Materials Design Analysis Reporting (MDAR) Checklist for Authors

The MDAR framework establishes a minimum set of requirements in transparent reporting applicable to studies in the life sciences (see Statement of Task: doi:10.31222/osf.io/9sm4x.). The MDAR checklist is a tool for authors, editors and others seeking to adopt the MDAR framework for transparent reporting in manuscripts and other outputs. Please refer to the MDAR Elaboration Document for additional context for the MDAR framework.

Materials

Antibodies	Yes (indicate where provided:	n/a
For commercial reagents, provide supplier name, catalogue number and RRID, if available.		Not available because we did not use antibodies in this study.

Cell materials	Yes (indicate where provided:	n/a
Cell lines: Provide species information, strain. Provide accession number in repository **OR** supplier name, catalog number, clone number, **OR** RRID		Not available because we did not use cell materials in this study.
Primary cultures: Provide species, strain, sex of origin, genetic modification status.		Not available because we did not use cell materials in this study.

Experimental animals	Yes (indicate where provided:	n/a
Laboratory animals: Provide species, strain, sex, age, genetic modification status. Provide accession number in repository **OR** supplier name, catalog number, clone number, **OR** RRID		Not available because we did not use experimental animals in this study.
Animal observed in or captured from the field: Provide species, sex and age where possible		Not available because we did not use experimental animals in this study.
Model organisms: Provide Accession number in repository (where relevant) **OR** RRID		Not available because we did not use experimental animals in this study.

Plants and microbes	Yes (indicate where provided:	n/a
Plants: provide species and strain, unique accession number if available, and source (including location for collected wild specimens)		Not available because we did not use plants and microbes in this study.
Microbes: provide species and strain, unique accession number if available, and source		Not available because we did not use plants and microbes in this study.

Human research participants	Yes (indicate where provided:	n/a
Identify authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	Provided in Methods/Study design and patients.	
Provide statement confirming informed consent obtained from study participants.	Provided in Methods/Study design and patients.	
Report on age and sex for all study participants.	Provided in Results/Table 1.	

Design

Study protocol	Yes (indicate where provided:	n/a
For clinical trials, provide the trial registration number **OR** cite DOI in manuscript.		Not available because we did not register the trial.

Laboratory protocol	Yes (indicate where provided:	n/a
Provide DOI or other citation details if detailed step-by-step protocols are available.	Provided in Methods.	

Experimental study design (statistics details)	Yes (indicate where provided:	n/a
State whether and how the following have been done**, or** if they were not carried out.		
Sample size determination	Table 1 has provided that our study included a total of 96 CRC patients.	
Randomisation		Not available because we did not random in our study.
Blinding		Not available because we did not blind in our study.
Inclusion/exclusion criteria	Inclusion: Patient was older than 18 years of age； Patient was diagnosed with carcinomas in the sigmoid colon, rectosigmoid junction or rectum； Genetic testing information of tissue was available or Tissue samples were available for genetic testing. Exclusion: Patient was younger than 18 years of age； No genetic testing information or tissue was available； Informed consent was declined.	

Sample definition and in-laboratory replication	Yes (indicate where provided:	n/a
State number of times the experiment was replicated in laboratory		Not available because we did not replicate in laboratory.
Define whether data describe technical or biological replicates		Not available because we did not replicate in laboratory.

Ethics	Yes (indicate where provided:	n/a
Studies involving human participants: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	This study was approved by the Ethics Committee of Wuxi Hospital of Traditional Chinese Medicine (201809001J01-01). It had provided in Methods/Study design and patients.	
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		Not available because we did not use experimental animals in this study.
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.		Not available because our study did not involve specimen and field samples.
Dual Use Research of Concern (DURC)	**Yes (indicate where provided:**	**n/a**

If study is subject to dual use research of concern, state the authority granting approval and reference number for the regulatory approval		Not available because our study was not subject to dual use research of concern.

Analysis

Attrition	**Yes (indicate where provided:**	**n/a**
State if sample or data point from the analysis is excluded, and whether the criteria for exclusion were determined and specified in advance.		Not available because we did not exclude any sample or data in our study.

Statistics	**Yes (indicate where provided:**	**n/a**
Describe statistical tests used and justify choice of tests.	In section of Methods/Statistical analyses.	

Data Availability	**Yes (indicate where provided:**	**n/a**
State whether newly created datasets are available, including protocols for access or restriction on access.	The datasets used and analyzed during the current study are available from the corresponding authors on reasonable request.	
If data are publicly available, provide accession number in repository or DOI or URL.		Not available because we did not use publicly available data in our study.
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.		Not available because we did not use publicly available data in our study.

Code Availability	**Yes (indicate where provided:**	**n/a**
For all newly generated code and software essential for replicating the main findings of the study:		Not available because we did not use all newly generated code and software in our study.
State whether the code or software is available.		Not available because we did not use all newly generated code and software in our study.
If code is publicly available, provide accession number in repository, or DOI or URL.		Not available because we did not use all newly generated code and software in our study.

Reporting

Adherence to community standards	**Yes (indicate where provided: section/paragraph)**	**n/a**
MDAR framework recommends adoption of discipline-specific guidelines, established and endorsed through community initiatives. Journals have their own policy about requiring specific		

guidelines and recommendations to complement MDAR.		
State if relevant guidelines (eg., ICMJE, MIBBI, ARRIVE) have been followed, and whether a checklist (eg., CONSORT, PRISMA, ARRIVE) is provided with the manuscript.	ICMJE guidelines were followed, as the journal follows ICMJE recommendations for publication.	

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