NEWS IN BRIEF

FDA rejects first cognitive claim for antidepressant

After years of disappointing clinical trial results for psychiatric drugs, many researchers believe that it is time to start thinking about mood disorders in terms of their composite symptoms. Major depressive disorder (MDD), for example, might need different drugs to manage fatigue, anhedonia and cognitive dysfunction. The FDA's rejection of Takeda and Lundbeck's application for a supplemental approval for vortioxetine deals a temporary delay to this approach.

Vortioxetine is a serotonin modulator and stimulator that the FDA approved for the treatment of MDD in 2013. Lundbeck and Takeda were seeking a supplemental approval to market the drug for the treatment of cognitive dysfunction in MDD, which would have helped it stand out from a crowded antidepressant market.

The application was based on data from three clinical trials, which showed improvements in the Digit Symbol Substitution Test (DSST) and the Rey Auditory Verbal Learning Test (RAVLT), two measures of cognitive function. Although an independent panel of advisors to the FDA voted 8 to 2 that these data supported the efficacy claim in February, the agency rejected the application in March.

"We were disappointed to get a negative action from the FDA," said Stevin Zorn, executive scientist in residence at Lundbeck Research USA, a subsidiary of Lundbeck. But he added that the discussion showed that the FDA recognizes the importance of cognitive dysfunction as a key component of MDD, and that they viewed it as a legitimate target for drug development. "This was just the beginning." The next step, he says, is for the field to develop new clinical endpoints that are sensitive and robust enough to measure changes in the different symptoms of mood disorders.

Earlier this year, regulators in Europe supported the approval of vortioxetine for cognitive dysfunction in MDD.

Asher Mullard

EMA greenlights second gene therapy

European regulators recommended approval of GlaxoSmithKline (GSK)'s gene therapy for the treatment of severe combined immunodeficiency (SCID) due to adenosine deaminase (ADA) deficiency (ADA-SCID). Once the European Commission finalizes the decision, the treatment will be sold as Strimvelis and will become the second gene therapy to be approved in Europe. The first was UniQure's alipogene tiparvovec for the treatment of lipoprotein lipase deficiency.

ADA-SCID is a rare metabolic disorder caused by mutations in the enzyme ADA, leading to the aberrant development of T and B cells, immunodeficiency and risk of opportunistic infections. Although some patients can be treated with bone marrow transplants from healthy donors, immune matching from donors is never perfect and immune incompatibility can lead to rejection. With Strimvelis, the patient's own bone marrow is removed and the cells are treated with a viral vector that inserts the ADA gene into cellular DNA. Gene-corrected cells are then re-introduced into the patient. In a trial of the one-off treatment, 11 of 12 patients (92%) hit the primary endpoint of intervention-free survival (they did not require bone marrow transplantation or more than 3 months of enzyme replacement therapy after treatment).

GSK has not yet disclosed how much the gene therapy will cost. But because ADA-SCID is a rare disease (there are only 15 new cases per year in Europe), and a one-off treatment provides long-term efficacy, analysts expect Strimvelis — and all gene therapies — to be very expensive. GSK has said it is considering an amortization model, in which payments are spread over several years.

UniQure's alipogene tiparvovec was approved in Europe in 2012, but product sales only began in the third quarter of 2015, in part owing to pricing discussions. UniQure had also considered an annuity-based pricing plan for its US$1-million drug, but decided against it due to the challenges of measuring outcomes and surrogate markers associated with lipoprotein lipase deficiency.

GSK has not disclosed its regulatory plans for Strimvelis in the United States.

Asher Mullard

US drug spending hits $425 billion

US drug spending grew by a double digit percentage, for the second year in a row, shows a report by IMS Institute for Healthcare Informatics. Payers spent US$425 billion in 2015, an increase of more than 12% from 2014. The rate of growth was reduced slightly compared with 2014.

The increased drug expenditure was due primarily to the launch of new drugs, IMS reports, but there was also a small rise in the volume of branded drug usage. Although the average price of branded drugs also increased, the change in average price was lower than in previous years. The average price of branded drugs grew by 2.8% in 2015, compared with a 5.1% increase in 2014, a 4.1% increase in 2013 and a 9.1% increase in 2012. "This reflects the heightened competition among manufacturers and more aggressive efforts by health plans and pharmacy benefit managers to limit price growth," the report says.

Oncology, the largest specialty medicine spending segment, brought in $39.1 billion. This was an increase of 18% compared with 2014. The fastest growing class of oncologics is still protein kinase inhibitors, which saw growth of 27%. Immuno-oncology monoclonal antibodies against programmed cell death protein 1 (PD1) also saw rapid uptake.

Hepatitis drugs and autoimmune treatments also drove spending higher, with spending on these medicines increasing by 54% and 29%, respectively.

US drug spending will hit $610–640 billion in 2020, IMS forecasts. Nearly one-third of this growth is expected to come from new medicines that will be launched in the coming years.

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