Supplementary Materials

Challenges and Inconsistencies in Using Lysophosphatidic Acid as a Biomarker for Ovarian Cancer

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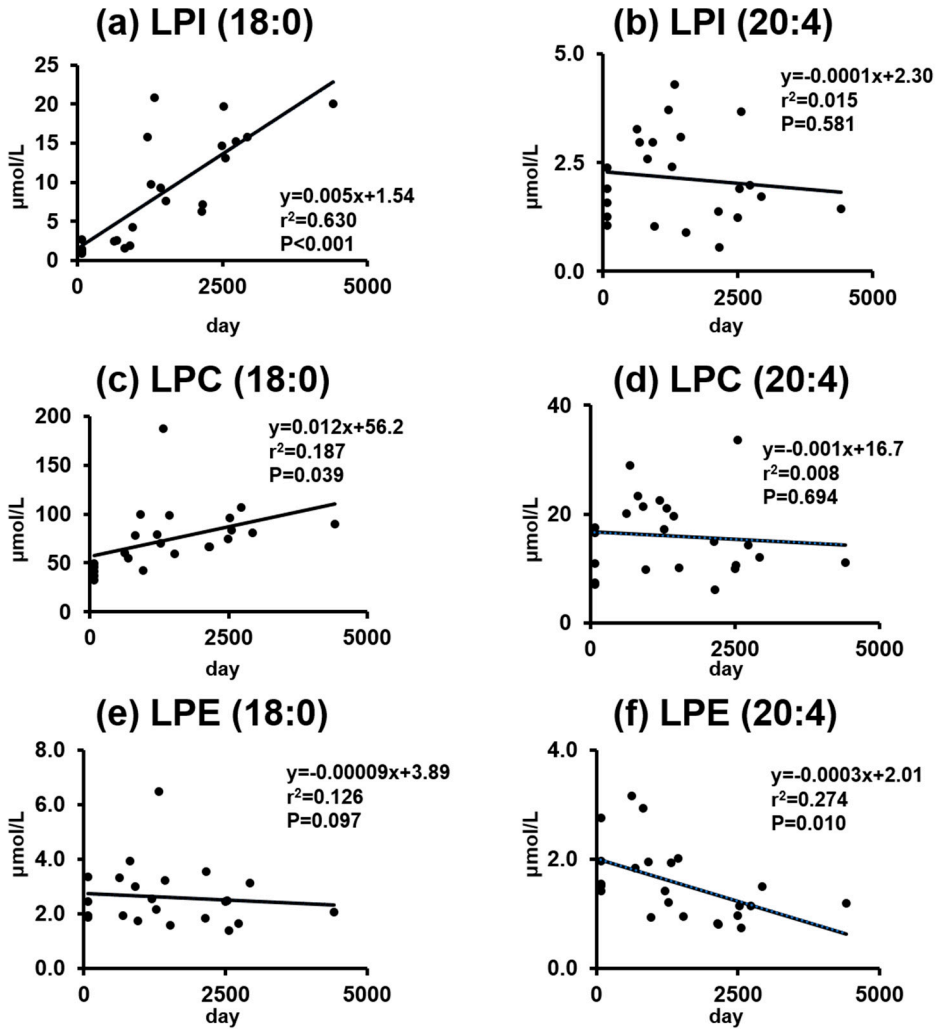

Figure S1. Regression analysis of other individual lysophospholipids species as a function of the duration of storage time in the control samples. The contents of LPI(18:0) and LPC(18:0) are significantly increased as a function of storage times (**a**,**c**), whereas the content of LPE(20:4) is significantly decreased (**f**). The contents of LPI(20:4), LPC(20:4), and LPE(18:0) are not significantly changed (**b**,**d**,**e**).

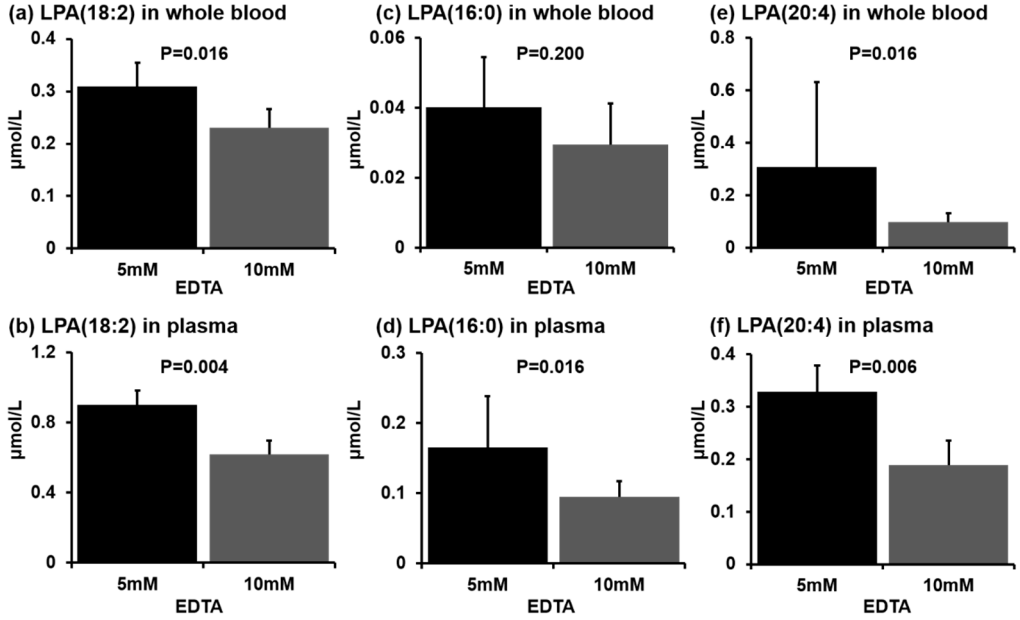

Figure S2. Whole blood and plasma incubation for 4 h at room temperature in lysophosphatidic acid LPA(18:2), LPA(16:0) and LPA(20:4). The increases in the contents of LPA(18:2), LPA(16:0), and LPA(20:4) in whole blood (**a**,**c**,**e**) and in plasma (**b**,**d**,**f**) are greater in the presence of 5 mM ethylenediaminetetraacetic acid (EDTA) compared to 10 mM EDTA.

Table S1. Summary of previous studies on LPA in ovarian cancer.

Reference	Country	Sample Collection		Method		LPA (µmol/L)			Sample Number		
		CAN	CON	acid	analysis	CON	BEN	CAN	CON	BEN	CAN
[1]	USA	2–3 years	same	+	GC-MS	0.6	2	8.6	48	17	48
[2]	USA	2.2 years	same	+	MS	1.1	-	3.3	10	-	9
[3]	USA	NM [1]	NM	-	LC-MS	0.7	-	0.8	32	-	49
[4]	Korea	NM	NM	+	MS	4.7	-	8.1	4	-	3
[5]	USA	2–3 years	same	+	MS	0.9	-	2.7	27	-	45
[6]	Slovenia	NM	NM	-	LC-MS	3.0	8.0	8.4	78	142 [2]	
[7]	Slovenia	NM	NM	-	LC-MS	2.9	8	8.4	55	65	50
[8]	USA	NM	NM	-	LC-MS	2.4	2.6	2.4	25	27	26
[9]	Czech	3 years	same	+	CE analysis	2.9	7.7	17.0	40	30	60
[10]	China	3.3 year	same	-	phosphorous	2.4	2.6	6.4	36	36	36
[11]	Turkey	NM	NM	+	GC-MS	0.6	1.6	4.3	50	74	87
[12]	Czech	5 years	same	+	CE analysis	1.9	6.2	11.5	27	51	81
[13]	China	3.5 years	NM	-	ELISA	0.6	1.2	3.9	30	40	80
[14]	China	~ 2 years		-	ELISA	-	1.8	5.3	-	100	100
[15]	China	1 year	same	-	ELISA	1.9	1.9	5.3	75	70	98

1, Not mentioned; 2, breakdown was not mentioned; CAN, cancer; CON, control; BEN, benign.

Reference

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