

## TIG Manuscript Data Dictionary

**Notes:**

**Structure** One row per TIGSubjectID  
**Population** All patients who were analyzed for the "Targeted Issues Grant (TIG)"  
**Unique identifier** TIGSubjectID

#	Variable Name	Label	Format	Description	Notes
1	TIGSubjectID	Patient identifier (PUD)	Numeric	Infant ID	
2	geo_accession	GSE64456 accession ID	Character	The ID associated with the infant's sample in the public microarray repository	
3	Signature_TT	SBI classifier training/test set indicator	Character	= "Training" if infant's RNA sample was used to train the SBI classifier = "Test" else if infant's RNA sample was used to test the SBI classifier	
4	Bacteremia_TT	Bacteremia classifier training/test set indicator	Character	= "Training" if infant's RNA sample was used to train the bacteremia classifier = "Test" else if infant's RNA sample was used to test the bacteremia classifier	
5	SBI_Blood	Blood culture positive according to PI review	YesNo. 1=Yes 0=No	A flag to indicate that at least one blood culture was positive after PI review	
6	SBI_Urine	Urine culture positive according to PI review	YesNo. 1=Yes 0=No	A flag to indicate that at least one urine culture was positive after PI review	
7	SBI_CSF	CSF culture positive according to PI review	YesNo. 1=Yes 0=No	A flag to indicate that at least one CSF culture was positive after PI review	
8	SBI_Patient	SBI status for the patient	YesNo. 1=Yes 0=No	= 1 if SBI_Blood or SBI_Urine or SBI_CSF is Yes = 0 else if SBI_Blood and SBI_Urine and SBI_CSF are No	
9	Enterovirus	Positive for Enterovirus	YesNo. 1=Yes 0=No	A flag to indicate that at least one enterovirus study was positive after PI review	
10	Flu	Positive for Flu	YesNo. 1=Yes 0=No	A flag to indicate that at least one flu study was positive after PI review	
11	Age	Age at consent	Numeric	The difference in days between the dates of birth and consent	
12	AgeCat	Age category (<=30 days)	AgeCat. 0 = 0-30 Days 1 = 31-60 Days	A flag to indicate that Age is 31 days or greater	
13	Gender	Gender	Gender. 1=Male 2=Female	The gender of the infant	
14	Temp	Qualifying temperature (degrees C)	Numeric	= Temperature if Temperature 60 or less = 5/9*(Temperature - 32) otherwise	Temperature was collected as both Fahrenheit and Celsius in the same column without a direct indication of the unit.
15	YOS	Yale Observation Scale Score	Numeric	The sum of all YOS components (YOSCry, YOSReaction, YOSState, YOSColor, YOSHydration, YOSResponse) provided that none were missing	The YOS components were collected on a 1-3-5 scale, with higher scores keyed to less healthy states or responses. Thus, the possible values for the total score include only even numbers between 6 and 30. A total score of 10 or less is considered normal.
16	UrineObtained	Was a urine culture obtained?	YesNo. 1=Yes 0=No	A flag to indicate that urine culture results were reported	

17 CSFObtained	Was a CSF culture obtained (including during follow up)?	YesNo. 1=Yes 0=No	A flag to indicate that a CSF culture from either the initial ED visit or follow-up was reported	
18 NeedFlup	Follow-up needed?	YesNoD. 1= Yes 0= No .d= Data Needed	A flag to indicate if follow-up was needed.  Follow-up was required when the infant did not have a CSF culture done at the initial visit and was either discharged home from the ED or had an ED disposition of "Other."  Follow-up was not required if either a CSF culture was done at the initial visit (that is, an LP was done and a CSF culture was reported) or the infant was either admitted to the hospital or transferred to another hospital.	
19 CompletedFU	Was follow-up information obtained?	YesNoN. 1= Yes 0= No .n=Not applicable	Not applicable if follow-up was not required, otherwise a flag to indicate that any of the following occurred within a week after the initial visit: (1) The infant did not return to the site or the primary care provider (PCP) for follow-up care (2) The infant returned to the site for follow-up care (3) The infant returned to the PCP for follow-up care but did not require hospitalization (4) The infant returned to the PCP and was subsequently hospitalized, and medical records from the hospitalization were obtained (5) The infant returned to the PCP and was hospitalized, the medical records were not obtained, but the infant did not return to the site	Within this sample of infants, follow-up was incomplete only in seven cases where the family could not be contacted to ascertain if follow-up care was needed and there was no record of the infant's having returned to the site within the follow-up period.
20 NoContact	Was follow-up information incomplete because of no contact?	YesNoN. 1= Yes 0= No .n=Not applicable	Not applicable if follow-up was not required or if it was completed, otherwise a flag to indicate that the infant's family could not be contacted and there was no record of the infant's having returned to the site within the follow-up period.	
21 Blood_Organisms	Organisms (pathogens or contaminants) found in blood	Character	A comma-separated list of all organisms reported in any of the infant's blood cultures, regardless of PIs' assessment of positivity	
22 Urine_Organisms	Organisms (pathogens or contaminants) found in urine	Character	A comma-separated list of all organisms reported in any of the infant's urine cultures, regardless of PIs' assessment of positivity	
23 CSF_Organisms	Organisms (pathogens or contaminants) found in CSF	Character	A comma-separated list of all organisms reported in any of the infant's CSF cultures, regardless of PIs' assessment of positivity	
24 Disposition	Disposition	Disposition. 1=Discharged 2=Admitted/Transferred 3=Died 90=Other 92=Unknown	Disposition from the ED, counting "left against medical advice" as Discharged and "observed in ED" as Admitted/Transferred	
25 WBC	White Blood Cell Count (x 10 <sup>3</sup> /muL)	Numeric	The WBC result from a CBC with platelets when one was obtained	
26 Platelets	Platelet Count (x 10 <sup>3</sup> /muL)	Numeric	The platelets from a CBC with platelets when one was obtained	
27 ANC	Absolute Neutrophil Count (x 10 <sup>3</sup> /muL)	Numeric	Computed absolute neutrophil count from the CBC with platelets, including bands when they were available (depending largely on the site). Results could be reported from manual or automated counts and could be expressed as either percentages of WBC or as counts (x 10 <sup>3</sup> /muL). The computation drew on the reported results in the following order: manual percentages, automated percentages, manual counts, automated counts.	

28	Viral_Test	Was any viral testing performed (including during follow up)?	YesNo. 1=Yes 0=No	A flag to indicate that any viral results from the initial visit or CSF viral results from follow-up were reported	
29	Viral_Positive	Were any viral tests positive?	YesNo. 1=Yes 0=No	A flag to indicate that at least one viral study was positive after PI review	
30	Viral_Pathogens	List of viral pathogens	Character	A comma-separated list of viral pathogens associated with viral studies that were positive after PI review	
31	Signature_Class	SBI classifier result	SigClass. 1 = SBI positive 0 = SBI negative . = Not classified	A flag to indicate if the SBI biosignature classified the infant as SBI positive or negative. In a few cases, the biosignature did not classify the infant.	This is the classification by the RNA biosignature derived from the 66 classifier genes which the k-NN algorithm identified to discriminate between infants with bacterial infections from those without.  The RNA biosignature failed to predict the infection status of four infants in the sample.
32	Signature_Error	SBI classifier error	SigClassError. 1 = False positive 0 = Classified correctly -1 = False negative . = Not classified	<b>When SBI_Patient is Yes/No and Signature_Class is SBI Positive/Negative</b> = 0 (Classified correctly) if SBI_Patient is Yes and Signature_Class is SBI positive = -1 (False negative) else if SBI_Patient is Yes but Signature_Class is SBI negative = 1 (False positive) else if SBI_Patient is No but Signature_Class is SBI positive = 0 (Classified correctly) else if SBI_Patient is No and Signature_Class is SBI negative  <b>When SBI_Patient is Yes/No and Signature_Class is Not classified</b> = 1 (False positive) else if SBI_Patient is No = -1 (False negative) else if SBI_Patient is Yes  <b>Otherwise</b> = missing (Not classified)	Non-classification by the RNA biosignature is considered an error.
33	Bacteremia_Class	Bacteremia classifier result	BacSigClass. 1 = Bacteremia positive 0 = Bacteremia negative . = Not applicable	A flag to indicate if the bacteremia biosignature classified the infant as bacteremia positive or negative.	This is the classification by the RNA biosignature derived from the 10 classifier genes which the k-NN algorithm identified to discriminate between infants with bacteremia from those without.  All cases used to train or test the bacteremia classifier were classified.
34	Bacteremia_Error	Bacteremia classifier error	SigClassError. 1 = False positive 0 = Classified correctly -1 = False negative . = Not classified	<b>When SBI_Patient is No or SBI_Blood is Yes</b> = 0 (Classified correctly) if SBI_Blood is Yes and Bacteremia_Class is Bacteremia positive = -1 (False negative) else if SBI_Blood is Yes but Bacteremia_Class is Bacteremia negative = 1 (False positive) else if SBI_Blood is No but Bacteremia_Class is Bacteremia positive = 0 (Classified correctly) else if SBI_Blood is No and Bacteremia_Class is Bacteremia negative  <b>Otherwise</b> = missing (Not classified)	