

## ***EVOTEC AND CELGENE ENTER INTO DRUG DISCOVERY COLLABORATION FOR NEURODEGENERATIVE DISEASES***

- **Exclusive broad R&D collaboration based on Evotec's unique induced pluripotent stem cell ("iPSC") platform which enables systematic drug screening in patient-derived disease models**

### **Hamburg, Germany, 15 December 2016:**

Evotec AG (Frankfurt Stock Exchange: EVT, TecDAX, ISIN: DE0005664809) announced today that Evotec and Celgene Corporation have entered into a strategic drug discovery and development collaboration to identify disease-modifying therapeutics for a broad range of neurodegenerative diseases. Initial disease areas of focus will include Amyotrophic lateral sclerosis, Alzheimer's disease, Parkinson's disease, and multiple other neurodegenerative disorders.

Evotec has built an industrialised iPSC infrastructure that represents one of the largest and most sophisticated iPSC platforms in the industry. Evotec's iPSC platform has been developed over the last five years with the goal to industrialise iPSC-based drug screening in terms of throughput, reproducibility and robustness to reach the highest industrial standards. This effort was enabled by a research collaboration and licence agreement with Harvard University involving world-leading scientists at the Harvard Stem Cell Institute. In particular, a collaboration termed *CureMotorNeuron* that was initiated in 2013 with the laboratories of Professors Kevin Eggan, PhD, and Lee Rubin, PhD, resulted in significant contributions to the platform. Additional aspects of the platform were built up through Evotec's more than 10-year collaboration with the CHDI Foundation in the field of Huntington's disease.

Under the terms of the agreement, Evotec will receive an upfront payment of \$ 45 m. Celgene holds exclusive options to in-license worldwide rights to Evotec programmes developed from the company's compound library. Evotec may be eligible to receive up to \$ 250 m in milestones as well as up to low double-digit royalties on in-licensed programmes. As part of the collaboration, Celgene may also elect to screen

compounds from its proprietary CELMoD<sup>®</sup> library using Evotec's iPSC platform to evaluate activity in models of neurodegenerative diseases. The initial term of the collaboration is five years.

**Dr Werner Lanthaler, Chief Executive Officer of Evotec, said:** "We are very excited about the opportunity to collaborate with Celgene, a medical innovation leader in the industry. Celgene perfectly complements and accelerates our business model and vision in bringing first-in-class therapeutics to patients with neurodegenerative diseases, where the burden for society is increasing dramatically."

**Dr Rupert Vessey, EVP and President of Research and Early Development of Celgene, commented:** "We are very pleased to enter into our first neurodegeneration collaboration with Evotec and look forward to the screening of their compound libraries using their proprietary iPSC platform. Recent breakthroughs in our understanding of the mechanism of action of the CELMoD<sup>®</sup> library may enable the discovery of other related compounds that can direct the degradation of proteins known to be neurotoxic. Screening for this activity in highly controlled cell-based screens developed by Evotec represents an excellent initial approach for drug discovery in neurodegenerative disorders."

**Dr Cord Dohrmann, Chief Scientific Officer of Evotec, added:** "The fact that many promising drug candidates fail during clinical development highlights the limited predictive and translational value of pre-clinical disease models commonly used during the drug discovery process. This is particularly true for neurodegenerative diseases, a field that has proven intractable as novel therapeutics for Alzheimer's disease, Parkinson's disease, and motor neuron disease have largely failed. The use of patient-derived disease models for drug screening represents a paradigm shift as it places the testing of human disease relevance at the front end of the drug discovery process and is expected to lead to the discovery of more disease-relevant drug candidates but also more focused clinical development paths."

### **Webcast/Conference Call**

Given the innovative character of the alliance, Evotec invites you to join a brief conference call. The conference will be held in English.

### **Conference call details**

Date: **Friday, 16 December 2016**  
Time: **02.00 pm CET (01.00 pm GMT, 08.00 am EST)**

From Germany: +49 (0) 69 22 22 29 043  
 From UK: +44 20 3009 2452  
 From USA: +1 855 402 7766  
 From France: +33 170 750 705  
 Access Code: 37969784#

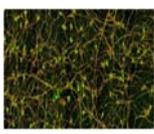
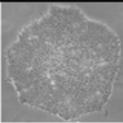
A simultaneous slide presentation for participants dialling in *via phone* is available at <http://www.audio-webcast.com/>, password: evotec1216.

**Webcast details**

To join the *audio webcast* and to access the *presentation slides* you will find a link on our home page [www.evotec.com](http://www.evotec.com) shortly before the event.

A replay of the conference call will be available for 24 hours and can be accessed by dialling +49 (0) 69 22 22 33 985 (Germany) or +44 20 3426 2807 (UK) and in the USA by dialling +1 866 535 8030. The access code is 654573#. The on-demand version of the webcast will be available on our website:

<https://www.evotec.com/article/en/Investors/Financial-Reports-2014-2016/188/6>.

						
Neuronal network human patient iPSC-derived motor neuron	Dr Cord Dohrmann, CSO	Dr Sandra Lubitz, Group Leader Stem Cells	Dr Dave Hallet, EVP Discovery Chemistry	Dr Rainer Kuhn, EVP Neuroscience	iPSC colony	Evotec's stem cell scientist

**ABOUT IPSC**

Induced pluripotent stem cells (also known as iPS cells or iPSCs) are a type of pluripotent stem cell that can be generated directly from adult cells. The iPSC technology was pioneered by Shinya Yamanaka's lab in Kyoto, Japan, who showed in 2006 that the introduction of four specific genes encoding transcription factors could convert adult cells into pluripotent stem cells. He was awarded the 2012 Nobel Prize along with Sir John Gurdon "for the discovery that mature cells can be reprogrammed to become pluripotent". Pluripotent stem cells hold great promise in the field of regenerative medicine. Because they can propagate indefinitely, as well as give rise to every other cell type in the body (such as neurons, heart, pancreatic and liver cells), they represent a single source of cells that could be used to replace those lost to damage or disease. (Source: [https://en.wikipedia.org/wiki/Induced\\_pluripotent\\_stem\\_cell](https://en.wikipedia.org/wiki/Induced_pluripotent_stem_cell))

**ABOUT CUREMOTORNEURON**

CureMotorNeuron was a research collaboration in the field of amyotrophic lateral sclerosis ("ALS") between scientists at Evotec and at Harvard University, specifically Harvard Stem Cell Institute ("HSCI"), aiming to identify compounds that prevent or slow down the loss of motor neurons, which is characteristic for ALS. Launched in 2013, the research initiative leveraged human motor neuron assays based on ALS patient-derived induced pluripotent stem cells that were developed by Professors Kevin

*Eggan, PhD, and Lee Rubin, PhD at Harvard, as well as Evotec's drug discovery infrastructure and expertise to identify compounds that may have therapeutic value against this life-threatening disease.*

#### **ABOUT EVOTEC AG**

*Evotec is a drug discovery alliance and development partnership company focused on rapidly progressing innovative product approaches with leading pharmaceutical and biotechnology companies, academics, patient advocacy groups and venture capitalists. We operate worldwide providing the highest quality stand-alone and integrated drug discovery solutions, covering all activities from target-to-clinic to meet the industry's need for innovation and efficiency in drug discovery (EVT Execute). The Company has established a unique position by assembling top-class scientific experts and integrating state-of-the-art technologies as well as substantial experience and expertise in key therapeutic areas including neuroscience, diabetes and complications of diabetes, pain and inflammation, oncology and infectious diseases. On this basis, Evotec has built a broad and deep pipeline of more than 70 partnered product opportunities at clinical, pre-clinical and discovery stages (EVT Innovate). Evotec has established multiple long-term discovery alliances with partners including Bayer, CHDI, Sanofi or UCB and development partnerships with e.g. Janssen Pharmaceuticals in the field of Alzheimer's disease, with Sanofi in the field of diabetes and with Pfizer in the field of tissue fibrosis. For additional information please go to [www.evotec.com](http://www.evotec.com).*

#### **ABOUT ALZHEIMER'S DISEASE**

*Alzheimer's disease ("AD") is an irreversible, progressive brain disease and the main cause for dementia. It slowly destroys brain cells and nerves and thus disrupts the transmission in the brain, particularly those responsible for storing memories. In the course of AD, the brain shrinks as gaps develop in the temporal lobe and hippocampus, which are responsible for storing and retrieving new information. Beside degeneration of neurons, typical pathological hallmarks for AD are beta amyloid plaques and neurofibrillary tangles composed by Tau protein in the brain. The cause and progression of AD however are still not completely understood. Like other chronic conditions, scientists believe that AD doesn't have one predominant cause, but is rather a complex result of various factors. At the moment, there is no cure available for AD and most other causes for dementia. Current treatments only tackle the symptoms of the disease. According to Alzheimer's Disease International, there were 47 million people diagnosed with dementia in 2015 worldwide. It is estimated that this number is going to increase to more than 130 million people in 2050. Approximately 10 million new cases of dementia are diagnosed each year. Concerning the dementia market volume, \$ 818 bn are yearly spent as of today on the treatment of dementia and it will become a trillion dollar disease by 2018. All in all, these costs equal about 1% of the world's GDP (average of GDP from countries worldwide).*

#### **ABOUT PARKINSON'S DISEASE**

*Parkinson's disease is a chronic, degenerative neurological disorder that is characterised by well-known motor symptoms including tremors, stiffness of limbs, slowness of movements and difficulties with posture and balance, as well as by non-motor symptoms. The cause is unknown, and although there is presently no cure, there are treatment options such as medication and surgery to manage its symptoms. Parkinson's disease is more common in people over 60 years of age and its prevalence is expected to increase significantly as the average age of the population increases. Estimates of the number of people living with the disease therefore vary, but recent research indicates that at least one million people in the United States, and more than five million worldwide, have Parkinson's disease. (Source: MJFF and Parkinson's Disease Foundation).*

#### **ABOUT AMYOTROPHIC LATERAL SCLEROSIS**

*Amyotrophic lateral sclerosis ("ALS") – also referred to as motor neuron disease or Lou Gehrig's disease in some part of the United States – is a debilitating disease with varied etiology characterised by rapidly progressive weakness, muscle atrophy and fasciculations, muscle spasticity, difficulty speaking (dysarthria), difficulty swallowing (dysphagia) and difficulty breathing (dyspnea). ALS is the most common of the five motor neuron diseases. The disorder induces muscle weakness and atrophy throughout the body caused by the degeneration of the upper and lower motor neurons. Unable to function, the muscles weaken and atrophy. Individuals affected by the disorder may ultimately lose the ability to initiate and control all voluntary movement, although bladder and bowel sphincters and the muscles responsible for eye movement are usually, but not always, spared until the terminal stages of the disease. The majority of people with ALS die within 3-5 years from the onset of the symptoms; only about 10% of the people with ALS survive for 10 years or more. ALS mainly affects people between the ages of 40 and 70, with an average age of 55 at the time of diagnosis. Generally, ALS is 20% more common in*

men than women. The incidence of ALS is 2 per 100,000 people and there are about 150,000 patients diagnosed with ALS worldwide.

**FORWARD LOOKING STATEMENTS**

*Information set forth in this press release contains forward-looking statements, which involve a number of risks and uncertainties. The forward-looking statements contained herein represent the judgement of Evotec as of the date of this press release. Such forward-looking statements are neither promises nor guarantees, but are subject to a variety of risks and uncertainties, many of which are beyond our control, and which could cause actual results to differ materially from those contemplated in these forward-looking statements. We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any such statements to reflect any change in our expectations or any change in events, conditions or circumstances on which any such statement is based.*