**Appendix 1: Search Strategy for “Effect of behavioural activation for individuals with post-stroke depression: a systematic review and meta-analysis”**

**Table S1. MEDLINE**

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| **#** | **Query** |
| 1 | behavio\* activat\*.ti,ab,kf. |
| 2 | (behavio\* adj3 (reinforce\* or re-inforce\*)).ti,ab,kf. |
| 3 | (behavio\* adj2 (contracting or modif\*)).ti,ab,kf. |
| 4 | reinforc\*.ti,kf. or ((positive adj1 reinforc\*) or (reinforc\* adj3 (environment\* or experience\*))).ti,ab,kf. |
| 5 | (activit\* adj2 schedul\*).ti,ab,kf. |
| 6 | ((pleas\* or enjoyable or rewarding) adj3 (activit\* or event?)).ti,ab,kf. |
| 7 | ((operant or instrumental) adj (conditioning or learning)).ti,ab,kf. |
| 8 | (positive interaction\* or avoida\* coping or environmental contingenc\* or contingency management).ti,ab,kf. |
| 9 | functional analysis.ti,ab,kf. |
| 10 | behavio\*.mp. and (self adj (evaluat\* or monitor\*)).ti,ab,kf. |
| 11 | (behavio\* adj (counsel\* or intervention\* or treatment\* or therap\* or psychotherap\*)).ti,ab,kf. |
| 12 | (mood adj3 monitor\*).ti,ab,kf. |
| 13 | Behavior Therapy/ |
| 14 | or/1-13 |
| 15 | exp stroke/ |
| 16 | brain ischemia/ and stroke.ti,ab. |
| 17 | Ischemic attack, transient/ |
| 18 | cerebral hemorrhage/ and stroke.ti,ab. |
| 19 | carotid stenosis/ and stroke.ti,ab. |
| 20 | (acute isch?emic and stroke).ti,ab. |
| 21 | (Stroke or poststroke or post stroke).ti,ab,kf. |
| 22 | (Brain Infarct\* or Brain Stem Infarct\*).ti,ab,kf. |
| 23 | (Lateral Medullary Syndrome\* or Cerebral Infarct\*).ti,ab,kf. |
| 24 | (Multi-infarct Dementia or Cerebral Artery infarct\*).ti,ab,kf. |
| 25 | (transient Isch?emic attack\* or cerebral isch?emi\*).ti,ab,kf. |
| 26 | (cerebrovascular event\* or cerebrovascular accident\*).ti,ab,kf. |
| 27 | (medullary infarct\* or cerebral artery occlusion or mcao).ti,ab,kf. |
| 28 | or/15-27 |
| 29 | depression/ |
| 30 | mood disorders/ |
| 31 | depressive disorder/ |
| 32 | depressive disorder, major/ |
| 33 | depressive disorder, treatment-resistant/ |
| 34 | dysthymic disorder/ |
| 35 | cyclothymic disorder/ |
| 36 | (depress\* or dysthymi\* or cyclothymi\*).ti,ab,kf. |
| 37 | (mood or low mood or mental health or mood disorder\*).ti,ab,kf.  |
| 38 | or/29-37 |
| 39 | 14 and 28 and 38 |

**Table S2.** Embase

|  |  |
| --- | --- |
| **#** | **Query** |
| 1 | behavio\* activat\*.ti,ab,kw. |
| 2 | (behavio\* adj3 (reinforce\* or re-inforce\*)).ti,ab,kw. |
| 3 | (behavio\* adj2 (contracting or modif\*)).ti,ab,kw. |
| 4 | reinforc\*.ti,kw. or ((positive adj1 reinforc\*) or (reinforc\* adj3 (environment\* or experience\*))).ti,ab,kw. |
| 5 | (activit\* adj2 schedul\*).ti,ab,kw. |
| 6 | ((pleas\* or enjoyable or rewarding) adj3 (activit\* or event?)).ti,ab,kw. |
| 7 | ((operant or instrumental) adj (conditioning or learning)).ti,ab,kw. |
| 8 | (positive interaction\* or avoida\* coping or environmental contingenc\* or contingency management).ti,ab,kw. |
| 9 | functional analysis.ti,ab,kw. |
| 10 | behavio\*.mp. and (self adj (evaluat\* or monitor\*)).ti,ab,kw. |
| 11 | (behavio\* adj (counsel\* or intervention\* or treatment\* or therap\* or psychotherap\*)).ti,ab,kw. |
| 12 | (mood adj3 monitor\*).ti,ab,kw. |
| 13 | Behavior Therapy/ |
| 14 | or/1-13 |
| 15 | cerebrovascular accident/ |
| 16 | brain ischemia/ and stroke.ti,ab. |
| 17 | Ischemic attack, transient/ |
| 18 | brain hemorrhage/ and stroke.ti,ab. |
| 19 | carotid artery obstruction/ and stroke.ti,ab. |
| 20 | (acute isch?emic and stroke).ti,ab. |
| 21 | (Stroke or poststroke or post stroke).ti,ab,kw. |
| 22 | (Brain Infarct\* or Brain Stem Infarct\*).ti,ab,kw. |
| 23 | (Lateral Medullary Syndrome\* or Cerebral Infarct\*).ti,ab,kw. |
| 24 | (Multi-infarct Dementia or Cerebral Artery infarct\*).ti,ab,kw. |
| 25 | (transient Isch?emic attack\* or cerebral isch?emi\*).ti,ab,kw. |
| 26 | (cerebrovascular event\* or cerebrovascular accident\*).ti,ab,kw. |
| 27 | (medullary infarct\* or cerebral artery occlusion or mcao).ti,ab,kw. |
| 28 | or/15-27 |
| 29 | depression/ |
| 30 | mood disorder/ |
| 31 | chronic depression/ or post-stroke depression/ or recurrent brief depression/ or seasonal affective disorder/ |
| 32 | major depression/ |
| 33 | treatment resistant depression/ |
| 34 | dysthymia/ |
| 35 | cyclothymia/ |
| 36 | (depress\* or dysthymi\* or cyclothymi\*).ti,ab,kw. |
| 37 | (low mood or mood disorder\* or affective disorder\*).ti,ab,kw. |
| 38 | or/29-37 |
| 39 | 14 and 28 and 38 |

**Table S3.** Ovid Emcare

|  |  |
| --- | --- |
| **#** | **Query** |
| 1 | behavio\* activat\*.ti,ab,kw. |
| 2 | (behavio\* adj3 (reinforce\* or re-inforce\*)).ti,ab,kw. |
| 3 | (behavio\* adj2 (contracting or modif\*)).ti,ab,kw. |
| 4 | reinforc\*.ti,kw. or ((positive adj1 reinforc\*) or (reinforc\* adj3 (environment\* or experience\*))).ti,ab,kw. |
| 5 | (activit\* adj2 schedul\*).ti,ab,kw. |
| 6 | ((pleas\* or enjoyable or rewarding) adj3 (activit\* or event?)).ti,ab,kw. |
| 7 | ((operant or instrumental) adj (conditioning or learning)).ti,ab,kw. |
| 8 | (positive interaction\* or avoida\* coping or environmental contingenc\* or contingency management).ti,ab,kw. |
| 9 | functional analysis.ti,ab,kw. |
| 10 | behavio\*.mp. and (self adj (evaluat\* or monitor\*)).ti,ab,kw. |
| 11 | (behavio\* adj (counsel\* or intervention\* or treatment\* or therap\* or psychotherap\*)).ti,ab,kw. |
| 12 | (mood adj3 monitor\*).ti,ab,kw. |
| 13 | Behavior Therapy/ |
| 14 | or/1-13 |
| 15 | cerebrovascular accident/ |
| 16 | brain ischemia/ and stroke.ti,ab. |
| 17 | transient ischemic attack/ |
| 18 | brain hemorrhage/ and stroke.ti,ab. |
| 19 | carotid artery obstruction/ and stroke.ti,ab. |
| 20 | (acute isch?emic and stroke).ti,ab. |
| 21 | (Stroke or poststroke or post stroke).ti,ab,kw. |
| 22 | (Brain Infarct\* or Brain Stem Infarct\*).ti,ab,kw. |
| 23 | (Lateral Medullary Syndrome\* or Cerebral Infarct\*).ti,ab,kw. |
| 24 | (Multi-infarct Dementia or Cerebral Artery infarct\*).ti,ab,kw. |
| 25 | (transient Isch?emic attack\* or cerebral isch?emi\*).ti,ab,kw. |
| 26 | (cerebrovascular event\* or cerebrovascular accident\*).ti,ab,kw. |
| 27 | (medullary infarct\* or cerebral artery occlusion or mcao).ti,ab,kw. |
| 28 | or/15-27 |
| 29 | depression/ |
| 30 | mood disorders/ |
| 31 | chronic depression/ or post-stroke depression/ or recurrent brief depression/ or seasonal affective disorder/ |
| 32 | major depression/ |
| 33 | treatment resistant depression/ |
| 34 | dysthymia/ |
| 35 | cyclothymia/ |
| 36 | (depress\* or dysthymi\* or cyclothymi\*).ti,ab,kw. |
| 37 | (low mood or mood disorder\* or affective disorder\*).ti,ab,kw. |
| 38 | or/29-37 |
| 39 | 14 and 28 and 38 |

**Table S4.** APA PsycInfo

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| --- | --- |
| **#** | **Query** |
| 1 | behavior activation system/ |
| 2 | behavio\* activat\*.tw. |
| 3 | (behavio\* adj3 (reinforce\* or re-inforce\*)).tw. |
| 4 | exp reinforcement/ |
| 5 | (behavio\* adj2 (contracting or modif\*)).tw. |
| 6 | (reinforc\* or ((positive adj1 reinforc\*) or (reinforc\* adj3 (environment\* or experience\*)))).tw. |
| 7 | (activit\* adj2 schedul\*).tw. |
| 8 | Planned Behavior/ |
| 9 | ((pleas\* or enjoyable or rewarding) adj3 (activit\* or event?)).tw. |
| 10 | ((operant or instrumental) adj (conditioning or learning)).tw. |
| 11 | exp operant conditioning/ |
| 12 | (positive interaction\* or avoida\* coping or environmental contingenc\* or contingency management).tw. |
| 13 | exp contingency management/ |
| 14 | functional analysis.tw. |
| 15 | behavio\*.mp. and (self adj (evaluat\* or monitor\*)).tw. |
| 16 | self-management/ and behavior change/ |
| 17 | (behavio\* adj (counsel\* or intervention\* or treatment\* or therap\* or psychotherap\*)).tw. |
| 18 | (mood adj3 monitor\*).tw. |
| 19 | Behavior Therapy/ |
| 20 | or/1-19 |
| 21 | cerebrovascular accidents/ |
| 22 | cerebral ischemia/ and stroke.ti,ab. |
| 23 | cerebral hemorrhage/ and stroke.ti,ab. |
| 24 | (acute isch?emic and stroke).ti,ab. |
| 25 | (stroke or poststroke or post stroke).tw. |
| 26 | (Brain Infarct\* or Brain Stem Infarct\*).tw. |
| 27 | (Lateral Medullary Syndrome\* or Cerebral Infarct\*).tw. |
| 28 | (Multi-infarct Dementia or Cerebral Artery infarct\*).tw. |
| 29 | (transient Isch?emic attack\* or cerebral isch?emi\*).tw. |
| 30 | (cerebrovascular event\* or cerebrovascular accident\*).tw. |
| 31 | (medullary infarct\* or cerebral artery occlusion or mcao).tw. |
| 32 | or/21-31 |
| 33 | Atypical Depression/ or Reactive Depression/ or Recurrent Depression/ or Late Life Depression/ |
| 34 | mood disorders/ |
| 35 | affective disorders/ |
| 36 | Major Depression/ |
| 37 | Treatment Resistant Depression/ |
| 38 | dysthymic disorder/ |
| 39 | cyclothymic disorder/ |
| 40 | (depress\* or dysthymi\* or cyclothymi\*).tw. |
| 41 | (low mood or mood disorder\* or affective disorder\*).tw. |
| 42 | or/33-41 |
| 43 | 20 and 32 and 42 |

**Table S5. Cochrane Library**

|  |  |
| --- | --- |
|  | **Query** |
| #1 | behavio\* next activat\* ti,ab, kw |
| #2 | (behavio\* Near/3 (reinforce\* or re-inforce\*)) ti,ab,kw |
| #3 | (behavio\* near/2 (contracting or modif\*)) ti,ab,kw |
| #4 | reinforc\* or ((positive near/1 reinforc\*) or (reinforc\* near/3 (environment\* or experience\*))):ti,ab, kw |
| #5 | (activit\* near/2 schedul\*) ti,ab,kw. |
| #6 | ((pleas\* or enjoyable or rewarding) near/3 (activit\* or event?)) ti,ab,kw |
| #7 | ((operant or instrumental) near (conditioning or learning))ti,ab,kw. |
| #8 | (positive next interaction\* or avoida\* next coping or environmental next contingenc\* or contingency next management) ti,ab,kw. |
| #9 | "functional analysis" ti,ab,kw. |
| #10 | behavio\* and (self near (evaluat\* or monitor\*)) ti,ab,kw. |
| #11 | (behavio\* near (counsel\* or intervention\* or treatment\* or therap\* or psychotherap\*)) ti,ab,kw |
| #12 | (mood near/3 monitor\*) ti,ab,kw. |
| #13 | MeSH descriptor: [Behavior Therapy] this term only |
| #14 | #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 # or #13 |
| #15 | MeSH descriptor: [Stroke] explode all trees |
| #16 | (Stroke or poststroke or "post stroke") ti,ab,kw |
| #17 | (Brain next Infarct\* or Brain next Stem next Infarct\*) ti,ab,kw. |
| #18 | (Lateral next Medullary next Syndrome\* or Cerebral next Infarct\*) ti,ab,kw. |
| #19 | ("Multi-infarct Dementia" or Cerebral next Artery next infarct\*) ti,ab,kw. |
| #20 | (cerebrovascular next event\* or cerebrovascular next accident\*) ti,ab,kw. |
| #21 | (medullary next infarct\* or "cerebral artery occlusion" or mcao) ti,ab,kw. |
| #22 | #15 or #16 or #17 or #18 or #19 or #20 or #21 |
| #23 | MeSH descriptor: [Depression] this term only |
| #24 | MeSH descriptor: [Mood Disorders] this term only |
| #25 | MeSH descriptor: [Depressive Disorder] this term only |
| #26 | MeSH descriptor: [Depressive Disorder, Major] this term only |
| #27 | MeSH descriptor: [Depressive Disorder, Treatment-Resistant] this term only |
| #28 | MeSH descriptor: [Dysthymic Disorder] this term only |
| #29 | MeSH descriptor: [Cyclothymic Disorder] this term only |
| #30 | (depress\* or dysthymi\* or cyclothymi\*) ti,ab,kw. |
| #31 | ("low mood" or mood next disorder\* or affective next disorder\*) ti,ab,kw. |
| #32 | #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 |
| #33 | #14 and #22 and #32 |