

## **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.

After the check according the MDAR checklist, the following modifications of the manuscript have been done:

A) The catalog numbers of CellSearch kits have been specified. See, please, the following Sections:

- 1) Whole blood collection for CTC enumeration (line 121)
- 2) CTC detection by CellSearch” (lines from 123 to 150)

B) Details on human cell lines have been included. See, please, the Section “detection of EML4-ALK fusion protein” (line 146)

C) It has been specified that clinicians used RECIST criteria for reevaluating disease status of the patients during the study follow-up. See, please, Section “Patients cohort” (lines 115-116).

Concerning all the other items of the MDAR checklist, they had been already provided in the first version of the manuscript.

For love of completeness, see, please, the Table below; it has been filled in by indicating Section and lines, in which each MDAR requirement has been cited.

**Materials**

<b>Antibodies</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
For commercial reagents, provide supplier name, catalogue number and RRID, if available.	See the following Sections: 1) Whole blood collection for CTC enumeration 2) CTC detection by CellSearch	
<b>Cell materials</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
<b>Cell lines:</b> Provide species information, strain. Provide accession number in repository <b>OR</b> supplier name, catalog number, clone number, <b>OR</b> RRID	See the following Section: <u>c) Detection of EML4-ALK fusion protein:</u>	
<b>Primary cultures:</b> Provide species, strain, sex of origin, genetic modification status.		X
<b>Experimental animals</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
<b>Laboratory animals:</b> Provide species, strain, sex, age, genetic modification status. Provide accession number in repository <b>OR</b> supplier name, catalog number, clone number, <b>OR</b> RRID		X
<b>Animal observed in or captured from the field:</b> Provide species, sex and age where possible		X
<b>Model organisms:</b> Provide Accession number in repository (where relevant) <b>OR</b> RRID		X
<b>Plants and microbes</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
<b>Plants:</b> provide species and strain, unique accession number if available, and source (including location for collected wild specimens)		X
<b>Microbes:</b> provide species and strain, unique accession number if available, and source		X
<b>Human research participants</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
Identify authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	See the following Sections: 1) Patient cohort 2) Ethical statement	
Provide statement confirming informed consent obtained from study participants.	See the following Sections: 1) Patient cohort; 2) Ethical statement	
Report on age and sex for all study participants.	See the Table 1	

**Design**

<b>Study protocol</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
For clinical trials, provide the trial registration number <b>OR</b> cite DOI in manuscript.	See Section "Patient cohort" and Section "Ethical Statement"	
<b>Laboratory protocol</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
Provide DOI or other citation details if detailed step-by-step protocols are available.	See the Section "CTC detection by CellSearch"	
<b>Experimental study design (statistics details)</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
State whether and how the following have been done, <b>or</b> if they were not carried out.		
Sample size determination		X
Randomisation		X
Blinding		X
Inclusion/exclusion criteria	See the Section "Patient cohort"	
<b>Sample definition and in-laboratory replication</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
State number of times the experiment was replicated in laboratory		X
Define whether data describe technical or biological replicates		X
<b>Ethics</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
Studies involving human participants: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	See the following Sections: 1) Patient cohort 2) Ethical statement	
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		X
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.		X
<b>Dual Use Research of Concern (DURC)</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
If study is subject to dual use research of concern, state the authority granting approval and reference number for the regulatory approval		X

**Analysis**

<b>Attrition</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
State if sample or data point from the analysis is excluded, and whether the criteria for exclusion were determined and specified in advance.	See Consort Diagram reported in Figure 1	
<b>Statistics</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
Describe statistical tests used and justify choice of tests.	See Section "Statistical analysis"	
<b>Data Availability</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
State whether newly created datasets are available, including protocols for access or restriction on access.	Dataset is available on motivated request to the PI of the study	
If data are publicly available, provide accession number in repository or DOI or URL.		X
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.		X
<b>Code Availability</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
For all newly generated code and software essential for replicating the main findings of the study:		
State whether the code or software is available.		X
If code is publicly available, provide accession number in repository, or DOI or URL.		X

**Reporting**

<b>Adherence to community standards</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
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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