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Supplementary Material

Article Title: Aripiprazole or Bupropion Augmentation Versus Switching to Bupropion in Treatment Resistant Depression: A Risk-Benefit Analysis

Authors: William U. Meyerson, MD, PhD; Eric L. Ross, MD; Chris J. Kennedy, PhD, MPA; Rick H. Hoyle, PhD; Jagpreet Chhatwal, PhD; Philip S. Wang, MD, DrPH; Jordan W. Smoller, MD, ScD

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LIST OF SUPPLEMENTARY MATERIAL FOR THE ARTICLE

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Supplementary Table for "Aripiprazole or bupropion augmentation vs switching to bupropion in treatment resistant depression: A benefit-risk analysis"

The base case assumed that the discount rate is 1.5%, time horizon is lifetime, disabilities from falls last 1 year, tardive dyskinesia incidence is derived from the class-wide incidence of second generation antipsychotics, a portion of weight gain is not reversed after discontinuation, weight change is calculated as a difference across arms, and patients of non-elevated weight at baseline are unaffected by weight gain. Univariate sensitivity analyses relax these assumptions in Supplementary Table 1 below.

Supplementary Table 1: Probability of treatments being most favored under univariate sensitivity analyses

Group	PSA Favorite	B0	D3	D0	H20	F2	ATD	WR3	NBT	WA
Age: 18-64 BMI: < 25	% S-BUP	0.5	0.4	0.6	0.1	0.7	0.3	0.5	0.6	0.6
	% C-BUP	87.5	78.1	93.6	67.8	86.5	70.7	87.5	88.6	96.2
	% A-ARI	12	21.5	5.8	32.1	12.8	29	12	10.8	3.2
Age: 65-84 BMI: < 25	% S-BUP	1.8	1.4	1.9	1.6	4.3	0.8	1.8	1.7	2.2
	% C-BUP	83	79.9	86.5	81.8	72.8	62.8	83	82.6	89.9
	% A-ARI	15.2	18.7	11.6	16.6	22.9	36.4	15.2	15.7	7.9
Age: 84-89 BMI: < 25	% S-BUP	5.2	4.4	6.7	5.2	8.7	1.9	5.2	6	8.3
	% C-BUP	36	33.9	37.7	36	17.2	20.3	36	34.7	**46.5****
	% A-ARI	58.8	61.7	55.6	58.8	74.1	77.8	58.8	59.3	45.2
Age: 18-64 BMI: ≥ 25	% S-BUP	0.6	0.6	0.6	0.6	0.9	0.8	0.5	0.6	0.6
	% C-BUP	99.4	99.1	99.4	91.3	99	99.1	90.4	99	99.4
	% A-ARI	0	0.3	0	**8.1**	0.1	0.1	**9.1**	0.4	0
Age: 65-84 BMI: ≥ 25	% S-BUP	2.5	2.4	2.6	2.4	7.4	2.2	2.2	2.6	2.5
	% C-BUP	96.8	96.2	97	96.6	91.1	96	89.8	94.9	96.8
	% A-ARI	0.7	1.4	0.4	1	1.5	1.8	**8**	2.5	0.7
Age: 85-89 BMI: ≥ 25	% S-BUP	15.8	14.1	17.7	15.8	32.4	13.2	10.4	13.7	15.8
	% C-BUP	70	66.5	71.2	69.9	41.6	61.7	54.4	60.2	70
	% A-ARI	14.2	**19.4**	11.1	14.3	26	**25.1**	**35.2**	**26.1**	14.2

Legend: B0: The "base case" column lists for each of 6 patient subgroups the percent of 1000 probabilistic sensitivity analysis runs that favor each of 3 treatments. Columns D3-WA represent the same quantities for 8 different univariate sensitivity analyses. BMI: body mass index; PSA: probabilistic sensitivity analysis; S-BUP: switch to bupropion monotherapy; C-BUP: combination therapy with bupropion; A-ARI: augmentation with aripiprazole. Univariate sensitivity analyses: D3: temporal discount rate set to 3%; D0: temporal discount rate set to 0%; H20: time horizon of 20 years; F2: disabilities after falls last 2 years; ATD: tardive dyskinesia incidence is derived from agent-specific incidence for aripiprazole; WR3: antipsychotic weight gain fully reversible after 3 years; NBT: weight gain with A-ARI is defined as change from baseline; WA: weight gain can have some effects on quality of life and mortality in patients with non-elevated weight. Cells in bold represent treatment strategies that have gained in favorability rank in a given univariate sensitivity analysis compared to in the base case. **: Treatment strategies that became the most favorable in a univariate sensitivity analysis that were not the most favorable in the base case.