

March 19, 2019

### “Depression Drugs: Battling the Blues”

Melancholia was once blamed on too much black bile. Depression is now much better understood, but for as many as 30% of sufferers treatment is little more effective than it was for the ancient Greeks. Cheering news, then, that one new drug has been approved. Another might soon follow.

This month, Johnson & Johnson's Spravato -- a molecular mirror-image of the party drug and anaesthetic ketamine -- got the green light. It is the first new type of antidepressant since Eli Lilly launched Prozac more than 30 years ago. Spravato stimulates receptors in the brain, helping change the strength of connections -- called synapses -- between brain cells on which learning and memory depend.

Less uplifting was the news that Allergan's new depression drug Rapastinel -- also inspired by ketamine -- failed in clinical trials. The failure of the drug will hand more ammunition to shareholders lobbying for a revamp. Allergan's shares rose almost 5% on the news.

Allergan is not alone. Trials of such drugs have high failure rates. Neuroscience is in its infancy. Depression's myriad symptoms make progress hard to measure. Many drugs have significant side effects and potential for abuse. No wonder new clinical trials halved in the decade to 2017. Even when approved, cash-strapped health systems find it hard to fund costly new drugs for chronic, common conditions.

But there is hope amid the gloom. High expectations for Sage Therapeutics' brexanolone (marketed under name Zulresso) have driven shares up 73% this year. Modelled on a hormone, it shows promise in women suffering post-natal depression. U.S. regulators will decide whether to approve it on March 19. <NB: FDA approved brexanolone/Zulresso on March 19, 2019>. Shares in another biotech, Axsome Therapeutics, also rocketed this year on encouraging trial results.

Depression is considered the world's most disabling disease. Expect advances in neuroscience to open new avenues to help sufferers escape <END>.