### Excel/Data entry into SOURCE sheets.

The aim of this document is to provide instruction on how to enter data into the SOURCE sheets provided in this package. The data must be entered in according to instructions in order for the R package to run without errors. Each excel SOURCE sheet and data entry per column header will be described here. Refer to the data dictionary for more information on column headers. It is best to enter the data into the SOURCE sheets in the order listed in this document.

#### SEIZURE\_RANKING\_SOURCE.xlsx

The column in seizure ranking source and instructions on how to enter data into the columns are listed below. Name this document with the patient’s first two letters of the first name and first two letters of their last name. If there is a conflict with the same naming scheme, then add the number 2 at the end and increase the number consecutively to account for all patients with the same name scheme (e.g. JADO\_SEIZURE\_RANKING\_SOURCE for someone named Jane Doe.).

1. **MRNUMBER**: Enter identifier or medical record number. Cell can never be blank.
2. **SEIZURE\_PARAMETER**: Cell can never be blank. See list of options in the Data Dictionary column “Options for categorical variables”. See also the example data set provided in package.
3. **SEIZURE\_ENTRY**: Cell can never be blank. Follow the instructions below for data entry into each cell.
   1. If the **SEIZURE\_PARAMETER** column is **SEIZURE SEVERITY,** then follow the entry instructions: Seizure severity was defined as mild, mild-moderate, moderate, moderate-severe, or severe. Caregivers determined severity of observed seizure when they considered all seizures their child has had in the past. Caregivers recorded 1 of 5 severities per seizure. If caregivers did not record severity, lab members determined severity from hospital notes or other source documents. Ranking points 0 through the maximum value were assigned to each severity with the maximum number being the most severe and the number 0 being seizure free. Mild severity received 1 point, Mild moderate severity received the next highest value, moderate severity received half of the maximum value, moderate severe severity received the second highest value, severe severity received the maximum number of points, and u or unknown severity was treated like a moderate severity unless caregiver specified otherwise. If more than one severity was recorded for a seizure, then the average of all severities was used. Codes frequently used in SEIZURE RANKING SOURCE were m, mm, md, ms, s, u, and 0 and the notes section defined the code as mild, mild-moderate, moderate, moderate-severe, severe, unknown, and 0 seizures respectively. Enter each code in a separate row with SEIZURE SEVERITY in the SEIZURE\_PARAMETER column.
   2. If the **SEIZURE\_PARAMETER** column is **SEIZURE TYPE,** then follow the entry instructions: The caregiver, when possible, described and ranked each seizure type. Neurologist classification and/or supporting literature was used to assign ranking points to each seizure types if caregivers ranking and description of seizure type did not exist. Ranking points 0 through the maximum value were assigned to each seizure type with the maximum value being the most severe and 0 being seizure free. The following scale, provided by the neurologists and/or supporting literature, was used to assign ranking points to seizure types: tonic clonic or generalized tonic clonic received the maximum number of points, complex partial and atonic seizures received the second highest value, myoclonic seizures received half of the maximum value, simple partial seizures received the second lowest value, and absence seizures and infantile spasms received 1 point. Enter a letter or number that is associated with the seizure type and write the description in the notes section. Enter 0 to indicate seizure freedom. Enter each code in a separate row with SEIZURE TYPE in the SEIZURE\_PARAMETER column
   3. If the **SEIZURE\_PARAMETER** column is **SEIZURE LENGTH,** then follow the entry instructions: The caregiver recorded seizure length in minutes and/or seconds. Caregivers recorded one length per seizure. Ranking points were assigned, 0 through the maximum value, with the maximum value being the most severe and 0 being seizure free. Unless specified otherwise, seizures less than 30 seconds were given a value of 1, and then each increase in length (interval was patient specific, i.e. 30 second increase in length) was given the next highest value until a maximum length used in the ranking system was reached. For example, if a caregiver indicated that every seizure over 5 minutes is severe, then 5 minutes (or 300 seconds) was the maximum length used in the ranking system. If caregivers did not record length, lab members determined length from hospital notes or other source documents. Enter each length cut off so that the ranking value represents greater than or equal to the number in the same row and less than the next largest number. Enter 0 to indicate 0 freedom. Enter each number range in a separate row with SEIZURE CLUSTER in the SEIZURE\_PARAMETER column.
   4. If the **SEIZURE\_PARAMETER** column is **SEIZURE CLUSTER,** then follow the entry instructions: Seizure cluster was recorded if the caregiver recorded the entire seizure event as one seizure and noted that the entire seizure event contained clusters of individual seizures. Ranking points were assigned, 0 through the maximum value, with the maximum value being the most severe and 0 being seizure free. Each increase in seizure cluster (interval was patient specific, i.e. increase in 10 seizures per cluster) was given the next highest value until a maximum seizure cluster used in the ranking system was reached. For example, if a caregiver indicated that 40 seizures in a cluster was severe then 40 was the maximum number of seizures in a cluster used in the ranking system. Enter each cluster number cut off so that the ranking value represents greater than or equal to the number in the same row and less than the next largest number. Enter 0 to indicate 0 freedom. Enter each number range in a separate row with SEIZURE CLUSTER in the SEIZURE\_PARAMETER column.
   5. If the **SEIZURE\_PARAMETER** column is **SEIZURE\_VARIABLE,** then follow the entry instructions: Seizure variables were defined and recorded by the caregiver for each seizure. Seizure variables included any aspect of the seizure that was not captured with seizure severity, seizure type, seizure length, or seizure cluster. Seizure variables included use of Diastat, drowsiness, loss of language, etc. The caregiver determined severity of the seizure variable. In the absence of a definition from the caregiver, literature or best judgment from the person entering the data was used to assign ranking points. Ranking points were assigned to each variable with the maximum value being the most severe and 0 being seizure free. Enter a letter or number that is associated with the seizure variable and write the description in the notes section. Enter 0 to indicate seizure freedom. Enter each code in a separate row with SEIZURE VARIABLE in the SEIZURE\_PARAMETER column
4. **SEIZURE\_RANKING**. Cell can never be blank. Follow the instructions below for data entry into each cell.
   1. If the **SEIZURE\_PARAMETER** column is **SEIZURE SEVERITY,** then follow the entry instructions: Seizure severity was defined as mild, mild-moderate, moderate, moderate-severe, or severe. Caregivers determined severity of observed seizure when they considered all seizures their child has had in the past. Caregivers recorded 1 of 5 severities per seizure. If caregivers did not record severity, lab members determined severity from hospital notes or other source documents. Ranking points 0 through the maximum value were assigned to each severity with the maximum number being the most severe and the number 0 being seizure free. Mild severity received 1 point, Mild moderate severity received the next highest value, moderate severity received half of the maximum value, moderate severe severity received the second highest value, severe severity received the maximum number of points, and u or unknown severity was treated like a moderate severity unless caregiver specified otherwise. Enter each ranking point in the corresponding row with SEIZURE SEVERITY in the SEIZURE\_PARAMETER column.
   2. If the **SEIZURE\_PARAMETER** column is **SEIZURE TYPE,** then follow the entry instructions: The caregiver, when possible, described and ranked each seizure type. Neurologist classification and/or supporting literature was used to assign ranking points to each seizure types if caregivers ranking and description of seizure type did not exist. Ranking points 0 through the maximum value were assigned to each seizure type with the maximum value being the most severe and 0 being seizure free. The following scale, provided by the neurologists and/or supporting literature, was used to assign ranking points to seizure types: tonic clonic or generalized tonic clonic received the maximum number of points, complex partial and atonic seizures received the second highest value, myoclonic seizures received half of the maximum value, simple partial seizures received the second lowest value, and absence seizures and infantile spasms received 1 point. Enter each ranking point in the corresponding row with SEIZURE TYPE in the SEIZURE\_PARAMETER column.
   3. If the **SEIZURE\_PARAMETER** column is **SEIZURE LENGTH,** then follow the entry instructions: The caregiver recorded seizure length in minutes and/or seconds. Caregivers recorded one length per seizure. Ranking points were assigned, 0 through the maximum value, with the maximum value being the most severe and 0 being seizure free. Unless specified otherwise, seizures less than 30 seconds were given a value of 1, and then each increase in length (interval was patient specific, i.e. 30 second increase in length) was given the next highest value until a maximum length used in the ranking system was reached. For example, if a caregiver indicated that every seizure over 5 minutes is severe, then 5 minutes (or 300 seconds) was the maximum length used in the ranking system. Enter each ranking point in the corresponding row with SEIZURE LENGTH in the SEIZURE\_PARAMETER column.
   4. If the **SEIZURE\_PARAMETER** column is **SEIZURE CLUSTER,** then follow the entry instructions: Seizure cluster was recorded if the caregiver recorded the entire seizure event as one seizure and noted that the entire seizure event contained clusters of individual seizures. Ranking points were assigned, 0 through the maximum value, with the maximum value being the most severe and 0 being seizure free. Each increase in seizure cluster (interval was patient specific, i.e. increase in 10 seizures per cluster) was given the next highest value until a maximum seizure cluster used in the ranking system was reached. For example, if a caregiver indicated that 40 seizures in a cluster was severe then 40 was the maximum number of seizures in a cluster used in the ranking system. Enter each ranking point in the corresponding row with SEIZURE CLUSTER in the SEIZURE\_PARAMETER column.
   5. If the **SEIZURE\_PARAMETER** column is **SEIZURE\_VARIABLE,** then follow the entry instructions: Seizure variables were defined and recorded by the caregiver for each seizure. Seizure variables included any aspect of the seizure that was not captured with seizure severity, seizure type, seizure length, or seizure cluster. Seizure variables included use of Diastat, drowsiness, loss of language, etc. The caregiver determined severity of the seizure variable. In the absence of a definition from the caregiver, literature or best judgment from the person entering the data was used to assign ranking points. Ranking points were assigned to each variable with the maximum value being the most severe and 0 being seizure free. Enter each ranking point in the corresponding row with SEIZURE VARIABLE in the SEIZURE\_PARAMETER column.
5. **ENTERED**: Can be left blank. This is a way to track who entered the data. Cell can be left blank.
6. **AUDITED**: Can be left blank. This is a way to track who audited the data. Cell can be left blank.
7. **COMMENTS**: Can be left blank. This is a way to track additional comments. Cell can be left blank.

#### SEIZURE\_DATA\_SOURCE.xlsx

The column in SEIZURE\_DATA\_SOURCE.xlsx and instructions on how to enter data into the columns are listed below. Name this document with the patient’s first two letters of the first name and first two letters of their last name. If there is a conflict with the same naming scheme, then add the number 2 at the end and increase the number consecutively to account for all patients with the same name scheme (e.g. JADO\_SEIZURE\_DATA\_SOURCE for someone named Jane Doe.).

1. **MRNUMBER**: Enter identifier or medical record number. Cell can never be blank.
2. **DATE**: Cell can never be blank. Enter date indicated on records. Every single date should be entered from the start of therapy to the end of therapy. If data does not exist on a date, then refer to the description in DAY\_QUALITY\_S column on how to record no data. Each seizure that occurs on the same date with either a different SEIZURE\_SEVERITY, SEIZURE\_LENGTH, \_SEIZURE\_TYPE, SEIZURE\_NUMBER, SEIZURE\_VARIALBE, or SEIZURE\_CLUSTER will be entered in a new row with the same date.
3. **DAY\_TYPE**: Cell can never be blank. See list in Options for categorical variables in the Data Dictionary. You will either enter a 1 in this cell if the date pertains to baseline or data collected before therapy or you will enter a 2 in this cell if the date pertains to data collected after or on the first day of therapy.
4. **DAY\_QUALITY\_S**: Cell can never be blank. The data quality will either be a record, recall, or imputed. See descriptions below to decide what number to enter in the column.
   1. Enter the number 1 if the data on this date is a record: Records were provided by a caregiver from paper or electronic sources, not including recall of seizure number and characteristics, and contained at least one of the following: seizure number, seizure severity, seizure type, seizure length, or other characteristics. If only one of the above seizure characteristics was recorded, then the remaining seizure characteristics were filled in per information in context or unknown was used if not information could be filled in.
   2. Enter the number 2 if the data on this date is a recall. Recall method: Information from progress notes, hospital notes, clinic notes, or other notes was entered (when available and applicable) if records were not available and was called recall method.
   3. Enter the number 3 if the data on this date needs to be imputed. Impute method: If recall or records were not available, then impute method was used. Time periods were defined by one or more consecutive incomplete days. The total number of consecutive incomplete days was divided in half so that there was a first half of the incomplete time period and a second half of the incomplete time period. Records and/or recall from before the incomplete time period were imputed into the first half of the incomplete time period with the oldest date imputed into the first date of the incomplete time period. Records and/or recall after the incomplete time period were imputed into the second half of the incomplete time period with the newest date imputed into the last date of the incomplete time period. If there was an odd number of incomplete days, then the extra day was imputed from the records and/or recall from before the incomplete time period. This method was applied separately to the baseline data and to the data on PKT, since the baseline data reflects data before treatment. If the incomplete time period was the very first set of days, then only days after the missing time period were imputed into the missing data time period. If the incomplete time period was the very last set of days, then only the days before the missing time period was imputed into the incomplete time period. If there were not enough record and/or recall dates before the incomplete time period to impute into the first half of the incomplete time period, then the available record and/or recall dates were repeated, starting with the oldest date, until all days in the first half of the incomplete time period were imputed. If there were not enough record and/or recall dates after the incomplete time period to impute into the second half of the incomplete time period, then the available record and/or recall dates were repeated, starting with the day immediately following the incomplete time period, until all days in the second half of the incomplete time period were imputed.
5. **SEIZURE\_SEVERITY**: Severity of seizure as written by caregiver. Write the code exactly as it appears in the SEIZURE\_RANKING\_SOURCE.xlsx. Cell cannot be left blank if the DAY\_QUALITY\_S is equal to 1 or 2. Cell must be left blank if the DAY\_QUALITY\_S is equal to 3.
6. **SEIZURE\_LENGTH**: Length of seizure as written by caregiver, record in seconds. Value in this cell should be a number without any letters or symbols. Cell cannot be left blank if the DAY\_QUALITY\_S is equal to 1 or 2. Cell must be left blank if the DAY\_QUALITY\_S is equal to 3.
7. **SEIZURE\_TYPE**: Seizure type as recorded by caregivers. Write the code exactly as it appears in the SEIZURE\_RANKING\_SOURCE. Cell cannot be left blank if the DAY\_QUALITY\_S is equal to 1 or 2. Cell must be left blank if the DAY\_QUALITY\_S is equal to 3.
8. **SEIZURE\_VARIABLE**: Seizure variables as recorded by caregivers. Write the code exactly as it appears in the SEIZURE\_RANKING\_SOURCE. Cell cannot be left blank if the DAY\_QUALITY\_S is equal to 1 or 2. Cell must be left blank if the DAY\_QUALITY\_S is equal to 3.
9. **SEIZURE\_NUMBER**: Seizure number as recorded by caregivers from records or recall. Value in this cell should be a number without any letters or symbols. Cell cannot be left blank if the DAY\_QUALITY\_S is equal to 1 or 2. Cell must be left blank if the DAY\_QUALITY\_S is equal to 3.
10. **SEIZURE\_CLUSTER**: Clusters of seizures within an event as written by caregiver. Value in this cell should be a number without any letters or symbols. Cell cannot be left blank if the DAY\_QUALITY\_S is equal to 1 or 2. Cell must be left blank if the DAY\_QUALITY\_S is equal to 3.
11. **ENTERED**: Can be left blank. This is a way to track who entered the data. Cell can be left blank.
12. **AUDITED**: Can be left blank. This is a way to track who audited the data. Cell can be left blank.
13. **COMMENTS**: Can be left blank. This is a way to track additional comments. Cell can be left blank.

#### MED\_DATA\_SOURCE.xlsx

The columns in MED\_DATA\_SOURCE.xlsx and instructions on how to enter data into the columns are listed below. Name this document with the patient’s first two letters of the first name and first two letters of their last name. If there is a conflict with the same naming scheme, then add the number 2 at the end and increase the number consecutively to account for all patients with the same name scheme (e.g. JADO\_MED\_DATA\_SOURCE for someone named Jane Doe.).

1. **MRNUMBER**: Enter identifier or medical record number. Cell can never be blank.
2. **DATE**: Cell can never be blank. Enter only dates of change in this sheet. Dates of change include type of medication or dosage of medication changed. Enter each individual medication in a different row with the same date. If a patient was receiving 3 medications and the dose of 1 med changed, then enter the date of change and the new dose of the changed med as well as the doses of the two meds that did not change. Refer to the example patient in this package if needed. Cell can never be blank.
3. **DAY\_TYPE**: Cell can never be blank. See list in Options for categorical variables in the Data Dictionary. You will either enter a 1 in this cell if the date pertains to baseline or data collected before therapy or you will enter a 2 in this cell if the date pertains to data collected after or on the first day of therapy.
4. **NDID**: Cell can be left blank
5. **MED\_ID**: Enter MED\_ID number given to each generic or brand name anti-epileptic drub, see MED\_RANKING\_SOURCE.xlsx for list of MED\_IDS. Cell can never be blank.
6. **REASON\_FOR\_CHANGE\_MED**: Enter reason for change in medication prescription or administration. See list in Options for categorical variables in Data Dictionary.xlsx. Cell can be left blank.
7. **PROD\_NAME**: Enter the name of the product from the medication label. Cell can be left blank
8. **DAILY\_MED\_DOSE\_MG**: Enter the total dose of medication per day in mg either prescribed or consumed. Cell can never be blank.
9. **MED\_DOSES**: Enter the total number of doses of medications per day either prescribed or consumed. Cell can be blank.
10. **MED\_COMMENTS**: Cell can be left blank. Enter additional comments pertaining to administration of meds.
11. **ENTERED**: Can be left blank. This is a way to track who entered the data. Cell can be left blank.
12. **AUDITED**: Can be left blank. This is a way to track who audited the data. Cell can be left blank.
13. **COMMENTS**: Can be left blank. This is a way to track additional comments. Cell can be left blank.

#### ANTHROPOMETRICS\_SOURCE

The columns in ANTHROPOMETRICS\_SOURCE.xlsx and instructions on how to enter data into the columns are listed below. Name this document with the patient’s first two letters of the first name and first two letters of their last name. If there is a conflict with the same naming scheme, then add the number 2 at the end and increase the number consecutively to account for all patients with the same name scheme (e.g. JADO\_ANTHROPOMETRICS\_SOURCE for someone named Jane Doe.).

1. **MRNUMBER**: Enter identifier or medical record number. Cell can never be blank.
2. **DATE**: Cell can never be blank. Enter only dates weight was collected in this sheet. Each new date is entered on a separate row.
3. **DAY\_TYPE**: Cell can never be blank. See list in Options for categorical variables in the Data Dictionary. You will either enter a 1 in this cell if the date pertains to baseline or data collected before therapy or you will enter a 2 in this cell if the date pertains to data collected after or on the first day of therapy.
4. **SOURCE**: Enter the number corresponding to the Options for categorical variables in the Data Dictionary. Enter 1 if the data was collected at a clinic visit. Enter 3 if the data was collected at home or some other place than a clinic visit.
5. **WT**: Enter the weight in kg on the date collected.
6. **ENTERED**: Can be left blank. This is a way to track who entered the data. Cell can be left blank.
7. **AUDITED**: Can be left blank. This is a way to track who audited the data. Cell can be left blank.
8. **COMMENTS**: Can be left blank. This is a way to track additional comments. Cell can be left blank.

#### CLINIC\_VISIT\_SOURCE.xlsx

The columns in CLINIC\_VISIT\_SOURCE.xlsx and instructions on how to enter data into the columns are listed below. This document does not need to be named with the patient’s initials. Keep the document name as CLINIC\_VISIT\_SOURCE. You will add clinic visit dates for all patients in this excel sheet.

1. **MRNUMBER**: Enter identifier or medical record number. Cell can never be blank.
2. **DATE**: Cell can never be blank. Enter only dates clinic visits occurred. Or you can enter dates that you want to generate seizure, med, or outcome bar graphs. For example, if you want to generate a bar graph for every month a patient was on therapy, you can enter the first of every month in this sheet.
3. **LAST**: Enter the patients last name. Cell can be left blank.
4. **FIRST**: Enter the patients first name. Cell can be left blank.

#### DEMOGRAPHICS\_SOURCE.xlsx

The columns in DEMOGRAPHICS\_SOURCE.xlsx and instructions on how to enter data into the columns are listed below. This document does not need to be named with the patient’s initials. Keep the document name as DEMOGRAPHICS\_SOURCE. You will add demographic information for all patients in this excel sheet.

1. **MRNUMBER**: Enter identifier or medical record number. Cell can never be blank.
2. **LAST**: Enter the patients last name. Cell can be left blank.
3. **FIRST**: Enter the patients first name. Cell can be left blank.
4. **DOB**: Enter the patients date of birth in this cell in mm/dd/yyyy format. Cell can never be blank.