Electronic Supplementary Material (ESI) for RSC Advances.

Table S1 A Gradient elution program on T3 column.

Time (min)	Flow (mL/min)	A%	B%	Curve
0	0.2	100	0	—
0.5	0.2	100	0	6
20	0.2	5	95	6
21	0.2	5	95	6
24	0.2	100	0	1

B Gradient elution program on C18 column.

Time (min)	Flow (mL/min)	A%	B%	Curve
0	0.2	65	35	—
0.5	0.2	65	35	6
20	0.2	0	100	6
21	0.2	0	100	6
24	0.2	65	35	1

Table S2 Identification results of 14 potential biomarkers in lung tissue.

No.	*m/z*	Quasi-molecular ion	MS/MS		Fomula	Identification	CAS
1	103.9	$[M + H]^+$	60.0	45.0	$C_5H_{13}NO$	Choline	62-49-7
2	112.9	$[M + H]^+$	95.9	70.0	$C_4H_4N_2O_2$	Uracil	66-22-8
3	118.0	$[M + H]^+$	58.8	57.1	C_5HNO_2	Betaine	590-46-5
4	122.9	$[M + H]^+$	79.9	78.0	$C_6H_6N_2O$	Niacinamide	98-92-0
5	132.0	$[M + H]^+$	99.0	87.0	$C_4H_9N_3O_2$	Creatine	57-00-1
6	136.9	$[M + H]^+$	118.8	109.8	$C_5H_4N_4O$	Hypoxanthine	68-94-0
			93.7	81.6			
7	153.0	$[M + H]^+$	136.0	110.0	$C_5H_4N_4O_2$	Xanthine	69-89-6
8	162.1	$[M + H]^+$	103.0	60.1	$C_7H_{15}NO_3$	Carnitine	541-15-1
9	274.3	$[M + H]^+$	256.3	239.2	$C_{16}H_{35}NO_2$	C16 sphinganine	———
10	302.3	$[M + H]^+$	284.3	60.0	$C_{18}H_{39}NO_2$	Sphinganine	764-22-7
11	318.3	$[M + H]^+$	300.3	256.3	$C_{18}H_{39}NO_3$	Phytosphingosine	———
12	496.2	$[M + H]^+$	478.3	184.3	$C_{24}H_{50}NO_7P$	LPC (16:0)	———
			103.8	85.5			
13	524.3	$[M + H]^+$	506.4	184.0	$C_{26}H_{54}NO_7P$	LPC (18:0)	———
			103.8				
14	544.3	$[M + H]^+$	526.3	287.2	$C_{28}H_{50}NO_7P$	LPC (20:4)	———
			240.1				