Childhood Acute Illness & Nutrition Network

KEMRI | Wellcome Trust Clinical Trials

Pancreatic Enzymes and Bile Acids: A Non-Antibiotic approach to Treat Intestinal Dysbiosis in Acutely Ill Severely Malnourished Children

Study Specific Procedure	**SSP No:** CL01 **Version No:** 1.0 **Supersedes:** None **Effective Date:** 18th October 2021

Title: Screening Procedure

	NAME	**SIGNATURE**	**DATE**
PREPARER	Johnstone Thitiri		**15th June 2021**
Q.A. AUTHORITY	Aisha Bwika		**16th October 2021**
APPROVING AUTHORITY	Robert Bandsma		**17th October2021**

1.0 PURPOSE / INTRODUCTION:

- The main purpose of this SSP is to standardize and harmonize the screening process of participants being enrolled into PB-SAM trial across all sites.
- The SSP describes the process of screening acutely ill children with severe malnutrition being admitted to hospital for eligibility in the PB-SAM trial.

2.0 SCOPE / RESPONSIBILITY:

2.1 This SSP applies to PB-SAM clinicians, nurses and study field workers involved in the screening of sick children at admission and within 24 hours of admission.

2.2 The Principal Investigator retains overall responsibility on implementation of these standards and recruitment of suitable participants into the study.

3.0 DEFINITIONS /ABBREVIATIONS:

3.1 **CRF:** Case Report Form

3.2 **MUAC:** Mid-Upper Arm Circumference

3.3 **SAM:** Severe Acute Malnutrition

3.4 **OPD:** Outpatient Department

3.5 **SD:** Standard Deviation

3.6 **WHZ:** Weight for Height z-score

4.0 MATERIALS

4.1 MUAC Tape

4.2 Weighing Scale

4.3 Length Board/Stadiometer

4.4 WHZ calculator

5.0 METHODOLOGY:

5.1 **Introduction**

a) Enrolment to PB-SAM trial must occur within a window of 72 hours from the time a child with SAM is admitted to hospital. **Preference is given to enrolment within the shortest time possible**. Quality assurance for this important consideration will monitor site performance on time to enrolment, aiming for up to 75% of enrolments to occur within 24 hours.

b) The screening component must occur early to allow the subsequent process preceding enrolment to occur timely i.e. information sharing and obtaining informed consent.

c) Consequently, screen children coming into hospital immediately on arrival at the point of

admission (i.e. OPD /casualty/ Paediatric ward) or within 24 hours of admission in case of out-of-hours or an emergency situation at admission requiring prioritization of clinical care.

a. Trial participants

Inclusion Criteria for trial study participants

a. Age 2 to <59 months
b. Admitted to hospital with an acute, non-traumatic illness and within 72 hours of admission at the time of enrolment
c. Severe malnutrition defined as:
   i. Children below between 2 to <6 months old:
      - MUAC <11 cm
      - WHZ <-3 SD of median WHO growth standards
      - Symmetrical oedema of at least the feet related to malnutrition (not related to a primary cardiac or renal disorder)
   ii. Children >6 to 59 months old:
      - MUAC <11.5cm,
      - WHZ <-3 SD of median WHO growth standards
      - Symmetrical oedema of at least the feet related to malnutrition (not related to a primary cardiac or renal disorder)
d. Presence of two or more features of severity as specified in table 1 below.

Clinical/Lab Feature	*Criteria*
Respiratory distress	*"Subcostal indrawing" or "nasal flaring" or "head-nodding"*
Oxygenation	*"Central cyanosis" or SaO_2 <90%*
Circulation	*Limb temperature gradient or capillary refill >3 seconds*
Conscious level (AVPU)	*< "A"*
Pulse	*> 180 per min*
Haemoglobin	*< 7g/dl*
Blood glucose	*< 3mmol/L*
White blood cell count	*< 4 or > 17.5 x 10^9/L*
Temperature	*<36 or >38.5°C*
Very low MUAC	*MUAC <11cm*

Table 1. Severity features, two or more are required for enrolment

e. Accompanied by care provider who provides written informed consent
f. Primary caregiver plans to stay in the study area during the duration of the study.

Exclusion criteria

i. Requires immediate cardiac/respiratory resuscitation (may be re-evaluated for study eligibility within 72h of admission)
ii. Presence of terminal illness (other than severe acute malnutrition) likely to result in death within 6 months in the opinion of the recruitment team
iii. Known congenital heart disease
iv. Admission for traumatic or surgical indication
v. Known liver disorder or exocrine pancreatic disorder – e.g. biliary atresia, history of gallstones, cystic fibrosis, or clinical jaundice
vi. Known stomach or duodenal ulcer
vii. Residence is outside the catchment area of study hospital
viii. Primary caregiver declines to provide informed consent
ix. Known intolerance or allergy to any study medication

5.2 Screening process

5.2.1 Establish a system of detecting NEW inpatient admission either at outpatient department or admission ward. This could include use of existing admission registers or electronic data capture systems for patients if available.

5.2.2 Allow not more than 12 hours for detection of NEW admissions to allow prompt screening and enrolment.

5.2.3 Ensure presence of a screening log to guide the screening process.

5.2.4 Carry along required tools for screening to include anthropometry equipment.

5.2.5 Identify yourself to carer and explain the planned screening of child. In case of emergency or child is too sick to allow conversation with carer, some of data may be obtained from clinical care notes and measurements.

5.2.6 Determine age of child. Use date of birth data from clinic cards or other written document. If none is available, use date provided by carer. Prompt for correctness e.g. number and types of vaccinations already received, or child's achieved milestones. If documents can be received later, ensure this is cross checked before participant leaves hospital.

5.2.7 Collect anthropometric measurements to confirm diagnosis of severe malnutrition according to criteria in section 5.1 above. DO NOT use anthropometry measurements collected routinely for use in trial decisions of eligibility.

5.2.8 Allow for the process of routine lab investigation to obtain laboratory information for assessment of severity

***NOTE**: If a participant is eligible by 2 clinical severity criteria, DO NOT wait for lab results to proceed.*

5.2.9 Undertake severity assessment using the protocol-specific criteria checklist in section 5.2 above. Severity assessment is a clinical assessment to be wholly done by a qualified clinician, preferably study clinician. Record the observations or results for this in form of codes found in the screening log.

5.2.10 Undertake assessment of exclusions which range from presence of terminal illness, congenital anomalies, exocrine disorders to allergy and intolerance to proposed investigational products. Again, this is strictly a clinical assessment to be completed by a qualified clinician, preferably study staff. Record results in the screening log in form of codes. A full list of codes is found with the screening log.

5.2.11 Complete the process by making a determination of eligibility based on the protocol and this SSP document, and record this in the screening log.

***NOTE:** Enrolment of correct population of participant for the trial is a critical requirement by trial staff and will form part of performance monitoring for the site. Enrolment of an ineligible participant is a serious error and a protocol violation requiring reporting to ethics and regulatory agencies.*

5.2.12 With screening process completed, immediately allow initiation of full informed consent process.

***NOTE:** If a potential study participant is so sick that it is difficult to introduce the study/consent the guardian/parent, clinical care will supersede enrolment into the trial. The guardian/parent can be consented later, and the child enrolled into the study within 72 hours after admission. If they are not approached for consent, this will be documented in the screening log and a comment made on the reason for failure to enrol.*

5.2.13 On weekly basis and as guided by Central Data Team**, collate** information from the screening log to present site screening report that allows scrutiny of adherence to protocol and performance indicators.

6.0 APPENDICES:

6.1 Screening Log for PB-SAM Participants

Date of screening	Screening No.	Patient Name	Hospital No.	Age in months	MUAC in cm	WHZ-score	Oedema (Yes or No)	1st of Severity Code and value* (Write 0 if none)	2nd of Severity Code and value (Write 0 if none)	Dir Bilirubin. Done? Y/N, give value if Y	Exclusion code	Eligible (Yes, No)	comments	staff Initials
26thAug 21	K0001	Sayeem Aktar	XXXXXX	14	10.9	-3.1	N	10 (10.9 cm)	5 (201bpm)		0	Y	First screened in Dhaka	JTH
27thAug 21	K0002	Eclears Mwachami	Xxxxxyyy	9	11.2	-3.2	N	2 (86%)	1 (Sub. Indrawing)		0	Y	Eligible	SMW
28th Aug 21	K0003	Munga Matanza	Xxxkkkkm	16	13.1	-2.5	Y	6 (4.2)	9 (39^{0}C)		3	N	Fracture femur	JWA
29th Aug 21	K0004	Esther Kaingu	Xxxmmkkk	3	10.8	-2.9	N	10 (10.8cm)	7 (2mmol/dl)		7	N	Refused Consent	MJU

Severity code

CODE	Clinical/Lab Feature	Criteria
0	**None**	**N/A**
1	Respiratory distress	"Subcostal indrawing" or "nasal flaring" or "head-nodding"
2	Oxygenation	"Central cyanosis" or SaO2 <90%
3	Circulation	Limb temperature gradient or capillary refill >3 seconds
4	Conscious level (AVPU)	< "A"
5	Pulse	> 180 per min
6	Haemoglobin	< 7g/dl
7	Blood glucose	< 3mmol/L
8	White blood cell count	< 4 or > 17.5 x 109/L
9	Temperature	<36 or >38.5oC
10	Very low MUAC	MUAC <11cm

Exclusion codes

CODE	Exclusion code list
0	None
1	Presence of terminal illness (other than severe acute malnutrition) likely to result in death within 6 months in the opinion of the recruitment team
2	Known congenital heart disease
3	Admission for traumatic or surgical indication
4	Known liver disorder or exocrine pancreatic disorder – e.g. biliary atresia, history of gallstones, cystic fibrosis or clinical jaundice
5	Known stomach or duodenal ulcer
6	Residence is outside the catchment area of study hospital
7	Primary caregiver declines to provide informed consent
8	Known intolerance or allergy to any study medication

7.0 REFERENCES

7.1 PB-SAM protocol

8.0 DOCUMENT CHANGE HISTORY

Version Table:

Version 1.0: Title: **Screening Procedure**	Dated: **18th October 2021**	SSP No.: **CL01**	No. Pages: **8**
Version 2.0: Title:	Dated:	SSP No.:	No. Pages:
Version 3.0: Title:	Dated:	SSP No.:	No. Pages:
This document is effective from the date of training/last approval signature and will be reviewed in two years.			

SSP Review and Updating Logs

DATE	NAME OF REVIEWER	SIGNATURE	REASON FOR REVIEW AND CHANGES MADE

SSP AWARENESS LOG

I, the undersigned below, hereby confirm that I am aware that the accompanying SSP is in existence from the date stated herein and that I shall keep abreast with the current and subsequent SSP versions in fulfillment of Good Clinical Practice (GCP).

Number	Name	Signature	Date (dd/mmm/yyyy)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			