

Supplemental Table S1. All Pearson correlation coefficients between Vitamin D Metabolites and matrix metalloproteinases (MMP) and Tissue Inhibitors of Metalloproteinases (TIMP) markers in women with PMOS. This includes the significant correlations presented in Table 3. No correlations in controls. None survived FDR testing.

Group	Vitamin D variable	Target	Pearson r	Pearson p	Permutation p	FDR q
PMOS	1,25(OH) ₂ D ₃	MMP9	-0.055	0.833	0.835	0.969
PMOS	1,25(OH) ₂ D ₃	MMP3	0.446	0.073	0.061	0.510
PMOS	1,25(OH) ₂ D ₃	MMP7	-0.144	0.581	0.597	0.927
PMOS	1,25(OH) ₂ D ₃	MMP17	0.193	0.458	0.462	0.904
PMOS	1,25(OH) ₂ D ₃	MMP2	0.067	0.797	0.799	0.969
PMOS	1,25(OH) ₂ D ₃	MMP12	-0.262	0.309	0.308	0.837
PMOS	1,25(OH) ₂ D ₃	MMP1	-0.071	0.787	0.789	0.969
PMOS	1,25(OH) ₂ D ₃	MMP13	0.244	0.346	0.373	0.881
PMOS	1,25(OH) ₂ D ₃	MMP14	-0.464	0.061	0.054	0.502
PMOS	1,25(OH) ₂ D ₃	MMP16	-0.203	0.435	0.423	0.904
PMOS	1,25(OH) ₂ D ₃	MMP10	-0.197	0.448	0.451	0.904
PMOS	1,25(OH) ₂ D ₃	MMP8	0.060	0.820	0.819	0.969
PMOS	1,25(OH) ₂ D ₃	TIMP1	0.012	0.963	0.963	0.969
PMOS	1,25(OH) ₂ D ₃	TIMP2	-0.034	0.898	0.898	0.969
PMOS	1,25(OH) ₂ D ₃	TIMP3	-0.221	0.394	0.398	0.884
PMOS	1,25(OH) ₂ D ₃	MMP14/TIMP2	-0.470	0.057	0.057	0.502
PMOS	1,25(OH) ₂ D ₃	MMP16/TIMP2	-0.156	0.549	0.549	0.922
PMOS	1,25(OH) ₂ D ₃	MMP17/TIMP2	0.087	0.739	0.742	0.969
PMOS	1,25(OH) ₂ D ₃	MMP14/TIMP3	-0.081	0.758	0.761	0.969
PMOS	1,25(OH) ₂ D ₃	MMP16/TIMP3	0.252	0.329	0.323	0.863
PMOS	1,25(OH) ₂ D ₃	MMP17/TIMP3	0.374	0.140	0.136	0.690
PMOS	25(OH)D ₃	MMP9	0.014	0.955	0.955	0.969
PMOS	25(OH)D ₃	MMP3	0.012	0.959	0.960	0.969
PMOS	25(OH)D ₃	MMP7	0.030	0.899	0.900	0.969
PMOS	25(OH)D ₃	MMP17	0.440	0.052	0.052	0.502
PMOS	25(OH)D ₃	MMP2	0.215	0.362	0.365	0.884
PMOS	25(OH)D ₃	MMP12	0.130	0.585	0.585	0.927
PMOS	25(OH)D ₃	MMP1	-0.153	0.519	0.525	0.922
PMOS	25(OH)D ₃	MMP13	0.109	0.646	0.664	0.969
PMOS	25(OH)D ₃	MMP14	-0.125	0.599	0.628	0.932
PMOS	25(OH)D ₃	MMP16	0.397	0.083	0.084	0.539
PMOS	25(OH)D ₃	MMP10	-0.071	0.766	0.767	0.969
PMOS	25(OH)D ₃	MMP8	0.267	0.256	0.259	0.827
PMOS	25(OH)D ₃	TIMP1	0.009	0.969	0.970	0.969
PMOS	25(OH)D ₃	TIMP2	0.054	0.820	0.814	0.969
PMOS	25(OH)D ₃	TIMP3	-0.601	0.005	0.005	0.142
PMOS	25(OH)D ₃	MMP14/TIMP2	-0.180	0.447	0.447	0.904

PMOS	25(OH)D ₃	MMP16/TIMP2	0.174	0.463	0.479	0.904
PMOS	25(OH)D ₃	MMP17/TIMP2	0.345	0.136	0.134	0.690
PMOS	25(OH)D ₃	MMP14/TIMP3	0.311	0.181	0.186	0.726
PMOS	25(OH)D ₃	MMP16/TIMP3	0.539	0.014	0.017	0.219
PMOS	25(OH)D ₃	MMP17/TIMP3	0.600	0.005	0.006	0.142
PMOS	24,25(OH) ₂ D ₃	MMP9	0.026	0.914	0.912	0.969
PMOS	24,25(OH) ₂ D ₃	MMP3	-0.020	0.935	0.946	0.969
PMOS	24,25(OH) ₂ D ₃	MMP7	0.036	0.881	0.873	0.969
PMOS	24,25(OH) ₂ D ₃	MMP17	0.419	0.066	0.068	0.502
PMOS	24,25(OH) ₂ D ₃	MMP2	0.204	0.387	0.385	0.884
PMOS	24,25(OH) ₂ D ₃	MMP12	0.149	0.531	0.536	0.922
PMOS	24,25(OH) ₂ D ₃	MMP1	-0.092	0.699	0.707	0.969
PMOS	24,25(OH) ₂ D ₃	MMP13	0.038	0.874	0.870	0.969
PMOS	24,25(OH) ₂ D ₃	MMP14	0.110	0.646	0.664	0.969
PMOS	24,25(OH) ₂ D ₃	MMP16	0.381	0.098	0.102	0.548
PMOS	24,25(OH) ₂ D ₃	MMP10	-0.033	0.892	0.892	0.969
PMOS	24,25(OH) ₂ D ₃	MMP8	0.301	0.197	0.197	0.751
PMOS	24,25(OH) ₂ D ₃	TIMP1	0.094	0.694	0.688	0.969
PMOS	24,25(OH) ₂ D ₃	TIMP2	0.041	0.863	0.859	0.969
PMOS	24,25(OH) ₂ D ₃	TIMP3	-0.585	0.007	0.007	0.142
PMOS	24,25(OH) ₂ D ₃	MMP14/TIMP2	0.051	0.831	0.836	0.969
PMOS	24,25(OH) ₂ D ₃	MMP16/TIMP2	0.156	0.510	0.501	0.922
PMOS	24,25(OH) ₂ D ₃	MMP17/TIMP2	0.317	0.173	0.177	0.726
PMOS	24,25(OH) ₂ D ₃	MMP14/TIMP3	0.451	0.046	0.049	0.502
PMOS	24,25(OH) ₂ D ₃	MMP16/TIMP3	0.532	0.016	0.015	0.219
PMOS	24,25(OH) ₂ D ₃	MMP17/TIMP3	0.590	0.006	0.006	0.142