

THE COMPARATIVE NEUROCOGNITIVE EFFECTS OF SIX ANTIDEPRESSANTS

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OBJECTIVES: To measure the differential effects of commonly prescribed antidepressants on neurocognitive performance.

METHOD: The CNS Vital Signs screening battery is a new, PC-based instrument comprised of seven familiar tests: Verbal and Visual Memory, Finger Tapping, Symbol Digit Coding, the Stroop test, Shifting Attention and the Continuous Performance Test.

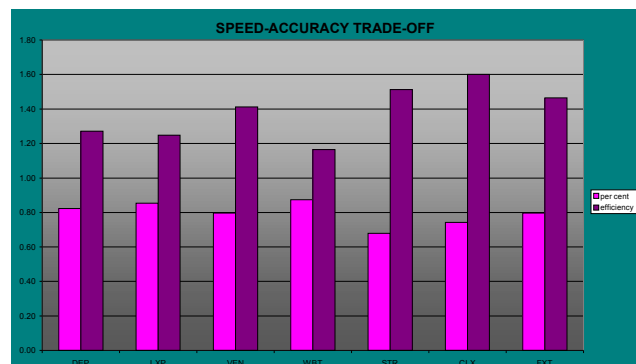
The test battery was administered to 255 depressed patients on six antidepressants: bupropion (40), citalopram (32), escitalopram (56), fluoxetine (36), sertraline (36), and venlafaxine (55); compared to 37 matched comparison patients who were depressed but not on medication.

RESULTS: Bupropion (BP) was consistently superior to the other five antidepressants. On 32 variables, patients on BP scored first on 27 and second on 4. Combining variables generated this order of ranks:

Bupropion	1.2
Escitalopram	2.7
Fluoxetine	3.7
Venlafaxine	4.0
Citalopram	4.6
Sertraline	4.8

CONCLUSION: Modern antidepressants are not equivalent with respect to their neurocognitive effects. Computerized monitoring of patients of antidepressants could potentially be a guide to prescription and improve treatment.

DRUG	ETP	VEN	BP	STR	CTP	FXT
AGE	40.7	39.1	39.2	38.4	36.8	40.1
N	56.0	55.0	40.0	36.0	32.0	36.0
VBMiy	3	6	1	4	5	2
VBMIn	3	2	1	6	4	5
VBMdy	3	6	1	2	4	5
VBMdn	4	1	2	6	3	5
VBMtot	2	4	1	5	3	6
VIMiy	5	6	4	3	1	2
VIMIn	4	2	1	6	3	5
VIMdy	1	5	2	3	6	4
VIMdn	5	3	2	6	1	4
VIMtot	3	5	1	6	2	4
MEM	3	4	1	6	2	5
Rtaps	2	4	1	5	6	3
Ltaps	2	3	1	5	6	4
SDCcorr	3	2	1	6	5	4
MS	2	3	1	5	6	4
SDCerr	5	4	2	6	3	1
STsrt	3	5	1	6	4	2
STcrt	2	5	1	3	6	4
STsrtt	2	6	1	3	5	4
RT	2	6	1	3	5	4
STRerrs	3	2	1	5	6	4
SATcorr	2	3	1	5	6	4
SATerr	2	4	1	6	5	3
CF	2	3	1	6	5	4
SATrt	3	4	1	2	6	5
per cent	2	4	1	6	5	3
efficiency	2	3	1	5	6	4
CPTcorr	2	5	1	4	6	3
CPTom	2	5	1	4	6	3
CPTcom	4	3	1	5	6	2
ATT	2	4	1	6	5	3
CPTrt	2	5	1	4	6	3
MEAN	2.7	4.0	1.2	4.8	4.6	3.7



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