

	1. ELIGIBILITY CHECKLIST		
	1.1. Inclusion Criteria		
		YES	NO (ineligible)
a)	Age between 2 months and 59 months		
b)	Admitted to hospital with an acute non-traumatic illness (Within this time, children requiring CPR or unable to take orally (NPO) will be re-evaluated daily)		
c)	Admitted within 72 hours of admission		
d)	Severe malnutrition (weight for height < -3z scores of the median WHO growth standards and/or MUAC  • Age > 6months <115mm  • 2- <6 months <110mm  or symmetrical oedema of at least the feet related to malnutrition, i.e. not related to a primary cardiac or renal disorder		
e)	Parent or guardian able and available to consent		
f)	Able to feed orally in usual state of health		
g)	Presence of two or more features of severity as specified in Table below**		
h)	Primary caregiver plans to stay in the study area during the duration of the study		
	1.2. Exclusion Criteria		
		YES (Ineligible)	NO
a)	Known congenital syndrome		
b)	Cleft palate		
c)	Known congenital cardiac disease		
d)	Known terminal illness e.g. cancer		
e)	Admission for surgery, or likely to require surgery within 6m		
f)	Admission for trauma?		
g)	Sibling enrolled in study		
h)	Previously enrolled in this trial or currently enrolled in this trial		
i)	Known stomach or duodenal ulcer		
j)	Known liver disorder or exocrine pancreatic disorder – e.g. biliary atresia, history of gallstones, cystic fibrosis or clinical jaundice		
k)	Known intolerance or allergy to any study medication		



#### \*\*Severity characteristics, two or more are required for enrolment

a)	☐ Respiratory distress	☐ subcostal indrawing or ☐ nasal flaring or ☐ head nodding ☐ grunting
b)	☐ Oxygenation	$\square$ central cyanosis or $\square$ SaO <sub>2</sub> <90% (adjusted for altitude)
c)	☐ Circulation	☐ Limb temperature gradient or ☐ cap refill >3 seconds
d)	□ AVPU	<"A"
e)	☐ Pulse	> 180 per min [beats per minute]
f)	□ Hb	< 7g/dl [g/dl]
g)	□ WBC	< 4 or > 17.5 x 10 <sup>9</sup> /l [10 <sup>9</sup> /l]
h)	☐ Blood glucose	< 3mmol/L [mmol/L]
i)	☐ Documented temperature at admission or screening	□<36 or □>38.5°C
j)	☐ Very low MUAC	MUAC <11cm

If eligible by 2 criteria, please continue to admission

	2. ADMISSION TO HO	OSPITAL AND TRIAL ENROLMENT
2.1.	DATE arrived at the hospital	/// D / M M / Y Y Y Y
2.2.	TIME arrived at the hospital	: unknown  24h Clock
2.3.	DATE of enrolment i.e. date consented and seen by research team	//
2.4.	TIME of enrolment	:: 24h Clock
2.5.	Sex	☐ Male ☐ Female
2.6.	DOB	/// D D / M M / Y Y Y Y
2.7.	Is the DOB:	☐ True ☐ Estimated*
2.8.	Date of consent	///
2.9.	Time of consent	: 24h Clock
2.10.	Consented by Initials	

<sup>\*</sup>if DOB is estimated, and the day is uncertain, write '15' for DD

3. PRESENTING AND CURRENT COMPLAINTS



3.1.	What were the presenting complaints at admission? (Select all that apply)	_	☐ Fever / Hotnes☐ Difficulty breat☐ Cough<14 days	hing ,		ioea <14 days	☐ Convulsions
	(Sciect all that apply)		☐ Diarrhoea >14		0	7.7	
			☐ Altered conscio		□ Blood		☐ Poor feeding
			☐ skin changes ( <i>f</i> i☐ Hair changes ( <i>fi</i>	-	□ Body	swelling (oedema	
			☐ Other				
3.2.	Skin changes (if checked of	at 3.1)	☐ Rash ☐ Hyperp			popigmentation [	] Peeling
			☐ Blisters ☐ Thic			. 5	
			How long have sk	in changes	s been pr	esent Days/	Months
3.3.	Hair Changes (if checked of	at 3.1)	☐ Reddened colo	_	t colour 🛭	☐ Straighter than	usual
			☐ Thinner than u	sual			
		4. TR	EATMENT FOR	THIS ILL	NESS		
4.1. I	Have you visited a hospital	for this	□ No □	Outpat	tient	☐ Inpatient (O	vernight stay)
i	<b>liness?</b> (Select any that apply)						
			5. BIRTH HIS	TORY			
5.1. E	Birth details	☐ Premature				Twin/multiple bir	th
	Select any that apply)	☐ Born at ter		•		,	
			C ANTUROR	SMETDY			
			6. ANTHROPO	JIVIETKY			
6.1.	Weight	seedes for CUAIN	l studul			ka	
6.2.	(to be taken using SECA  Length/Height	scales for CHAIN	stuay)	☐ Lengt	· ·h	_kg □ Height	
0.2.	(to be taken using SECA 416 info	antometer provid	led for study)		1: .	U	· 2: . cm
6.3.	MUAC	,	, ,,				
	(To be taken using MUA	C tape for CHAIN	l study)	Measurer	1:	cm Measure	er 2: cm
6.4.	Head circumference						
6.5	(To be taken using CHAI	N measuring tap	e)	Measurer	1:	cm Measure	er 2: cm
6.5.	Staff Initials			Measurer	1:	Measurer 2: _	
NB: If the	child is unwell the Length and	Head Circumfe	rence can be taken				
			7. PREVIOUS	LIENITU			
7.1	Draviously admitted to be	anital	7. PREVIOUS	ПЕАСІП			
7.1.	Previously admitted to ho (Includes other hospitals / healt Select 1)	•	<b>□ No</b> □ < 1 w	veek ago	□ 1 wee	ek-1month ago	□ >1month ago
7.2.	Any medication last 7 day	s before					
	admission.		☐ No medication	n $\square$ Ant	ibiotic <b>[</b>	] Antimalarial	☐ Traditional
	(Select all that apply)		☐ Deworming	□ Vita	amin F	Yes, but unknow	ın
			☐ Deworning ☐ ☐Other (Specify)			i 163, but ulikilow	
			(-1//				
7.3.	Has the child previously h	ad oedema	□ Y <b>□</b> I	N			
	(body swelling)?			14			
7.4.	Urine production in last 2	4hrs?			<b>-</b> .		
	(Select 1)		☐ Normal or gre	ater	⊔ Less t	han normal	☐ Not passing



			☐ Unknown					
		8.	LONG TERM MEDIC	CATION				
8 1 W	as child on any long	ARV's						
	medication before	Aires						
	talization?	Zidovudine	/azidothymidine (ZDV/A	ZT) 🗌 Lamivud	ine (3TC) [	Abacavir (ABC)		
(select	any that apply)	Nevirapine	(NVP) Efavirenz (EFV) Lopinavir/Ritonavir (Kaletra, LPV/r) Other					
		Neuro						
		☐ Phenobarb	oital Valproic acid	71 evetiracetam	□Lamotr	rigine Other		
Sickle cell		valprole dela _		Lamon	igine other			
		Hydroxyure	ea 🗌 Other					
		Anti-TBs						
☐ Isoniazid ☐ Rifampin ☐ Pyrazinamide (PZA) ☐ Ethambutol ☐ Other			ol 🗌 Other					
	0	TDEATMEN	IT CIVEN REFORE AR	DIVAL AT CTI	IDV HOCE			
	9	. IREALIVIEN	IT GIVEN BEFORE AR	RIVALATSIC	זענ חטא	TIAL		
9.1.	Intravenous Antibioti	cs Given?	☐ Not given					
(select any that apply)			☐ Benzylpenicillin	☐ Gentami	cin	☐ Ceftriaxone		
			☐ Co-amoxiclav	☐ Flu/Cloxa	icillin	☐ Chloramphenicol		
			☐ Ampicillin	☐ Amikacin		☐ Meropenem		
			☐ Levofloxacin	□ Vancomy	cin	☐ Metronidazole		
			Other					
9.2.	Oral Antibiotics Given (select any that apply)	1?	□ Not given			□ A=:4b		
	(select any that apply)		☐ Amoxicillin☐ Co-trimoxazole	☐ Erythrom☐ Metronic		☐ Azithromycin		
			☐ Cefalexin / cefaclor	☐ Co-amox		☐ Ciprofloxacin☐ Nalidixic acid		
			□ Penicillin	☐ Flucloxac		☐ Levofloxacin		
			Perilcillii	L Flucioxac	.111111	☐ Other		
9.3.	Initial treatment give	<u>n</u>	☐ IV Fluid Bolus		□ IV Mai	ntenance Fluids		
	(Select any that apply. For IV fluid bolus, and IV flu	uids specify type	☐ Oxygen			th (heater, warmed fluids)		
	and volume in ml, and durc			☐ Oral glucose		ercial F75		
			☐ Blood transfusion☐ Phenobarbitone			ercial F100 v prepared F75/ milk suji		
			☐ Diazepam			prepared F100 / milk suji 100		
			☐ Paracetamol		<u> </u>	ssed breast milk		
			□ Ibuprofen		☐ Dilute	F100		
			☐ Antimalarial			milk/ formula/ feed		
			☐ ReSoMal		☐ Other			
			□ ORS					



	10. E	NROLMEN	IT VITAL	SIGNS		
10.1.	Axillary temperature			. •	С	
10.2.	Respiratory rate				<u>-</u>	
	(Count for 1 minute)			/m	ninute	
10.3.	Heart rate					
	(Count for 1 minute)			/m	ninute	
10.4.	SaO2					
	(To be taken from finger or toe using pulse oximeter)	)		%		
			_	nk if unrecor		
10.5.	Where was SaO2 Measured?		⊔ Meas	ured on Ox	ygen 🗀 Meası	ired in Room Air
			☐ Unred	cordable		
			- Ome	Cordable		
		11. EXAM				
	Examination should be performed by CHAIN study of diagnosis based on clinical history and findings. Ref				n of children, and ai	ble to formulate a
11.1.	1 - 1	☐ Clear	-xummutio		s active support	
11.1.	11.1.   Airway   ☐ Clear   ☐ Obstructed/S				s active support	
11.2.	Breathing		-		e to circulation)	
	(select all that apply)	☐ Central	cvanosis	. г	☐ Nasal flaring	☐ Reduced air-
		_ centrar	cyanosis	_	i rasar naring	entry
		☐ Wheeze	<u> </u>		☐ Acidotic	, □ Grunting
				В	reathing	_
		☐ Lower c	hest wall		☐ Crackles	☐ Dull to
		indrawing				percussion
11.3.	Cinculations	☐ Head no	odding			
11.5.	Circulation:	□ <2s	□ 2-3	s □>	•3s	
	a) Cap Refill (select one)					
	b) Peripheral temperature	☐ Warm p	eripnerie	s 🗆 (	Cold peripheries	
	(select one)	☐ Normal		□Weak		
	c) Pulse Volume (select one):	Nominal		□VVCak		
11.4.	Disability:					
	a) Conscious level (select one)	☐ Alert		☐ Voice	☐ Pain	
	,				-	Unresponsive
	b) Fontanelle (select one)	□ Normal			☐ Sunken	☐ Not
				Bulging		present
	c) Tone (select one)	☐ Normal		☐ Hyperto	onic	☐ Hypotonic
	d) Posture (select one)	_		_		
	ay i ostare (sereet one)	☐ Normal		☐ Decorti	cate □Dece	rebrate
	e) Activity (select one)	☐ Normal			Leth	argic
				Irritable/A	gitated Letii	a bic
11.5.	Dehydration:	ПΥ	□и			
	a) Sunken eyes? (Select one)					
	b) Skin pinch (Select one)	☐ Immedi	ate	□<	<2 seconds	□ >2 seconds



11.6. Oedema (select any that apply)		□ None □ both feet/ankles □ lower legs			
	, , , , , , , , , , , , , , , , , , , ,	☐ hands or lower a	ırms □ face		
11.7.	Drinking/Breastfeeding (Select one)	☐ Normal	☐ Poorly	□ Not □ Eager / drinking Thirsty	
11.8.	Abdomen (select any that apply)	☐ Normal – no concerns	☐ Distension	☐ Hepatomegaly	
	, , , , , ,	□ Tenderness	□ Splenomegaly	☐ Other abdominal mass	
11.9.	Signs of Rickets (select any that apply)	□ None	☐ Wrist widening	g 🔲 Rachitic rosary	
	(Solition) that apply)	☐ Swollen knees	☐ Bow legs	☐ Frontal bossing	
11.10.	Jaundice (Select one)	□ Y <b>□ N</b>			
11.11.	ENT/Oral/Eyes (select any that apply)	☐ Mouth Normal ☐ Stomatitis	☐ Oral ulceration	n □ Oral candidiasis	
		☐ Ears Normal ear (mastoiditis)	☐ Pus from ear☐ Lymphadenop	☐ Tender swelling behind athy	
		☐ Eyes Normal ☐ Visual impairmen	☐ Conjunctivitis nt	☐ Eye discharge	
11.12.	Skin	☐ Normal	☐ Hyperpigment	ation   Depigmentation	
	a) Type of skin lesion (select any that apply)	☐ Broken skin☐ Cellulitis☐ Vesicles	☐ Dermatitis☐ Impetigo☐ Desquamation	☐ 'Flaky paint' ☐ Pustules ☐ Macular or papular	
	b) Site of skin lesions. (select any that apply)	□ <b>Not applicable (</b> I □ Face / scalp □ Legs □ Bu	No rash) □ Palms /		

	12. SUSPECTED CHRONIC CONDITIONS			
Select co	onfirmed, suspected or none for all conditions:	Confirmed/Suspected (diagnosed previously/ recorded/ clinician's impression)	None	
12.1.	Cerebral palsy/neurological problem/epilepsy (Select one)			
12.2.	Sickle Cell disease (select one)			
12.3.	Thalassaemia (Select one)			
12.4.	Visual problem / Blindness (select one)			

#### 13. FEEDING PRIOR TO ADMISSION



13.1.	Prior to this admission child actively attending outpatient nutrition program?  (Select one)	☐ Supplementary (corn soy blend, RUSF, khichuri, halwa) ☐ Therapeutic (RUTF, Plumpy-nut)		
		☐ None		
13.2.	Has the child eaten solid food in last 24 hrs (Select one)	□ Yes	□ No	
13.3.	Has child taken liquids or breastfed in last 24 hrs (Select one)	☐ Yes	□No	
13.4.	Is the child usually breastfeeding? (Select one)	☐ Yes	□No	
13.5.	Does the child usually have other feeds other than breastmilk? (Select one)	□ Yes	□No	
13.6.	If NOT breastfeeding at all, age stopped in months?	□ N/A (still breastfeeding)		
	(select one)	□ 0-3m	□ 4-6m □ 7-12m □ >12m	
		□ Unknown		

	14. IMMEDIATE CLINICAL INVE	ESTIGATIONS AND HIV STATUS AT ENROLMENT
14.1.	Malaria RDT? (select one)	☐ Positive ☐ Negative ☐ Not done
14.2.	HIV status known?	□ No, child not previously tested, not known to be exposed □ Yes, known PCR positive □ Yes, antibody positive, unknown PCR status □ Yes, known exposed, known PCR negative (children under 18m with PCR result SEEN BY RESEARCH TEAM. If not seen select below and perform HIV RDT □ No, child untested, but known to be HIV exposed
14.3.	a) If not known positive, HIV RDT results now? (select one)	☐ Reactive / positive ☐ Non-Reactive / Negative ☐ Indeterminate ☐ Declined testing ☐ Testing not offered by study team (e.g. culturally not sensitive)
	b) If RDT results now is positive, was PCR sample sent? (select one)	☐ Yes ☐ No missed ☐ No referred
14.4.	Biological mother present at enrolment? (select one)	☐ Yes ☐ No
14.5.	HIV test offered to caregiver? (Offer if only biological mother)	Yes, Reactive       Yes, Non-reactive       Yes, but Declined         No, mother is known positive       Missed       N/A child in care home         Not offered by study team (e.g. culturally not sensitive)         Not applicable (mother not available)



	15.	. TREATMENT IN STUDY I	HOSPITAL BEFORE ENRO	DLMENT
15.1.	Admitted to: (select one)	☐ Admission to wa	ard	HDU ☐ Admission to ICU
15.2.	Date and time First antibiotics given	///		——:—— □Not given
15.3.	Intravenous Antibiotic Given? (select any that apply)	□ Not given □ Benzylpenicillin □ Co-amoxiclav □ Ampicillin □ Levofloxacin □ Other	☐ Gentamicin ☐ Flu/Cloxacillin ☐ Amikacin ☐ Vancomycin	☐ Ceftriaxone ☐ Chloramphenicol ☐ Meropenem ☐ Metronidazole
15.4.	Oral Antibiotics Given (select any that apply)	Penicillin  Not given  □ Amoxicillin  □ Co-trimoxazole  □ Cefalexin / cefaclor  □ Penicillin	☐ Erythromycin ☐ Metronidazole ☐ Co-amoxiclav ☐ Flucloxacillin	☐ Azithromycin ☐ Ciprofloxacin ☐ Nalidixic acid ☐ Levofloxacin ☐ Other
15.5. Initial treatment given (Select any that apply. For IV fluid bolus, and IV fluids specify type and volume in ml, and duration)			Oral Glucose Co C	Maintenance Fluids armth (heater, warmed fluids) mmercial F75 mmercial F100 cally prepared F75/ milk suji cal prepared F100 / milk suji 100 pressed breast milk ute F100 her milk/ formula/ feed her
Clinical d <b>16.1.</b>	liagnosis should be based on ex	xamination and investigation findi	INITIAL DIAGNOSES: ings. Tick the three most likely d e Cell Disease □ Thala	
	(select any that apply)	☐ Not applicable	dysfunction	
16.2.	Respiratory (select any that apply)	☐ LRTI/pneumonia ☐ Bron☐ Otitis media ☐ Asth		☐ Pulmonary TB ble
16.3.	Infection (select any that apply)	☐ Soft tissue infection [	□ Varicella □ Oste	elated illness omyelitis



		☐ Not applica	able			
16.4.	CNS	-				
	(select any that apply)	☐ Febrile cor☐ Other ence☐ Cerebral p	ephalopathy	☐ Epilepsy☐ Hydrocephalus☐ Not applicable	<ul><li>□ Probable meningitis</li><li>□ Developmental delay</li></ul>	
16.5.	Other suspected					
10.5.	diagnosis (select any that apply)	☐ Other ☐ U	nknown 🗖 Fa	illed appetite test on	y □ Suspected Toxicity □ Not applicable	
	47	A DRAICCION	INIVECTIO	TIONE AND CAN	IDLE COLLECTION	
4= 4					PLE COLLECTION	
17.1.	CBC with differential t		Yes	☐ No		
17.2.	(As part of routine clinical co		Yes	□No		
17.2.	Clinical chemistry take (Kilifi and Dhaka; select one		☐ res			
17.3.	EDTA blood taken	/	Yes	□No		
17.3.	(Select one)					
17.4.	Blood culture taken		☐ Y BEFOR	E ABX	ABX 🗆 No	
_,	(if available at site as oart o	f routine care;	= : 52: 510		•	
	select one))	,				
<i>17.5.</i>	Unable to take all bloc	od samples,	☐ Not app	licable (all bloods tal		
why?		☐ Difficult venepuncture ☐ Child uncooperative				
	(Select one)		☐ Parent re	efused $\square$ C	ther	
17.6	Do stol sweb tolese		☐ Y BEFOR	E ABX	ABX 🗆 No	
<i>17.6.</i>	Rectal swab taken (Select one)		LL Y BEFOR	E ABX LITAFIER	ABX LINO	
17.7.	Time Rectal swabs tak	en				
17.7.	Time Nectal Swabs tak	CII	: Hrs			
			24 h cloc	k		
<i>17.8.</i>	Stool sample taken?					
	(Must be Taken within fir	st 48h of	Yes	□No		
4= 0	enrolment; select one)					
17.9.	Date stool sample take	en	,	/		
			D D / M I	$\frac{1}{M} \frac{1}{Y} \frac{1}{Y} \frac{1}{Y} \frac{1}{Y} \frac{1}{Y}$		
			,	,		
			18. SAN	IPLES TAKEN BY		
18.1.	Blood Samples taken k	ov (initials)				
	•					
18.2.	Rectal Swabs taken by	(initials)				
18.3.	Stool taken by (initials	)		<del></del>		
	, ,	•				
			40-68	COMPLETION		
			19. CR	F COMPLETION		
19.1.	a) CRF Completed by	(Initials) – to	be			
	signed when comp	-				
	Do not sign if any fields					
	b) Date	, ,				
	,		/	/		
			D D /	MM/YYYY		
	c) <b>Time</b>					
				·		