



CENTER OF DIAGNOSTICS AND TELEMEDICINE

MosMedData: Expanded set of brain CT scans with and without signs of intracranial hemorrhage, supplemented with clinical and technical parameters

About Dataset

This dataset contains the results of head CT with and without (normal) signs of intracranial hemorrhage (supplemented with clinical and technical parameters). The research data were collected in the radiology departments of the Moscow medical facilities between 05.05.2020 and 08.01.2023.

- The dataset is enriched with clinical data
- Signs of ICH
- Signs of epidural hemorrhage
- Signs of subarachnoid hemorrhage
- Signs of subdural hemorrhage
- Signs of intracerebral hemorrhage
- Signs of multiple hemorrhages
- Signs of a skull fracture
- Signs of combined pathologies
- Signs of a break in the cerebrospinal fluid spaces
- Radiology text report
- The dataset is enriched with and technical data
- SliceThickness kVp (kiloVolt Peak)
- XRayTubeCurrent (mA)
- Convolution Kernel
- Manufacturer

Disclaimer

Scope of use of this dataset:

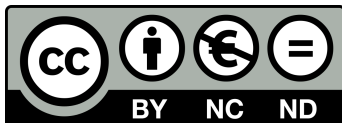
- development, training and validation of AI-powered services (incl. those based on the computer vision technologies) capable of detecting the intracranial Hemorrhage signs;
- rising awareness among health professionals and the general public.

The license permits **free use (sharing)** of this dataset which includes making copies and sharing on any medium or in any format, **under the following conditions**:

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- using this dataset for commercial purposes;
- sharing a modified or transformed dataset or any new dataset built upon the dataset;
- providing a fee-based access to the dataset;
- preventing the sharing of the dataset through any technical methods.



General Information

Dataset Title

MosMedData Expanded set of brain CT scans with and without signs of intracranial hemorrhage, supplemented with clinical and technical parameters

Internal Code

HEMORRHAGE

Annotation Class

C3

Verification

Review by a specialist

Keywords

MosMedData, artificial intelligence, CT, head, brain, hemorrhage

Language

English, Russian

Funding Sources

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<https://rscf.ru/project/22-25-20231>

Dataset Version

1.0.0

Permanent link

<https://mosmed.ai/datasets/>

Release Date

12.10.2023

Affiliation and Contributors

Contributors

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Data Structure

```
.
|-- dataset_registry.xlsx
|-- README_EN.md
|-- README_RU.md
|-- README_EN.pdf
|-- README_RU.pdf
`-- studies
    |--studyUID_X
    |   |-- seriesUID_X
    |   |   |-- UID_X.dcm
    |   |   |-- UID_X.dcm
    |   |   `-- ...
    |   |
    |   `-- seriesUID_X
    |       |-- UID_X.dcm
    |       |-- UID_X.dcm
```

```
|      \-- ...
|--studyUID_X
|      |-- seriesUID_X
|      |      |-- UID_X.dcm
|      |      |-- UID_X.dcm
|      |      \-- ...
|      \-- seriesUID_X
|          |-- UID_X.dcm
|          |-- UID_X.dcm
|          \-- ...
\--...
```

- README_EN.md and README_RU.md contain general information about the dataset in the Markdown format in English and Russian languages, respectively. README_EN.pdf and README_RU.pdf contain the same information in the PDF format.
- dataset_registry.xlsx contains a list of studies included in the dataset and the path to the corresponding dataset file.
- The Studies folder contains studyUID-X folders, each of which contains studies in DICOM format.

Data Overview

Property	Value
Number of studies, pcs.	800
Number of patients, ppl.	800
Distribution by sex,ppl (M/ F)	459/ 338
Distribution by age, years (min./ median/ max.)	19/ 57/ 100
Number of studies in each category, psc. (With pathology/ Without pathology)	400/ 400

Sharing and Access Information

License

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Citation

Recommended citation:

Datasets of Research and Practical Clinical Center for Diagnostics and Telemedicine Technologies of the Moscow Health [Electronic resource]. – 2022. – URL: <https://mosmed.ai/datasets/>

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