

Supplementary material

Table S1. Pathway enrichment analysis of the differential genes between the PCPA+MWA group and the control group (top 30)

Term	Database	ID	Corrected P-Value
Cocaine addiction	KEGG PATHWAY	rno05030	5.66E-03
Alcoholism	KEGG PATHWAY	rno05034	7.39E-03
Neuroactive ligand-receptor interaction	KEGG PATHWAY	rno04080	2.37E-02
Amphetamine addiction	KEGG PATHWAY	rno05031	3.16E-02
Dopamine receptor mediated signaling pathway	PANTHER	P05912	4.80E-02
Retrograde endocannabinoid signaling	KEGG PATHWAY	rno04723	8.44E-02
Adrenaline and noradrenaline biosynthesis	PANTHER	P00001	9.38E-02
Nicotine pharmacodynamics pathway	PANTHER	P06587	9.38E-02
Nicotine addiction	KEGG PATHWAY	rno05033	1.36E-01
Dopaminergic synapse	KEGG PATHWAY	rno04728	1.40E-01
MAPK signaling pathway	KEGG PATHWAY	rno04010	1.54E-01
GABAergic synapse	KEGG PATHWAY	rno04727	1.57E-01
Vasopressin synthesis	PANTHER	P04395	1.90E-01
Thyrotropin-releasing hormone receptor signaling pathway	PANTHER	P04394	2.02E-01
Cholinergic synapse	KEGG PATHWAY	rno04725	2.10E-01
Synaptic vesicle cycle	KEGG PATHWAY	rno04721	2.16E-01
Serotonergic synapse	KEGG PATHWAY	rno04726	2.17E-01
Opioid prodynorphin pathway	PANTHER	P05916	2.25E-01
Parkinson's disease	KEGG PATHWAY	rno05012	2.53E-01
Calcium signaling pathway	KEGG PATHWAY	rno04020	2.80E-01
Autoimmune thyroid disease	KEGG PATHWAY	rno05320	3.02E-01
Tyrosine metabolism	KEGG PATHWAY	rno00350	3.09E-01
Type I diabetes mellitus	KEGG PATHWAY	rno04940	3.51E-01
Oxytocin signaling pathway	KEGG PATHWAY	rno04921	3.63E-01
Morphine addiction	KEGG PATHWAY	rno05032	3.75E-01
Heterotrimeric G-protein signaling pathway-Gq alpha and Go alpha mediated pathway	PANTHER	P00027	3.80E-01
Corticotropin releasing factor receptor signaling pathway	PANTHER	P04380	3.80E-01
HTLV-I infection	KEGG PATHWAY	rno05166	4.00E-01
Taurine and hypotaurine metabolism	KEGG PATHWAY	rno00430	4.15E-01
PI3K-Akt signaling pathway	KEGG PATHWAY	rno04151	4.19E-01

Table S2. Pathway enrichment analysis of the differential genes between PCPA+MWA group and the PCPA group (top 30)

Term	Database	ID	Corrected P-Value
Neuroactive ligand-receptor interaction	KEGG PATHWAY	rno04080	6.32E-02
Nicotine addiction	KEGG PATHWAY	rno05033	6.32E-02
Retrograde endocannabinoid signaling	KEGG PATHWAY	rno04723	6.97E-02
GABAergic synapse	KEGG PATHWAY	rno04727	1.11E-01
Thyrotropin-releasing hormone receptor signaling pathway	PANTHER	P04394	1.85E-01
Cocaine addiction	KEGG PATHWAY	rno05030	1.85E-01
Morphine addiction	KEGG PATHWAY	rno05032	2.23E-01
Pancreatic secretion	KEGG PATHWAY	rno04972	2.55E-01
Amphetamine addiction	KEGG PATHWAY	rno05031	2.81E-01
Ether lipid metabolism	KEGG PATHWAY	rno00565	2.96E-01
Alcoholism	KEGG PATHWAY	rno05034	3.24E-01
Angiotensin II-stimulated signaling through G proteins and beta-arrestin	PANTHER	P05911	3.71E-01
Calcium signaling pathway	KEGG PATHWAY	rno04020	4.14E-01
Adrenaline and noradrenaline biosynthesis	PANTHER	P00001	4.45E-01
Nicotine pharmacodynamics pathway	PANTHER	P06587	4.45E-01
Maturity onset diabetes of the young	KEGG PATHWAY	rno04950	4.45E-01
Synaptic vesicle cycle	KEGG PATHWAY	rno04721	4.45E-01
Cholinergic synapse	KEGG PATHWAY	rno04725	4.79E-01
Dopamine receptor mediated signaling pathway	PANTHER	P05912	4.82E-01
Thyroid cancer	KEGG PATHWAY	rno05216	4.82E-01
Serotonergic synapse	KEGG PATHWAY	rno04726	4.85E-01
Vascular smooth muscle contraction	KEGG PATHWAY	rno04270	5.16E-01
Tyrosine metabolism	KEGG PATHWAY	rno00350	5.22E-01

ECM-receptor interaction	KEGG PATHWAY	rno0451 2	5.22E-01
Fc gamma R-mediated phagocytosis	KEGG PATHWAY	rno0466 6	5.22E-01
Insulin secretion	KEGG PATHWAY	rno0491 1	5.22E-01
Prolactin signaling pathway	KEGG PATHWAY	rno0491 7	5.22E-01
Melanogenesis	KEGG PATHWAY	rno0491 6	5.34E-01
Taurine and hypotaurine metabolism	KEGG PATHWAY	rno0043 0	5.40E-01
Type II diabetes mellitus	KEGG PATHWAY	rno0493 0	5.40E-01

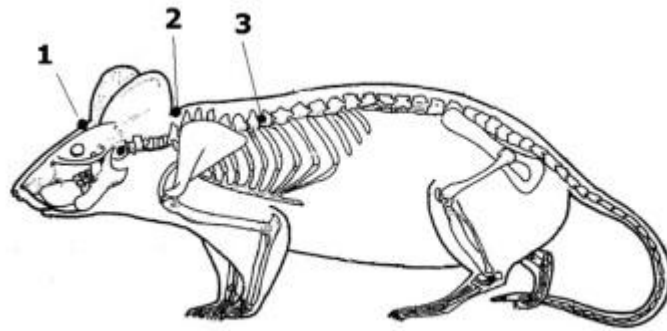
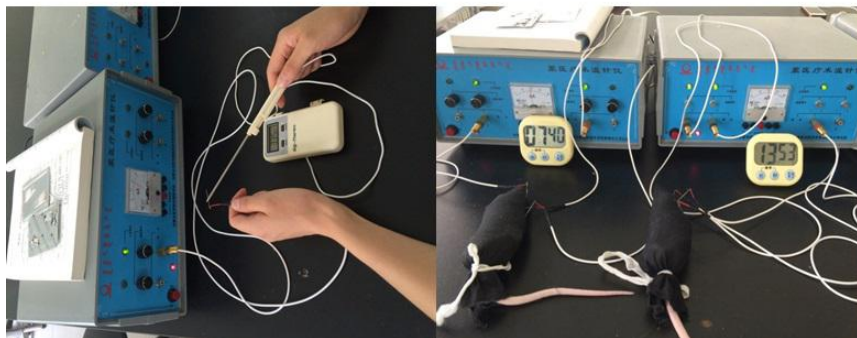


Figure. S1. Selection of the acupoints for acupuncture 1 is the Dinghui acupoint, 2 was the Heyi acupoint, 3 was the Xin acupoint.



acupuncture group



MWA group

Figure.S2 The treatment of insomnia rates by PCPA+MWA and PCPA+MA. The rats were fixed by black bags in the PCPA+MWA group.

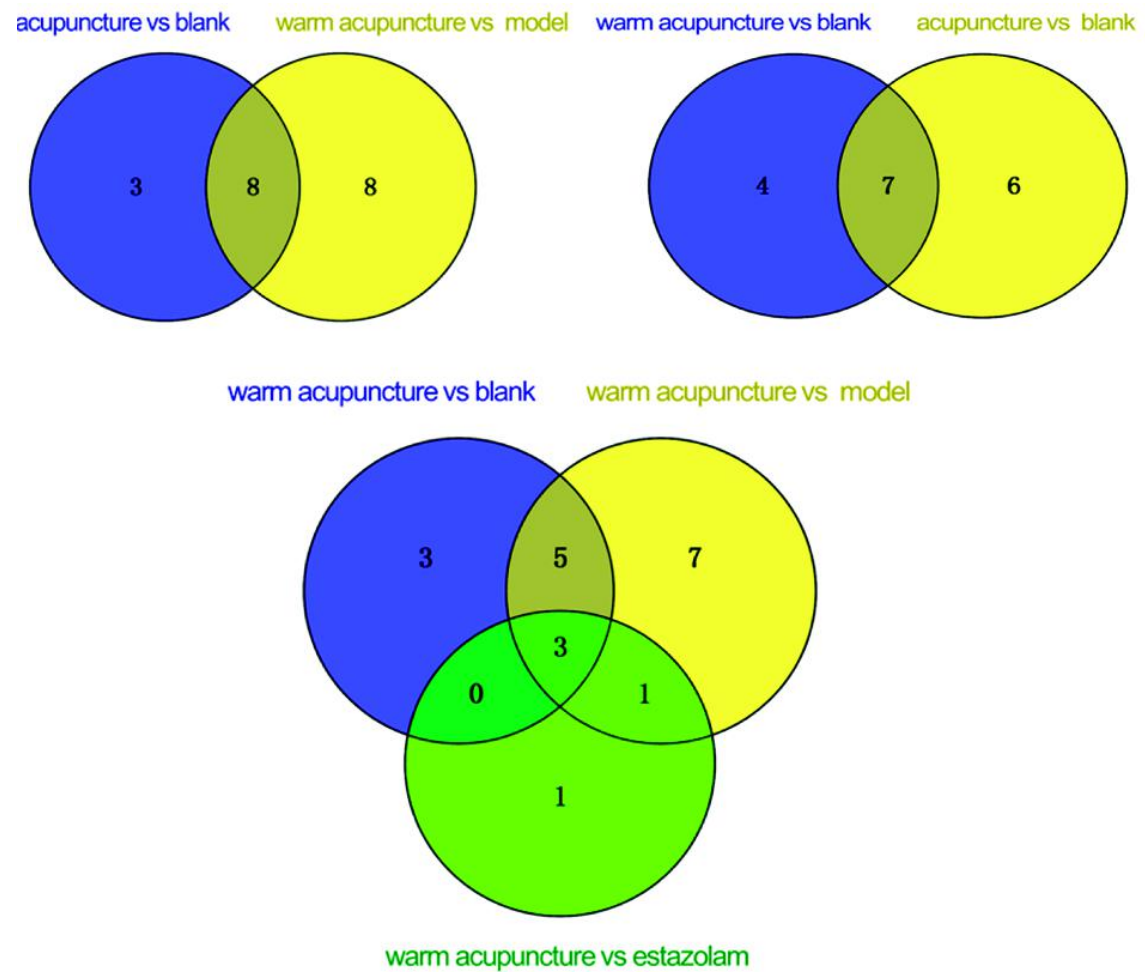


Figure.S3 Venn Diagram of PCPA+MWA group (warm acupuncture), the control group, the PCPA group, PCPA+MA group and PCPA+estazolam group.

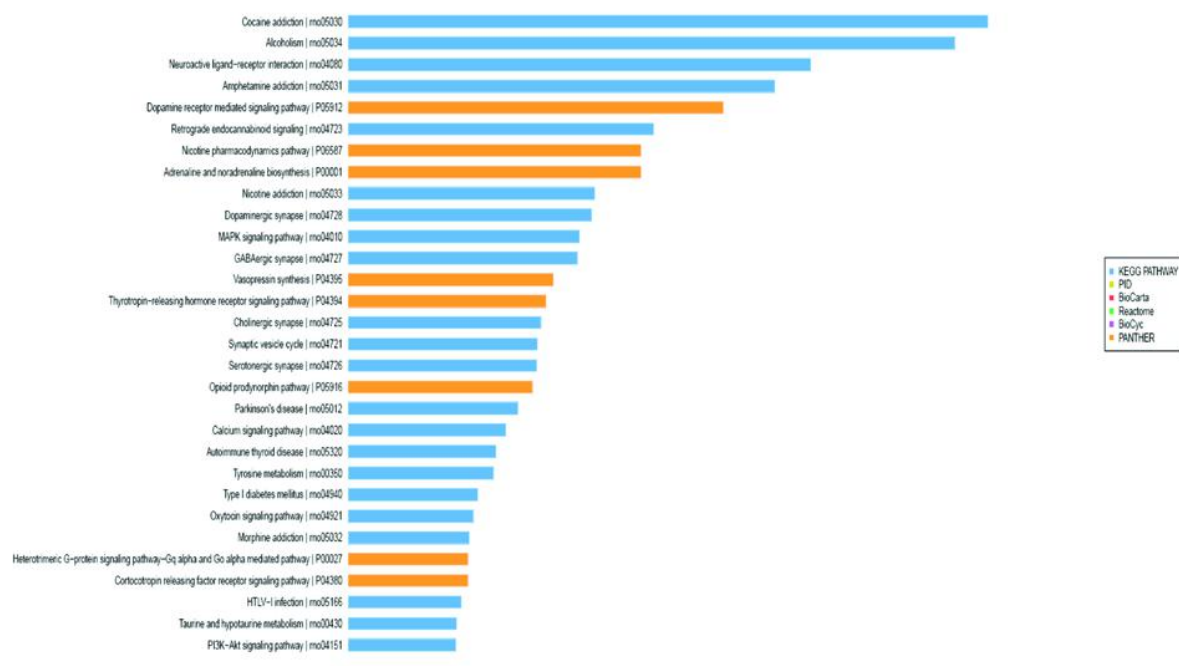


Figure S4. Pathway enrichment analysis of the differential genes between PCPA+MWA group and the control group (top 30).

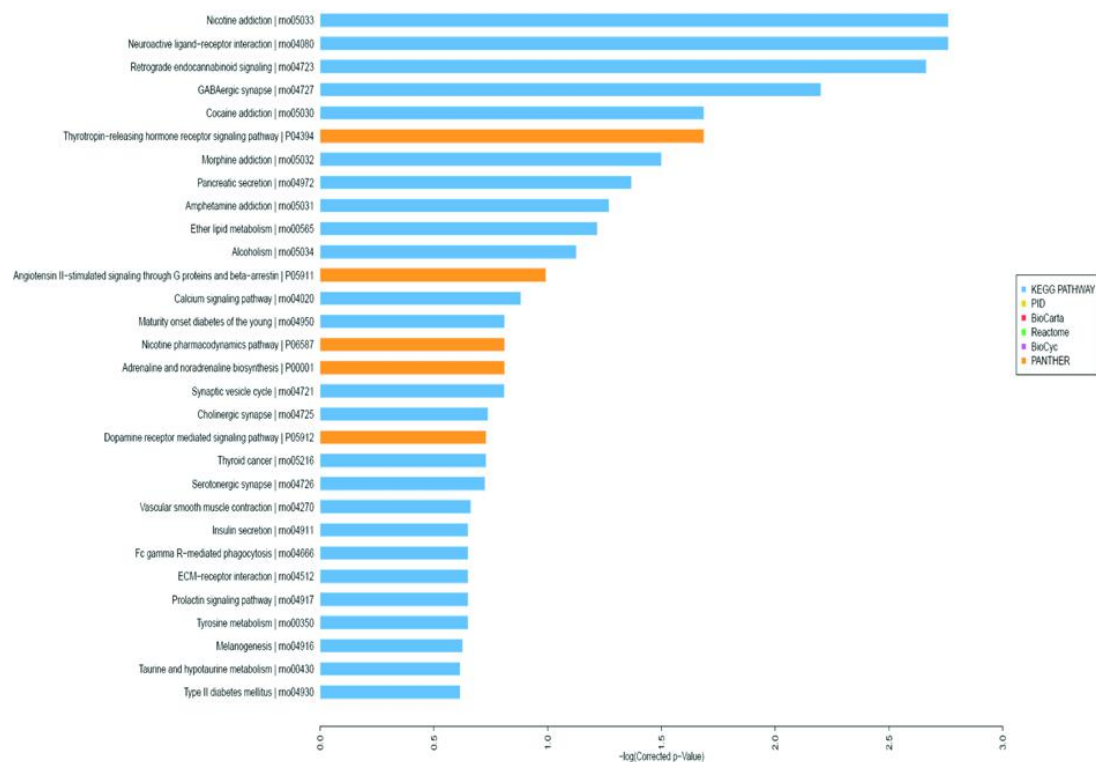


Figure S5. Pathway enrichment analysis of the differential genes between

PCPA+MWA group and the PCPA group (top 30).