

Role	Description
Conceptualização Conceptualization	Ideas; formulation or evolution of overarching research goals and aims
Gestão dos dados Data curation	Management activities to annotate (produce metadata), scrub data and maintain research data (including software code, where it is necessary for interpreting the data itself) for initial use and later re-use.
Análise dos dados Formal Analysis	Application of statistical, mathematical, computational, or other formal techniques to analyse or synthesize study data
Aquisição de financiamento Funding acquisition	Acquisition of the financial support for the project leading to this publication
Investigação Investigation	Conducting a research and investigation process, specifically performing the experiments, or data/evidence collection.
Metdologia Methodology	Development or design of methodology; creation of models.
Gestão do projeto Project administration	Management and coordination responsibility for the research activity planning and execution.
Gestão de recursos Resources	Provision of study materials, reagents, materials, patients, laboratory samples, animals, instrumentation, computing resources, or other analysis tools.
Software	Programming, software development; designing computer programs; implementation of the computer code and supporting algorithms; testing of existing code components.
Supervisão Supervision	Oversight and leadership responsibility for the research activity planning and execution, including mentorship external to the core team.
Validação Validation	Verification, whether as a part of the activity or separate, of the overall replication/reproducibility of results/experiments and other research outputs.
Visualização Visualization	Preparation, creation and/or presentation of the published work, specifically visualization/data presentation.
Escrita – 1ª versão Writing – original draft	Preparation, creation and/or presentation of the published work, specifically writing the initial draft (including substantive translation)
Escrita – revisão e edição Writing – review & editing	Preparation, creation and/or presentation of the published work by those from the original research group, specifically critical review, commentary or revision – including pre- or post-publication stages.