

2020-09-04 Executive Committee Meeting notes

Date

04 Sep 2020

Attendees

- [Beyers, Matthew \(NIH/NCI\) \[C\]](#)
- Anju, Amy, Connie, Debbie, John, Ralph, Toby
- Regrets: Erika

Agenda

1. User Acceptance Testing: We've identified that we'd like to develop a test case and have it evaluated by several (3-4) individuals. Who should we ask to do this? What questions should we ask them to answer? We probably need to define a small group to write out the process and questions we'd like answered.
2. Gathering data source ideas. Toby has suggested that we might want to look at external data sources such as overseas. Do we have ideas where we should look first?
3. Non-Cancer canine data from Elaine Ostrander – what can we do to facilitate this?
4. Enhancing COTC007b – how can we get additional data for this study (the system currently only has clinical data)?

Discussion items

Time	Item	Who	Notes
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User Acceptance Testing		<p>Ask a simple question we know we can get an answer to. Tests if they can go in, find the data, do the analysis and provide the answer. Suggestion: How many dogs/files are associated with a set of characteristics.</p> <p>Using the glioma data, PARP inhibitor efficacy? Is there evidence for a targetable drug agnostic of breed and maybe parse</p> <p>Amy suggests putting together a focus group from the glioma community. Pete, Liz Cluhar, Simon Platt, Rene Chambers, Mark Gilbert. How would this change the way you practice medicine or focus your research? ICDC is a cohort building tool. Select equivalent set from GDC and do comparison/analysis of both in SBG. SBG provides analysis tools, allows you to bring in own data/tools. Toby wants to start with simple questions to make sure we can do this and then ratchet it up to more complex questions. Debbie: should we have initial step where we bring in some people just to test navigation. Amy: once navigation is tested, then start iteration to more tools/questions. Focus Group Members: Amy will put together list of members. Debbie will write letter. Could result in publication. Start out working individually and then work together to collaborate on a publication.</p> <p>Connie sent some ideas for a starting point:</p> <p>For the glioma data set (81 samples), for boxers, bulldogs, and terriers vs all other breeds: Some DNA sequence question, e.g. what is the frequency of a particular PDGFRA mutation in one breed group vs the other? Amy – is there a particular PDGFRA (or other) mutation that could be queried? Some histology question, e.g. what is the frequency of a particular histology? Amy – could the particular histology be astrocytoma? Or another suggestion is welcome.</p> <p>From Amy:</p> <p>Suggestions for questions and approach for user acceptance testing:</p> <p>We are interested in opinions of those listed below on their experience with the ICDC infrastructure specific to the glioma dataset (genomics, clinical demographics, MRI data, scanned H&Es). Specifically we would like feedback on: How will access to these dataset in aggregate accelerate your research? What types of questions do you propose using this dataset to answer? What are your needs with regard to tools/software for cloud-based analysis? Is the user interface tractable/"user friendly"?</p> <ol style="list-style-type: none"> Specific to glioma – create a focus group of potential users: <ol style="list-style-type: none"> DVMs: Clinicians: John Rossmeisl/VaTech; Pete Dickinson/UC-D; Liz Pluhar/UMN; Rebecca Packer/CSU; Simon Platt/UGA; Tim Bentley/Purdue DVMs: pathologists: Jey Koehler/Auburn; Kevin Woolard/UC-D; Kara Corps/Ohio State; Andrew Miller/Cornell; Brian Porter/TAMU; Dan Rissi/UGA; Molly Church/Penn; Gerry O'Sullivan/UMN MDs: Clinicians: Renee Chambers/UAB; Mark Gilbert/NCI/CCR/NOB or other NOB clinicians; Elias Sayour/UFL; David Raleigh/UCSF; Graeme Woodworth/UMaryland MDs: pathologists: Ken Aldape/NCI/CCR/Lab of Pathology; Dan Brat/Northwestern; Craig Horbinski/Northwestern; Jason Huse/MD Anderson; Ryan Miller/UAB; Caterina Giannini/Mayo Potential questions: <ol style="list-style-type: none"> Breed-specific questions with regard to pathway-level genomic alterations e.g. do certain breeds/groups of breeds have distinct signatures? Gene signatures and link to druggable targets – comparable to available human data? Correlates between genomics and imaging data – MRI, H&Es, cellular infiltrates and/or tissue archetypes? <p>Analysis will cost - maybe we can establish a credit system so that ICDC is paying compute. Reach out to SBG to see if they have bandwidth to support this group. Matt to reach out to Natalie and Tanja. Include this plan in the letter.</p>
Gathering data source ideas		<p>Look in PubMed. There are institutes at NIH other than NCI that do cancer research - look into these for those that involve canines. Anju: agrees that looking at publications is a great idea. Can we get involved with veterinary oncology communities in various countries? Toby has some contacts at cancer centers in Europe - she could reach out and ask if they know of veterinary oncologists who might be interested. Debbie can reach out to European Veterinary Oncologist Society, Japanese, Brazilians and Australians. Amy suggests ESVOMC - European society for veterinary oncology.... Toby can get in touch with Ed Harlow and see who are the appropriate people to contact within CRUK (Cancer Research UK) & NIH.</p>
Non-Cancer canine data		<p>Doodle Poll for 1st meeting has been sent as of 9/3/20. Looking at dates next week or 4th week in Sept.</p>
Enhancing COTC 007b		<p>Immunoassay data, PK/PD data, Microscopy images tied to microscopy assays (do we want representative image or all images?). Can put values in a spreadsheet - but can be confusing when there's one value (average) and 20 images. Upload quantitative data into commons first, worry about images later. Amy wonders if this data set is useful to the wider audience. Ralph considers this a case study as to how to do this as a procedural issue helping us establish how to do this in the future. Add publication to study in system. Representative images may be loaded for the same purpose - establishing the process - help people understand what values represent. Ralph/Amy/Matt/Phil to meet separately to discuss details. Take values from PK/PD and match to H&E images, matched to case?</p>
Comparative Meningioma Board		<p>200 cases, 1/2 of which have good clinical followup. H&E and panel of 8 IHC markers with emphasis on correlative tumor infiltrates. Amy has assembled hybrid veterinary/physician pathology board. Currently looking at this 200 case set series and creating classification scheme. 70 separate cases will have transcriptomic profiling and will be classified. One of the pathologists on the board is looking at visipharma to analyze. Data expected mid-2021. Can go back and get MRIs from these cases. Nanostring MIS70 panel - does this include human sequences for comparison? MIS70 panel will be ready for end of September. TIS18 is for immuno-oncology in humans. Canine IO and counter-panel gene list available for download. Hard to look at expression in canines without monoclonal antibodies - trying to get around that by using this panel. Question: are the 18 genes in TIS18 (human) included in the MIS70 panel (canines)? Link to Nanostring Canine IO panel: https://www.nanostring.com/download_file/view/2864/10842</p>
		<p>Amy wrote a review recently for Nature and included the ICDC!</p>

Action items

- ☐ Amy to provide list of focus group member suggestions.
- ☐ Debbie to draft invitation letter to focus group members.
- ☐ Debbie to reach out to European, Australian, Japanese and Brazilian Veterinary Oncology Societies to see if there are data sets or clinicians interested in providing data to ICDC.
- ☐ Matt to reach out to SBG/Natalie/Tanja to talk about credit system and bandwidth to support this project. Provide this information to Debbie to include in focus group letter.
- ☒ Matt to setup meeting with Ralph/Amy/Philip to discuss next steps in COTC007B data set.
- ☐ Toby to reach out to cancer centers in Europe for potential new data partners - contact Ed Harlow and CRUK.
- ☐ Anju to search through publications in PubMed for potential new data sets? (not sure about this last one as an action item).