#### <u>Materials Design Analysis Reporting (MDAR)</u> 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: section/paragraph)	n/a
For commercial reagents, provide supplier	Yes, has been indicated in the "Methods" - "Genome	
name, catalogue number and RRID, if available.	DNA extraction and 16S rRNA gene amplicon	
	sequencing" section	
Cell materials	Yes (indicate where provided: section/paragraph)	n/a
Cell lines: Provide species information, strain.		n/a
Provide accession number in repository <b>OR</b>		
supplier name, catalog number, clone number,		
OR RRID		
Primary cultures: Provide species, strain, sex of		n/a
origin, genetic modification status.		
Experimental animals	Yes (indicate where provided: section/paragraph)	n/a
Laboratory animals: Provide species, strain, sex, age,		n/a
genetic modification status. Provide accession		
number in repository <b>OR</b> supplier name, catalog		
number, clone number, <b>OR</b> RRID		
Animal observed in or captured from the		n/a
field: Provide species, sex and age where		
possible		
Model organisms: Provide Accession number		n/a
in repository (where relevant) <b>OR</b> RRID		
Plants and microbes	Yes (indicate where provided: section/paragraph)	n/a
Plants: provide species and strain, unique accession		n/a
number if available, and source (including location		
for collected wild specimens)		
Microbes: provide species and strain, unique		n/a
accession number if available, and source		
Human research participants	Yes (indicate where provided: section/paragraph)	n/a
Identify authority granting ethics approval (IRB or	Yes, has been indicated in the "Ethical Statement"	
equivalent committee(s), provide reference number	section	
for approval.		
Provide statement confirming informed consent	Yes, has been indicated in the "Ethical Statement"	
obtained from study participants.	section	
Report on age and sex for all study participants.	Yes, has been indicated in Table 1	

# <u>Design</u>

Study protocol	Yes (indicate where provided: section/paragraph)	n/a
For clinical trials, provide the trial registration number <b>OR</b> cite DOI in manuscript.		n/a
Laboratory protocol	Yes (indicate where provided: section/paragraph)	n/a
Provide DOI or other citation details if detailed step- by-step protocols are available.		n/a
Experimental study design (statistics details)	Yes (indicate where provided: section/paragraph)	n/a
State whether and how the following have been done, <b>or</b> if they were not carried out.		
Sample size determination	Yes, has been indicated in the "Methods" - "Patients and sample collection" section	
Randomisation		n/a
Blinding	Yes, has been indicated in the "Methods" - "Genome DNA extraction and 16S rRNA gene amplicon sequencing" section	
Inclusion/exclusion criteria	Yes, has been indicated in the "Methods" - "Patients and sample collection" section	
Sample definition and in-laboratory replication	Yes (indicate where provided: section/paragraph)	n/a
State number of times the experiment was replicated in laboratory	Yes, has been indicated in the "Methods" - "Genome DNA extraction and 16S rRNA gene amplicon sequencing" section	
Define whether data describe technical or biological replicates	Yes, has been indicated in the "Methods"-"Genome DNA extraction and 16S rRNA gene amplicon sequencing" section	
Ethics	Yes (indicate where provided: section/paragraph)	n/a
Studies involving human participants: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	Yes, has been indicated in the "Ethical Statement" section	
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		n/a
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.		n/a
Dual Use Research of Concern (DURC)	Yes (indicate where provided: section/paragraph)	n/a
If study is subject to dual use research of concern, state the authority granting approval and reference number for the regulatory approval		n/a

### <u>Analysis</u>

Attrition	Yes (indicate where provided: section/paragraph)	n/a
State if sample or data point from the analysis is	Yes, one sample was not available due to surgical	
excluded, and whether the criteria for exclusion were	procedure (indicated in "Results" - "Characteristics of	
determined and specified in advance.	the study participants" section), and the exclusion	
	criteria were stated in "Methods" - "Patients and	
	sample collection" section.	
Statistics	Yes (indicate where provided: section/paragraph)	n/a
Describe statistical tests used and justify choice of	Yes, has been indicated in the "Methods" - "Data	
tests.	analysis" and "Statistical analysis" sections	
Data Availability	Yes (indicate where provided: section/paragraph)	n/a
State whether newly created datasets are available,		n/a
including protocols for access or restriction on		, ۵
access.		
If data are publicly available, provide accession		n/a
number in repository or DOI or URL.		
If publicly available data are reused, provide		n/a
accession number in repository or DOI or URL, where		
possible.		
Code Availability	Yes (indicate where provided: section/paragraph)	n/a
For all newly generated code and software essential		
for replicating the main findings of the study:		
State whether the code or software is available.		n/a
If code is publicly available, provide accession		n/a
number in repository, or DOI or URL.		

# **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 guidelines for publication.	

Article information: https://dx.doi.org/10.21037/tlcr-23-231