

To reviewer,

Thank you for your important comments and suggestions. Our responses to your questions have been shown as follows:

Major points

1. As the authors said that the mean age of controls was relatively high. The association of age and genotypes need to be clarified.

The mean age of our controls was 57.1 years old. So, we investigated the distribution of genotypes among younger (below 57 years old) and older (above 58 years old).

As a result, there is no difference of the distribution among two groups in controls.

	below 57 years	above 58 years	p value
number of sample	322	426	
(rs4268033 G>A)			0.96
GG	157	210	
GA	139	184	
AA	26	32	
(rs3735656 T>C)			0.97
TT	143	187	
TC	147	198	
CC	32	41	
(rs10226620 C>T)			0.95
CC	151	195	
CT	139	188	
TT	32	43	

2. The control people are also patients suffering from other diseases. Community people will be better choice.

We agree to the reviewer's comments. However, although it is very difficult to enroll many healthy subjects with an informed consent, we selected such subjects as a control in this study. Therefore, we confirmed whether distribution of genotypes in our controls were different from the subjects in HapMap-JPT. In addition, it described in "Discussion" as one of clinical limitations.

3. The diagnostic criteria of UC should be mentioned.

We diagnosed UC according to the Podolsky's review by history of symptom, histologic and endoscopic findings, which were described in p 8, line 8-9 "Clinical samples in Materials and Methods". In addition, ref 15 was changed because my mistake.

4. Are there differences in genotypes between male and female?

There are no significant differences in genotypes between male and female in controls.

	male	female	p value
number of sample	438	310	
(rs4268033 G>A)			0.17
GG	202	127	
GA	198	148	
AA	38	35	
(rs3735656 T>C)			0.27
TT	213	132	
TC	186	142	
CC	39	36	
(rs10226620 C>T)			0.2
CC	227	139	
CT	179	145	
TT	32	26	