Depression and obesity treatments are life saving

To the editor—I was disappointed to read in your September 2002 issue a classification of antidepressants and antiobesity drugs as "lifestyle drugs"[1]. Depression is not a lifestyle; it is a severe medical disorder that has been recognized as such since antiquity[2]. Melancholia (black bile in Greek) is a subtype of depression that was named by Hippocrates 2,500 years ago. It is the only disease category to have survived in its original name from the Hippocratic classification of disease based on the four humors[2]. Moreover, people die of depression, and do so in great numbers. Depression is the major cause of suicide. According to recently released information from the Centers for Disease Control and Prevention (CDC), in the year 2000 suicide was the 11th highest cause of death in the United States[3]. When causes of death are examined by age group, the importance of suicide as a cause of death is self-evident (Table 1)[3]. Moreover, depression is an independent risk factor for heart disease, which is the leading cause of mortality in the US. In this context, antidepressant treatment is not a lifestyle option, it is a life-saving necessity.

Table 1 CDC data on suicide in the U.S.

Age-group	Ranking of suicide as cause of death
5–14	5th
15–24	3rd
25–44	4th
45–64	8th

Death data is preliminary for 2000.

Obesity is also a key contributor to morbidity and mortality and can have a profound negative impact on health and life expectancy. Obesity is associated with diabetes, heart disease, pulmonary disorders, bone and joint disease, reproductive diseases, cancer and gallstones. Moreover, modern research has recognized a strong genetic component to obesity.

It is simply unacceptable to label as "lifestyle drugs" treatments for diseases of gene–environment interactions, such as depression and obesity, which are serious public health problems worldwide.

JULIO LICINIO & MA-LI WONG
Laboratory For Pharmacogenics
Neuropsychiatric Institute
David Geffen School of Medicine
University of California, Los Angeles
Los Angeles, California, USA
Email: licinio@ucla.edu

We reply—We certainly agree that depression and obesity are potentially life-threatening conditions, and regret the characterization of these in our news story as mere "lifestyles". However, we stand by the main part of the piece, which focused not only on these conditions, but on other afflictions currently the focus of pharmaceutical development, including hair loss, age-associated wrinkling, graying hair and smoking cessation. To some extent, whether these afflictions are life "threatening" or life "style" is a matter of degree, which will vary widely between individuals. Finally, we would like to make the point that many of the "lifestyle drugs" described are widely advertised to the public, which consequently may be tempted to obtain and take these drugs even in the absence of a life-threatening condition.

1. Atkinson, T. Lifestyle drug market booming. *Nature Med.* **8**, 909 (2002).
2. Wong, M.-L. & Licinio, J. Research and treatment approaches to depression. *Nature Rev. Neurosci.* **2**, 343–351 (2001).
3. National Vital Statistical Reports. vol. 49, number 12, 9 October, 2001, CDC, Atlanta.

How to submit microarray data

Nature Medicine will implement a new policy regarding microarray experiments on 1 December 2002. As discussed in a recent editorial in *Nature* (**419**, 323; 2002), *Nature Medicine* will now require authors to submit microarray data in accordance with the Minimal Information About a Microarray Experiment guidelines issued by the Microarray Gene Expression Data society. The guidelines include a checklist of relevant information that should be included with every new microarray submission, and can be found online at http://www.mged.org/Workgroups/MIAME/miame_checklist.html. The supplementary information must be supplied with the manuscript on five compact discs, at the time of submission, in a format compatible with commonly available software packages. We will also require that data central to the paper's conclusions be deposited in a public database for microarray data and accession numbers provided, where available, at or before acceptance for publication. By adopting this policy, we hope that the explicit description of experimental design and methods will facilitate the review and replication of microarray results.