

Table 2a. Gene Ontology analysis of Category I-IV genes

		I	II	III METH	III VPA	IV METH	IV VPA
GO ANALYSIS - CATEGORIES – NO. OF GENES							
1.	Cell communication	2	4	9	12	18	36
2.	Cell growth and/or maintenance	1	5	10	20	25	56
3.	Metabolism	2	9	12	19	35	72
4.	Morphogenesis	1	4	2	4	6	14
5.	Response to stress	1		2	1	5	1
6.	Response to external stimuli	1		2	2	7	2
7.	Reproductive behavior	1				1	
8.	Behavioral fear response	1					
9.	Cell motility		1	2	3	1	3
10.	Homeostasis		1	1			3
11.	Reproduction		1		1		2
12.	Pattern specification		1			1	1
13.	Embryonic development		1				
14.	Cell differentiation			2	2		3
15.	Learning and/or memory				1	1	2
16.	Cell death				1	1	2
17.	Death				1	1	2
18.	Circulation			4			1
19.	Rhythmic behavior				1		1
20.	Genetic transfer				1		
21.	Bone remodelling					1	1
22.	Hemostasis					1	
23.	Regulation of gene expression epigenetic					1	
24.	Membrane fusion						1
25.	Secretion						2

Table 2b. Gene Ontology analysis of genes changed in multiple brain regions

Drug / Brain regions	METH			VPA				
	PFC/CP	PFC/VT	CP/NA	AMY/CP/VT	PFC/AMY	AMY/CP	AMY/VT	CP/VT
GO ANALYSIS – CATEGORIES NO. OF GENES								
1.	Cell communication		1		1	7	1	1
2.	Cell growth and/or maintenance	1			1	12	1	1
3.	Metabolism		1	1	1	10	1	1
4.	Morphogenesis					1		
14.	Cell differentiation					1		
19.	Rhythmic behavior					1		
25.	Secretion					1		