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: section/paragraph) | N/A |
|------------|-----------------------------------------------|-----|
| METTL7B (methyltransferase-like 7B) rabbit polyclonal antibody Proteintech, Wuhan, China, #17001-1-AP | Method: Paragraph 2 & 7 | |
| GAPDH (Glyceraldehyde-3-phosphate dehydrogenase) rabbit monoclonal antibody, Proteintech, USA #10494-1-AP | Method: Paragraph 7 | |

| Cell materials | Yes (indicate where provided: section/paragraph) | N/A |
|----------------|-----------------------------------------------|-----|
| H1299: 3111C0001CCC000469 H1975: 3111C0001CCC000252 A549: 3111C0001CCC000002 HCC827: 3111C0001CCC000478 PC9: 3142C0001000001959 SPCA1: 3111C0001CCC000387 BEAS2B: 3131C0001000200027 | Method: Paragraph 5 | |
| **Primary cultures:** Provide species, strain, sex of origin, genetic modification status. | It is not the part of our research. | N/A |

| Experimental animals | Yes (indicate where provided: section/paragraph) | 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 | We did not use laboratory animals in our study. We used human cell lines, tissue and serum. | N/A |
| **Animal observed in or captured from the field:** Provide species, sex and age where possible | We did not use laboratory animals in our study. We used human cell lines, tissue and serum. | N/A |
| **Model organisms:** Provide Accession number in repository (where relevant) OR RRID | We did not use laboratory animals in our study. We used human cell lines, tissue and serum. | N/A |

| Plants and microbes | Yes (indicate where provided: section/paragraph) | N/A |
|---------------------|-----------------------------------------------|-----|
| **Plants:** provide species and strain, unique accession number if available, and source (including location for collected wild specimens) | Plants are not used in our research. | N/A |
| **Microbes:** provide species and strain, unique accession number if available, and source | We have not used Microbes in our study. | N/A |

| Human research participants | Yes (indicate where provided: section/paragraph) | N/A |
|-----------------------------|-----------------------------------------------|-----|
| This study was approved by the Ethics Review Committee of the Second Hospital of Dalian Medical University. Reference number for approval is 2019046 | Method: Paragraph 3 Footnote: Paragraph 3 | |
| Written informed consent was retrieved from all participants. | Method: Paragraph 3 | |
| Report on age and sex for all study participants. | Method: Paragraph 3 | |
Design

| Study protocol | Yes (indicate where provided: section/paragraph) | N/A |
|----------------|-------------------------------------------------|-----|
| For clinical trials, provide the trial registration number OR cite DOI in manuscript. | We did not perform clinical trials. | 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. | We followed the standard protocol which are usually used in our laboratory. | N/A |

| Experimental study design (statistics details) | Yes (indicate where provided: section/paragraph) | N/A |
|------------------------------------------------|-------------------------------------------------|-----|
| State whether and how the following have been done, or if they were not carried out. | Initially, we identified a gene which could play a role in lung adenocarcinoma. Afterwards gene was analyzed by using The Cancer Genome Atlas (TCGA) database. Then survival curves were constructed according to the Kaplan Meier method and compared with the log-rank test (P<0.05). p value was statistically significant. After that we performed western blot, got desirable results and choose it for further study. | N/A |

| Sample size determination | We did not get the sample size. | N/A |
|---------------------------|---------------------------------|-----|
| Randomisation | Randomisation is part of clinical trial but we did not perform any clinical trial in our research. | N/A |
| Blinding | Blinding is a part of clinical research study our research is basic medicine research. | N/A |
| Inclusion/exclusion criteria | There was no inclusion/exclusion criteria required for this study. | N/A |

| Sample definition and in-laboratory replication | Yes (indicate where provided: section/paragraph) | N/A |
|-------------------------------------------------|-------------------------------------------------|-----|
| The tests were repeated thrice to decrease the variability. | Method: Paragraph 7 | |
| Procedure technique was repeated. | Method: Paragraph 7 | |

| Ethics | Yes (indicate where provided: section/paragraph) | N/A |
|--------|-------------------------------------------------|-----|
| This study was approved by the Ethics Review Committee of the Second Hospital of Dalian Medical University. Reference number for approval is 2019046 | Method: Paragraph 3  
Footnote: Paragraph 3 | |
| Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval. | Our study did not involve experimental animals. | 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. | Our study did not involve field samples. | 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 | Study is not subject to dual use research of concern. | N/A |
### Analysis

| Attrition | Yes (indicate where provided: section/paragraph) | 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. | There is no sample or data point in this study which need to be excluded from analysis. | N/A |

| Statistics | Yes (indicate where provided: section/paragraph) | N/A |
|------------|-----------------------------------------------|-----|
| GraphPad Prism (version 8.0; GraphPad Software, San Diego, CA, USA) log-rank test using the Kaplan Meier method | Method: Paragraph 12 | |

| Data Availability | Yes (indicate where provided: section/paragraph) | N/A |
|-------------------|-----------------------------------------------|-----|
| State whether newly created datasets are available, including protocols for access or restriction on access. | We performed standard protocols according to our laboratory instructions. | N/A |
| If data are publicly available, provide accession number in repository or DOI or URL. | There is no data which is publicly available. | N/A |
| If publicly available data are reused, provide accession number in repository or DOI or URL, where possible. | We did not reuse any publicly available data. | N/A |

| 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: | We did not generate any new code in this study. | N/A |
| State whether the code or software is available. | There is no code which is used in this research. | N/A |
| If code is publicly available, provide accession number in repository, or DOI or URL. | We did not use publicly available code in this research. | N/A |

### Reporting

| Adherence to community standards | Yes (indicate where provided: section/paragraph) | N/A |
|--------------------------------|-----------------------------------------------|-----|
| This article follows the MDAR checklist for reporting standards. | Introduction: paragraph 3  
Footnote: paragraph 2 | |
| All authors have completed the ICMJE uniform disclosure form. | Footnote: paragraph 1 | |

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