Author's response to reviews

Title: The Cancer Translational Research Informatics Platform

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Author's response to reviews: see over
General Comments

1) Please rewrite/rearrange your abstract to comply with the BMC style for a medical manuscript according to the guidelines provided at the link below:

http://www.biomedcentral.com/info/ifora/abstracts

We have rewritten the abstract to comply with the BMC Bioinformatics abstract requirements

2) Please move your acknowledgements section to the end of the manuscript before the references and include a "competing interests" and "authors' contributions" sections as described below:

We’ve moved the acknowledgements and added competing interests and authors’ contributions sections.

3) Please structure your manuscript to comply with the BMC requirements for a software article:

We have restructured the article.

4) We recommend that you copyedit the paper to improve the style of written English. If this is not possible, you may need to use a professional copyediting service.

We have revised the language of the article.

Referee 2 Comments

Major Compulsory Revisions

In the Implementation section, please describe how caTrip was implemented at Duke in Phase one. Include for example, the services or data sources that were included in the implementation. Please describe the experience of the initial group of users. It also would be beneficial to include an example of one of the scientific use cases and dissect how it is executed within the phase One implementation.

We have included a subsection in the Implementation section to address this. We chose not to dissect the execution of a use case because we believe that the details are too low level and out of scope for this article.
In the Technical Requirements section, please include a very brief summary of the scientific use cases. It is inadequate to direct the readers to the document that is online.

We address the scientific use cases in the Background section. We have revised the Technical Requirements section to reflect this.

Please clarify whether the software is available at no cost for non-commercial use, per the policy of the journal.

We have addressed this in the restructured document.

*Minor Essential Revisions*

In the abstract, please remove references to terms that are not commonly understood or not defined within the abstract such as foreign CDEs and automated honest broker service.

We define or spell out all acronyms upon first use per journal guidelines.

The writing of this paper needs major improvement. There are several typographical errors, spelling errors, and incorrect uses of grammar (e.g., split infinitives, inconsistencies in parallelisms). I have pointed out a few of these below. I recommend the manuscript be reviewed by a language editor prior to resubmission.

We have significantly revised the language of the paper.

*Discretionary Revisions*

In the Distributed Query Engine, an example of how a DCQL breaks up into a CQL would be helpful.

We have determined that this is too low-level of a detail and have not included it in the paper.

*Referee 1*

*Minor Essential Revisions*

The authors introduce the meaning of the abbreviations ER and PR but not of Her-2/neu. Inclusion of a few words to this effect, such as “The human epidermal growth factor receptor 2 (HER-2)/neu (c-erbB-2) gene . . .” would be helpful to readers like me who are neither oncologists nor geneticists.
We have made this modification

On p 16 (my count) the following seems uninformative and redundant:

However, with this comes the flexibility to perform queries not supported by the “Simple Interface”. For example, the user can combine data in more flexible and complex ways.

The second sentence does not give new information and a practical example of what the user really can do would be helpful.

We have modified the text.

There are numerous minor typos.

We have revised the text in its entirety.

Referee 3

1. The paper is too long. A reduced version should improve its quality and should make it easier to read as well.

We have eliminated some content throughout, but we see no sections in their entirety that should be removed.

2. The paper is full of details outside the scientific interest of the research (methods, results, experiments) that should be the focus of the paper.

We believe that the reorganization of the paper should provide a clearer scientific approach.

3. The paper looks more like a report to be delivered to a funding agency rather than a scientific report. In the latter, focus should be made on methods and results, emphasizing the importance and originality of the approach.

We believe that the reorganization of the paper should provide a clearer scientific approach.

4. The organization of the paper is not adequate for a scientific journal. The introduction of a “case study” section at the beginning with an “ideal” situation does not add anything concrete to the paper. It shows a hypothetical context that is not supported later with the actual achievements.

We have reorganized the paper to meet journal specifications.
5. The design objectives of the paper are not concrete. Other similar objectives could be added to the paper. These kinds of objectives are adequate for a report or research proposal but not for a scientific paper. The classical structure Introduction-Background-Methods-Results-Discussion-Conclusions fits much better here. There is no need to change such common approach that provides a clear focus on research and actual achievements.

We have reorganized the paper to meet journal specifications.

6. The technical requirements section include a bullet (“scientific requirements”), which does not seem the best choice. In addition, there are standard methodologies and approaches for this section (e.g., from IEEE) that are more clear and focused. Furthermore, the section is full of acronyms. Some of them are not familiar outside the caBIG project and should be explained in more detail to the readers. Anyway, such long number of acronyms should be avoided.

We removed the technical requirements that do not offer interest outside of the project. The bulleted list has been removed (per next comment).

7. The same can be applied to “Software architecture” and the different “Interface” subsections that have only a limited interest for researchers. All projects are full of these details but only the necessary details are needed, particularly if they introduce some original approach.

We agree – we have trimmed or removed this type of content entirely.

8. Similarly the “Distributed Query Engine” presents 7 different acronyms in just one paragraph, which makes difficult to follow its meaning. A better description of the actual rationale behind should be made. This is not a trivial issue, since there are many different approaches in the literature that should be analyzed, showing the reasons for adopting such approach.

Our goal was to provide an overview of the software, not provide a detailed analysis of the design decisions around a single component. While this may be of interest, we believe that it is out of the scope of this paper. Each of the acronyms is spelled out, and the acronyms in this paragraph generally fall into parentheses.

9. The different subheadings of the paper, in general, present a predominance of technical details at a low level, missing the important issues. For instance, to include a section about installation requirements do not appear interesting from a scientific perspective. A lot of such information could be easily reduced leading to a more focused and coherent paper.
We have removed many of the small subsections that are less relevant in the restructuring, including the Installation Requirements section.

10. The reference section is too short and not relevant for this paper. There are many research papers published in the last decade addressing relevant issues that should be analyzed and discussed.

We believe that the references are sufficient to provide context for the software and point users to other scientific works that are of interest or referenced in paper. We did not reference detailed papers on federated query because that level of analysis is out of scope for this paper.

11. Finally, the authors should emphasize where is the originality of the approach. There are many related approaches in the literature and it is not clear what is actually new and improved here from a research perspective.

We believe that the references are sufficient. We can specific approaches that the editor or referee believes that we should reference.