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* You should state whether an appropriate sample size was computed when the study was being designed
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This manuscript describes a new resource for hosting post-mortem datasets associated with existing or ongoing studies, the *Digital Brain Bank*. The number of samples provided with each dataset is provided in Table 1 in the manuscript. As the manuscript describes a data resource rather than a specific study, further details of sample size estimation outlined above do not apply to our submission.

**Replicates**

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Details of exclusion/inclusion criteria for datasets uploaded to the *Digital Brain Bank* resource are provided in the *Methods* section under the *Datasets*, *Conditions for Data Uploading* and *Types of Data Provided* subheadings. As the manuscript describes a data resource rather than a specific study, further details of replicates outlined above do not apply to our submission.

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As the manuscript describes a data resource rather than a specific study, details of statistical analysis outlined above do not apply to our submission. However, to demonstrate the potential of the data provided in the *Digital Brain Bank* resource, a single example cohort analysis was performed. Results of this analysis are provided in *Figure 3c*. Details of the methodology and statistical analysis for this cohort analysis are provided in the *Supporting Information* under the *Human ALS MRI-Histology Callosum analysis* subheading.

(For large datasets, or papers with a very large number of statistical tests, you may upload a single table file with tests, Ns, etc., with reference to sections in the manuscript.)

**Group allocation**

* Indicate how samples were allocated into experimental groups (in the case of clinical studies, please specify allocation to treatment method); if randomization was used, please also state if restricted randomization was applied
* Indicate if masking was used during group allocation, data collection and/or data analysis

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One cohort dataset provided in the first release to the *Digital Brain Bank* (*Human ALS MRI-Histology* dataset) contains two groups of post-mortem brains (control and ALS brains). These brains were allocated to control and ALS groups by the Oxford Brain Bank, as noted in the *Results* section (*Digital Pathologist* subheading).

**Additional data files (“source data”)**

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* Where provided, these should be in the most useful format, and they can be uploaded as “Source data” files linked to a main figure or table
* Include model definition files including the full list of parameters used
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* Avoid stating that data files are “available upon request”

Please indicate the figures or tables for which source data files have been provided:

The *Digital Brain Bank* is a data resource. All datasets described in this manuscript (*Table 1*) are available through the *Digital Brain Bank*, with details of access provided within the manuscript (*Results* section - *Requirements for Data Access and Referencing Datasets* subheading) and on the website ([https://open.win.ox.ac.uk/DigitalBrainBank/](https://open.win.ox.ac.uk/DigitalBrainBank/#/)).

Code for the *Digital Brain Bank* resource is available through GitLab (<https://git.fmrib.ox.ac.uk/thanayik/dbb>), linked in the manuscript (*Results* section – *Tview* subheading) and on the *Digital Brain Bank* website.

When available, details of associated processing code for each dataset (*Table 1*) is linked to the dataset's Information page on the *Digital Brain Bank* website, as noted in the manuscript (*Methods* section - *Types of Data Provided* subheading) .

Source data for the corpus callosum analysis in Fig 3c is additionally provided as a Supplementary File (*Figure 3c – Source Data*).