

# Deep Learning for Precision Diagnostics of Brain Tumors

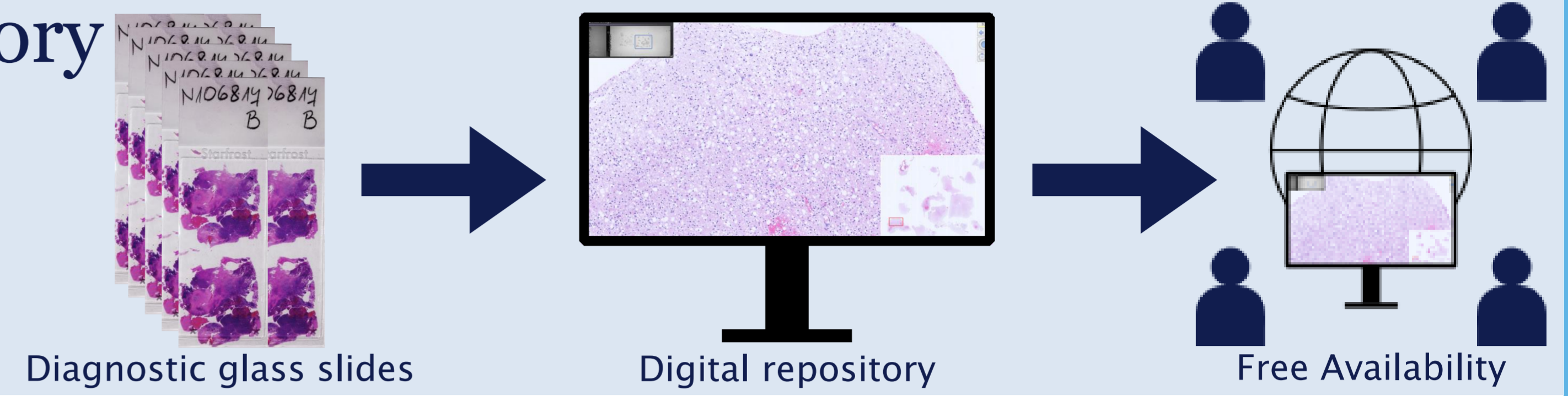
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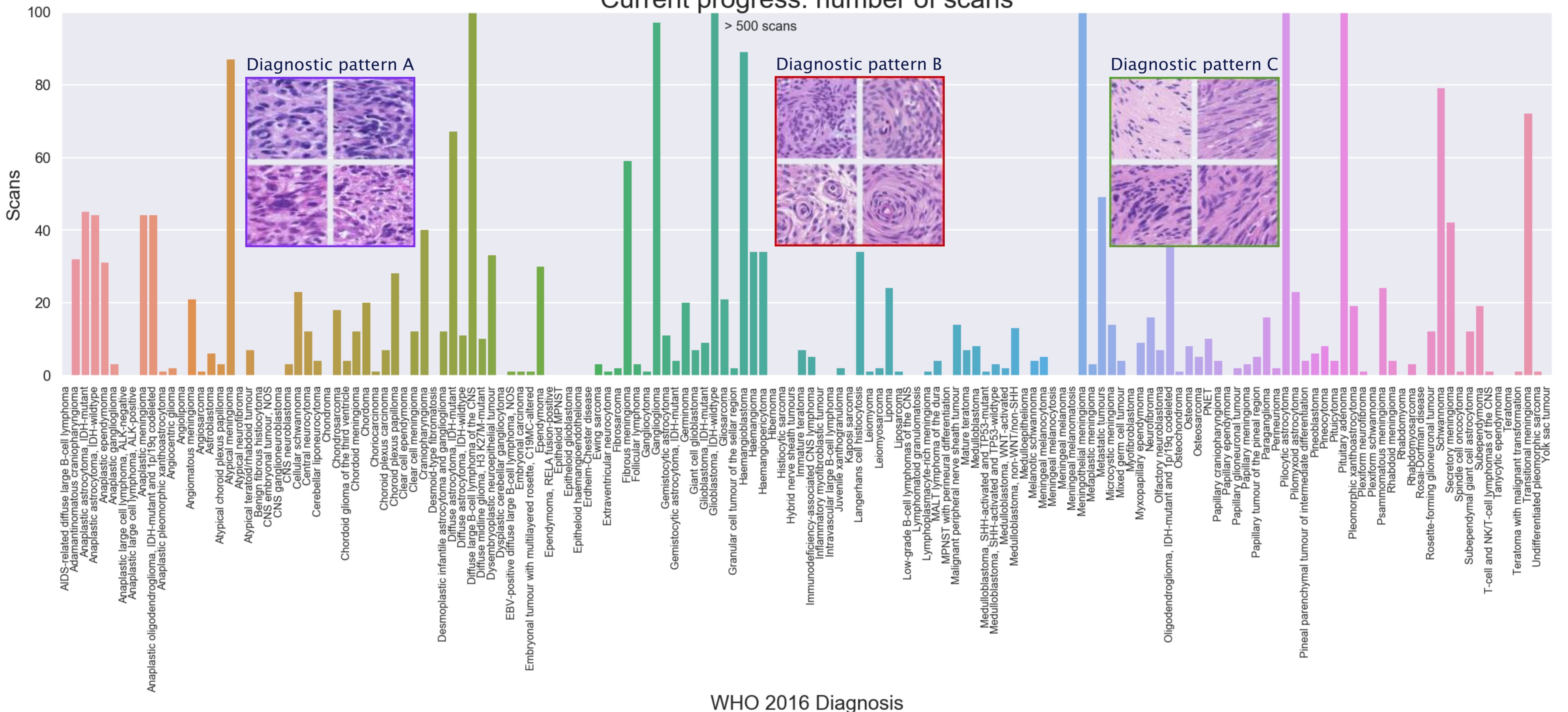
## Objective 1: Compile a digital histology repository

Needed for

- Training of AI-based **diagnostic algorithms**
- **Training resource** for neuropathologists
- **Independent validation dataset** for digital pathology projects

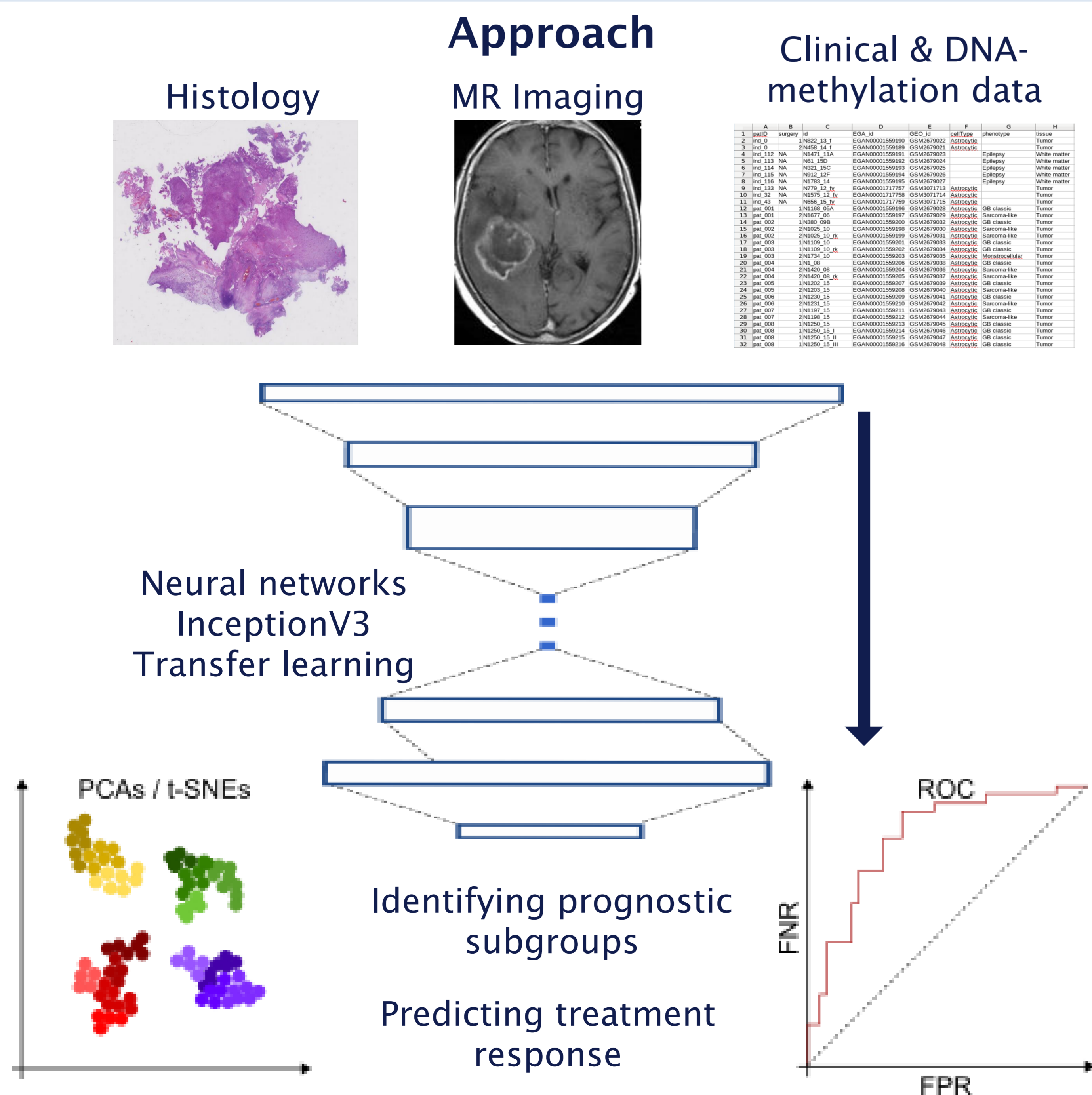
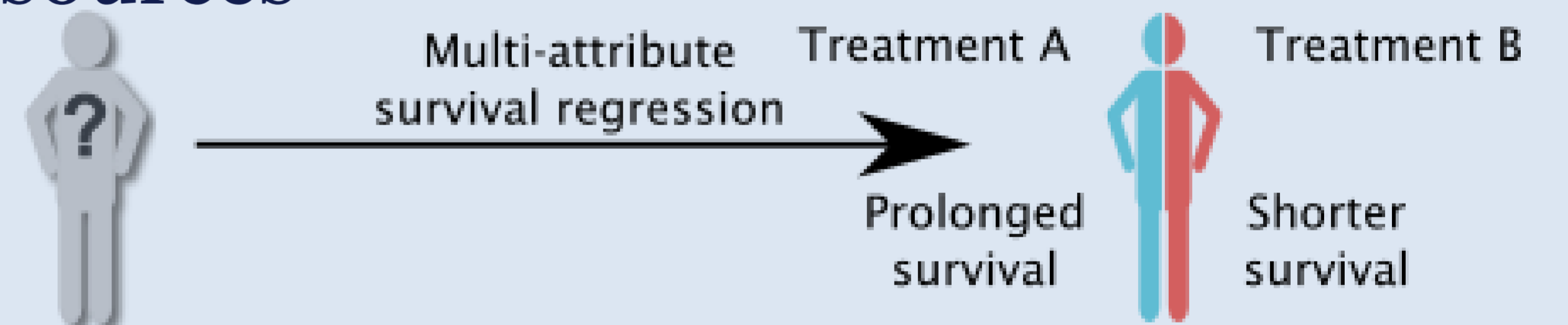


### Current progress: number of scans



## Objective 2: Predict outcome based on multiple data sources

- Focus on **glioblastoma**, the most malignant brain tumor
- Link the digital slides with a **fully annotated clinical cohort**
- Train deep learning algorithms on the data for **disease and outcome modeling**



### Unique challenges of histological data

#### Stain color variation



#### Generalization from small image patches to whole slide scan

