Title: Hyperacute prediction of long-term functional outcome in spontaneous intracerebral haemorrhage: systematic review and meta-analysis

Supplementary figures and tables

**Supplementary Figure 1:** Sensitivity analysis: Fixed effect meta-analysis of association between poor outcome and patient characteristics and presenting symptoms.

**Supplementary Figure 1:** Sensitivity analysis: Fixed effect meta-analysis of association between poor outcome and features on CT.

**Supplementary Table 1:** PRISMA Checklist
**Supplementary Table 2:** Search strategy
**Supplementary Table 3:** Study details
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**Supplementary Figure 1**: Fixed effect meta-analysis of association between poor outcome and patient characteristics and presenting symptoms.

| Marker    | OR (95% CI)       | p    | heterogeneity (I²) |
|-----------|-------------------|------|--------------------|
| Age       | 1.06 (1.05, 1.06) | <0.001 | 39.7%              |
| Pre mRS   | 1.73 (1.52, 1.96) | <0.001 | 0.00%              |
| GCS       | 0.88 (0.87, 0.90) | <0.001 | 87.3%              |
| NIHSS     | 1.12 (1.11, 1.13) | <0.001 | 87.5%              |
| Systolic BP| 1.00 (1.00, 1.01) | .44  | 79.7%              |
**Supplementary Figure 2:** Sensitivity analysis: Fixed effect meta-analysis of association between poor outcome and features on CT.

| Marker         | OR (95% CI)    | p   | heterogeneity (I²) |
|----------------|----------------|-----|--------------------|
| Volume         | 1.05 (1.04, 1.05) | <0.001 | 96.3%               |
| IVH            | 1.86 (1.66, 2.09) | <0.001 | 52.6%               |
| Deep           | 2.82 (2.04, 3.90) | <0.001 | 36.7%               |
| Infratentorial | 1.33 (0.94, 1.88) | .104  | 92.6%               |
| CT hypodensity | 0.95 (0.92, 0.99) | .009  | 74.1%               |
### Supplementary table 1: PRISMA checklist

| Section/topic | #  | Checklist item                                                                                                                                                                                                 | Reported on page # |
|---------------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| **TITLE**     |    |                                                                                                                                                                                                                |                   |
| Title         | 1  | Identify the report as a systematic review, meta-analysis, or both.                                                                                                                                              |                   |
| **ABSTRACT**  |    |                                                                                                                                                                                                                |                   |
| Structured summary | 2  | Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number. |                   |
| **INTRODUCTION** |    |                                                                                                                                                                                                                |                   |
| Rationale     | 3  | Describe the rationale for the review in the context of what is already known.                                                                                                                                   |                   |
| Objectives    | 4  | Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).                                                                 |                   |
| **METHODS**   |    |                                                                                                                                                                                                                |                   |
| Protocol and registration | 5  | Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.                                               |                   |
| Eligibility criteria | 6  | Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.                                           |                   |
| Information sources | 7  | Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.                                                      |                   |
| Search        | 8  | Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.                                                                                 |                   |
| Study selection | 9  | State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).                                                      |                   |
### Data collection process
10. Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.

### Data items
11. List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.

### Risk of bias in individual studies
12. Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.

### Summary measures
13. State the principal summary measures (e.g., risk ratio, difference in means).

### Synthesis of results
14. Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., $I^2$) for each meta-analysis.

### Risk of bias across studies
15. Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).

### Additional analyses
16. Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.

## RESULTS

### Study selection
17. Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.

### Study characteristics
18. For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.

### Risk of bias within studies
19. Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).

### Results of individual studies
20. For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.

### Synthesis of results
21. Present results of each meta-analysis done, including confidence intervals and measures of consistency.

### Risk of bias across studies
22. Present results of any assessment of risk of bias across studies (see Item 15).

### Additional analysis
23. Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see...
### DISCUSSION

| Item |  |
|------|---|
| **Summary of evidence** | 24 Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers). |
| **Limitations** | 25 Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). |
| **Conclusions** | 26 Provide a general interpretation of the results in the context of other evidence, and implications for future research. |

### FUNDING

| Item |  |
|------|---|
| **Funding** | 27 Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review. |
Supplementary Table 2: Search Strategy

| Database                        | Search criteria                                                                 |
|--------------------------------|----------------------------------------------------------------------------------|
| Medline (Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) 1946 to February 07, 2020) | ('Cerebral hemorrhage') AND ('Predict*') AND ('Recovery of Function' OR 'function* outcome*' OR 'recover* function*' OR 'outcome') |
| Embase (1974 to 2020 February 07) | ('Intracerebral H$emorrhage*' OR 'Cerebral h$emorrhage*') AND ('recover* of function*' OR 'function* outcome*') AND ('predict*') |
| CINAHL plus                     | ('Cerberal Hemorrhage' OR 'intracerebral haemorrhage' OR 'intracerebral hemorrhage'). AND ('Functional Status' OR 'recover* of function*' OR 'function* outcome*' OR 'outcome*') AND ('Predictive Research' OR 'predict*') |
| Study Design       | Study Population | Study Duration | Sample | Predictive values                                                                 | Follow-up | mRS Cut-off | Additional Adjusting Confounding Variable |
|-------------------|------------------|----------------|--------|------------------------------------------------------------------------------------|-----------|------------|-------------------------------------------|
| Asadollahi et al, 2016(1) | Prospective      | Iran           | 2011-2012 | Age, Antiplatelets, CAD, Dyslipidaemia, HTN, ICH-L, ICH-V, IVH, Midline shift, Smoking | 3 years   | 4          | M/N Antiplatelets, Dyslipidaemia, CAD, HTN, ICH score, Midline shift, Smoking |
| Boulouis et al, 2016(2) | Retrospective    | USA            | 1994-2016 | Age, CT hypodensities, GCS, ICH-L, ICH-V, Warfarin                                  | 3 months  | 4          | M/N                                      |
| Castellanos et al, 2005(3) | Retrospective    | Spain          | 1999-2001 | CSS, Fibrinogen levels, ICH Location                                               | 3 months  | 3          | M/N Fibrinogen levels                     |
| Chu et al, 2019(4)    | Retrospective    | China          | 2011-2014 | Age, GCS, ICH-L, ICH-V, IVH, Minimal CT attenuation value                          | 3 months  | 4          | M Minimal CT attenuation value (+/ <31 HU) |
| Delcourt et al, 2016(5) | RCT              | Multiple       | 2008-2012 | Haematoma density, Haematoma Shape                                                | 3 months  | 3          | M/N Antiplatelets, China, Decision to withdraw treatment, Onset to CT scan time, Randomized treatment, SBP |
| Dowlatshahi et al, 2011(6) | Retrospective    | Multiple       | unknown  | Age, Anticoagulant use, Blood glucose, ICH-V, IVH, NIHSS, Prior HTN, Prior stroke | 3 months  | 4          | M/N Antiplatelets, Blood glucose, BP, Sex, Onset-to-CT time, Smoking |
| El-Senousey et al, 2010(7) | Prospective      | Egypt          | Unknown  | Age, GCS, ICH-L, ICH side, ICH-V, IVE, MAP, Midline shift                          | 2 months  | 4          | M/N ICH side, MAP, Midline shift          |
| Study design | Study populatio n | Study Duration | Sample | Predictive values | Follow-up | mRS cut-off | Additional adjusting confounding variable (in addition to age, GCS, ICH location, volume, IVH, anticoagulant use) |
|--------------|-------------------|----------------|--------|-------------------|-----------|-------------|--------------------------------------------------------------------------------------------------|
| Giede-Jeppe et al, 2017(8) | Retro specti ve Germany  | 2006-2014 | 855 | Age, ICH-V, NIHSS, NLR | 3 months | 4 M/N | Dyslipidaemia, Graeb score, Haemoglobin, Haematocrit, ICH score, Leucocytes, MAP, Midline shift, Pre-morbid mRS |
| Havesteen et al, 2014(9) | Prosp ective Denmark | 2009-2013 | 128 | Age, ICH-V, NIHSS, Spot sign | 3 months | 5 M/N | Blood glucose, Sex, Pre-morbid mRS, SAH, Spot sign |
| Ironside et al, 2019(10) | Retro specti ve USA | 2009-2017 | 311 | Age, GCS, ICH-L, ICH-V, IVH | 3 months | 2 M | |
| Ji et al, 2013(11) | Retro specti ve China | 2007-2008 | 3255 | Age, Blood glucose, GCS, ICH-L, ICH-V, IVH, NIHSS | 1 year | 3 M/N | Antiplatelets, Sex, Hospital academic status, Laboratory tests on admission, Statins, Stroke risk factors, Transportation mode to hospital |
| Kidwell et al, 2017(12) | Prosp ective USA | 2011-2014 | 600 | ICH-L, Race | 3 months | 4 M/N | DWI lesion count, In hospital HTN treatment, Race, WMH score |
| Law et al, 2020(13) | Retro specti ve Multiple | 2013-2017 | 2307 | Age, Antiplatelets, Blend sign, Blackhole sign, GCS, Sex, Hypodensities, ICH-L, ICH-V, Island sign, IVH, Onset-to-CT, Pre-morbid mRS, SBP, Tranexamic acid | 3 months | 4 M/N | Antiplatelet, Black hole sign, Blend sign, Hypodensities, Island sign, Onset-to-CT, Pre-morbid mRS, SBP, Sex, Tranexamic acid |
| Leasure et al, 2019(14) | Retro specti ve USA | 2011-2013 | 2139 | Age, GCS, Sex, ICH-V, IVH | 3 months | 4 M/N | Sex |
| Li et al, 2017(15) | Prosp ective China | 2011-2016 | 252 | Age, GCS, ICH-L, ICH-V, Island sign, IVH, SAH, SBP | 3 months | 3 M/N | Alcohol, Diabetes, HTN, Island sign, SAH, SBP, Smoking |
| Study design | Study population | Study Duration | Sample | Predictive values | Follow-up | mRS cut-off | Additional adjusting confounding variable (in addition to age, GCS, ICH location, volume, IVH, anticoagulant use) |
|--------------|------------------|----------------|--------|-------------------|-----------|------------|--------------------------------------------------|
| Li et al, 2018(16) | Retrospective | china | 2011-2016 | 225 | ICH-L | 3 months | 4 | M | Black hole sign |
| Miyares et al, 2020(17) | Retrospective | USA | 2011-2015 | 418 | Pre-morbid mRS, SBP | 3 months | 4 | M | Male, Pre-morbid mRS, Race, SBP |
| Palm et al, 2013(18) | Retrospective | Germany | 2006-2010 | 152 | GCS, Hypercholesterolaemia, ICH-V, IVH, Leukocyte count, Midline shift, NIHSS, Prior mRS, | 1 year | 4 | M/N | GCS, NIHSS, DNR order, Hypercholesterolemia, Pre-morbid mRS, ICH-V, Midline shift, IVH Leukocyte count, Age, Sex |
| Qiu et al., 2016(19) | Retrospective | Multiple | 2005-2012 | 3185 | HR | 3 months | Shift of 1 | N | Antiplatelets, β-blockers, China, Female, Intensive BP-lowering treatment, SBP, Time from onset to randomization |
| Rådholm et al, 2015(20) | RCT | Multiple | 2008-2012 | 2794 | Age | 3 months | 3 | N | Anti-HTN drugs, Blood glucose, Diabetes, Prior stroke, Recruitment from china, Randomised treatment, Sex, SBP, time from ICH onset to baseline CT, |
| Rodriguez-Luna et al, 2011(21) | Prospective | Spain | 2009-2010 | 108 | Age, ICH-V, IVH, NIHSS | 3 months | 3 | M/N | Albumin, Blood glucose, Body temperature, Statin |
| Rodriguez-Luna et al, 2016(22) | Retrospective | Multiple | 2006-2010 | 178 | ICH-V, Spot sign, uHG, | 3 months | 3 | N | Sex |
| Study design | Study population | Study Duration | Sample | Predictive values | Follow-up | mRS cut-off | Additional adjusting confounding variable (in addition to age, GCS, ICH location, volume, IVH, anticoagulant use) |
|--------------|------------------|----------------|--------|-------------------|-----------|-------------|-------------------------------------------------------------------------------------------------------|
| Roeder et al, 2019(23) | Retrospective | Germany | 2006-2015 | 1112 | Graeb score | 3 months | 4 | N | Pre-morbid mRS |
| Sato et al, 2012(24) | Prospective | Japan | 2009-2011 | 211 | Conjugate eye deviation | 3 months | 3 | N | Sex |
| Sato et al, 2016(25) | Retrospective | Multiple | 2008-2012 | 2065 | Sedimentation level | 3 months | 3 | N | China, Female, onset to CT time, randomized intensive BP lowering, |
| Saxena et al, 2016(26) | RCT | Multiple | 2008-2012 | 2635 | Blood glucose, Diabetes | 3 months | 3 | N | Aspirin, Diabetes, Heart disease, HTN, Randomized treatment, Region, SBP, Sex |
| Siddiqui et al, 2017(27) | Retrospective | USA | 2011-2013 | 1093 | Statin | 3 months | n/a | N | Antiplatelets, pre-morbid mRS, Race, Sex |
| Sun et al, 2016(28) | Retrospective | China | 2007-2008 | 2951 | Blood glucose | 3 months | 3 | N | Admitted department, AF, CAD, Craniotomy, Dehydrant agents treatment, Gender, HTN, Pre-morbid mRS, Smoking, Support withdrawal |
| Yu et al, 2016(29) | RCT | Multiple | 2008-2012 | 2630 | Leucocyte count | 3 months | 3 | N | Chinese, Blood glucose, Body temperature, HR, Lipid lowering agent, Onset to CT time, Randomized treatment, SBP, Sex |
| Zheng et al, 2016(30) | Retrospective | Multiple | 2008-2012 | 2623 | eGFR | 3 months | 3 | N | ACS, Antiplatelets, Chinese, Diabetes, HTN, Ischemic stroke, HTN, Randomly assigned group, Statins, SBP, Time from onset-to-Randomization |
**Supplementary Table 4: Risk of bias assessment: individual study analysis**

| Study participants | Study attrition | Prognostic factor measurement | Outcome measurement | Adjustment for other prognostic factors | Statistical analysis and reporting |
|--------------------|-----------------|-------------------------------|---------------------|-----------------------------------------|-----------------------------------|
| Asadollahi et al, 2016(1) | Low | Low | Low | Low | Low | High |
| Boulouis et al, 2016(2) | Low | Medium | Low | Low | Low | Medium |
| Castellanos et al, 2005(3) | Low | Low | Low | Medium | Low | Medium |
| Chu et al, 2019(4) | Low | Low | Low | Low | Low | Medium |
| Delcourt et al, 2016(5) | Low | Low | Medium | Medium | Low | Low |
| Dowlatshahi et al, 2011(6) | High | Medium | Medium | Medium | Low | Medium |
| El-senousey et al, 2010(7) | High | Low | High | Medium | Low | Medium |
| Giede-Jeppe et al, 2017(8) | Low | Medium | Low | Low | Low | High |
| Havsteen et al, 2014(9) | Medium | Low | Low | Low | Low | Medium |
| Ironside et al, 2019(10) | Low | Low | Low | Medium | Low | Low |
| Ji et al, 2013(11) | Low | Low | Low | Low | Low | Low |
| Kidwell et al, 2017(12) | Low | High | Low | Low | Low | Low |
| Law et al, 2020(13) | Low | Low | Low | Low | Low | Low |
| Leasure et al, 2019(14) | Low | Medium | Low | Low | Low | Low |
| Authors                  | Nature1 | Nature2 | Nature3 | Nature4 | Nature5 | Nature6 |
|-------------------------|---------|---------|---------|---------|---------|---------|
| Li et al, 2017(15)      | Low     | Mediu m | Low     | Medium  | Low     | Low     |
| Li et al, 2018(16)      | Medium  | Mediu m | Low     | Medium  | Low     | Medium  |
| Miyares et al, 2020(17) | Medium  | Mediu m | Low     | Low     | Low     | Medium  |
| Palm et al, 2013(18)    | Low     | Mediu m | Low     | Medium  | Low     | Medium  |
| Qui et al, 2016(19)     | Low     | Low     | Low     | Medium  | Low     | Medium  |
| Rådholm et al, 2015(20) | Low     | Low     | Low     | Medium  | Low     | Medium  |
| Rodriguez-Luna et al, 2011(21) | Medium | Low | Low | Medium | Low | High |
| Rodriguez-Luna et al, 2016(22) | Low | Low | Medium | Medium | Low | Medium |
| Roeder et al, 2019(23)  | Low     | Low     | Low     | Low     | Low     | Low     |
| Sato et al 2012(24)     | Low     | Low     | High    | Low     | Low     | Medium  |
| Sato et al, 2016(25)    | Low     | Low     | Low     | Medium  | Low     | Medium  |
| Saxena et al, 2016(26)  | Low     | Low     | Low     | Medium  | Low     | Medium  |
| Siddiqui et al, 2017(27)| Low     | Mediu m | Low     | Low     | Low     | Medium  |
| Sun et al, 2016(28)     | Low     | Low     | Low     | Low     | Low     | Medium  |
| Yu et al, 2016(29)      | Low     | Low     | Low     | Medium  | Low     | Low     |
| Zheng et al, 2016(30)   | Low     | Low     | Low     | Medium  | Low     | Low     |
### Supplementary Table 5:  Data included for each factor: Clinical factors

| Factor          | Contributing papers | n    | Odds-ratio | CI low | CI high | p         | Heterogeneity (I²) |
|-----------------|---------------------|------|------------|--------|---------|-----------|-------------------|
| Age             | Law et al 2020      | 2307 | 1.05       | 1.04   | 1.06    | <0.001    | 39.7%             |
|                 | Leasure et al 2019  | 1305 | 1.07       | 1.05   | 1.08    |           |                   |
|                 | Asadollahi et al 2016 | 228  | 1.05       | 1      | 1.1     |           |                   |
|                 | Giede-Jeppe et al 2017 | 855  | 1.066      | 1.044  | 1.088   |           |                   |
|                 | Chu et al 2019      | 311  | 1.04       | 1.001  | 1.08    |           |                   |
|                 | Ji et al 2013       | 3255 | 1.05       | 1.04   | 1.06    |           |                   |
|                 | Ironside et al 2019 | 311  | 1.074      | 1.033  | 1.116   |           |                   |
|                 | Boulouis et al 2016 | 800  | 1.07       | 1.06   | 1.09    |           |                   |
|                 | Li et al 2017       | 252  | 1.04       | 1.01   | 1.06    |           |                   |
| Pre-morbid mRS  | Law et al 2020      | 2307 | 1.71       | 1.5    | 1.95    |           |                   |
|                 | Miyares et al 2020  | 418  | 16.87      | 4.86   | 58.54   |           |                   |
|                 | Palm et al 2013     | 152  | 1.98       | 1.2    | 3.25    |           |                   |
| GCS             | Law et al 2020      | 2307 | 0.77       | 0.72   | 0.82    |           |                   |
|                 | Chu et al 2019      | 311  | 0.598      | 0.371  | 0.962   |           |                   |
|                 | Palm et al 2013     | 152  | 0.75       | 0.62   | 0.92    |           |                   |
|                 | Boulouis et al 2016 | 800  | 0.88       | 0.84   | 0.92    |           |                   |
|                 | Leasure et al 2019  | 1305 | 0.82       | 0.78   | 0.86    |           |                   |
|                 | Ji et al 2013       | 3255 | 0.92       | 0.89   | 0.93    |           |                   |
|                 | Ironside et al 2019 | 311  | 0.667      | 0.548  | 0.812   |           |                   |
|                 | Li et al 2017       | 252  | 0.89       | 0.8    | 0.99    |           |                   |
|                 | El-Senousey et al 2010 | 67   | 0.19       | 0.08   | 0.5     |           |                   |
| NIHSS           | Dowlatshahi et al 2011 | 496  | 1.2        | 1.1    | 1.2     |           |                   |
|                 | Palm et al 2013     | 152  | 1.19       | 1.1    | 1.3     |           |                   |
|                 | Giede-Jeppe et al 2017 | 855  | 1.167      | 1.13   | 1.204   |           |                   |
|                 | Ji et al 2013       | 3255 | 1.1        | 1.08   | 1.11    |           |                   |
|                 | Havesteen et al 2014 | 128  | 1.21       | 1.1    | 1.32    |           |                   |
|                 | Castellanos et al 2005 | 138  | 1.5        | 1.28   | 1.77    |           |                   |
| Systolic BP     | Law et al 2020      | 2307 | 1          | 0.996  | 1.003   |           |                   |
|                 | Miyares et al 2020  | 418  | 1.1        | 1.02   | 1.18    |           |                   |
|                 | Li et al 2017       | 252  | 1.01       | 1      | 1.02    |           |                   |
| Factor     | Contributing papers | n   | Odds-ratio | CI low | CI high | p     | Heterogeneity ($I^2$) |
|------------|---------------------|-----|------------|--------|---------|-------|-----------------------|
| **Volume** |                     |     |            |        |         |       |                       |
|            | Law et al 2020       | 2307| 1.12       | 1.07   | 1.16    | <0.001| 96.3%                 |
|            | Havesteen et al 2014 | 128 | 1.02       | 1.0     | 1.04    |       |                       |
|            | Palm et al 2013      | 152 | 1.03       | 0.99    | 1.05    |       |                       |
|            | Boulouis et al 2016  | 800 | 1.56       | 1.39    | 1.77    |       |                       |
|            | Leasure et al 2019   | 1305| 1.09       | 1.08    | 1.1     |       |                       |
|            | Giede-Jeppe et al 2017 | 855 | 1.023      | 1.01    | 1.037   |       |                       |
|            | Chu et al 2019       | 311 | 1.13       | 1.027   | 1.242   |       |                       |
|            | Ji et al 2013        | 3255| 1.02       | 1.01    | 1.03    |       |                       |
|            | Ironside et al 2019  | 311 | 1.375      | 1.085   | 1.743   |       |                       |
|            | Li et al 2017        | 252 | 1.04       | 1.01    | 1.07    |       |                       |
|            | El-Senousey et al 2010 | 67 | 1.41       | 1.01    | 2       |       |                       |
| **IVH**    |                     |     |            |        |         |       |                       |
|            | Dowlatshahi et al 2011 | 496 | 2.3        | 1.4    | 3.8     |       |                       |
|            | Law et al 2020       | 2307| 2.24       | 1.76    | 2.87    |       |                       |
|            | Boulouis et al 2016  | 800 | 1.66       | 1.13    | 2.47    |       |                       |
|            | Leasure et al 2019   | 1305| 1.52       | 1.11    | 2.07    |       |                       |
|            | Asadollahi et al 2016 | 228 | 3.72       | 1.16    | 11.8    |       |                       |
|            | Chu et al 2019       | 459 | 1.424      | 0.807   | 1.664   |       |                       |
|            | Palm et al 2013      | 129 | 6.01       | 2.39    | 15.12   |       |                       |
|            | Ji et al 2013        | 3255| 1.62       | 1.34    | 1.98    |       |                       |
|            | Ironside et al 2019  | 311 | 2.921      | 1.076   | 7.93    |       |                       |
|            | Li et al 2017        | 252 | 3.05       | 1.61    | 5.78    |       |                       |
|            | Rodriguez-Luna et al 2011 | 108 | 4.61       | 1.29    | 16.49   |       |                       |
|            | Havesteen et al 2014 | 128 | 4.76       | 1.2     | 20      |       |                       |
| **Deep**   |                     |     |            |        |         |       |                       |
|            | Boulouis et al 2016  | 800 | 3.1        | 2       | 4.9     |       |                       |
|            | Kidwell et al 2017   | 600 | 3.526      | 1.896   | 6.558   |       |                       |
|            | Li et al 2018        | 225 | 2.09       | 0.805   | 5.45    |       |                       |
|            | Ironside et al 2019  | 311 | 0.934      | 0.307   | 2.842   |       |                       |
|            | El-Senousey et al 2010 | 67 | 27.78      | 0.64    | 1000    |       |                       |
| **Infraentorial** |                 |     |            |        |         |       |                       |
|            | Boulouis et al 2016  | 800 | 5.17       | 2.52    | 8.98    |       |                       |
|            | Delcourt et al, 2016 | 781 | 1.06       | 0.85    | 1.33    |       |                       |
|            | Boulouis et al 2016  | 800 | 1.7        | 1.1     | 2.64    |       |                       |
|            | Chu et al 2019       | 459 | 0.945      | 0.912   | 0.978   |       |                       |
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