

Dear Editor,

We thank you and the reviewers for the constructive comments on our manuscript. We are pleased to submit a revised version of this manuscript with modifications to the manuscript, as suggested by the reviewers.

### **Response to Reviewers' Comments**

#### **Reviewer 1:**

#### **Major comments:**

1. The manuscript needs significant language refinement and there are a lot of spacing and punctuation errors. Some of them are listed below and others in minor comments:

- a. e.g. in methods section: In line 5, space between "**water.The**"; in line 7: space between "**day,and**"; on page 3, line 19: "**At 14 days,mice**" space needed between days and mice *etc.*
- b. **In the discussion section, last paragraph** "NF- $\kappa$ B in mediating" should be replaced as NF- $\kappa$ B in mediating. Also, "**DSSinduced**" and "**mice.Attempts**" should be replaced with "DSS induced" and "mice. Attempts" respectively
- c. The heading on page 4: "**RNA isolation and Quantitative PCR**" should be corrected as "RNA isolation and Quantitative PCR"

**Response:** We have refined language again. We tried our best to correct the spacing and punctuation errors .

2. In methods section, please indicate the number of mice used in each group.

**Response:** We have indicated the number of mice used in each group (n=10) in methods section.

3. The authors should define the groups used in this study clearly. It is not clear if a control group that was only treated with JPQCD was also used to determine the effect of JPQCD alone on mice that did not receive DSS induced injury.

**Response:** we have defined the groups used in this study clearly, 40 mice were randomly divided into four groups: control, DSS, JPQCD and 5-aminosalicylic acid (5-ASA); each containing ten mice. And the control group was not

treated with JPQCD, after the DSS-induced acute UC model was successfully established, only giving 0.3ml normal saline by intragastric injection. JPQCD group were orally treated with JPQCD at the dose of raw powder 17.1 g/kg/d.

4. It is not mentioned that how much saline was given to the control and DSS group.

**Response:** The Control group, DSS group were given 0.3ml normal saline by intragastric injection

5. It is not clear when JPQCD treatment was performed; was it administered after the DSS-induced injury or the animals were pretreated with JPQCD followed by the injury.

**Response:** After the DSS-induced injury, JPQCD treatment was performed. JPQCD group were orally treated with JPQCD at the dose of raw powder 17.1 g/kg/d.

6. The table 1 which shows the primer length and the primer sequences does not have uniformity. The primer length matches with the primer sequences for IL-1 $\beta$ , IL-8 and TNF- $\alpha$ , whereas the length does not match for NF- $\kappa$ B and ACTIN.

**Response:** we have revised as follows

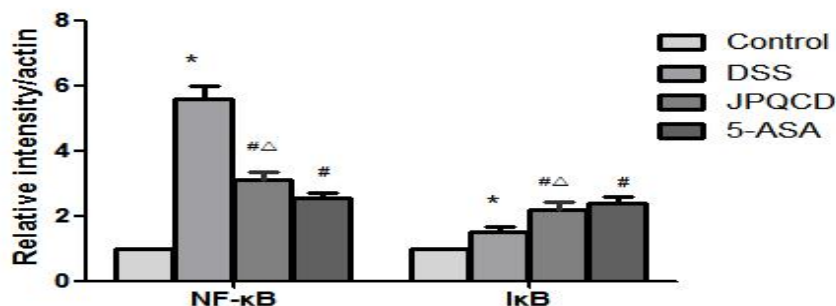
Number	Gene		Primer sequence	Primer length
1	IL-1 $\beta$	Forward-	5'-TAGACAACTGCACTACAGGCTCCGA-3'	25
		Reverse-	5'-GGGTCCGACAGCAGAGGCT-3'	20
2	IL-8	Forward-	5'-ATGCTGGTGACAACCACGGCC-3'	21
		Reverse-	5'-CCTCTGTGAAGTCTCCTCTCCGGAC-3'	25
3	TNF- $\alpha$	Forward-	5'-TGGTGACCAGGCTGTCGCTACA-3'	22
		Reverse-	5'-TACAGTCACGGCTCCCGTGGG-3'	21
4	NF- $\kappa$ B	Forward-	5'-GTGGAGGCATGTTCCGGTAGTG-3'	21
		Reverse-	5'-TCTTGGCACAATCTTTAGGGC-3'	21
5	actin	Forward-	5'-GTGCCGCCTGGAGAAACC-3'	18
		Reverse-	5'-GGTGAAGAGTGGGAGTTGC-3'	20

7. In the section RNA isolation and qPCR section: It is written as "1  $\mu$ g of cDNA in a 25- $\mu$ l reaction mixture". Is it 25 ml or 25  $\mu$ l reaction mixture? Authors need to correct it.

**Response:** we have revised 1  $\mu$ l of cDNA in a 20  $\mu$ l reaction mixture

8. Figure 5: No quantitative analysis has been provided. A densitometry scan needs to be done.

**Response:** we have supplemented quantitative analysis



#### Minor comments:

The manuscript needs language refinement and needs to be corrected for the proper usage of punctuation.

1. Proper use of capital letters after full stop and it is advised not start with capital letter randomly in middle of a sentence
  - a. On page 1, methods section, line 5: Control should start with small c.
  - b. On page 1, methods section, in line 11: “the” mRNA should start as “The”
  - c. On page 1, methods section, in line 12: the peotein should be corrected as “The protein”
  - d. Page 2, line 6: “...and 5-ASA, The”, here “The” should be replaced with “the”
  - e. Page 2, line 8: “Levels” should be replaced as level
  - f. Page 2, line 9: **Significantly** should be replaced with significant
  - g. Page 3, in the “materials and methods section, line 13: “**day, The daily weight**” the comma needs to be removed and replaced by full stop
  - h. Page 3, in the “materials and methods section, line 22: after “**examination analyses**”, full stop is missing
  - i. In the discussion part, last paragraph “Similarly, Furthermore” should also be corrected.
  - j. In the acknowledgement part: names should be in correct format Prof. Zhipeng TANG and yancheng Dai
2. In the introduction part
  - a. line 2: “**damage. which**” remove full stop

- b. line 3: “involves in environmental” remove in
- c. line 5: “bloody, and purulent” remove comma
- d. Second para Line3: “UC [7]. the”T should be capital
- 3. Needs correction in spelling
  - a. Under the heading “**JPQCD Reduces Microscopic Colon Damage in DSS Induced Acute Colitis**” lowm should be written as low
  - b. In the discussion part, second paragraph “weigh” should be corrected as weight
- 4. Uniformity in labelling is missing at some places e.g. labelling of NF-Kb should be uniformly labelled as NF-κB
- 5. **Some of the sentences are incomplete e.g. in the discussion part 3 paragraph** : “It has been reported that elevated levels of cytokines, such as IL-1β, IL-8 ,TNF-a, IL-6, IL-17, and IL-21, in UC” is incomplete so it is not clear what the author wish to convey
- 6. In the reference section there should be uniformity in the writing style as per the journal *i.e.* either use “Times New Roman” or “Calibri”, not both.

**Response:**we have refined the language and corrected for the proper usage of punctuation.

We thank you and the Reviewers again for your considerable efforts in reviewing our manuscript.

Sincerely,

Lie zheng, Ph.D.