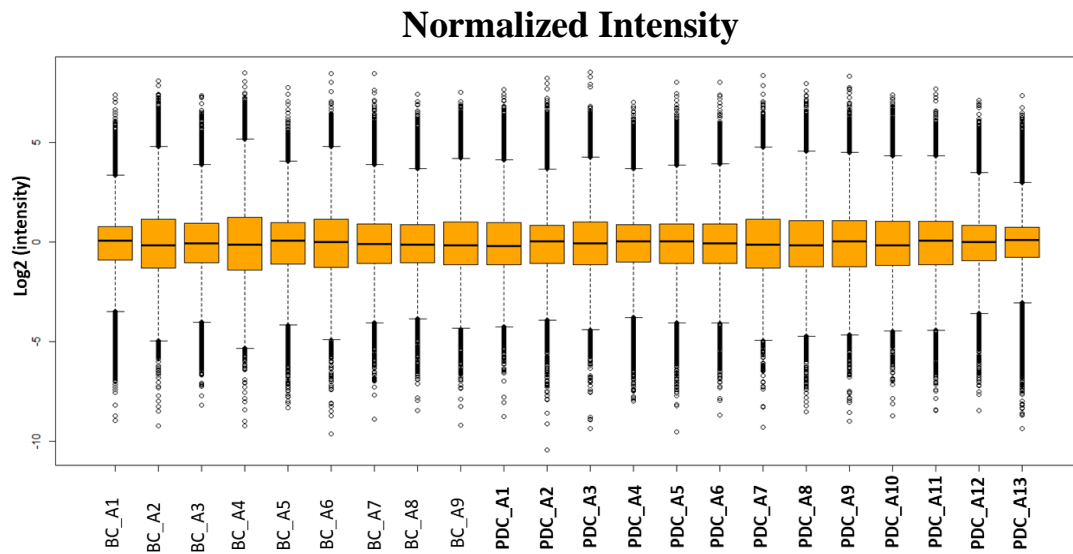
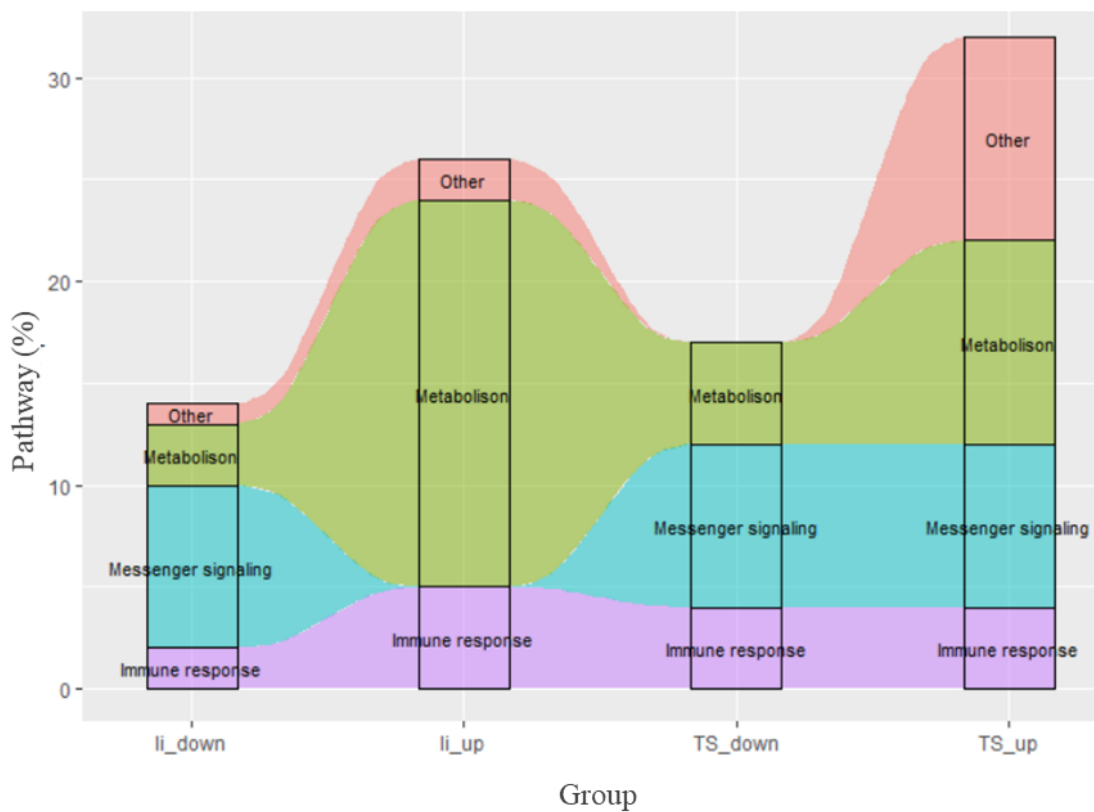


## Supplementary material



**Fig. S1. Box plots summarizing the lncRNA and mRNA profiles.** After normalization, the distributions of the log<sub>2</sub>-ratios of fluorescence signals in phlegm-dampness constitution (PDC) samples were nearly identical among balanced constitution (BC) samples.



**Fig. S2. The reproducibility of the pathway was researched by IPA between this study and previous studies.** The TS\_up and TS\_down respectively represents the up-regulated and down-regulated mRNAs of this study. The li\_up and li\_down respectively represents the up-regulated and down-regulated mRNAs of L. Li's paper <sup>[1]</sup>.

## References

- [1] L. Li, J. Feng, H. Yao, L. Xie, Y. Chen, L. Yang, S. Hou, S. Zhao, R. Sun, Y. Wu, T. Bai, Y. Li, R. Yu, J. Wang, Q. Wang, Gene expression signatures for phlegm-dampness constitution of Chinese medicine, *Sci China Life Sci* 60(1) (2017) 105-107.

**Table S1. LncRNA RT- qPCR primers and product sizes.**

lncRNA ID	Forward primer (5'- >3')	Reverse primer (5'- >3')	Size of PCR Product (bp)
CA3	TCTCCAGTGCTGAGAACGA	CTCACCACCCTGTTATTGAT	82
RFTN1	CTCCTTAGACCACCCGAC	ACTGAGGTATAACACCAACGA	86
PIP4K2A	ACCGGCTTAATGTTGATGG	CTGTAGAGCCCTTTAAGTCGTA	101
ORAI3	CTTTGCCCTGCATTTCTACC	AGGCGATTCAGTTCCTCT	81
ARHGEF9	TATGATGATGCTGGAGTGGAC	AGAAGTGCTGCAACATGG	93
TTY15	GTATGATTGGCCTTAGAGCAC	TCATCCTATCAACTGACCTTCC	85
RP11-317J10.2	ACTGTGCTTACAGGGCCTA	CCGTGGATGGAGTCAAGT	88
LINC00690	AGATCTTCCAAGTCCAGCCA	AGAGGGAAGGGATGTGTC	94
RP11-809C18.3	TGGGGAATTCTGGCTGAG	TCAGCACAAATGTTAGCATTGA	118
AC135048.13	TAGCCACCATTTCCATTCCTAT	CTGGGAAACAGACTGTCTCA	97

**Table S2. The top 100 co-expression network (CNC) of 421 differentially expressed mRNAs and 357 lncRNAs were involved ( $P < 0.05$ ,  $|PCC| > 0.7$ ). (PCC: Pearson correlation coefficient).**

mRNA	LncRNA	Correlation	P-value
SLC45A4	RP11-707G14.6	0.9895119	1.36E-10
CARD17	LINC00703	0.984012	1.36E-09
GDI2	AC004158.2	0.9838924	1.42E-09
TRH	CTB-102L5.7	0.9826928	2.10E-09
MCPH1	CTD-2541M15.4	0.9826714	2.12E-09
TRH	SACS-AS1	0.9805585	3.97E-09
HRSP12	RP11-61L19.3	0.9782015	7.42E-09
C17orf78	RP11-331F9.3	0.976173	1.21E-08
Q93YZ4	RP11-168C9.1	0.9745898	1.71E-08
FAM90A1	RP11-482D24.3	0.9731323	2.32E-08
TTC39C	AC004067.5	0.97306	2.35E-08
CARD8	MIR296	0.9711006	3.45E-08
CEP350	RP11-144G6.12	0.9710308	3.50E-08
TTC39C	CTD-2507G9.1	0.9684739	5.54E-08
LENG8	CTB-102L5.7	0.968213	5.79E-08
KRTAP13-3	RP11-718I15.1	0.9674175	6.63E-08
LACTB2	AC004158.2	0.965052	9.70E-08
MCPH1	CTD-2336O2.1	0.9649822	9.81E-08
KRTAP13-3	AC023128.1	0.9643445	1.08E-07
PEX13	RP11-820L6.1	0.9630746	1.31E-07
POLE2	RP11-144G6.12	0.9627661	1.37E-07
LENG8	RP11-168C9.1	0.9611557	1.72E-07
LACTB2	DLEU2	0.9607576	1.82E-07
PRKACB	RP11-159H10.3	0.9603007	1.94E-07
MCPH1	RP11-65M17.1	0.9601132	1.99E-07
FLJ44838	RP11-864I4.3	-0.960045	2.01E-07

RAB3IP	RP11-192H23.8	0.9596123	2.13E-07
LUZP6	CTD-2589M5.5	0.9593015	2.22E-07
SNX3	CTD-2589M5.5	0.9590293	2.30E-07
KRTAP13-3	CTD-2532D12.4	0.9583467	2.51E-07
ORAI3	AC135048.13	0.9580502	2.61E-07
ZCCHC18	AC004158.2	0.9571166	2.94E-07
OAT	RP11-1028N23.4	0.9558822	3.43E-07
RNF19A	CTD-2589M5.5	0.9558968	3.43E-07
PER3	CTC-304I17.5	0.955858	3.44E-07
GDI2	ZCCHC18	0.9553168	3.68E-07
ATF6B	KB-1572G7.3	0.9549737	3.83E-07
TMEM221	CTD-2541M15.4	0.9546193	4.00E-07
KRTAP13-3	RP11-167P22.3	0.9544495	4.08E-07
Q93YZ4	CTB-102L5.7	0.9520167	5.41E-07
PEX13	AC023128.1	0.9508375	6.17E-07
LENG8	KB-1572G7.3	0.9508131	6.18E-07
ZNF117	RP11-159H10.3	0.9505038	6.40E-07
PRKACB	CTD-2541M15.4	0.9504253	6.45E-07
TRH	RP11-168C9.1	0.9501974	6.61E-07
NCAPG2	CTB-133G6.2	0.9476456	8.66E-07
PPP1CC	CTD-2589M5.5	0.9471303	9.13E-07
DAZAP1	ZCCHC18	0.9468264	9.42E-07
SLC17A5	AC004158.2	0.9461139	1.01E-06
MCPH1	RP1-290I10.3	0.9457305	1.05E-06
C18orf25	CTD-2541M15.4	0.9456015	1.06E-06
ZDHHC2	CTA-204B4.6	0.9455959	1.07E-06
GJD2	AC099344.3	0.9448587	1.15E-06
HIP1R	RP11-383C6.2	0.9447342	1.16E-06
PRKACB	AC114273.1	0.9440662	1.24E-06

GDI2	CTD-2541M15.4	0.9437577	1.27E-06
DTX3	RP11-705O3.1	0.9429145	1.38E-06
YOD1	RP11-702F3.3	0.9424639	1.44E-06
CLIC2	RP5-1073O3.2	0.941823	1.53E-06
RAB3IP	AC099684.1	0.9417726	1.54E-06
HIP1R	XLOC_001441	0.9415231	1.57E-06
HRSP12	RP11-430L16.1	0.9412279	1.62E-06
FBXO5	RP11-375D13.2	0.9409165	1.66E-06
GYPA	AC017048.1	-0.940656	1.70E-06
C8orf80	RP11-215N21.1	-0.940543	1.72E-06
LACTB2	RP11-144G6.12	0.9403463	1.75E-06
SLC17A5	ZCCHC18	0.9400605	1.80E-06
Q93YZ4	RP11-685F15.1	0.9395887	1.87E-06
LRRIQ1	CTD-2532D12.4	0.9394809	1.89E-06
PRKACB	AC004158.2	0.9395072	1.89E-06
PRKACB	RP1-290I10.3	0.9391295	1.95E-06
SNX3	RP11-702F3.3	0.939058	1.96E-06
TDO2	CTA-217C2.1	0.9388402	2.00E-06
ZDHHC2	RP11-61L19.3	0.9388561	2.00E-06
GDI2	DLEU2	0.9387404	2.02E-06
ZNF304	RP11-375D13.2	0.9387363	2.02E-06
C17orf78	CT64	0.9379785	2.16E-06
ARL6IP1	CTD-2589M5.5	0.937815	2.19E-06
Q93YZ4	RP11-839D17.2	0.9376711	2.22E-06
MFHAS1	CTD-2589M5.5	0.9374868	2.25E-06
CAMTA1	RP11-1028N23.4	0.9369385	2.36E-06
FAM185A	RP11-144G6.12	0.9366641	2.42E-06
SLC5A7	RP11-718I15.1	0.9364262	2.47E-06
HIP1R	RP11-125B21.2	0.9362374	2.50E-06

C18orf25	RP11-423H2.3	0.9359343	2.57E-06
C17orf78	LINC00264	0.9357893	2.60E-06
HPRT1	XLOC_12_01237 8	0.9354959	2.67E-06
ZCCHC18	XLOC_005857	0.934913	2.80E-06
PRKACB	RP11-65M17.1	0.9348794	2.81E-06
FBXO30	CTD-2589M5.5	0.9347795	2.83E-06
DAZAP1	AC004158.2	0.934507	2.89E-06
MCPH1	AC004158.2	0.9345314	2.89E-06
INSL5	CTB-133G6.2	0.9338976	3.04E-06
MINPP1	AC004158.2	0.9335128	3.14E-06
FBXO30	LINC00849	0.9330637	3.25E-06
MCPH1	RP11-159H10.3	0.9327146	3.34E-06
POLE2	DLEU2	0.9325059	3.40E-06
FAM200B	RP11-1028N23.4	0.9324354	3.42E-06
ACSL3	RP11-1028N23.4	0.9323484	3.44E-06
ZCCHC18	RP5-899B16.2	0.9317486	3.61E-06

**Table S3. Demographic and clinical characteristics of 21 subjects.**

Variables	PDC (n = 9)	BC (n = 12)	P-value
Male, n (%)	42.66	58.33	0.56
Age (years), Mean (SD)	36 ± 6.78	38 ± 5.68	0.36
Body mass index (kg/m <sup>2</sup> )	23.12 ± 1.9	22.27 ± 2.3	0.25