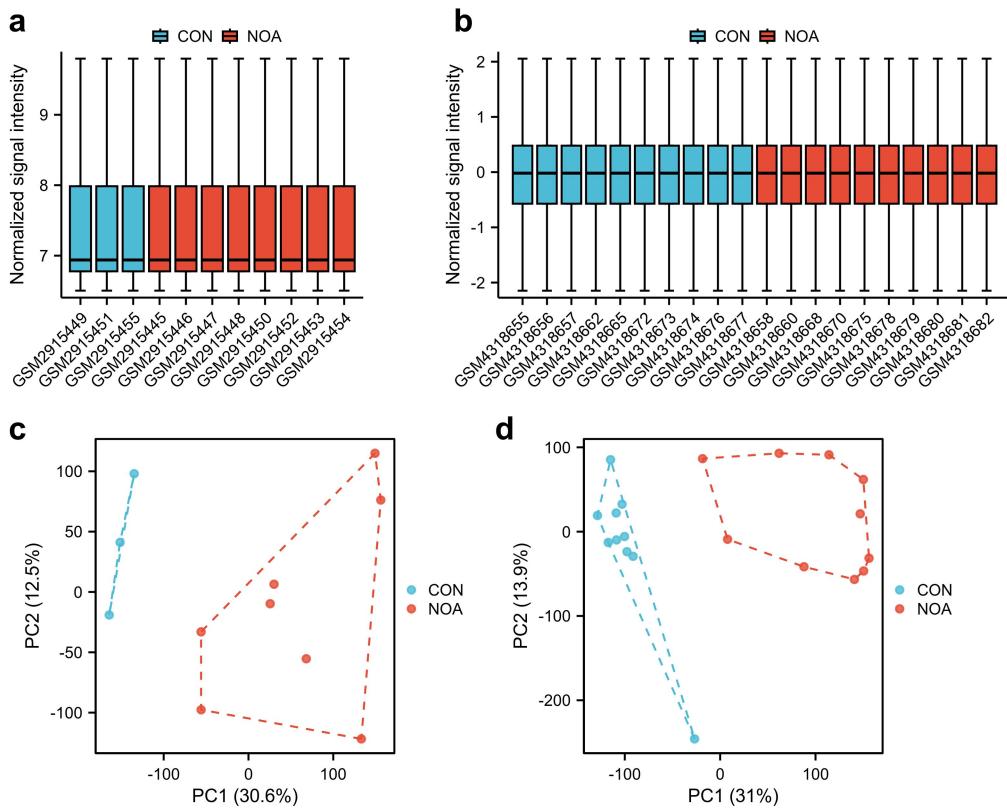
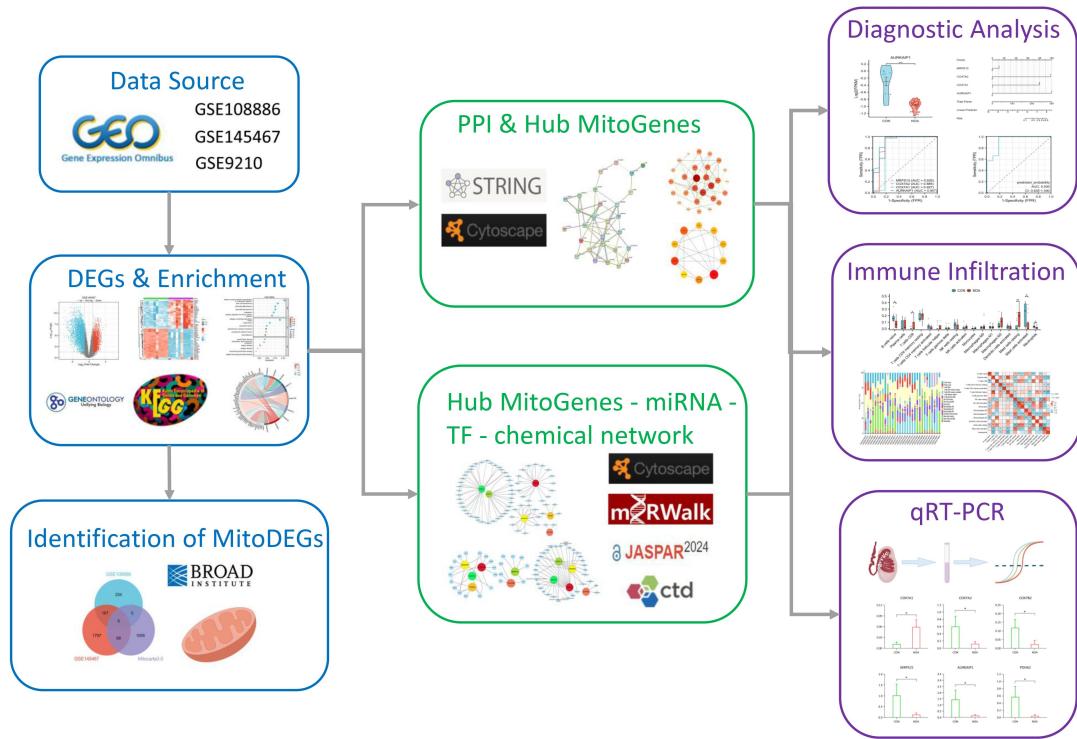


1 **Integrative bioinformatics analyses of mitochondrial dysfunction-related genes**
 2 **in human non-obstructive azoospermia**
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 6 **Supplementary Fig. S1.** Box plots and Principal Component Analysis of samples in
 7 GSE108886 and GSE145467. In the box plots for GSE 108886 **(a)** and GSE145467
 8 **(b)**, the x-axis represented the sample symbol and the y-axis represented the
 9 normalized gene expression value. In the Principal Component Analysis for
 10 GSE108886 **(c)** and GSE145467 **(d)**, the x-axis and y-axis represented Principal
 11 Component 1 and Principal Component 2, respectively. And the distances between the
 12 points reflected the differences among samples. CON, control; NOA, non-obstructive
 13 azoospermia.



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15 **Supplementary Fig. S2.** The workflow chart of data processing, analysis and

16 validation.

17 **Supplementary Table S1.** Demographic and clinical characteristics between NOA
18 and OA patients.

Characteristics	NOA (n=3)	OA (n=3)	P value
Age (year)	31.67±2.40	33.33±6.01	0.809
BMI (Kg/m²)	23.35±1.66	23.89±1.11	0.798
FSH (mIU/ml)	27.34±0.90	6.82±3.10	0.003
INB (pg/ml)	37.88±5.22	87.77±5.96	0.003
Testosterone (ng/ml)	3.45±0.33	4.52±0.95	0.038
Mean testicular volume (ml)	8.83±0.72	17.5±1.44	0.006
NAG (mU/ejaculate)	31.50±1.36	4.84±2.58	<0.001
Fructose (μmol/ejaculate)	32.83±6.16	37.43±7.64	0.664

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20 Data are presented as mean ± standard error. NOA: non-obstructive azoospermia; OA:
21 obstructive azoospermia; FSH: follicle-stimulating hormone; INH-B: inhibin B; NAG:
22 neural α-glucosidase.

23 **Supplementary Table S2.** Summary of key information of datasets used in the study.

GSE Accession	Platform	Organism	Sample	Type	Sample size	
					Control	NOA
GSE108886	GPL10558	Homo sapiens	Testis tissue	mRNA	3	8
GSE145467	GPL4133	Homo sapiens	Testis tissue	mRNA	10	10
GSE9210	GPL887	Homo sapiens	Testis tissue	mRNA	20	20

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