Alteration of the Expression of Pesticide-Metabolizing Enzymes in Pregnant Mice: Potential Role in the Increased Vulnerability of the Developing Brain

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Drug Metabolism and Disposition

Supplemental Table 1. Gene names, RefSeq IDs and corresponding human orthologs.

Mouse Gene	Mouse Gene Transcript ID	Human Gene
Cytochromes P450s		
Cyp1a2	NM_009993.3	CYP1A2
Cyp2b10	NM_009999.3	CYP2B6
Cyp2d22	NM_001163472.1	CYP2D6
Cyp2c37	NM_010001.2	CYP2C19
Cyp2c50	NM_134144.2	CYP2C19
Cyp2c54	NM_206537.2	CYP2C19
Cyp3a11	NM_007818.3	CYP3A4
Cyp3a16 *(juvenile)*	NM_007820.2	CYP3A4
Cyp3a44 *(female)*	NM_177380.3	CYP3A4
Cyp3a41a/b *(female)*	NM_017396.2/ NM_001105159.1	CYP3A4
Cyp3a13	NM_007819.4	CYP3A7
Cyp2d22	NM_019823.4	CYP2D6
Carboxylesterases		
Ces1d *(Ces3)*	NM_053200.2	CES1
Ces1g *(Ces1, Es/x)*	NM_021456	CES1
Ces1c *(Es1,Est-N, EsN, Es4)*	NM_007954.4	CES1
Ces1e *(Es22 (egasyn))*	NM_133660.3	CES1
Ces2e *(Ces5)*	NM_172759.3/	CES2

	NM_001163756.1	
Ces2c *(Ces2,*		
Ces2a3)	NM_145603.1	CES2
Ces2a *(Ces6)*	NM_133960.4	CES2
Ces3a/b *(Es31)*	NM_198672.1	CES3
Paraoxonase		
Pon1	NM_011134.3	PON1
Nuclear receptors		
AhR	NM_013464.4	AHR
Nr1i3 (Car)	NM_009803	CAR
Pparα	NM_011144.6	PPARα
Nr1i2 (Pxr)	AF031814	PXR
Rxrα	NM_011305	RXRα
Nr1h4 (Fxr)	NM_001163504	NR1H4 (Fxr)
Nr1h2 (Lxr)	NM_009473.2	NR1H2 (Lxr)
Hnf4α	NM_008261.2	HNF4α
	Normalizers	
ß-actin	NM_007393	ß-ACTIN
Gapdh	NM_008084	GAPDH

Supplemental Table 2. Statistical outcomes (p-values) of the paired comparisons (t-test) of the different GD and PD groups to the corresponding virgin mice group.

	GD7	GD11	GD14	GD17	PD1	PD15	PD30
Cyp1a2	**0.016**	**0.008**	**0.029**	0.798	0.743	0.281	0.900
Cyp2b10	0.105	0.111	0.080	0.385	0.100	**0.017**	0.399
Cyp2d22	0.136	**0.002**	**0.047**	0.118	0.600	**0.018**	0.475
Cyp2c37	0.685	**0.010**	**0.005**	**0.029**	0.967	0.115	0.365
Cyp2c50	**0.045**	**0.001**	**0.003**	**0.016**	**0.019**	**0.014**	0.162
Cyp2c54	**0.044**	**0.001**	**0.003**	0.068	0.170	0.842	0.642
Cyp3a11	**0.008**	**0.020**	**0.008**	**0.031**	**0.030**	**0.022**	**0.034**
Cyp3a13	0.656	0.149	0.083	**0.018**	0.636	0.057	0.097
Ces1c	0.736	0.080	0.095	0.267	0.787	0.698	0.276
Ces1d	0.858	**0.039**	0.105	0.611	0.747	**0.003**	0.179
Ces1e	**0.016**	0.255	0.466	0.473	0.100	0.703	0.382
Ces1g	0.959	0.160	0.073	0.153	0.202	0.966	0.589
Ces2a	**0.018**	**0.004**	**0.003**	0.058	0.414	0.681	0.516
Ces2c	0.251	0.705	0.523	0.171	0.154	0.156	**0.047**
Ces2e	0.080	0.846	0.900	0.070	0.311	0.931	0.401
Pon1	0.902	0.979	0.084	0.922	0.703	0.544	0.764
Cyp3a16	**0.001**	**0.001**	**0.004**	**0.015**	**0.011**	**0.001**	0.089
Cyp3a41a/b	**0.030**	0.053	0.121	**0.001**	**0.027**	**0.001**	**0.023**
Cyp3a44	**0.001**	**0.014**	**0.014**	**0.002**	**0.011**	**0.001**	**0.007**
Hnf4α	0.340	0.211	0.698	0.257	0.885	0.302	0.479

Pparα	0.209	0.096	0.275	**0.043**	**0.022**	0.332	0.855
Gr	0.733	0.673	0.418	0.769	0.574	0.052	0.549
Pxr	0.546	0.283	0.581	0.823	0.552	0.874	0.273
Car	0.708	0.075	0.054	0.060	0.594	0.308	0.443
Ahr	0.256	0.484	0.402	0.328	0.138	0.247	0.773
Rxrα	0.664	0.466	0.765	0.849	0.911	0.267	0.996
Fxr	0.087	0.876	0.673	0.897	0.790	0.108	0.080
Lxr	0.418	0.854	0.651	0.263	0.759	0.105	0.513