

From heterogeneity to mechanism: A systems-level analysis pinpoints the S100A8/A9 axis in colorectal cancer

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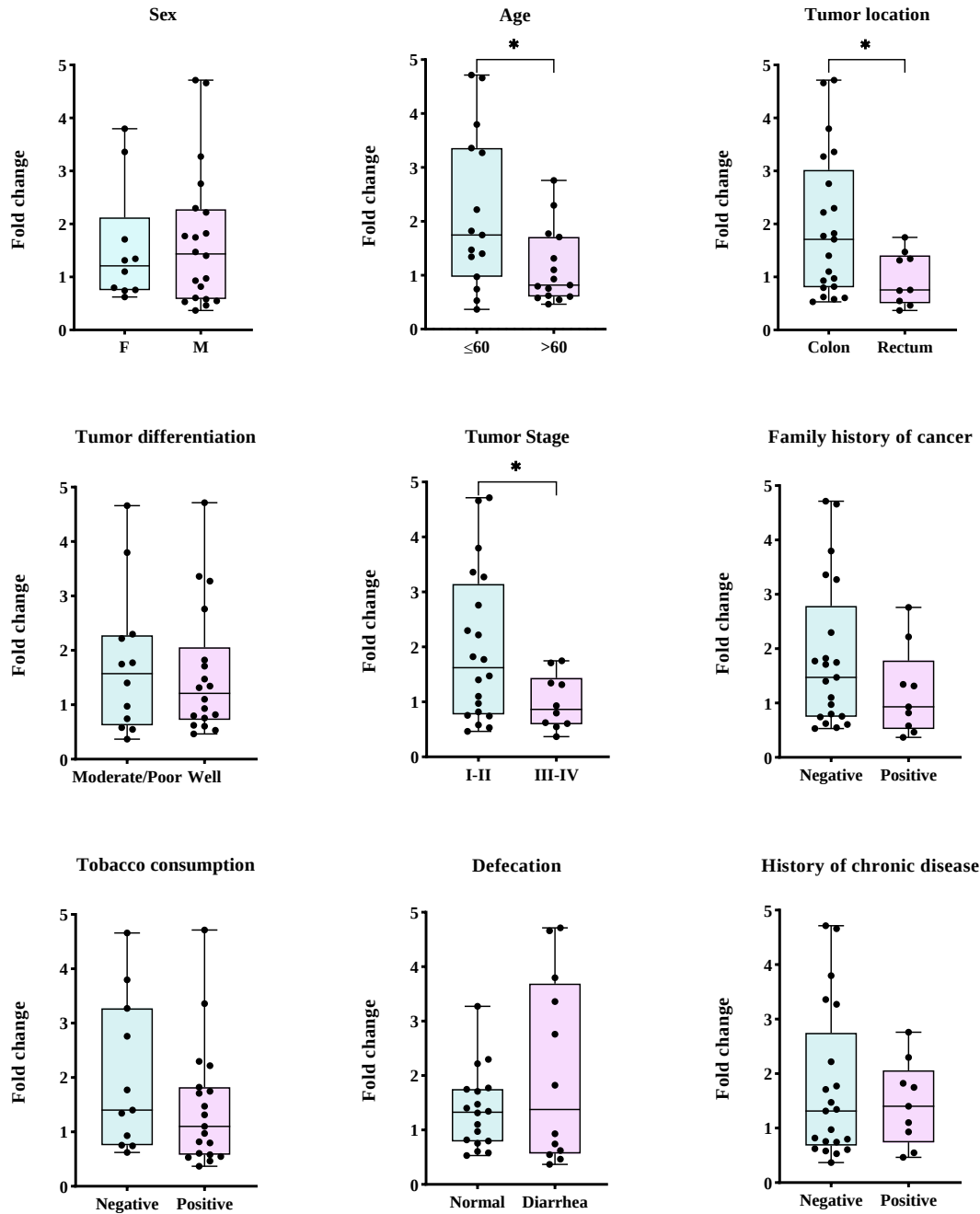


Fig. S1 Association of *S100A8* expression with clinicopathological parameters in CRC patients. Boxplots showing the relative mRNA expression of *S100A8* stratified by patient sex, age, tumor location, differentiation, stage, family history, and other clinical factors. Statistical significance was assessed using the Mann-Whitney U test. * $p < 0.05$.

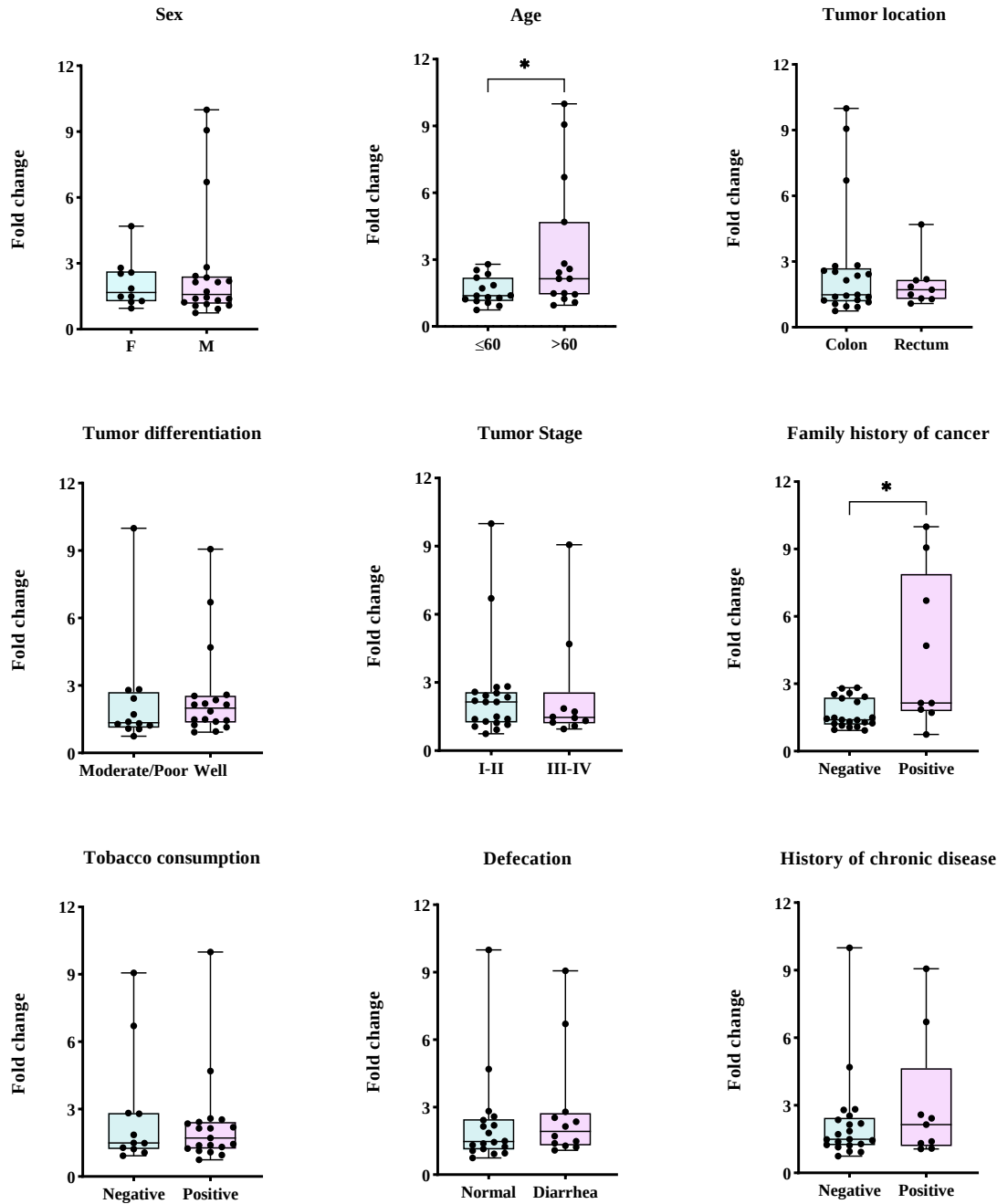


Fig. S2 Association of *S100A9* expression with clinicopathological parameters in CRC patients. Boxplots showing the relative mRNA expression of *S100A9* stratified by patient sex, age, tumor location, differentiation, stage, family history, and other clinical factors. Statistical significance was assessed using the Mann-Whitney U test. * $p < 0.05$.

Table S1 Characteristics of CRC subjects included in this research

Variables	Patients (%)
Gender	
Male	20 (66.66%)
Female	10 (33.33%)
Age	
Mean	53.7 ± 15.3 Years
Range	24-87 Years
Tumor location	
Colon	21 (70%)
Rectum	9 (30%)
TNM Stage	
I-II	20 (66.66%)
III-IV	10 (33.33%)
Differentiation	
Well	18 (60%)
Moderate/Poor	12 (40%)
Family history of cancer	
Negative	21 (70%)
Positive	9 (30%)
Tobacco consumption	
Negative	11 (36.66%)
Positive	19 (63.33%)
Defecation	
Normal	18 (60%)
Diarrhea	12 (40%)
History of chronic disease	
Negative	21 (70%)
Positive	9 (30%)

Table S2 Oligonucleotide sequences used in this study

Target gene	Oligonucleotide sequence (5'-3')
<i>β-actin</i>	F: ATGTGGCCGAGGACTTTGATT R: AGTGGGGTGGCTTTTAGGATG
<i>S100A8</i>	F: GCCAAGCCTAACCGCTATAA R: CCCACCAGGTCTTCTGAAAG
<i>S100A9</i>	F: GGCTTTGACAGAGTGCAAGA R: AGGTGTTGATGATGGTCTCTATG
<i>TLR4</i>	F: CGAGGAAGAGAAGACACCAGT R: CATCATCCTCACTGCTTCTGT
<i>NF-κB</i>	F: GTATTTCAACCACAGATGGCACT R: AACCTTTGCTGGTCCCACAT
<i>IL-6</i>	F: GCACTGGCAGAAAACAACCT R: TCAAACCTCCAAAAGACCAGTGA
<i>IL-8</i>	F: AAGAGAGCTCTGTCTGGACC R: GATATTCTCTTGGCCCTTGG
<i>IL-1β</i>	F: AACAACTACTCAGAAACACAAG R: CAGAACTCAGGAATGGA
<i>TNF-α</i>	F: AGCCCATGTTGTAGCAAACC R: GGTCTGGGCCATAGAACTGA