

# Lnc-MALAT1/miR-125b/FOXQ1/PTGS2/CDK5 in Alzheimer's disease

**Table S1.** Correlation of candidate genes with CSF biomarkers in PD patients and Ctrl

Items	Items	Lnc-MALAT1		MiR-125b		FOXQ1		PTGS2		CDK5	
		P value	r	P value	r	P value	r	P value	r	P value	r
PD patients											
CSF samples (N = 50)	MMSE	0.047	0.282	0.014	-0.346	0.277	0.157	0.025	-0.317	0.119	-0.223
	A $\beta$ 42	0.063	0.265	0.064	-0.264	0.277	0.157	0.377	-0.128	0.681	-0.060
	t-tau	0.092	-0.241	0.016	0.338	0.358	-0.133	0.016	0.339	0.187	0.190
	p-tau	0.059	-0.269	0.013	0.348	0.352	-0.134	0.028	0.312	0.217	0.178
Plasma samples (N = 120)	MMSE	0.578	0.051	0.056	-0.175	0.254	0.105	0.138	-0.136	0.128	-0.140
	A $\beta$ 42	0.587	0.050	0.297	-0.096	0.995	-0.001	0.140	0.135	0.046	-0.183
	t-tau	0.024	-0.206	0.480	0.065	0.200	-0.118	0.999	0.000	0.130	0.139
	p-tau	0.058	-0.174	0.713	0.034	0.174	-0.125	0.949	-0.006	0.432	0.070
Ctrl											
CSF samples (N = 50)	MMSE	0.103	0.233	0.328	-0.141	0.601	0.076	0.835	0.030	0.855	0.026
	A $\beta$ 42	0.036	0.298	0.537	-0.089	0.210	0.180	0.154	-0.204	0.228	-0.174
	t-tau	0.113	-0.227	0.009	0.366	0.001	-0.455	0.058	0.270	0.174	0.195
	p-tau	0.288	-0.153	0.027	0.313	0.002	-0.423	0.038	0.295	0.299	0.150
Plasma samples (N = 120)	MMSE	0.470	0.067	0.638	0.043	0.721	-0.033	0.462	0.068	0.853	0.017
	A $\beta$ 42	0.042	0.186	0.239	-0.108	0.600	0.048	0.660	-0.048	0.714	-0.034
	t-tau	0.233	-0.110	0.477	0.065	0.049	-0.180	0.150	0.132	0.670	0.039
	p-tau	0.189	-0.121	0.946	0.006	0.127	-0.140	0.061	0.171	0.887	0.013

Correlation was determined by Spearman's rank correlation test. CSF, cerebrospinal fluid; PD, Parkinson's disease; Ctrl, controls; Lnc-MALAT1, long noncoding RNA metastasis-associated lung adenocarcinoma transcript 1; miR-125b, microRNA 125b; FOXQ1, forkhead box Q1; PTGS2, prostaglandin-endoperoxide synthase 2; CDK5, cyclin dependent kinase 5; MMSE, mini-mental state examination; A $\beta$ 42, amyloid  $\beta$  42; t-tau, total tau; p-tau, phosphorylated tau.