**Appendix A:** Data Extraction Form.

**Summary Data**

|  |  |
| --- | --- |
| Reviewer name |  |
| Date form completed |  |

**Trial Unique Identifier**

e.g. Smith1999a

|  |
| --- |
|  |

**Source**

|  |  |
| --- | --- |
| Year of publication |  |
| Journal |  |
| PUBMED ID |  |
| Institutional sponsor and/or data custodian |  |
| Corresponding author  (if different to above) |  |

**Methods (Bias)**

|  |  |
| --- | --- |
| Trial Registration ID |  |
| Study design |  |
| Total study duration |  |
| Sequence generation |  |
| Allocation sequence  concealment |  |
| Blinding |  |
| Completeness of outcome data |  |
| Selective reporting |  |
| Other concerns about bias |  |

**Participants**

|  |  |  |
| --- | --- | --- |
| Total number |  | |
| Country |  | |
| Setting |  | |
| Inclusion criteria |  | |
| Exclusion criteria |  | |
| Withdrawals/exclusions |  | |
| Diagnostic criteria of  coma |  | |
| Age |  | |
| Sex | Males | |
| Methods of recruitment |  | |
| Average length of fever |  | |
| Seizures |  | |
| Type of seizure | Tonic clonic |  |
| Focal |  |
| Lactate |  | |
| BCS (or equivalent coma score) on admission |  | |
| Retinopathy |  | |
| EEG |  | |
| Cerebral imaging |  | |
| HIV status | Proportion tested |  |
|  | Proportion unknown |  |
| Proportion HIV+ |  |
| CD4 count |  |
|  | Proportion exposed |  |
| HIV ART treatment | Proportion on ART |  |
| Nutrition status | Proportion with malnutrition |  |
|  |  |
|  | Proportion with SAM  Proportion with wasting |  |
| Proportion with wasting |  |
| Proportion with stunting |  |
| Admission details | Delay to hospital presentation |  |
|  | Time from admission to diagnosis |  |
|  | Time from admission to discharge |  |
|  | Duration of coma prior to admission |  |
|  | Depth of coma prior to admission |  |
| Other comorbidities |  |  |
| Other subgroups reported |  |  |

**Interventions (for RCT studies)**

|  |  |  |  |
| --- | --- | --- | --- |
| Number of  intervention groups |  | | |
|  | Regimen 1 | Regimen 2 | Regimen 3 |
| Intervention e.g. drug type |  |  |  |
| Number randomised to group |  |  |  |
| Duration of treatment period |  |  |  |
| Timing |  |  |  |
| Delivery |  |  |  |
| Providers |  |  |  |
| Co-interventions |  |  |  |

**Outcomes**

**Aetiology**

|  |  |  |
| --- | --- | --- |
| Details of microbiological methods | *Microbiological microscopy and culture* |  |
| *Molecular (PCR)* |  |
| *Type of PCR (single or multiplex)* |  |
| *Other (e.g. metagenomic sequencing* |  |
| Details of antimicrobial resistance testing |  | |
| % of culture positive cases |  | |
| % of culture negative cases |  | |
| **1 Aetiology**  **Syndrome proportion**  **e.g. ABM % of total cohort** | Cerebral Malaria |  |
| CM with co-infection |  |
| ABM |  |
| Encephalitis |  |
| Sepsis |  |
| Unknown Encephalopathy |  |
| Non-infective Encephalopathy |  |
| Other (group) |  |
| Specify other if listed e.g. neurocysticercosis) |  |
| Other 1 |  |
| Other 2 |  |
| Other 3 |  |
| **2 Aetiology**  **pathogen proportion per syndrome e.g. Strep Pneumo % of total ABM (for all syndromes e.g. ABM, encephalitis etc)** | **Cerebral Malaria** |  |
| CM with co-infection (list pathogens) |  |
| **ABM** |  |
| Strep Pneumoniae |  |
| Salmonella spp (include type if available) |  |
| N. Meningitidis |  |
| H. Influenzae |  |
| E. coli |  |
| Klebsiella |  |
| Acinetobacter |  |
| Other |  |
| **Encephalitis** |  |
| HSV1 |  |
| HSV2 |  |
| CMV |  |
| VZV |  |
| Enterovirus |  |
| Other |  |
| **Sepsis** |  |
| Staphylococcal aureus |  |
| N. Meningitidis |  |
| H. Influenzae |  |
| E. coli |  |
| Klebsiella |  |
| Acinetobacter |  |
| **Unknown Encephalopathy** |  |
| **Other (group)** |  |
| Specify other if listed e.g. neurocysticercosis |  |
| Other 1 |  |
| Other 2 |  |
| Other 3 |  |

**Clinical Outcome**

**Outcomes**

Notes:

For interventional studies, the outcomes in the usual care arm of the study only were included

|  |  |  |
| --- | --- | --- |
| Outcome measures used | Neurological Sequelae |  |
| Death |  |
| Other (e.g. neurocognitive assessments) |  |
| *Please specify:* | |
| Duration of follow-up |  | |

**Disability**

|  |  |
| --- | --- |
| **1 disability proportion in entire cohort e.g. 35% had neurological sequelae** |  |

|  |  |  |
| --- | --- | --- |
| **Outcome 2 disability proportion in each syndrome e.g. 35% had neurological sequelae in ABM** | Cerebral Malaria |  |
| CM with co-infection |  |
| ABM |  |
| Encephalitis |  |
| Sepsis |  |
| Unknown Encephalopathy |  |
| Other (group) |  |
|  | Specify other if listed e.g. neurocysticercosis) |  |
| Other 1 |  |
| Other 2 |  |
|  | Other 3 |  |

|  |  |  |
| --- | --- | --- |
| **Outcome 3 Disability proportion in each pathogen e.g. 35% had neurological sequelae with Strep Pneumo** | **Cerebral Malaria** |  |
| CM with co-infection (list pathogens) |  |
| **ABM** |  |
| Strep Pneumoniae |  |
| Salmonella spp (include type if available) |  |
| N. Meningitidis |  |
| H. Influenzae |  |
| E. coli |  |
| Klebsiella |  |
| Acinetobacter |  |
| Other |  |
| **Encephalitis** |  |
| HSV1 |  |
| HSV2 |  |
| CMV |  |
| VZV |  |
| Enterovirus |  |
| Other |  |
| **Sepsis** |  |
| N. Meningitidis |  |
| H. Influenzae |  |
| E. coli |  |
| Klebsiella |  |
| Acinetobacter |  |
| **Unknown Encephalopathy** |  |
| **Other (group)** |  |
| Specify other if listed e.g. neurocysticercosis) |  |
| Other 1 |  |
| Other 2 |  |
| Other 3 |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Outcome 4 - Proportion of disability type per clinical diagnosis e.g. %age ABM patients with deafness** | Cerebral Malaria | *Motor*  *Cognitive/behavioural*  *Visual impairment*  *Hearing impairment*  *Epilepsy* |  |
| CM with co-infection | *Motor*  *Cognitive/behavioural*  *Visual impairment*  *Hearing impairment*  *Epilepsy* |  |
| ABM | *Motor*  *Cognitive/behavioural*  *Visual impairment*  *Hearing impairment*  *Epilepsy* |  |
| Encephalitis | *Motor*  *Cognitive/behavioural*  *Visual impairment*  *Hearing impairment*  *Epilepsy* |  |
| Sepsis | *Motor*  *Cognitive/behavioural*  *Visual impairment*  *Hearing impairment*  *Epilepsy* |  |
| Unknown Encephalopathy | *Motor*  *Cognitive/behavioural*  *Visual impairment*  *Hearing impairment*  *Epilepsy* |  |
| Other (group) | *Motor*  *Cognitive/behavioural*  *Visual impairment*  *Hearing impairment*  *Epilepsy* |  |
| Specify other if listed e.g. neurocysticercosis) |  |  |
| Other 1 |  |  |
| Other 2 |  |  |
| Other 3 |  |  |

**Death**

|  |  |
| --- | --- |
| **Outcome 1 Death proportion in entire cohort e.g. 35% died** |  |

|  |  |  |
| --- | --- | --- |
| **Outcome 2 death proportion in each syndrome e.g. 35% died in ABM** | Cerebral Malaria |  |
| CM with co-infection |  |
| ABM |  |
| Encephalitis |  |
| Sepsis |  |
| Unknown Encephalopathy |  |
| Other (group) |  |
| Specify other if listed e.g. neurocysticercosis) |  |
| Other 1 |  |
| Other 2 |  |
| Other 3 |  |

|  |  |  |
| --- | --- | --- |
| **Outcome 3 Death proportion in each pathogen e.g.** 35% of those with Strep Pneumo ABM died | **Cerebral Malaria** |  |
| CM with co-infection (list pathogens) |  |
| **ABM** |  |
| Strep Pneumonia |  |
| Salmonella spp (include type if available) |  |
| N. Meningitidis |  |
| H. Influenzae |  |
| E. coli |  |
| Klebsiella |  |
| Acinetobacter |  |
| Other |  |
| **Encephalitis** |  |
| HSV1 |  |
| HSV2 |  |
| CMV |  |
| VZV |  |
| Enterovirus |  |
| Other |  |
| **Sepsis** |  |
| Staphylococcal aureus |  |
| N. Meningitidis |  |
| H. Influenzae |  |
| E. coli |  |
| Klebsiella |  |
| Acinetobacter |  |
| **Unknown Encephalopathy** |  |
| **Other (group)** |  |
| Specify other if listed e.g. neurocysticercosis) |  |
| Other 1 |  |
| Other 2 |  |
| Other 3 |  |

**Other Information**

|  |  |
| --- | --- |
| Comments on statistical methods |  |
| Have important populations been excluded from the study? |  |
| Key conclusions of study authors |  |
| Funding source |  |