**Experimental design and statistics**

**Methods section**

1. blank group n=8; model group n=8; CPD treatment group n=12; control treatment group n=12. individual data values were shown of each sample
2. The hypothalamus and distal colon (3 cm proximal to the anus) were rapidly collected after the rats were executed. The intestinal contents were washed with 0.9% normal saline. Then, the cleaned colon was quickly placed in 4% polyoxymethylene and fixed at 4 temperature for 48 h for subsequent immunohistochemical analysis.
3. A total of 40 rats are randomly divided into four group after 1 week of adaptive feeding. blank group, model group, CPD treatment group and control treatment group.
4. The colorectal dilatation method was used to detect the abdominal wall withdrawal reflex in rats with irritable bowel syndrome. Three unsuspecting researchers observed and determined the abdominal withdrawal of rats with irritable bowel syndrome.
5. Each show experiment is repeated three times
6. Statistics are expressed as mean ± SD and analyzed using rank sum test and one-way analysis of variance.
7. The purpose of the animal experiment is to prove that the CPD hypothesis is effective in treating IBS, and the relevant data proves the hypothesis of the test.

**Antibodies**

MAPK8, rabbit source, AF6318, MAPK8 Antibody detects endogenous levels of total MAPK8, dilutions 1:100(IHC),

VEGFA, rabbit source, AF5131, VEGFA Antibody detects endogenous levels of total VEGFA, dilutions 1:100(IHC),

PTGS2, rabbit source, AF7003, PTGS2 Antibody detects endogenous levels of total PTGS2, dilutions 1:100(IHC),

**Organisms**

Wistar rats, 200-200g, male rat,

**Tools**

TCMSP database

GEO database GSE36701

STRING database

VENN 2.1 online analysis tools

Cytoscape 3.7.2 software

Rstudio 1.2.1335 software

R×64 3.6.0 software