Algorithm for the Management of Major Depression from the Psychopharmacology Algorithm Project at the Harvard South Shore Program (PAPHSS)

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BACKGROUND
The PAPHSS published evidence-supported algorithms for pharmacological treatment of major depressive disorder in 1993 and 1998. The tremendous volume of studies, reviews and meta-analyses since then make an update necessary.

METHODS
Earlier algorithms and associated references were re-evaluated. A literature search was conducted on PubMed including review articles and recent studies pertinent to initial treatment and to various levels of treatment-resistance, to see what changes in the recommendations were justified.

RESULTS
After initial steps of ruling out bipolar and prebipolar depressions, medical etiologies, and depression secondary to substance use, the basic algorithm starts by questioning if there is an urgent indication for ECT. Then, different pathways are proposed for the initial pharmacotherapy of inpatients with severe depression and melancholia and other patients with major depression. For the first group, venlafaxine or mirtazapine, or tricyclics are recommended. Unsatisfactory response is followed by a switch to another of these, or augmentation with lithium, thyroid, or an atypical antipsychotic. For the other group, initial treatment is with an SSRI (sertraline and escitalopram are preferred) or bupropion. The second trial is with another of these. If response is unsatisfactory and the patient has atypical features, consider augmenting an SSRI with aripiprazole, or try an MAOI. The next step for patients from either group after these trials depends on comorbidity. If none, consider combinations of two antidepressants, or augmentations among those mentioned or others. ECT may be reconsidered at any point. If comorbidity is present, consider whether the depression may be secondary, and try treating with medications with specific effect on the comorbid condition. If this fails or is deemed inappropriate, return to the options for patients without comorbidity.

CONCLUSIONS
This revision resulted in relatively minor changes from the basic structure of the 1998 version, though there are new medications. It organizes the vast amount of evidence to facilitate practical, evidence-supported application and optimized outcome.