National Cancer Institute (NCI) Integrated Canine Data Commons (ICDC) Steering Committee (SC)

Teleconference Wednesday, January 22, 2020

Participants (*Present)

External Committee Members

Matthew Breen*

Renee Chambers*

Dawn Duval*

Allison Heath*

Will Hendricks

Warren Kibbe*

Debbie Knapp, ICDC-SC Chair*

Cheryl London*

Jeff Trent

Roel Verhaak*

Shaying Zhao*

Internal Committee Members (NCI, National Institutes of Health, and Frederick National

<u>Laboratory for Cancer Research [FNLCR]</u>)

Matthew Beyers*

Allen Dearry

Toby Hecht*

Paula Jacobs*

Tony Kerlavage*

Erika Kim*

Amy LeBlanc*

Christina Mazcko*

Philip Musk*

Elaine Ostrander*

John Otridge*

Ralph Parchment, ICDC-SC Managing Secretary*

Connie Sommers*

Greg Tawa*

Others

Lori Lydard

Tara Whipp

Mary Cerny (writer)*

Opening and Welcome

Drs. Knapp and Parchment opened the meeting at 11:31 a.m. ET and welcomed attendees.

Minutes of the November and December Meetings

The minutes of the November 13, 2019, ICDC-SC meeting were accepted as written.

The following corrections and clarifications were noted for the minutes of the December 18, 2019, ICDC-SC meeting:

- Reference to the "OMA" platform needs to be corrected to the Veterinary Observational Medical Outcomes Partnership (OMOP V5+). Dr. London will provide additional information on this partnership.
- Reference to the NextGenomics meeting needs to be replaced with information about the Paws for a Cure Research Symposium.

Ms. Cerny will revise the December meeting minutes as indicated.

Demonstration: Canine Commons Website

The website for the ICDC has launched and can be found at caninecommons.cancer.gov. Mr. Beyers presented the website, which describes the mission and purpose of the ICDC and its connection to the Cancer Research Data Commons (CRDC). It delineates the ICDC data model, which can be viewed in greater detail via the GitHub link provided on the site, and describes the process for submitting data to, searching, and accessing the data commons. The site provides a link to the DGAB Data Submission Guidelines and an email address that routes all inquiries to a central ICDC "help desk." The site also lists the members of the Steering Committee and their roles on the SC as well as on the DGAB and the BPSC.

The presentation included a demonstration that walked through the key features of the site with a focus on the many ways the site can be searched to identify and sort specific data sets, studies, cohorts, and cases. Search categories can be expanded or collapsed under the frame on the left side of the "cases" page. Thus far, the site includes 2 studies, 144 cases, 136 samples, 331 files, and 0 aliquots. Searches can be done by program (e.g., Comparative Oncology Program [COP]), study, study type, breed, diagnosis, primary disease site, stage of disease, file type (e.g., pathology report, sequence file), and file format (e.g., doc, pdf). Each case includes details about the dog enrolled in a study in addition to information such as date of diagnosis, study and study arm assignment, date of registration, and study site. Data and files flagged by those searching the site can be saved online to a "My Cases" folder (or folders) created by the user, who can also make notes about the saved items. The data can also be downloaded as a "manifest" file that opens into an Excel spreadsheet; data are pulled out from the cloud resources for analysis.

All data available on the ICDC include what is being submitted with the clinical studies, including (where available) treatment-naïve samples and sequences files for both normal and tumor tissue. It was noted that the data belong to the submitters. The ICDC uses study-code-based IDs to identify cases without creating an entirely new identifier; the ICDC case ID

includes a unique ICDC prefix along with the existing study code. Currently, is not possible to update individual cases, but researchers with cumulative data will be able to add new information to cohorts already in the system. There is no mechanism in place for tracking when and how a case or file has been updated, but such a mechanism is being considered. A means for identifying data associated with a specific publication is also in development. One approach to distinguishing between partial and augmented data sets might be through use of Digital Object Identifier (DOIs). Linking data to the Sequence Read Archive (SRA) is under consideration.

Reports from the Working Groups (WGs)

Data Governance Advisory Board (DGAB) Chair's Report

The DGAB has started reviewing submissions for proposals for the ICDC. To date, one data set that has been reviewed by both the DGAB—which recommended the proposal for publication—and the NCI Senior Advisory Committee—which makes the final decision regarding data and proposal prioritization—has been approved. That data set is now undergoing clean-up for the ICDC. Three additional data sets have been submitted or are pending. The DGAB has found the process to be informative and looks forward to more submissions. Committee members who have submitted or are in the process of submitting proposals have found the process to be straightforward.

Best Practices Subcommittee (BPS) Chair's Update

The most recent meeting of the BPS was January 21, 2020. The BPS has continued its review of the DGAB Data Submission Guidelines and has put together a list of field types and values for various studies, cases, and other parameters used for data submission. Discussions will continue in order to reach an agreement on what the standard formats for these parameters should be.

The following updates were provided for each of the BPS WGs:

Imaging WG

The team is working with other sites to collect more images and to better understand and further refine the process for selecting images for the ICDC. The team is also discussing how to handle dates within images and studies.

Clinical and Pathology WG

The team is focused on a common data platform and use of OMOP and how to bring in veterinary electronic medical records in a consistent manner. A demonstration is expected in the near future.

Genomics WG

The WG continues to work on developing a framework to identify and establish tools and opportunities for cancer-related pipelines, with a focus on cloud-based pipelines for analysis of genomics data.

Immunology WG

The WG is curating a list for IHC and cytometry and is interested in PRECINT's use of the nanostring platform to evaluate immune shifts following treatment.

Other Issues

None

Administrative Items

Next ICDC-SC Meeting

The date and time of the next meeting of the ICDC-SC are to be determined. Dr. Parchment will forward the meeting information and materials ahead of the teleconference.

DGAB and BPS Meetings

Dates and times of other upcoming meetings are still to be determined. Details will be distributed to committee members as they become available.

Honoraria

A copy of the honorarium reimbursement form for ICDC-SC meeting participation was distributed ahead of the meeting. External members were reminded to forward the paperwork for their honoraria to Ms. Lydard. Anyone having problems with the form or reimbursement should contact Dr. Parchment.

Action Items

- Ms. Cerny will revise the minutes of the December 2019 ICDC-SC meeting as reviewed.
 Dr. London will forward information on the OMOP V5+ to Ms. Cerny for incorporation into the minutes.
- Topics for future meetings should be forwarded to Drs. Knapp and Parchment.
- Dr. Parchment will forward the logistics information and materials for the next teleconference as they become available.

Adjournment

The meeting was adjourned at 12:26 p.m. ET.