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Editorial Board

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Dear Editors,

We are pleased to submit our manuscript entitled “Enhancing Clinical Data Warehouses with Provenance and Large File Management: The gitOmmix Approach for Clinical Omics Data” to be considered for publication as an Original Research Paper. This article describes gitOmmix, an open-source tool aiming to complement existing Clinical Data Warehouse systems by implementing the management of large data files (such as those produced by medical imaging or genomics) and their relation with clinical events, through the recording of provenance information. To do so, gitOmmix leverages established file versionning tools (git and git-annex), a standard provenance knowledge representation (W3C PROV-O), and a data model aligning both systems. The core contribution of gitOmmix is that it offers a method and its practical implementation of the operations needed to record, manage, query, and retrieve omics data related to clinical events and vice-versa, enabling further adherence to FAIR principles within CDWs.

We think that the scope of the Journal of Biomedical Informatics is very suitable for our contribution, a tool that enables using and reusing large unstructured data files in association with clinically relevant information, which is central to translational bioinformatics. The fact that ever larger data are generated during routine care, including longitudinal follow-up and involved in complex clinical decision-making, and the value of accurate clinical data in translational research expose the need to facilitate managing longitudinaly and semantically related data. Finally, the design of gitOmmix as an open source and FAIR tool supported by established standards makes it easily extensible and adaptable to existing solutions.

This is original work that is not submitted elsewhere. No other manuscript or material about this work is under review by any journal. The people who revised the manuscript are the co-authors.

Thank you for the consideration of our manuscript for publication in the Journal of Biomedical Informatics.

Sincerely,

Bastien Rance\* and co-authors

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The authors did not have any prior discussion with JBI Editorial Board members.

Bastien Rance