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DECLARATION

Declaration of transparency and scientific rigour: Checklist for reproducibility of natural product research

This checklist for reproducibility of natural product research provides guidance for transparent reporting and scientific rigour of preclinical research as set out in *A practical guide for transparent reporting of research on natural products in the British Journal of Pharmacology: reproducibility of natural product research* (Izzo et al., 2020). This checklist is intended as a guide for submission to the *British Journal of Pharmacology*.

Criteria	Number	Issue	Where to place information
BJP scope	1	Identification of the possible mechanism of action of the natural product is mandatory, and this should be highlighted in the abstract.	Abstract
Compound purity	2a	Purity of the compound (and major impurities) must be reported.	Methods
	2b	Papers on mixtures of compounds (e.g., herbal extracts) must be accompanied by evidence demonstrating similar activity of a purified component(s) of that extract and percentage of purity must be stated.	Methods and Results
Extract source and natural product preparation	3a	Full details regarding the provenance and handling of extracts must be provided.	Methods
	3b	The source of the product (i.e., country and region, from the wild or in captivity) should be reported.	Methods
	3c	Extracts must be chemically characterized, and the content of component compound(s) must be measured with validated analytical methods.	Methods
Vehicle effects	4a	Vehicle effects must be clearly reported, with mean ± SEM or *SD*, appropriate statistical analysis and with $n \geq 5$.	Discussion
	4b	Reporting of the minimum concentration of vehicle required to enable solubilization is advised.	Results
	4c	The effect of the vehicle on the responses under study must be reported.	Results
	4d	In cases where the vehicle can affect the response being studied, concentration–response curves for both the vehicle and the compound under investigation must be shown.	Results
Positive control	5	The effect of the compound under investigation should be compared with a clinically effective drug. If the positive control has not been reported, a valid scientific justification must be included (e.g., there are no clinically effective drugs for the specific disease). The size of the effect in relation to the disease under evaluation must be discussed.	Results and/or Discussion
Concentrations in vitro	6a	Rationale for the selection of concentrations used must be provided.	Methods
	6b	Pharmacokinetic data on plasma levels following systemic administration should be considered.	Results and/or Discussion
	6c	Concentrations much higher than the IC_{50} or Ki reported for the compound under investigation must not be used.	Methods
Doses in vivo	7	The rationale for selection of the doses used must be provided. If testing as a potential therapeutic, relevance to the clinical setting must also be provided.	Methods
Route and timing of administration	8	The rational for the selection of the route, timing, and frequency of administration should be provided.	Methods
Toxicity	9	Evidence of safety should be provided. If not available, potential toxicity should be discussed.	Results and/or Discussion
Adherence to *BJP* guidelines	10	*BJP* guidelines must be adhered to using Editorials as a reference (Curtis et al., 2018; George et al., 2017; George et al., 2019; Alexander et al., 2018; Docherty et al., 2019). Checklists are available on *BJP* website.	Methods and Results

