# Lipidomic alterations in human saliva from Cystic Fibrosis patients

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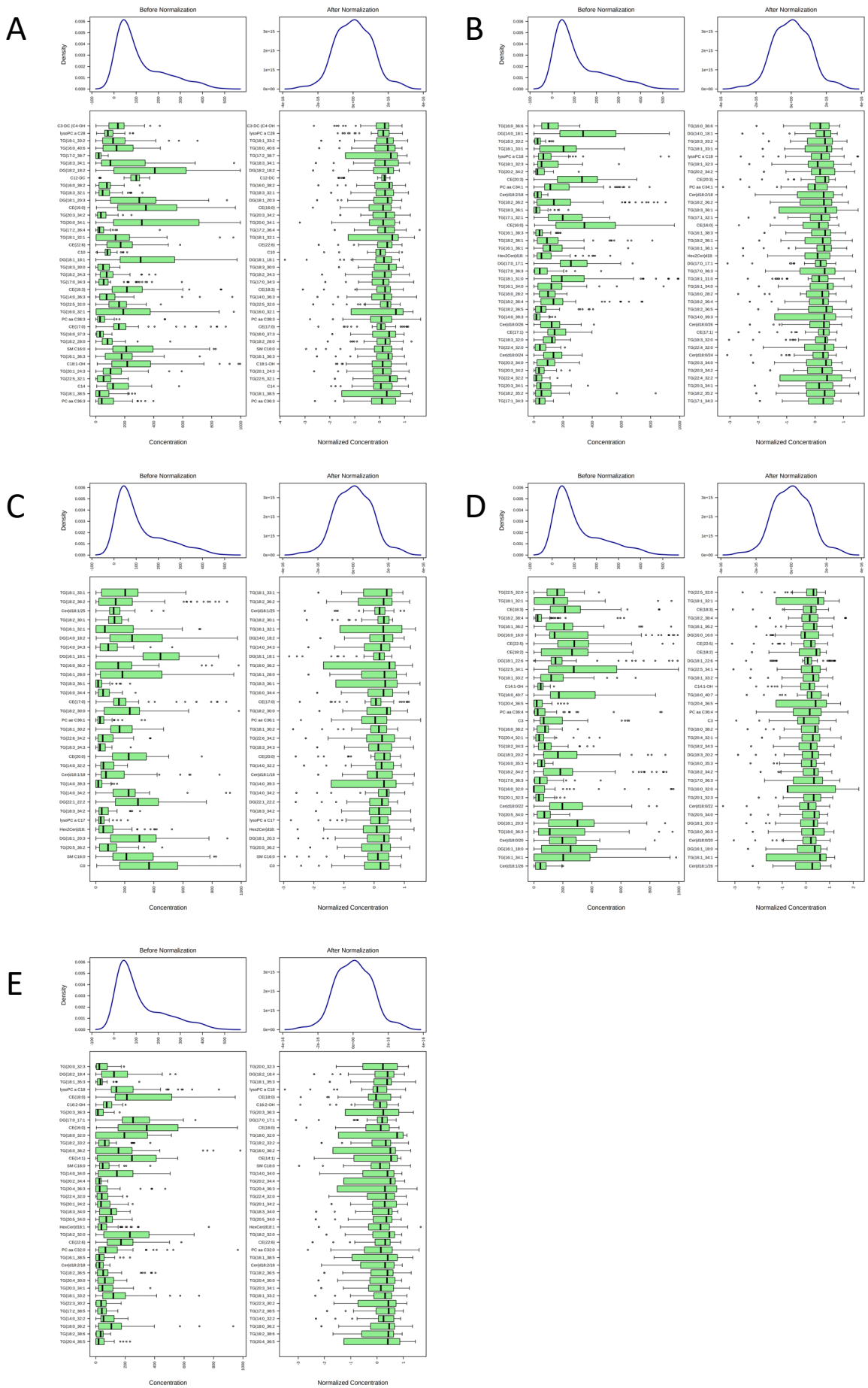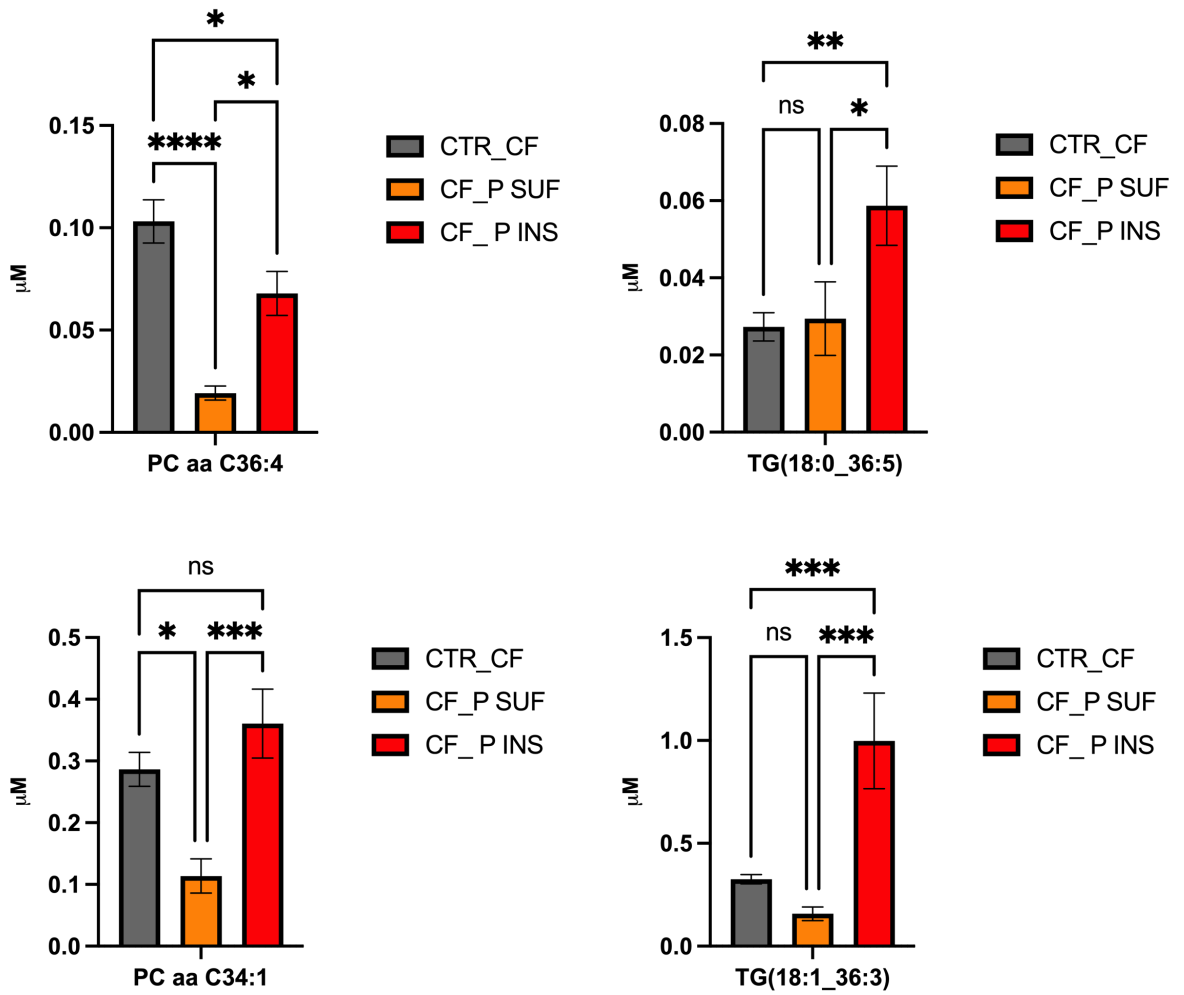
Supplementary Figure 1. Normalized distributions of lipids concentrations from A) CF_notPA and CF_PA; B) CF_P SUF and CF_INS; C) CF_FEV_mild and CF_FEV_severe; D) CF_notLD and CF_LD and E) CF_noRD and CF_RD datasets.
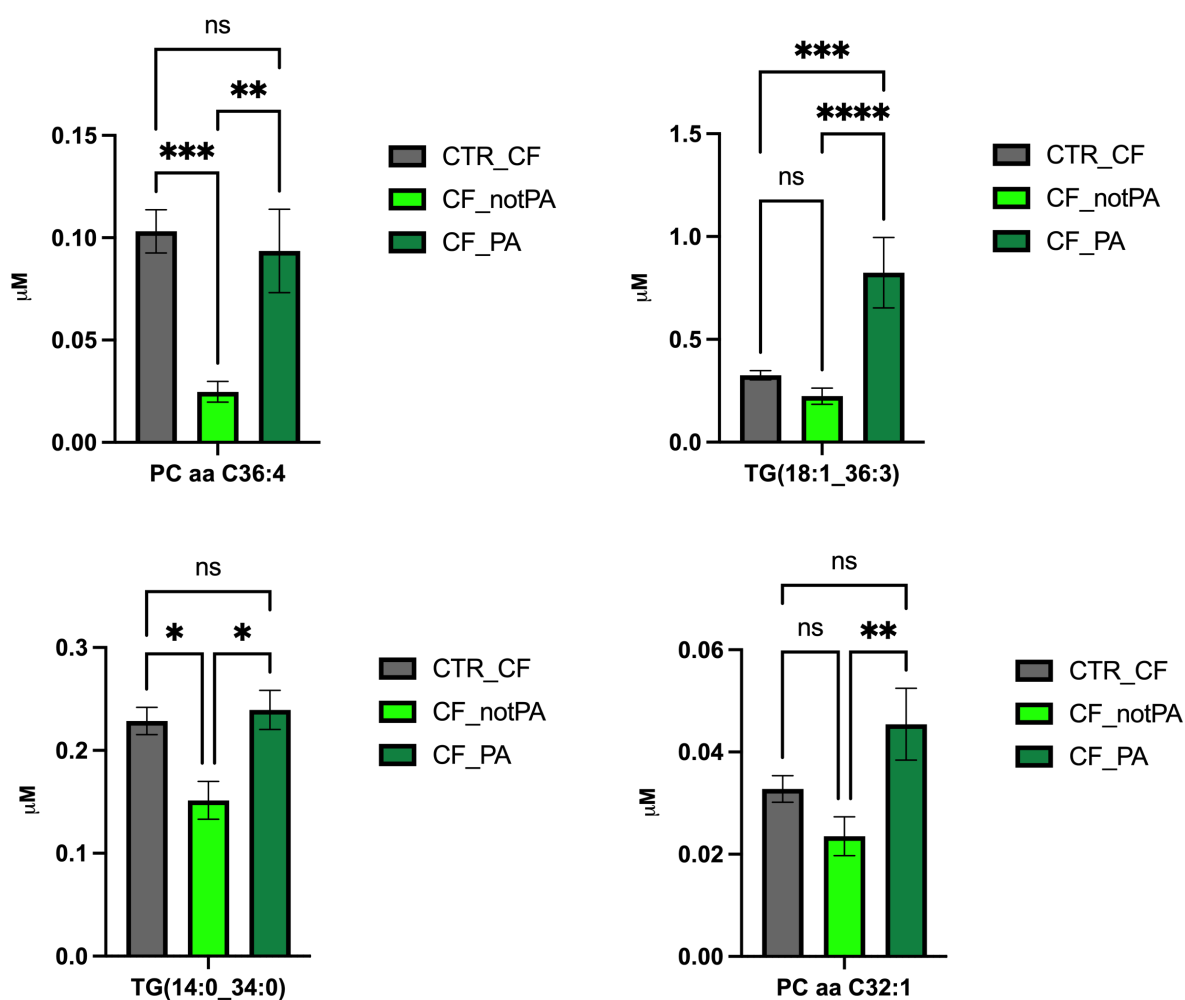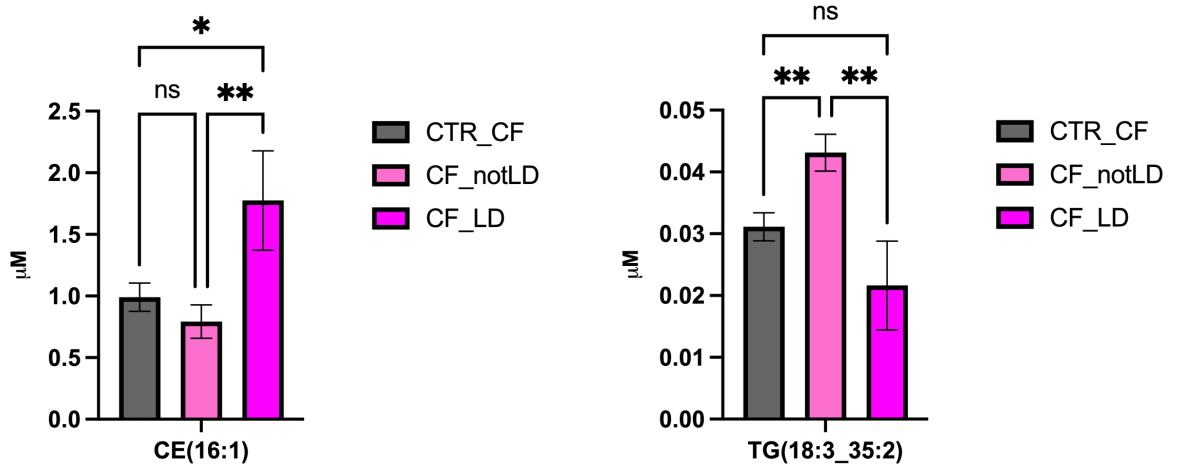
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Lipids	Multiple comparisons test	Mean or Mean rank differences	Summary	Adjusted P Value
	CTR_CF vs. CF_notPA	0,07839	***	0,0007
	CTR_CF vs. CF_PA	0,009535	ns	0,8664
PC aa C36:4	CF_notPA vs. CF_PA	-0,06886	**	0,0082
	CTR_CF vs. CF_notPA	0,1016	ns	0,6756
	CTR_CF vs. CF_PA	-0,4992	***	0,0001
TG(18:1_36:3)	CF_notPA vs. CF_PA	-0,6008	****	<0,0001
	CTR_CF vs. CF_notPA	0,00925	ns	0,2732
	CTR_CF vs. CF_PA	-0,01266	ns	0,0825
PC aa C32:1	CF_notPA vs. CF_PA	-0,02191	**	0,0046
	CTR_CF vs. CF_notPA	0,07709	**	0,007
	CTR_CF vs. CF_PA	-0,0108	ns	0,877
TG(14:0_34:0)	CF_notPA vs. CF_PA	-0,08789	**	0,0056

<u>Supplementary Figure 2</u>. Significantly different lipid concentrations in CTR_CF (heathy controls, n=64), CF_notPA (patients without *P. aeruginosa* colonization, n=32) and CF_PA (patients with *P. aeruginosa* colonization, n=38). Plots represents the original lipid concentrations (means ± SD). Multiple comparison was performed by ordinary one-way ANOVA test and Hold-Sidak's multiple comparison test in normally distributed datasets and Kruskal-Wallis test and Dunn's multiple comparison test in not-normally distributed datasets. The normal distribution was verified according to D'Agostino Pearson test. The mean differences between original concentrations and the value of adjusted p-value were reported to each comparison.
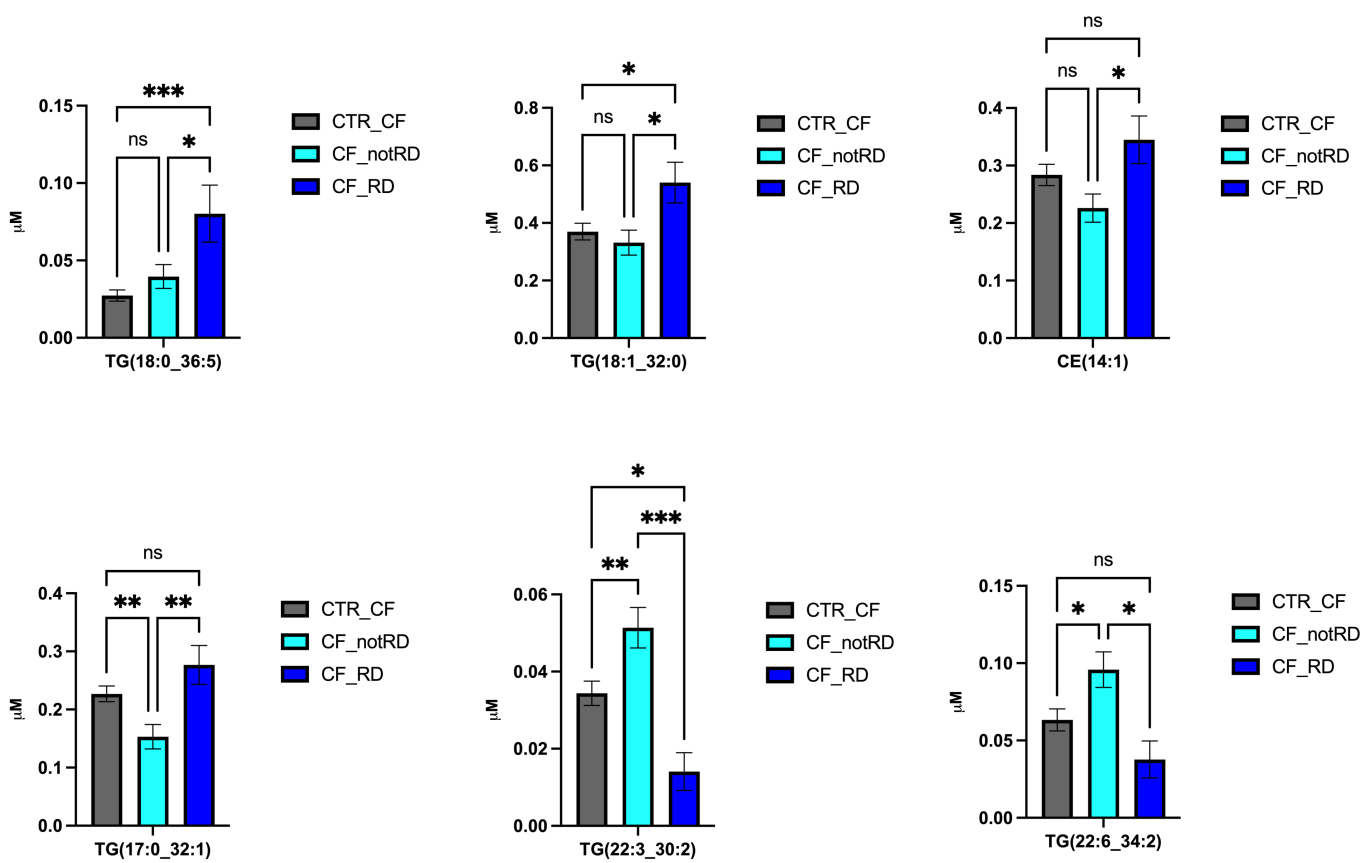
Lipids	Multiple comparisons test	Mean or Mean rank differences	Summary	Adjusted P Value
	CTR_CF vs. CF_SUFF	0,08389	****	<0,0001
	CTR_CF vs. CF_INS	0,03522	*	0,0419
PC aa C36:4	CF_SUFF vs. CF_INS	-0,04868	*	0,0254
	CTR_CF vs. CF_SUFF	-0,002143	ns	0,9795
	CTR_CF vs. CF_INS	-0,03139	**	0,0038
TG(18:0_36:5)	CF_SUFF vs. CF_INS	-0,02925	*	0,0395
	CTR_CF vs. CF_SUFF	0,1727	*	0,0126
	CTR_CF vs. CF_INS	-0,07422	ns	0,3276
PC aa C34:1	CF_SUFF vs. CF_INS	-0,2469	***	0,0006
	CTR_CF vs. CF_SUFF	0,1675	ns	0,7114
	CTR_CF vs. CF_INS	-0,6731	***	0,0007
TG(18:1_36:3)	CF_SUFF vs. CF_INS	-0,8406	***	0,0008

Supplementary Figure 3. Significantly different lipid concentrations in CTR_CF (heathy controls, n=64), CF_P SUF (patients with pancreatic sufficiency, n=28) and CF_P INS (patients with pancreatic insufficiency, n=42). Plots represents the original lipid concentrations (means ± SD). Multiple comparison was performed by ordinary one-way ANOVA test and Hold-Sidak's multiple comparison test in normally distributed datasets and Kruskal-Wallis test and Dunn's multiple comparison test in not-normally distributed datasets. The normal distribution was verified according to D'Agostino Pearson test. The mean differences between original concentrations and the value of adjusted p-value were reported to each comparison.

Lipids	Multiple comparisons test	Mean or Mean rank differences	Summary	Adjusted P Value
	CTR_CF vs. CF_notLD	0,1981	ns	0,53
	CTR_CF vs. CF_LD	-0,7846	*	0,0396
CE 16:1	CF_notLD vs. CF_LD	-0,9827	**	0,0074
	CTR_CF vs. CF_notLD	-0,01201	**	0,0061
	CTR_CF vs. CF_LD	0,009493	ns	0,2782
TG(18:3_35:2)	CF_notLD vs. CF_LD	0,0215	**	0,0027

Supplementary Figure 4. Significantly different lipid concentrations in CTR_CF (heathy controls, n=64), CF_notLD (patients without liver disease, n=58) and CF_LD (patients with liver disease, n=12). Plots represents the original lipid concentrations (means $\pm$ SD). Multiple comparison was performed by ordinary one-way ANOVA test and Hold-Sidak's multiple comparison test in normally distributed datasets and Kruskal-Wallis test and Dunn's multiple comparison test in not-normally distributed datasets. The normal distribution was verified according to D'Agostino Pearson test. The mean differences between original concentrations and the value of adjusted p-value were reported to each comparison.

Lipids	Multiple comparisons test	Mean or Mean rank differences	Summary	Adjusted P Value
	CTR_CF vs. CF_notRD	-0,01218	ns	0,3653
	CTR_CF vs. CF_RD	-0,05295	***	0,0004
TG(18:0_36:5)	CF_notRD vs. CF_RD	-0,04077	*	0,01
	CTR_CF vs. CF_notRD	0,03809	ns	0,4558
	CTR_CF vs. CF_RD	-0,1706	*	0,0464
TG(18:1_32:0)	CF_notRD vs. CF_RD	-0,2087	*	0,0222
	CTR_CF vs. CF_notRD	0,05766	ns	0,1397
	CTR_CF vs. CF_RD	-0,06124	ns	0,3734
CE 14:1	CF_notRD vs. CF_RD	-0,1189	*	0,0304
	CTR_CF vs. CF_notRD	0,07378	**	0,008
	CTR_CF vs. CF_RD	-0,0498	ns	0,3658
TG(17:0_32:1)	CF_notRD vs. CF_RD	-0,1236	**	0,0034
	CTR_CF vs. CF_notRD	-0,01701	**	0,0072
	CTR_CF vs. CF_RD	0,02029	*	0,0332
TG(22:3_30:2)	CF_notRD vs. CF_RD	0,03729	***	0,0005
	CTR_CF vs. CF_notRD	-0,03235	*	0,0327
	CTR_CF vs. CF_RD	0,02555	ns	0,4664
TG(22:6_34:2)	CF_notRD vs. CF_RD	0,0579	*	0,025

Supplementary Figure 5. Significantly different lipid concentrations in CTR_CF (heathy controls, n=64), CF_notRD (patients without diabetes, n=54) and CF_RD (patients with diabetes, n=16). Plots represents the original lipid concentrations (means $\pm$ SD). Multiple comparison was performed by ordinary one-way ANOVA test and Hold-Sidak's multiple comparison test in normally distributed datasets and Kruskal-Wallis test and Dunn's multiple comparison test in not-normally distributed datasets. The normal distribution was verified according to D'Agostino Pearson test. The mean differences between original concentrations and the value of adjusted p-value were reported to each comparison.