Supplementary files:

Supplementary Table 1: Detailed clinical and demographic characteristics of children with and without TBM

Parameter	**Non TBM (n=24)**	**TBM (n =23)**
Median age, months (IQR)	30 (9-96)	18 (11-40)
Male Gender	17	13
CSF lymphocytes, cells/μL	31.82	66.4
CSF neutrophils, cells/μL	5.87	24.45
CSF protein, g/L	1.14	1.51
CSF glucose, mmol/L	3.01	2.36
Serum glucose, mmol/L	7.63	3.71
Gastric washing TB positive*	3	6
Decreased level of consciousness	7	6
Fever	7	10
Vomiting	5	7
Weight loss	3	7
Seizures	9	9
Cough	7	9
Symptom duration, days	5.6	9.4
TB contact	7	7
BCG done	16	17
Raised intracranial pressure	5	5
Hemiplegia	6	7
HIV positive	6	0
Bateriologically-confirmed TBM	0	2
CSF bacterial culture positive	1	0
Viral PCR positive	2	1
Clear CSF	21	19

TBM= tuberculous meningitis; CSF= cerebrospinal fluid, TB= tuberculosis, BCG= *Bacille Calmette-Guerin;* PCR= polymerase chain reaction; IQR = Inter-quartile range; *three of the children in the Non TBM group yielded TB positive culture results from gastric washings. This is a common finding in children with pulmonary TB but without TB meningitis in our high burden setting.

Supplementary Table 2: Utility of host biomarkers detectable in CSF samples from children with suspected meningitis in the diagnosis of TB meningitis. Median levels (inter-quartile ranges in parenthesis) of all host markers and accuracies in the diagnosis of TBM as determined by ROC curve analysis are shown. Cut-off values and associated sensitivities and specificities were selected based on the Youden's index. #Values shown are in ng/ml, all other analytes are in pg/ml.*Values shown are absorbance and not concentration values.

Host marker	Median in TBM (IQR)	Median in No-TBM (IQR)	p-value	AUC (95% CI)	Cut-off Value	Sensitivity % (95% CI)	Specificity % (95% CI)
VEGF	45.4 (15.1-150.2)	3.1 (2.5-8.1)	0.000300	0.81 (0.67-0.94)	>9.4	82.6 (61.2-95.1)	79.2 (57.9-92.9)
IL-13	671.68 (246.08-1409.68)	378.2 (89.0-870.4)	0.322220	0.58 (0.42-0.75)	>524.9	52.2 (30.6-73.2)	66.7 (44.7-84.4)
*Cathelicidin-LL37	0.1 (0.1-0.1)	0.0 (0.1-0.1)	0.619521	0.55 (0.38-0.71)	>0.045	69.6 (47.1-86.8)	50.0 (29.1-70.9)
IFN-γ	469.9 (194.0-818.1)	10.3 (3.9-45.7)	<0.0001	0.98 (0.95-1.00)	>99.5	91.3 (72.0-98.9)	91.7 (73.0-99.0)
#MIP-4	47.5 (31.0-105.4)	0.3 (0.2-0.8)	0<0.0001	0.97 (0.94-1.00)	>11.4	91.3 (72.0-98.9)	95.8 (78.9-99.9)
MIG/CXCL9	9846.2 (4983.6-29684.1)	1349.7 (929.7-2205.9)	<0.0001	0.95 (0.90-1.00)	>4855.0	82.6 (61.2-95.0)	95.8 (78.9-99.9)
I-309/CCL1	156.6 (127.2-318.9)	5.4 (3.8-11.4)	<0.0001	0.95 (0.87-1.00)	>74.6	91.3 (72.0-98.9)	95.8 (78.9-99.9)
RANTES	22.3 (14.6-52.0)	3.8 (0.1-5.7)	<0.0001	0.95 (0.87-1.00)	>9.9	91.3 (72.0-98.9)	91.7 (73.0-99.0)
IL-6	524.8 (196.3-2659.9)	2.8 (1.1-12.3)	<0.0001	0.95 (0.88-1.00)	>100.7	87.0 (66.4-97.2)	95.8 (78.9-99.9)
TNF-α	69.2 (50.9-137.6)	1.2 (0.0-8.5)	<0.0001	0.93 (0.85-1.00)	>19.8	95.7 (78.1-99.9)	87.5 (67.6-97.3)

MPO	62078.8 (49640.6-73505.9)	1430.5 (495.4-5436.1)	<0.0001	0.93 (0.83-1.02)	>25823.0	95.7 (78.1-99.9)	91.7 (73.0-99.0)
MMP-9	4074.6 (2081.8-7163.1)	8.6 (0.0-198.8)	<0.0001	0.91 (0.81-1.00)	>963.9	95.7 (78.1-99.9)	91.7 (73.0-99.0)
MMP-8	8640.1 (2811.4-23467.6)	257.3 (0.0-1075.2)	0.000002	0.91 (0.82-1.00)	>1695.0	91.3 (72.0-98.9)	83.3 (62.6-95.3)
#CC2	2188.4 (1229.9-180000.0)	87.5 (41.8-558.7)	0.000006	0.89 (0.78-0.99)	>712.0	87.0 (66.4-97.2)	83.3 (62.6-95.3)
PAI-1	6090.8 (2456.8-12786.0)	401.6 (194.4-1189.3)	0.000008	0.88 (0.77-0.99)	>2163.0	82.6 (61.2-95.1)	87.5 (67.6-97.3)
IL-1β	47.9 (24.2-64.3)	0.0 (0.0-9.7)	0.000009	0.87 (0.76-0.99)	>12.9	82.6 (61.2-95.1)	79.2 (57.9-92.9)
IL-8/CXCL8	970.6 (519.7-1550.8)	110.2 (50.2-331.2)	0.000010	0.88 (0.77-0.99)	>394.8	87.0 (66.4-97.2)	79.2 (57.9-92.9)
IP-10/CXCL10	44900.0 (2102.7-44900.0)	257.6 (85.5-837.4)	0.000016	0.86 (0.75-0.97)	>1200.0	95.7 (78.1-97.2)	79.2 (57.9-92.9)
#A1AT	2209.8 (916.0-6488.9)	338.4 (236.8-866.1)	0.000023	0.87 (0.75-0.98)	>715.3	91.3 (72.0-98.9)	75.0 (53.3-90.2)
IL-10	47.8 (22.2-82.4)	5.3 (0.0-12.0)	0.000037	0.88 (0.76-1.00)	>15.3	91.3 (72.0-98.9)	87.0 (67.6-97.3)
G-CSF	400.2 (178.1-561.0)	0.0 (0.0-152.9)	0.000043	0.85 (0.73-0.97)	>137.5	91.3 (72.0-98.9)	75.0 (53.3-90.2)
#CC4	1201.2 (667.0-2196.0)	336.2 (232.7-593.2)	0.000060	0.84 (0.73-0.96)	>653.3	78.3(56.3-92.5)	79.2 (57.9-92.9)
#CC4b	565.7 (377.5-668.8)	172.7 (94.3-331.7)	0.000103	0.83 (0.71-0.96)	>364.7	78.3 (56.3-92.5)	79.2 (57.9-92.9)

GM-CSF	88.9 (64.7-105.1)	27.9 (13.4-60.5)	0.000112	0.81 (0.71-0.95)	>63.8	78.3 (56.3-92.5)	79.2 (57.9-92.9)
#Apo AI	1708.0 (980.1-7429.6)	150.8 (0.0-980.1)	0.000167	0.82 (0.69-0.95)	>365.4	91.3 (72.0-98.9)	70.8 (48.9-87.4)
CC5a	66.7 (35.1-93.0)	6.4 (4.4-42.8)	0.000173	0.81 (0.68-0.95)	>26.0	82.6 (61.2-95.1)	70.8 (48.9-87.4)
PDGF-AB/BB	12.9 (5.8-24.5)	5.0 (0.9-7.0)	0.000175	0.82 (0.69-0.95)	>7.7	69.6 (47.1-86.8)	87.5 (67.6-97.3)
#MBL	12.3 (3.7-56.2)	1.0 (0.6-6.6)	0.000221	0.81 (0.69-0.94)	>2.9	87.0 (66.4-97.2)	66.7 (44.7-84.4)
Ferritin	4697.7 (3261.4-300000.0)	705.7 (325.5-3376.9)	0.000236	0.81 (0.68-0.94)	>2729.0	91.3 (72.0-98.9)	75.0 (53.3-90.2)
#CC5	344.7 (166.1-724.3)	36.2 (20.8-178.0)	0.000309	0.81 (0.67-0.94)	>155.4	82.6 (61.2-95.1)	75.0 (53.3-90.2)
#SAP	63.4 (34.6-184.6)	9.6 (5.7-33.5)	0.000364	0.81 (0.67-0.95)	>30.8	87.0 (66.4-97.2)	75.0 (53.3-90.2)
#CFH	1242.8 (669.1-5717.9)	238.9 (82.8-795.3)	0.000629	0.79 (0.66-0.93)	>850.9	73.9 (51.6-89.8)	78.3 (56.3-92.5)
ICAM-1	2128.5(1610.6-4313.7)	499.8 (319.5-1190.1)	0.000743	0.79 (0.65-0.93)	>1372.0	82.6 (61.2-95.1)	79.2 (57.9-92.9)
#P-Selectin	1.2 (0.0-1.8)	0.0 (0.0-0.0)	0.001036	0.76 (0.62-0.89)	>0.3	73.9 (51.6-89.8)	83.3 (62.6-95.3)
PDGF-AA	13.6 (7.3-19.9)	5.5 (3.5-7.8)	0.001047	0.78 (0.64-0.92)	>6.6	82.6 (61.2-95.1)	75.0 (53.3-90.2)
TGF-α	10.0 (5.8-25.7)	3.7 (0.0-7.3)	0.001048	0.78 (0.65-0.92)	>8.6	73.9 (51.6-89.8)	83.3 (62.6-95.3)

#NGAL	77.8 (16.8-512.8)	1.7 (0.7-7.3)	0.001401	0.78 (0.61-0.94)	>16.8	78.3 (56.3-92.5)	95.8 (78.9-99.9)
#CC3	886.7 (357.8-1722.5)	192.8 (56.5-749.1)	0.002344	0.76 (0.62-0.91)	>528.6	73.9 (51.6-89.8)	69.6 (47.1-86.8)
MIP-1β/CCL4	356.3 (240.6-624.8)	185.9 (122.5-261.6)	0.002480	0.76 (0.62-0.90)	>261.6	69.6 (47.1-86.8)	75.0 (53.3-90.2)
IL-17A	14.9 (4.9-32.5)	0.0 (0.0-9.2)	0.002642	0.75 (0.60-0.89)	>2.6	82.6 (61.2-95.1)	66.7 (44.7-84.4)
#CRP	230000.0 (522.0-230000.0)	361.6 (64.1-230000.0)	0.003122	0.74 (0.60-0.87)	>116193.43	69.6 (47.1-86.8)	70.8 (48.9-87.4)
NCAM	30138.4 (18759.6-35617.2)	41021.7 (31229.8-52874.4)	0.003673	0.75 (0.61-0.89)	<36722.0	78.3 (56.3-92.5)	66.7 (44.7-84.4)
#CC9	43.1 (35.5-59.0)	27.3 (20.7-35.8)	0.004645	0.74 (0.59-0.90)	>36.6	73.9(51.6-89.8)	83.3 (62.6-95.3)
CD40L	471.7 (350.8-823.8)	263.7 (160.1-426.2)	0.006422	0.73 (0.58-0.88)	>369.6	73.9 (51.6-89.8)	75.0 (53.3-90.2)
#CF1	480.3 (246.4-970.6)	111.3 (83.2-369.5)	0.006448	0.73 (0.58-0.88)	>263.4	73.9 (51.6-89.8)	70.8 (48.9-87.4)
MIP-1α/CCL3	277.3 (208.8-348.8)	179.0 (35.1-262.5)	0.007518	0.73 (0.58-0.87)	>223.9	69.6 (47.1-86.8)	70.8 (48.9-87.4)
#D-dimer	98000.0 (1425.0-98000.0)	95.7 (2.5-1581.2)	0.007729	0.72 (0.56-0.87)	>49857.4	73.9 (51.6-89.8)	79.2 (57.9-92.9)
#Apo CIII	69.8 (22.7-442.0)	14.2 (6.5-48.4)	0.015650	0.71 (0.56-0.87)	>26.3	73.9 (51.6-89.8)	69.6 (47.1-86.8)
VCAM-1	119507.9 (45091.2-149043.0)	41549.9 (17719.0-122798.7)	0.020942	0.70 (0.55-0.85)	>79387.1	69.6 (47.1-86.8)	66.7 (44.7-84.4)

IL-12/23p40	249.0 (0.00-695.8)	0.0 (0.0-181.8)	0.018510	0.69 (0.54-0.84)	>168.7	69.6 (47.1-86.8)	75.0(53.3-90.2)
#Adipsin/Complement factor D	50.1 (37.6-168.9)	26.1 (15.8-64.7)	0.046258	0.67 (0.51-0.83)	>35.5	82.6 (61.2-95.1)	62.5(40.6-81.2)
#GDF-15	0.4 (0.2-0.5)	0.0 (0.0-0.2)	0.049282	0.67 (0.50-0.84)	>0.2	73.9 (51.6-89.8)	79.2 (57.9-92.9)
#PEDF	746.8 (667.8-837.2)	658.0 (575.6-819.8)	0.056793	0.66 (0.50-0.83)	>689.6	73.9 (51.6-89.9)	62.5 (40.6-81.2)
MMP-1	448.8 (328.8-1058.9)	308.9 (243.0-581.1)	0.058111	0.66 (0.50-0.82)	>318.9	78.3 (56.3-92.5)	58.3 (36.6-77.9)
#SAA	450.4 (1.5-230000.0)	6.5 (0.1-254.2)	0.059259	0.66 (0.50-0.82)	>204.9	60.9 (38.5-80.3)	75.0 (53.3-90.2)
Aβ40	580.0 (305.1-918.5)	800.5 (323.6-2195.3)	0.190601	0.61 (0.44-0.78)	<759.5	65.2 (42.7-83.6)	58.3 (36.6-77.9)
#ADMTS13	8.1 (6.3-15.9)	6.1 (0.5-9.7)	0.212312	0.60 (0.44-0.77)	>6.2	78.3 (56.3-92.5)	54.2 (32.8-74.5)
Aβ42	172.8 (54.3-288.2)	219.0 (81.9-645.3)	0.259233	0.60 (0.43-0.76)	<292.1	78.3 (56.3-92.5)	41.7 (22.1-63.4)
#Myoglobin	0.5 (0.1-1.1)	0.1 (0.0-0.9)	0.266718	0.60 (0.43-0.76)	>0.2	73.9 (51.6-89.8)	58.3 (36.6-77.9)
MCP-1/CCL2	812.5 (457.9-1348.7)	1076.2 (513.2-1423.7)	0.292145	0.59 (0.42-0.76)	<881.0	60.9 (38.5-80.3)	66.7 (44.7-84.4)
S100B	41.2 (41.2-2800.0)	41.2 (28.0-64.6)	0.311691	0.59 (0.42-0.77)	>64.6	38.9 (17.3-64.3)	75.0 (50.9-91.3)
MMP-7	101.5 (81.6-181.6)	101.5 (81.6-121.5)	0.329877	0.58 (0.42-0.75)	>111.5	43.5 (23.2-65.5)	70.8 (48.9-87.4)

IL-4	162.6 (107.9-229.2)	191.6 (132.7-248.9)	0.394463	0.57 (0.40-0.74)	<181.1	65.2 (42.7-83.6)	58.3 (36.6-77.9)
sRAGE	14.1 (12.8-15.3)	14.4 (12.8-16.6)	0.473024	0.56 (0.39-0.73)	<14.4	56.5 (34.5-76.8)	50.0 (29.1-70.9)
Cathepsin D	75722.1 (61184.2-91429.2)	66539.1 (50433.7-96857.8)	0.537070	0.55 (0.38-0.72)	>68062.2	69.6 (47.1-86.8)	54.2 (32.8-74.5)
IL-7	4.3 (0.0-7.0)	5.3 (2.4-7.9)	0.645745	0.54 (0.37-0.71)	<4.3	52.2 (30.6-73.2)	58.3 (36.6-77.9)
BDNF	0.6 (0.0-1.1)	0.5 (0.0-1.0)	0.674752	0.54 (0.37-0.70)	>0.5	60.9 (38.5-80.3)	50.0 (29.1-70.9)
IL-21	43.2 (12.7-78.2)	46.8 (30.9-61.1)	0.781809	0.52 (0.35-0.69)	<37.36	47.8 (26.8-69.4)	66.7 (44.7-84.4)
GDNF	2.2 (1.8-2.3)	2.1 (1.9-2.5)	0.828794	0.48 (0.31-0.65)	<2.1	47.8 (26.8-69.4)	41.7 (22.1-63.4)