

Table 1: Correlation of arterial cord blood parameters and Apgar scores at birth with network metrics in neonates in tertiary phase of hypoxic-ischemic encephalopathy

Network Characteristics	Metric	Apgar Score at 1 min		Apgar Score at 5 min		Apgar Score at 10 min		Cord Blood Ph		Cord Blood Base Deficit		Cord Blood CO2		Cord Blood Bicarbonate	
		r	p-value	r	p-value	r	p-value	r	p-value	r	p-value	r	p-value	r	p-value
Hierarchy	ab	-0.074	0.874	0.277	0.548	0.789	0.062	-0.846	0.034	-0.553	0.255	0.477	0.339	-0.335	0.516
	abzscore	0.025	0.958	0.391	0.386	0.705	0.117	-0.912	0.011	-0.461	0.358	0.702	0.120	-0.104	0.844
Clustering Coeff	aCp	0.073	0.876	0.002	0.996	-0.670	0.145	0.129	0.808	0.450	0.371	0.433	0.391	0.681	0.136
Global efficiency	aEg	-0.070	0.881	0.350	0.441	0.471	0.345	0.073	0.891	0.002	0.998	-0.244	0.641	-0.395	0.438
Local efficiency	aEloc	0.004	0.993	0.246	0.595	-0.433	0.391	0.028	0.959	0.512	0.299	0.588	0.220	0.652	0.160
Characteristic path length	aGamma	0.201	0.666	0.635	0.126	0.206	0.696	-0.113	0.832	0.567	0.241	0.738	0.094	0.611	0.197
	aLambda	-0.006	0.990	-0.047	0.920	-0.715	0.111	0.019	0.971	0.417	0.411	0.536	0.273	0.657	0.156
	aLp	0.091	0.846	-0.257	0.577	-0.813	0.049	0.455	0.365	0.453	0.367	0.002	0.997	0.556	0.252
Assortativity	ar	-0.171	0.715	-0.292	0.526	-0.916	0.010	0.457	0.363	0.426	0.400	-0.042	0.938	0.425	0.401
	arzscore	-0.291	0.527	-0.536	0.215	-0.933	0.007	0.306	0.556	0.184	0.728	-0.072	0.892	0.287	0.582
Synchrony	as	0.155	0.741	0.577	0.175	0.270	0.605	0.328	0.525	0.745	0.089	0.269	0.606	0.467	0.350
	aszscore	-0.148	0.752	-0.317	0.489	0.579	0.229	-0.309	0.551	-0.735	0.096	-0.417	0.411	-0.714	0.111
Small world	aSigma	0.141	0.763	0.675	0.096	0.501	0.311	-0.152	0.774	0.323	0.532	0.435	0.389	0.159	0.764