Supplementary materials

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# Supplementary Tables

## ST 1: Change in data availability statement openness by preprint decision category and journal policy

| **Preprint decision** | **Open data policy** | **Number of journals  (N)** | **Number of records  (N)** | **Open at preprint  % (N)** | **Open at publication  % (N)** | **Change from preprint to publication** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **More open  (N)** | **More closed  (N)** | **No change  (N)** |
| **(1) Data not made available** | Does not require open data | 12 | 13 | 0% (0) | 23.1% (3) | 3 | 0 | 10 |
| Requires open data | 3 | 7 | 0% (0) | 28.6% (2) | 2 | 0 | 5 |
| **(2) Data available on request to authors** | Does not require open data | 31 | 33 | 0% (0) | 9.1% (3) | 3 | 0 | 30 |
| Requires open data | 5 | 11 | 0% (0) | 63.6% (7) | 7 | 0 | 4 |
| **(3) Data will be made available in the future (link provided)** | Does not require open data | 2 | 2 | 0% (0) | 50% (1) | 1 | 0 | 1 |
| Requires open data | 1 | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **(4) Data will be made available in the future (no link provided)** | Does not require open data | 4 | 4 | 0% (0) | 75% (3) | 3 | 0 | 1 |
| Requires open data | 3 | 3 | 0% (0) | 66.7% (2) | 2 | 0 | 1 |
| **(5) Data available from central repository (access-controlled or open access), but insufficient detail available to find specific dataset** | Does not require open data | 17 | 21 | 0% (0) | 0% (0) | 0 | 0 | 21 |
| Requires open data | 8 | 15 | 0% (0) | 33.3% (5) | 5 | 0 | 10 |
| **(6) Data available from central access-controlled repository, and sufficient details included to identify specific dataset e.g. via extract or accession ID or date stamp** | Does not require open data | 2 | 2 | 0% (0) | 0% (0) | 0 | 0 | 2 |
| Requires open data | 1 | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **(7) Data available in the manuscript/supplementary files** | Does not require open data | 9 | 9 | 100% (9) | 55.6% (5) | 0 | 4 | 5 |
| Requires open data | 2 | 8 | 100% (8) | 100% (8) | 0 | 0 | 8 |
| **(8) Data available via a online repository that is not access-controlled e.g. GitHub, Zenodo** | Does not require open data | 10 | 10 | 100% (10) | 60% (6) | 0 | 4 | 6 |
| Requires open data | 5 | 11 | 100% (11) | 100% (11) | 0 | 0 | 11 |

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## ST 2: Change in data availability statement openness by journal

| **Journal** | **Open data policy** | **Number of records  (N)** | **Open at preprint  % (N)** | **Open at publication  % (N)** | **Change from preprint to publication** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **More open  (N)** | **More closed  (N)** | **No change  (N)** |
| **Acta Neuropathologica Communications** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Alzheimer's Research & Therapy** | Requires open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Annals of the Rheumatic Diseases** | Does not require open data | 2 | 0% (0) | 50% (1) | 1 | 0 | 1 |
| **Archives of Public Health** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Asia-Pacific Journal of Ophthalmology** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **BMC Cancer** | Does not require open data | 2 | 50% (1) | 50% (1) | 1 | 1 | 0 |
| **BMC Endocrine Disorders** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **BMC Medicine** | Does not require open data | 2 | 50% (1) | 50% (1) | 1 | 1 | 0 |
| **BMC Ophthalmology** | Does not require open data | 1 | 100% (1) | 0% (0) | 0 | 1 | 0 |
| **BMC Pediatrics** | Does not require open data | 1 | 0% (0) | 100% (1) | 1 | 0 | 0 |
| **BMC Public Health** | Does not require open data | 1 | 100% (1) | 100% (1) | 0 | 0 | 1 |
| **BMJ** | Does not require open data | 2 | 50% (1) | 0% (0) | 0 | 1 | 1 |
| **BMJ Global Health** | Does not require open data | 3 | 0% (0) | 33.3% (1) | 1 | 0 | 2 |
| **BMJ Open** | Does not require open data | 3 | 33.3% (1) | 33.3% (1) | 1 | 1 | 1 |
| **BMJ Open Quality** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Cell** | Requires open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Cell Discovery** | Requires open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Clinical Epigenetics** | Does not require open data | 2 | 0% (0) | 0% (0) | 0 | 0 | 2 |
| **Clinical Infectious Diseases** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **EBioMedicine** | Requires open data | 1 | 0% (0) | 100% (1) | 1 | 0 | 0 |
| **EClinicalMedicine** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Egyptian Journal of Medical Human Genetics** | Does not require open data | 1 | 100% (1) | 0% (0) | 0 | 1 | 0 |
| **Epidemics** | Does not require open data | 1 | 100% (1) | 100% (1) | 0 | 0 | 1 |
| **Epidemiology** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **ESMO Open** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **European Psychiatry** | Does not require open data | 2 | 0% (0) | 0% (0) | 0 | 0 | 2 |
| **European Respiratory Journal** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Eurosurveillance** | Does not require open data | 1 | 100% (1) | 100% (1) | 0 | 0 | 1 |
| **Experimental Eye Research** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **F1000Research** | Requires open data | 4 | 0% (0) | 75% (3) | 3 | 0 | 1 |
| **Family Practice** | Does not require open data | 1 | 100% (1) | 100% (1) | 0 | 0 | 1 |
| **Frontiers in Bioengineering and Biotechnology** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Frontiers in Immunology** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Frontiers in Integrative Neuroscience** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Frontiers in Medicine** | Does not require open data | 2 | 0% (0) | 0% (0) | 0 | 0 | 2 |
| **Frontiers in Neurology** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Frontiers in Nutrition** | Does not require open data | 1 | 100% (1) | 100% (1) | 0 | 0 | 1 |
| **Frontiers in Psychiatry** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Frontiers in Public Health** | Does not require open data | 2 | 50% (1) | 50% (1) | 0 | 0 | 2 |
| **Gates Open Research** | Requires open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Genetics** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Genetics in Medicine** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Genome Medicine** | Does not require open data | 2 | 50% (1) | 50% (1) | 0 | 0 | 2 |
| **Human Brain Mapping** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Human Molecular Genetics** | Does not require open data | 1 | 100% (1) | 0% (0) | 0 | 1 | 0 |
| **Implementation Science Communications** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **International Journal of Behavioral Nutrition and Physical Activity** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **International Journal of Cancer** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **International Journal of Health Geographics** | Does not require open data | 2 | 0% (0) | 0% (0) | 0 | 0 | 2 |
| **International Journal of Infectious Diseases** | Requires open data | 2 | 0% (0) | 0% (0) | 0 | 0 | 2 |
| **JAMA Network Open** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Journal of Clinical Medicine** | Requires open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Journal of Clinical Pathology** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Journal of Experimental Orthopaedics** | Does not require open data | 1 | 0% (0) | 100% (1) | 1 | 0 | 0 |
| **Journal of Infection** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Journal of Medical Internet Research** | Does not require open data | 1 | 100% (1) | 0% (0) | 0 | 1 | 0 |
| **Journal of Neurology, Neurosurgery & Psychiatry** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Journal of Oncology** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Journal of Pregnancy** | Does not require open data | 1 | 0% (0) | 100% (1) | 1 | 0 | 0 |
| **Journal of The Royal Society Interface** | Requires open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Journal of Virology** | Requires open data | 1 | 100% (1) | 100% (1) | 0 | 0 | 1 |
| **mBio** | Requires open data | 1 | 0% (0) | 100% (1) | 1 | 0 | 0 |
| **Molecular & Cellular Proteomics** | Requires open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Molecular Autism** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Multiple Sclerosis Journal** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Nature Machine Intelligence** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Nature Medicine** | Does not require open data | 4 | 0% (0) | 0% (0) | 0 | 0 | 4 |
| **NeuroImage: Clinical** | Does not require open data | 2 | 0% (0) | 0% (0) | 0 | 0 | 2 |
| **Neurology** | Does not require open data | 2 | 0% (0) | 50% (1) | 1 | 0 | 1 |
| **Neurology - Neuroimmunology Neuroinflammation** | Does not require open data | 1 | 100% (1) | 100% (1) | 0 | 0 | 1 |
| **Occupational and Environmental Medicine** | Does not require open data | 1 | 0% (0) | 100% (1) | 1 | 0 | 0 |
| **PeerJ** | Requires open data | 1 | 0% (0) | 100% (1) | 1 | 0 | 0 |
| **PLOS Computational Biology** | Requires open data | 2 | 50% (1) | 100% (2) | 1 | 0 | 1 |
| **PLOS Medicine** | Requires open data | 1 | 0% (0) | 100% (1) | 1 | 0 | 0 |
| **PLOS Neglected Tropical Diseases** | Requires open data | 2 | 50% (1) | 50% (1) | 0 | 0 | 2 |
| **PLOS ONE** | Requires open data | 31 | 41.9% (13) | 67.7% (21) | 8 | 0 | 23 |
| **PLOS Pathogens** | Requires open data | 1 | 100% (1) | 100% (1) | 0 | 0 | 1 |
| **Prostate Cancer** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Psychiatry Research** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Respiratory Research** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Science** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Scientific Data** | Requires open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Scientific Reports** | Does not require open data | 6 | 16.7% (1) | 16.7% (1) | 0 | 0 | 6 |
| **Supportive Care in Cancer** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Swiss Medical Weekly** | Does not require open data | 1 | 100% (1) | 100% (1) | 0 | 0 | 1 |
| **The British Journal of Psychiatry** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **The Lancet Infectious Diseases** | Does not require open data | 1 | 100% (1) | 100% (1) | 0 | 0 | 1 |
| **Translational Psychiatry** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Vaccine** | Does not require open data | 1 | 0% (0) | 0% (0) | 0 | 0 | 1 |
| **Wellcome Open Research** | Requires open data | 2 | 100% (2) | 100% (2) | 0 | 0 | 2 |

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# Supplementary Materials

## SM 1: decision examples for data availability statements meeting mutliple categories

For items that met the criteria for multiple categories (e.g. “Most of the data analyzed in this manuscript are provided either within the manuscript itself, or in the manuscript posted by Sasani et al. on bioRxiv at <https://www.biorxiv.org/content/10.1101/552117v2> and its accompanying links; additional data may be accessed by contacting the corresponding author (Dr. Cawthon).”), we took a conservative approach, and categorized them based on the least permissive aspect of the statement. This approach was taken on the basis that ***all*** data must be available - for example, in the above statement, the additional information that is available on request may be required in order to reproduce the analysis.