COMET | Case Report Form

Version 1.8 | Date: 10.05.2025

IMPERIAL

Study Centre Name:							
Randomisation Number:				3 Digits			
Subject ID:							6 Digits

1. Written informed consent obtained from parent?	☐ Yes ☐ No
2. Eligibility confirmed, and consent countersigned by medically qualified personnel on delegation log?	☐ Yes ☐ No
3. Screening and randomisation completed on Sealed Envelope (including eligibility, neurological assessment, date and time of birth)	☐ Confirmed
4. Treatment Allocation	☐ Normothermia (Control) / ☐ Cooling (Intervention)

If allocated to Cooling		
Cooling start date and time:		*DD/MM/YYYY	HH:MM*
Baby's age at start of cooling:		*Hours and minutes*

Case Report Form Sections:

1. Delivery | Resuscitation
2. Maternal | Pregnancy
3. Admission | Transport
4. Temperature | Investigations
5. Hospitalisation | Discharge
6. Final Check | Sign-off

Full name of delegated staff completing this form:	
Date CRF completed:	
Signature:	

Subject ID:

Section 1. Delivery | Resuscitation

1	Gestational age at birth:		*Weeks + Days*
2	Birth Weight:		*grams*
3	Head Circumference:		*cm*
4	Baby's Gender: ☐ Male ☐ Female		
5	Apgar scores at 1, 5, and 10 minutes after birth: 1 min: _____ 5 min: _____ 10 min: _____		*Write NA if not available*
6	Details of resuscitation?		*Tick all that apply*
	☐ No resuscitation ☐ Bag and Mask ☐ Intubation ☐ Medications		
	☐ Cardiac compression ☐ Emergency Blood Transfusion ☐ Other (specify): _____		

Section 2. Maternal | Pregnancy

1	Mother's Date of Birth:		*DD/MM/YYYY*
2	Please record the mother's pregnancy history below:		
	Gravida: _____ Parity: _____ Live Births: _____ Miscarriages/terminations: _____		
3	Was this a multiple birth?	☐ Yes ☐ No	
4	Was the CTG abnormal before delivery?	☐ Yes ☐ No ☐ Not known	
5	Did the mother receive intrapartum antibiotics?	☐ Yes ☐ No ☐ Not known	
6	Was there meconium staining of amniotic fluid?	☐ Yes ☐ No ☐ Not known	
7	Reduced fetal movements in 24h before birth?	☐ Yes ☐ No ☐ Not known	
8	Was an umbilical cord blood gas available?	☐ Yes ☐ No ☐ Not known	
	If yes, record values: pH: _____ pCO_2 (mmHg): _____ Base excess (mmol/L): _____ Lactate (mmol/L): _____		
9	Was a blood gas available within 1 hour of birth?	☐ Yes ☐ No	
	If yes, type (tick one): ☐ Arterial ☐ Venous ☐ Capillary Record values: pH: _____ pCO_2 (mmHg): _____ Base excess (mmol/L): _____ Lactate (mmol/L): _____		
10	Mode of birth (tick one): ☐ Elective LSCS ☐ Spontaneous vaginal delivery ☐ Instrumental vaginal delivery; if ticked, please specify clinical indication: _____ ☐ Emergency LSCS; if ticked, please specify clinical reason: _____		

11	Prolonged rupture of membranes (>24hrs)?	☐ Yes ☐ No ☐ Not known
12	Were there any intrapartum sentinel events?	☐ Yes ☐ No ☐ Not known
	If yes, specify (tick all that apply): ☐ Shoulder dystocia ☐ Head entrapment ☐ Uterine rupture ☐ Umbilical cord prolapse ☐ APH - Abruption ☐ Uterine dehiscence ☐ Other (specify): _____ ☐ APH - Placenta previa ☐ APH - Vasa previa ☐ APH - Unknown	
13	Please tick all maternal complications that were present during the current pregnancy	
	☐ Gestational hypertension ☐ Chronic hypertension ☐ Liver disorders ☐ Hyperthyroidism ☐ Eclampsia ☐ Hypothyroidism ☐ Asthma ☐ Urinary tract infection ☐ Cardiac Disorders ☐ None ☐ Other (specify): _____	

Section 3. Admission | Transport

1	Where was the baby born? (tick one):	☐ Home ☐ SCBU ☐ LNU ☐ NICU If born in NICU, skip questions 2 & 3 below.	
2	Was the baby transferred to a cooling centre?	☐ Yes ☐ No	
	If yes, what was the reason for transfer?	☐ Cooling ☐ Other (specify): _____	
	Date/time baby left birth hospital:		*DD/MM/YYYY; HH:MM*
3	Name of birth Hospital (SCBU or LNU)		

Section 4. Temperature | Investigations

Neonatal Unit Admission Date & Time		*DD/MM/YYYY; HH:MM*
Baby's Temperature at Admission:		*Temperature (°C)*

Instructions for completing the Temperature Observation Table on the next page:

Time zero = randomisation time. Record all observations relative to time since randomisation.

- **Rectal Temperature:** Hourly recording is only required for babies in the Cooling arm
- **Axillary termperature:** For both trial arms record hourly for the first 4 hours, then every 4 hours
  Note: If axillary temperature is >37.5°C or <36°C, confirm with a rectal temperature.
- **Heart Rate:** For both trial arms record hourly for the first 4 hours, then every 4 hours

For ease of documentation, the first hourly observation can be rounded up to the next full hour. If a measurement is not available or not done, enter "NA" (Not Available) or "ND" (Not Done).

Subject ID:

4.1. Temperature Observation Table | Please read instructions on the previous page first

	Date *DD/MM/YY*	Time (HH:MM) *please pre-fill*	Temperature (°C)		Heart Rate (bpm)
			Rectal	Axillary	
0		Randomisation Time :			
1					
2					
3					
4					
5					
6					
7					
8					
9					
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25					
26					
27					
28					
29					

	Date *DD/MM/YY*	Time (HH:MM) *please pre-fill*	Temperature (°C)		Heart Rate (bpm)
			Rectal	Axillary	
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
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59					

Please continue data collection on the following page

Subject ID:

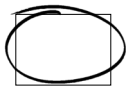
4.1. Temperature Observation Table | Continued from previous page

	Date *DD/MM/YY*	Time (HH:MM) *please pre-fill*	Temperature (°C)		Heart Rate (bpm)
			Rectal	Axillary	
60					
61					
62					
63					
64					
65					
66					
67					
68					
69					
70					
71					
72					
73					
74					

	Date *DD/MM/YY*	Time (HH:MM) *please pre-fill*	Temperature (°C)		Heart Rate (bpm)
			Rectal	Axillary	
75					
76					
77					
78					
79					
80					
At 80 (±6) hours, do the Expanded Modified Sarnat Staging on page 6					
81					
82					
83					
84					
85					
86					
87					
88					

Subject ID:

4.2. Expanded Modified Sarnat Staging at 80 (±6) hours since randomisation

Each category in the table must have its severity level indicated, circle the appropriate column like this: 

Name of neurological assessor:				(This field **must** be completed)			
Date:		*DD/MM/YY*	**Level of Severity**				
Time:		*HH:MM*	NORMAL	MILD	MODERATE	SEVERE	
Categories (Total of 6)	**1. Level of consciousness**		Alert, Responsive to external stimuli when awake.	Hyper-alert, has an Exaggerated response to minimal stimuli, has a stare, is inconsolable.	Lethargic – i.e. delayed but complete response to a stimulus.	Stupor/coma	
	2. Spontaneous activity		Active (Changes position when awake)	Slightly reduced activity	Markedly reduced activity	Absent	
	3. Posture		Predominantly flexed when quiet	Mild flexion of distal joints (fingers and wrist usually)	Complete extension, frog legged (complete abduction) moderate flexion of distal joints	Decerebrate or decorticate	
	4. Tone		Strong flexor tone in all extremities, including at the hip	Slightly increased peripheral tone in limbs	Hypotonia/floppy (focal or general) or Hypertonia (peripheral + truncal)	Flaccid or Rigid	
	5. Primitive reflexes (**only count** the highest level of severity out of the two sub-categories)	**Suck**	Strong, easy to elicit	Weak suck	Suck has a bite	Absent	
		Moro	Complete	Low threshold to elicit	Incomplete or delayed response	Absent	
	6. Autonomic system (**only count** the highest level of severity out of the three sub-categories)	**Pupils**	In dark: 2.5-4.5 mm. In light, reactive: 1.5-2.5 mm	Dilated (Mydriasis)	Constricted (Miosis) and reacting to light	Deviation/ Fixed dilated/asymmetric/ non-reactive to light	
		Heart rate	100-160 bpm	Tachycardia (HR>160 bpm)	Bradycardia (HR<100 bpm)	Variable HR	
		Respiration	Breathing spontaneously	Tachypnoeic (RR >60/min) or requiring supplemental oxygen	CPAP or High flow	Apnoea or requires ventilator	
Total Score (count the number of the circles in each column)							
			The total across all four columns must always be 6.				

Please note:

- The level of encephalopathy will be assigned based on which level of 9 signs (mild, moderate or severe) predominates among the 6 categories.
- If moderate and severe categories are equally distributed, the designation is then based on the highest level in level of consciousness.
- Any neonates with seizure should be classified as moderate or severe encephalopathy depending on the neurologic exam.
- The spectrum of mild encephalopathy may vary between 2 categories under mild and 4 under normal (mildest end) to two categories under moderate or severe and remaining under mild (severe end).

Detailed guidance is provided in the COMET Trial Expanded Modified Sarnat Staging SOP

Do not leave any fields blank. If a measurement is not available or not done, enter "NA" (Not Available) or "ND" (Not Done).

Important: Only record blood test results if they were taken as part of routine clinical care. Do not perform additional blood tests for research purposes.

4.3 Blood Counts + Electrolytes

Investigation	Baseline (0–6h)	Day 1 (24h ±4h)	Day 2 (48h ±4h)	Day 3 (72h ±4h)
Hb (g/L)				
WBC ($\times 10^9$/L)				
Platelets ($\times 10^9$/L)				
CRP (mg/L)				
Na (mmol/L)				
K (mmol/L)				
Ca++ (mmol/L)				
Glucose (mmol/L)				

4.4. Blood gas + clotting + organ function markers

Investigation	Baseline (0–6h)	Day 1 (24h ±4h)	Day 2 (48h ±4h)	Day 3 (72h ±4h)
pH				
pCO_2 (kPa)				
pO_2 (kPa)				
ABE (mmol/L)				
Lactate (mmol/L)				
PT (sec)				
APTT (sec)				
INR				
Urea (mmol/L)				
Creatinine (µmol/L)				
Troponin (ng/L)				
ALT (U/L)				
CPK MB (U/L)				

Subject ID:

4.5. Anti-Seizure Medication (ASM) use

Did baby receive any anti-seizure medication?	☐ Yes ☐ No (If yes, complete the table below)			
ASM	**Baseline (0–6h)**	**Day 1 (24h ±4h)**	**Day 2 (48h ±4h)**	**Day 3 (72h ±4h)**
Phenobarbitone	☐	☐	☐	☐
Phenytoin	☐	☐	☐	☐
Levetiracetam	☐	☐	☐	☐
Midazolam	☐	☐	☐	☐
Lignocaine	☐	☐	☐	☐
Pyridoxine	☐	☐	☐	☐

4.6. Inotropes

Did the baby receive any inotropes during their hospital stay?	☐ Yes ☐ No

If yes, specify (Tick all that apply and specify the total duration of use in hours):

☐ Dopamine _____ hrs. ☐ Noradrenaline _____ hrs. ☐ Milrinone _____ hrs. ☐ Dobutamine _____ hrs.

☐ Adrenaline _____ hrs. ☐ Vasopressin _____ hrs.

4.7. Respiratory Support: Type, Timing, and Duration

Was any respiratory support given?	☐ Yes ☐ No

If yes, specify (Tick all that apply and specify the total duration of use in hours):

☐ Low Flow Nasal Cannula _____ hrs. ☐ High Flow Nasal Cannula _____ hrs.

☐ Continuous Positive Airway Pressure (CPAP) _____ hrs. ☐ Mechanical Ventilation _____ hrs.

☐ Nasal Intermittent Positive Pressure Ventilation (NIPPV) _____ hrs.

4.8. Rewarming

1	Did the baby undergo Cooling during hospitalisation?	☐ Yes → complete rewarming section ☐ No → Skip to next section	
2	If yes, indicate reason for cooling: ☐ Allocated to cooling (intervention arm) ☐ Clinically cooled despite allocation to Normothermia. Specify reason: _____ and the cooling start date (DD/MM/YYYY): _____ and start time (HH:MM): _____		
3	Rewarming start date and time?		*DD/MM/YYYY / HH:MM*
4	Date & time Rectal Temperature >36.5°C ?		*DD/MM/YYYY / HH:MM*
5	Age of baby at start of rewarming?		*Age in hours, HH:MM*

Subject ID:

Section 5. Hospitalisation | Discharge

5.1. Neonatal Seizures and Monitoring

1	Was a video of the neurological exam recorded and sent to Imperial?		☐ Yes ☐ No
	If No, specify reason:		
2	Was the aEEG trace recorded and sent to Imperial?		☐ Yes ☐ No
	If No, specify reason:		
3	Did the baby have seizures after randomisation?		☐ Yes ☐ No
	If Yes, was an aEEG taken after seizure and the trace sent to Imperial?		☐ Yes ☐ No
	What was the baby's age at seizure onset?		*Age in hours, HH:MM*
	Total duration of ASM use during hospital stay		*In days, DD*
	Were antiepileptic medications continued at discharge?		☐ Yes ☐ No

5.2. Feeding

1	Baby's age when trophic (enteral) feeds were first given		*Age in days, DD*
2	Baby's age when full breast/bottle feed established		*Age in days, DD*
3	Was the baby exclusively breastfed at discharge?		☐ Yes ☐ No

5.3. Infection

1	Was there a blood culture-positive sepsis?	☐ Yes ☐ No	
	If yes, state the name of causative organism		
2	Was a lumbar puncture performed?	☐ Yes ☐ No	
	If yes, what was the result?	☐ Normal ☐ Abnormal	
	If Abnormal, give description:		
3	Was there clinical sepsis with negative blood and CSF cultures?	☐ Yes ☐ No	
	If yes, what was the suspected site of infection? ☐ Chest infection ☐ NEC (necrotising enterocolitis) ☐ Skin infection ☐ Other (please specify): _____		
4	Did the baby receive intravenous antibiotics?	☐ Yes ☐ No	
	If yes, what was the duration of antibiotic therapy?		*in days, DD*

5.4. Transfusions

1	Thrombocytopenia requiring platelet transfusion?	☐ Yes ☐ No	
	If yes, please state baby's age at transfusion		*Age in hours, HH:MM*
2	Coagulopathy requiring blood products?	☐ Yes ☐ No	
	If yes, please state baby's age at transfusion		*Age in hours, HH:MM*

Subject ID:

5.5. Surgical Interventions

1	Did the baby undergo any surgical or skin procedure?	☐ Yes ☐ No
	If yes, please provide details:	
2	Did the baby develop subcutaneous fat necrosis?	☐ Yes ☐ No

5.6. Medication Record: Administration and Duration

Tick if given. Record total number of days administered.

Drug Name	Given?	Duration (Days)	Drug Name	Given?	Duration (Days)
Morphine	☐ Yes ☐ No		Colistimethate sodium	☐ Yes ☐ No	
Fentanyl	☐ Yes ☐ No		Levofloxacin	☐ Yes ☐ No	
Nevirapine	☐ Yes ☐ No		Vancomycin	☐ Yes ☐ No	
Zidovudine	☐ Yes ☐ No		Liposomal Amphotericin B	☐ Yes ☐ No	
Nitric oxide	☐ Yes ☐ No		Sodium benzoate	☐ Yes ☐ No	
Parenteral nutrition	☐ Yes ☐ No		Carnitine	☐ Yes ☐ No	

5.7. Diagnostic Tests and Imaging

Tick if done. Record total number times performed.

Investigations	Done?	Times performed	Investigations	Done?	Times performed
Cranial ultrasound	☐ Yes ☐ No		Echo	☐ Yes ☐ No	
CT scan	☐ Yes ☐ No		EEG	☐ Yes ☐ No	
Ultrasound	☐ Yes ☐ No		ECG	☐ Yes ☐ No	
Other: _____	☐ Yes ☐ No		X-Ray	☐ Yes ☐ No	
MRI scan	☐ Yes ☐ No		Date of MRI (if done)		*DD/MM/YYYY*

☐ No investigations performed

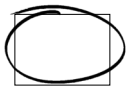
5.8. Specialist Reviews

For this section, "specialist" refers to any consultant-level doctor or specialist nurse (e.g., neurologist, cardiologist, metabolic specialist) providing a formal clinical review during the baby's hospital stay. ☐ No specialist reviews were performed.

Specialist Type	Done?	Number of Reviews/Comments
Neurologist	☐ Yes ☐ No	
Cardiologist	☐ Yes ☐ No	
Other (specify):	☐ Yes ☐ No	

Subject ID:

5.9. Expanded Modified Sarnat Staging before Discharge

Each category in the table must have its severity level indicated, circle the appropriate column like this: 

Name of neurological assessor:			(This field **must** be completed)			
Date:		*DD/MM/YY*	**Level of Severity**			
Time:		*HH:MM*	NORMAL	MILD	MODERATE	SEVERE
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	6. Autonomic system (**only count** the highest level of severity out of the three sub-categories)	**Pupils**	In dark: 2.5-4.5 mm. In light, reactive: 1.5-2.5 mm	Dilated (Mydriasis)	Constricted (Miosis) and reacting to light	Deviation/ Fixed dilated/asymmetric/ non-reactive to light
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Detailed guidance is provided in the COMET Trial Expanded Modified Sarnat Staging SOP

5.10. Neurological Examination at Discharge

Tick ND if not done

1	Persistent asymmetric tonic neck reflex (>30 sec)	☐ Present ☐ Absent ☐ ND
2	Clonus (sustained)	☐ Present ☐ Absent ☐ ND
3	Fisted hand	☐ Present ☐ Absent ☐ ND
4	Abnormal movements	☐ Present ☐ Absent ☐ ND
5	Gag reflex	☐ Present ☐ Absent ☐ ND
6	Stage of Encephalopathy	☐Normal ☐ Mild ☐ Moderate ☐ Severe ☐ ND

5.11. Hospitalisation Summary

1	Days of care: Intensive Care _____ ; High Dependency Care _____ ; Special Care _____ ; Neonatal Transitional Care _____ ; Postnatal Care _____ ; PICU _____		
2	Total duration of hospital stay (birth to discharge)		*In days, DD*
3	Final discharge destination?	☐ Hospice/Care home ☐ Home ☐ Other (specify):	
4	Final discharge date?		*DD/MM/YYYY*
5	Number of hospitals providing neonatal care before discharge?		

Section 6. Final Check | Sign-off

6.1. Protocol Deviations / Violations / SAEs

1	Any deviation or violation prior to discharge?	☐ Yes ☐ No
	If yes, logged in deviation tracking log?	☐ Yes ☐ No ☐ Not applicable
2	Any serious adverse event (SAE) prior to discharge?	☐ Yes ☐ No
	If yes, SAE form completed?	☐ Yes ☐ No ☐ Not applicable

6.2. PI Review and Approval

Principal Investigator (full name)		
PI signature		
Date		*DD/MM/YYYY*

Please submit the completed and signed CRF to the central trial team promptly.
All data queries should be resolved within 48 hours of receipt.