CHILDHOOD CANCER CLINICAL DATA COMMONS (C3DC)

Release 5 (version 1.4.0)
03/05/2025

Overview

The March release brings key enhancements to the C3DC application, including new datasets, updates to existing datasets, and the introduction of the **Cohort Analyzer**. These updates improve data exploration and enhance the user experience.

Data Updates

This release includes the addition of 2 new datasets, updates to existing one, and the temporary removal of two, ensuring the latest information is available for research and exploration:

- **New Datasets**:
  - phs000469 (TARGET: Cancer Model Systems (MDLS): Cell Lines and Xenografts (including PPTP)
  - phs000468 (TARGET: Osteosarcoma (OS))
- **Updated Dataset:**
  - phs002517 (Molecular Characterization across Pediatric Brain Tumors and Other Solid and Hematologic Malignancies for Research, Diagnostic, and Precision Medicine)
- **Temporarily Removed Datasets:**
  - phs003111 (Clonal Evolution During Metastatic Spread in High-Risk Neuroblastoma)

- phs002620 (Feasibility and Clinical Utility of Whole Genome Profiling in Pediatric and Young Adult Cancers)

General Application Updates

This release introduces significant updates to the user interface and underlying data model for enhanced search and analysis capabilities.

- **Data Model Enhancements:**
  - New properties added to support genetic analysis, data organization, and usability
    genetic_analysis:
    - Props:
      - genetic_analysis_id
      - gene_symbol
      - transcript
      - age_at_genetic_analysis
      - genomic_source_category
      - reported_significance
      - reported_significance_system
      - hgvs_coding
      - hgvs_protein
      - hgvs_genome
      - allelic_ratio
      - vaf_numeric
      - alteration
      - dna_index_numeric
      - iscn
      - status
      - second_gene_symbol
  - Updated permissible values to better align with research needs.
- **Cohort Selector Improvements:**
  - Users can now create and manage up to **20 cohorts** (previously 10).
- **New Feature: Cohort Analyzer**
  - Compare up to **three cohorts** using an interactive **Venn diagram** and data table.
  - Select multiple properties (Participant ID, Diagnosis, Treatment) for comparison.
  - Export results, including the data table and Venn diagram, for further analysis or integration into other platforms.
  - Apply advanced filters (diagnosis, treatment subcategories) for deeper analysis.

Support & Inquiries

For additional support or questions, contact the **Childhood Cancer Data Initiative** at NCIChildhoodCancerDataInitiative@mail.nih.gov.