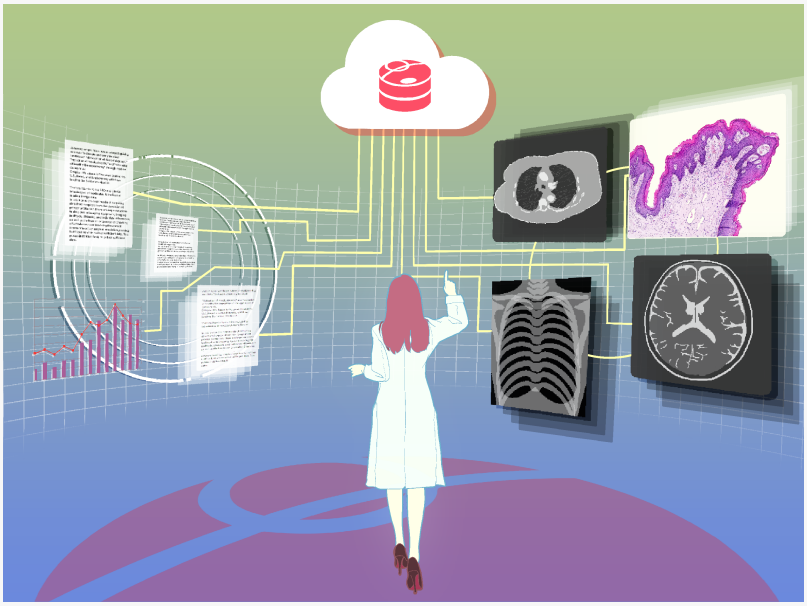
Callisto Launches Radiological/Pathological Image Data Platform "Callisto DataHub"

Callisto Inc. has launched "Callisto DataHub," a Japan-based medical image data platform ready-to-use for medical AI/drug discovery AI R&D.



Callisto DataHub

TOSHIMA, TOKYO, JAPAN, March 14, 2024 /EINPresswire.com/ -- The University of Tokyo-originated startup, Callisto Inc. has launched "Callisto DataHub," a medical image data platform ready-to-use for medical AI/drug discovery AI R&D. To mark this release, we are offering a free dataset featuring 152 lung cancer CT cases with detailed annotations of lung cancer and lung field segmentations. Callisto DataHub serves as a platform to buy anonymized datasets collected from Japanese hospitals/clinics, including a variety of high-quality, annotated radiological and pathological scans, alongside clinical and molecular diagnostic data.

 Characteristics of Datasets on Callisto DataHub
Data from Japan
Collected from Japanese hospitals and clinics, making it particularly suitable for R&D within the country or for R&D involving Asian demographics.
No Ethical Review Required
All data have already undergone ethical reviews for secondary use, eliminating the need for further ethical reviews.
Anonymized
Ensured through legal compliance to protect privacy.
Carefully-Curated
Data unsuitable for medical AI applications, such as cases with complications or excessive noise, are excluded.
Standardized

Comprehensive standardization across images, clinical data, radiology/pathology reports, and molecular diagnostic results minimizes further pre-processing and verification efforts.
Annotated and Double-Checked
Expert radiologists/pathologists provide annotations and validations for disease segmentations and radiology/pathology reports, so no extra annotation work is necessary. Note: Annotations are generally only applicable for major diseases with significant client interest.

 Types of Datasets on Callisto DataHub
Radiological Scans
Includes CT scans (e.g., lung nodule, normal abdomen, brain tumor) and MRI scans (e.g., brain tumor, breast cancer, prostate cancer).
Pathological Scans
Includes Whole Slide Image (WSI) scans (e.g., lung cancer, interstitial pneumonia, breast cancer).
Annotations
Includes disease segmentations and radiology/pathology reports, annotated and verified by expert radiologists/pathologists (lung field segmentations are also available).
Clinical Information
Includes age, sex, height, weight, medical history/family history, surgical history, main complaint, major symptoms/progress, nursing observation record, referring department, and diagnosis.
Molecular Diagnostic Results
Includes positive/negative results for molecules, such as ER, PgR, HER2 in the case of breast cancer.

 Use Cases of Callisto DataHub's Datasets
Medical AI
Includes image diagnosis, automatic contour extraction, and dose distribution creation. An example of Callisto's Customers includes Fujifilm.
Drug Discovery AI
Includes drug screening, biomarker discovery, and therapeutic target identification.
Clinical Trials
Includes clinical trial design, drug toxicity/effectiveness evaluation, and histopathological assessment.

 Ecosystem Realized by Callisto DataHub
Hospitals & Clinics: Provide anonymized medical images and clinical information, possibly including molecular diagnostic results.
Callisto: Conducts data selection, annotation, and standardization to prepare datasets ready-to-use for medical AI R&D.
AI companies, biopharma & Medical device manufacturers: Purchase datasets for medical AI, drug discovery AI, clinical trials, etc, and may delegate AI R&D or consulting to Callisto. Revenue is shared with the medical facilities. Note: Regarding this business model, our paper has been accepted to "SPIE Medical Imaging 2024," and our patent application is in progress.

 Free Distribution of Lung Cancer CT Dataset

To celebrate the launch of DataHub, we are excited to offer this annotated lung CT cancer dataset for free. This dataset enhances the publicly-available "Lung-PET-CT-Dx" dataset from The Cancer Imaging Archive with our expert radiologists' double-checked annotations, including detailed segmentations of lung cancer and lung fields. Our goal is to accelerate R&D in medical AI, drug discovery AI, and oncology by providing high-quality, annotated data covering various lung cancer types, such as adenocarcinoma, small cell carcinoma, squamous cell carcinoma, and large cell carcinoma. Each case is enriched with clinical information sourced from the original dataset, offering comprehensive context for developers and researchers. If you find this dataset valuable, we encourage you to consider purchasing our private medical image datasets listed on DataHub to further enhance your R&D efforts——We can provide dataset samples, dataset customization, and data-related consulting services, including medical feedback, customized AI development, and regulatory application support for entering the Japanese medical device market.

 Company Profile
Name: Callisto Inc.
Business Activities: 1. Operating a medical image data platform for medical AI R&D. 2. developing custom drug discovery AI/medical AI solutions.
Executives: CEO Changhee Han (Kallis) and External Director Yumi Kato.
Location: DaiyaGate Ikebukuro 5F, 1-16-15 Minami Ikebukuro, Toshima-ku, Tokyo 171-0022.
Established: June 27, 2022.

For inquiries about dataset purchases, contracting or consulting for drug discovery AI/medical AI R&D, interviews, collaborations, investments, please contact us.

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