

**Table S5 CSF/serum ratios of KP metabolites (A) and the correlation with CSF WBC and albumin ratio (B)**

**A.**

CSF/serum ratio	Encephalitis (n=10)	VM (n=12)	ABM (n=6)	Controls (n=22)	P – value <sup>a</sup>
TRP <sup>e</sup>	0.043 (0.027,0.063)	0.0080 (0.0063,0.017) <sup>b,c</sup>	0.13 (0.038,0.24) <sup>b,d</sup>	0.037 (0.028,0.053)	<0.001
KYN	0.098(0.066,0.26) <sup>b</sup>	0.40(0.32,0.61) <sup>b,c</sup>	0.36(0.13,0.65) <sup>b</sup>	0.022(0.017,0.028)	<0.001
KYNA	0.12(0.077,0.19) <sup>b</sup>	0.21(0.090,0.56) <sup>b</sup>	0.27(0.14,2.19) <sup>b</sup>	0.076(0.051,0.095)	<0.001
AA	0.66(0.48,0.92) <sup>b</sup>	1.24(0.85,3.60) <sup>b,c</sup>	1.27(0.38,4.02) <sup>b</sup>	0.24(0.20,0.32)	<0.001
3-HK	0.25(0.15,0.37) <sup>b</sup>	0.38(0.25,0.76) <sup>b</sup>	0.28(0.18,0.43) <sup>b</sup>	0.078(0.069,0.10)	<0.001
3-HAA	0.20(0.053,0.49) <sup>b</sup>	0.90(0.37,3.22) <sup>b,c</sup>	0.88(0.41,2.71) <sup>b,c</sup>	na	<0.001
QA	0.88(0.21,1.50) <sup>b</sup>	0.75(0.39,3.37) <sup>b</sup>	0.64(0.20,1.64) <sup>b</sup>	0.050(0.036,0.064)	<0.001
PIC	0.72(0.60,0.89)	0.69(0.45,0.72)	0.72(0.55,0.82)	0.56(0.46,0.79)	0.51
Neopterin	2.2(1.46,4.03) <sup>b</sup>	4.43(2.33,5.66) <sup>b</sup>	0.99 (0.86,2.33) <sup>b,d</sup>	0.62(0.48,0.75)	<0.001

**B.**

CSF/serum ratio	CSF WBC	CSF albumin/serum albumin
	(n=28)	(n=23)
TRP <sup>e</sup>	-0.24(0.22)	0.25(0.24)
KYN	<b>0.44(0.02)</b>	0.25(0.25)
KYNA	0.21(0.28)	0.36(0.10))
AA	<b>0.40(0.04)</b>	0.14(0.51)
3-HK	<b>0.45(0.02)</b>	0.32(0.14)
3-HAA	<b>0.64(&lt;0.001)</b>	0.41(0.052)
QA	<b>0.39(0.04)</b>	0.23(0.29)
PIC	0.20(0.31)	<b>0.56(0.005)</b>
Neopterin	0.20(0.31)	-0.03(0.91)

**A.** The relative concentrations of metabolites (tryptophan, kynurenines and neopterin) in CSF versus serum for patients with CNS infection given as CSF/serum ratio, indicating a lower level of KP metabolites in CSF compared with serum for most metabolites. Data shown are median (IQR).

**B.** Correlation of metabolite CSF/serum ratio with CSF white blood cell count (CSF WBC) and albumin ratio (CSF albumin/serum albumin) for patients with CNS infection given as Spearman Rho (p- values).

<sup>a</sup>p values for one way analysis of variance (Kruskal Wallis)

<sup>b</sup>p<0.05 for analysis with Mann-Whitney U test (MWU) in comparison with control group

<sup>c</sup>p<0.05 for analysis with MWU in comparison with encephalitis

<sup>d</sup>p<0.05 for analysis with MWU in comparison with VM.

<sup>e</sup>TRP levels below lower level of detection (LOD) for 9 patients with CNS infection were adjusted to this value (0.4 μM) for calculation of the TRP ratio