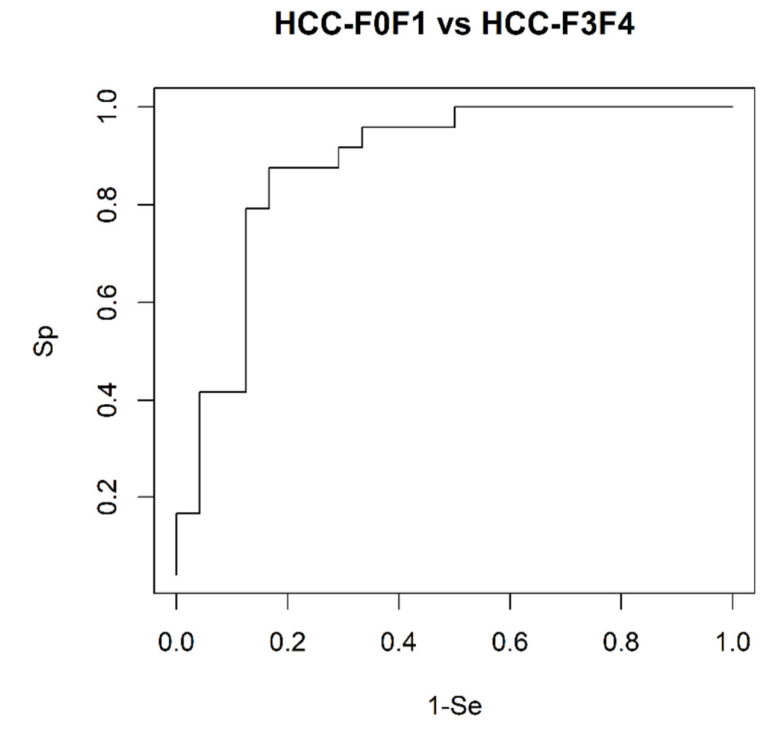


B

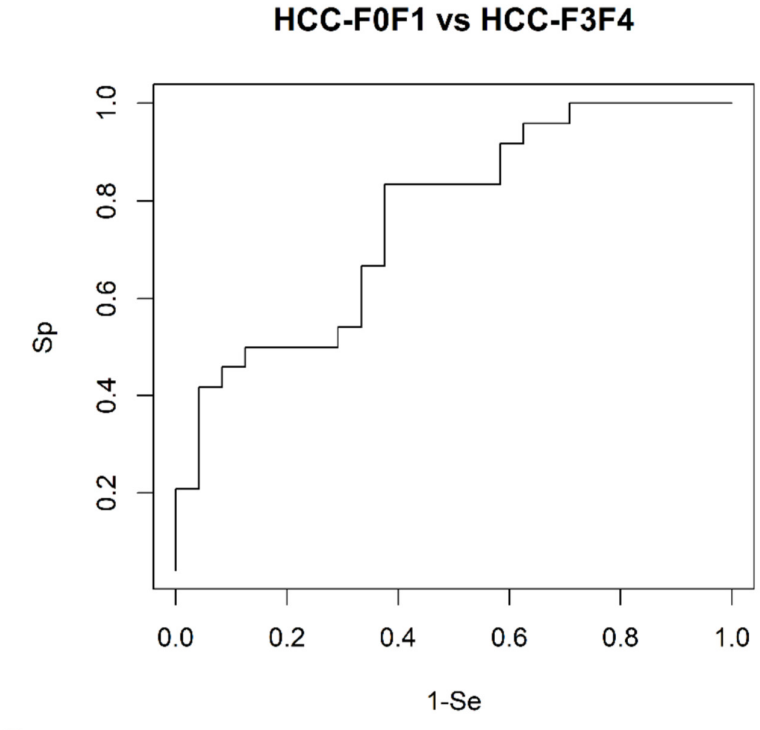
Figure S4: ROC curves of each subset of significant metabolites identified in aqueous (**A**) and lipid phases (**B**) for the discrimination of HCC from NTT in F3F4 fibrosis.

Table S3. Discriminant metabolites between HCC-F0F1 *versus* HCC-F3F4 according to the number of selections in the aqueous and lipid phases. Upregulated (red) and down-regulated (blue) metabolites in HCC-F0F1.

Chemical Shift (ppm)	Metabolites	Selections
Aqueous Phase (threshold: >45 selections)		
3.50	Glucose	2756
3.74		55
5.23		61
3.62	Choline derivatives	2086
Lipid Phase (threshold: >50 selections)		
2.11	MUFA	61
5.46		64
3.05-3.07	Phosphoethanolamine	374
4.12-4.22	TAG	531



A



B

Figure S5: ROC curves of each subset of significant metabolites identified in aqueous (**A**) and lipid phases (**B**) for the discrimination of HCC-F3F4 from HCC-F0F1.