

clinical development. According to Decision Resources, a market-research firm based in Waltham, Massachusetts, only one in twenty-five obese people in the United States have prescriptions for drug treatment.

Existing weight-loss drugs have well-known side effects, including faecal incontinence and high blood pressure. They are only mildly effective; none produces an average weight loss of more than 4.5 kilograms. So many insurance plans will not reimburse patients for them, and many patients discard them after a few months. Thousands are turning instead to surgery to lose weight (see graph, left).

Bernice Welles, an endocrinologist and vice-president at DiObex, a San Francisco-based biotechnology company, told an obesity meeting in Washington DC earlier this month that, if it lives up to its promise, rimonabant will transform this picture.

"Sanofi-Aventis definitely has a blockbuster drug on its hands," says Donny Wong, a biochemist and analyst at Decision Resources. Wong's firm is predicting an annual obesity drug market of \$2.3 billion by 2013, with rimonabant accounting for some 60% of those sales. Other analysts have suggested that sales could go higher than that — but the drug's prospects are dampened by concerns that insurers may refuse to pay for it.

And safety concerns will lurk in the background until the drug is tried and tested in the market. In a letter to *The Lancet* in July, Bernard Hirschel, an infectious disease specialist at Geneva University Hospital, suggested that Sanofi-Aventis test its drug candidate in high-risk groups before it goes on sale (*Lancet* 366, 369; 2005).

Jeffrey Bland, a biochemist and president of Metagenics, a maker of nutritional products based in San Clemente, California, says that diet drugs that act on the brain have had a troubled history. A case in point is the fenfluramine-phentermine combination popularly called 'fen-phen', made by Wyeth of Madison, New Jersey. Its fenfluramine component suppressed appetite by boosting serotonin levels in the brain. But it was found to cause serious damage to heart valves and was withdrawn in 1997. "In central nervous system-mediated medication, we almost always learn something once those products are released that we didn't know before," Bland says.

Others, like Lilly's Caro, predict that in the long term, pharmacological approaches to obesity are unlikely to hinge on any single drug, however effective. They will probably involve several, deployed in combinations devised for each patient. In the short term, however, rimonabant could soon have the obesity medicine chest largely to itself. ■

IN BRIEF

UP IN THE AIR The European Commission has introduced legislation that would set standards, for the first time, on pollutants released by cars. The commission says its proposals would reduce premature deaths caused by air pollution from 370,000 to 230,000 each year by 2020 — and cost €7 billion (US\$8.5 billion) annually to implement. Until now, European regulations have focused on fuel economy standards, encouraging the manufacture of diesel-powered cars that use less fuel, but release particulates into the air. Environmental groups had pushed for even tougher and more expensive legislation, and criticized the proposed rules.

PAYOUT TIME GlaxoSmithKline will pay the US Department of Justice \$150 million to settle a claim that the drug company inflated the prices paid by government healthcare programmes for its anti-nausea drugs Zofran (ondansetron) and Kytril (granisetron). The payout arose after a small healthcare provider informed the government of the alleged overcharging, under a law that allows whistle-blowers to gain financially from a settlement. Justice department officials said that 150 similar cases involving drug firms are under investigation. GlaxoSmithKline admitted no wrongdoing in the settlement.

FLUREADY The US health department has given a \$100-million contract to Sanofi-Pasteur to manufacture an avian flu vaccine that has just recently proved safe and effective in human volunteers. The vaccine against H5N1 avian influenza — which is threatening to become a global pandemic — will be produced this month and next at the company's US headquarters in Swiftwater, Pennsylvania. It will contribute a yet-to-be-fixed number of doses to a stockpile of 20 million vaccines that the government hopes to build up. The vaccine producer is a division of the French drugmaker Sanofi-Aventis.

MARKET WATCH

CLEAN-ENERGY STOCKS



Alternative energy is back in vogue — in the most unfortunate of circumstances. With crude oil and gasoline prices at record levels, investors who once dismissed 'clean' energy as a backwater are changing their minds.

The WilderHill Clean Energy Index — whose symbol on the American Stock Exchange is ECO — tracks energy companies that have alternative energy interests. It has moved sharply upwards since Hurricane Katrina began to threaten Louisiana's oil installations in late August.

Even more significant, according to Robert Wilder, a former political scientist at the University of California, Santa Barbara, whose company runs the index, is the influx of cash into a fund he has created that tracks its performance. About \$100 million has flooded into the fund in the past month, Wilder says — ten times the rate of investment it enjoyed earlier in the year.

"This sector is getting hot," he says. "When oil hits \$70 a barrel, people start thinking about alternatives."

The value of the index is now approaching its 2001 market peak. But this time, Wilder says, "it is much less speculative" than during the dot-com boom, when some stocks were trading at price-to-earnings ratios of up to 100. Now clean-energy stocks have ratios in a more sensible range, typically in the low twenties.

Analysts warn that worries about oil supply are likely to persist, as exporters may get used to prices of \$50 a barrel or more. But Wilder warns clean-energy investors not to get carried away. "People tend to buy a product after it has gone up," he says. "I wouldn't be surprised to see this index go down." And last week, even as Hurricane Rita threatened Texan oil refineries, the index slipped back on profit-taking. ■