

Germany: EIB backs Atriva Therapeutics with €24 million for the development of a potential COVID-19 treatment



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- European Investment Bank and Atriva Therapeutics sign financing agreement of €24 million for the research, development and clinical testing of the company's lead product candidate against influenza and COVID-19
- Atriva's ATR-002 molecule is the only host-cell targeting antiviral therapeutic specifically developed to treat severe respiratory infections caused by RNA (ribonucleic acid) viruses – it may prevent progression to critical-stage COVID-19 in hospitalised patients and holds strong potential in the current pandemic
- The EIB venture debt transaction is financed under the Infectious Diseases Finance Facility set up as part of Horizon 2020, the EU research and innovation programme for 2014-2020

The European Investment Bank (EIB) and Atriva Therapeutics GmbH, a biopharmaceutical company pioneering the development of host-targeting antiviral therapies, concluded a €24 million financing agreement today to facilitate the company's development and clinical testing of a novel therapy treating severe respiratory infections with RNA viruses. RNA viruses cause

diseases such as influenza, SARS and COVID-19. Atriva's ATR-002, an oral small molecule, has been proven to block the viral propagation of SARS-CoV-2 in pre-clinical trials, making it a much-needed therapeutic option for patients with moderate to severe COVID-19 symptoms who require hospitalisation.

"While one needs to be careful when comparing COVID-19 to the flu, it might be helpful that both diseases have overlaps in their mechanisms of infection," said **Ambroise Fayolle, EIB Vice-President** in charge of innovation and transactions in Germany. *"If, as Atriva's research indicates, one small molecule can work to treat both diseases, this would be excellent news not only for the millions of people who fall ill from the flu every year but also for the many more who are affected by the coronavirus lately. An effective treatment would also lift a huge burden from our health systems and help mitigate the impact these diseases have on our daily lives and the economy. This is a case where EIB financing can contribute to addressing an extremely high unmet medical need, which is something I am proud of."*

Mariya Gabriel, Commissioner for Innovation, Research, Culture, Education and Youth, said: *"The European Union is doing all in its power to protect Europeans against coronavirus. The European Commission is coordinating the [Coronavirus Global Response](#), the global action for universal access to tests, treatments and vaccines against coronavirus and for the global recovery. With this loan to Atriva, the EU continues its support for the development of innovative Covid-19 treatments. Their therapy can add to the range of complementary solutions that we need to tackle this disease."*

Dr Rainer Lichtenberger, co-founder and CEO of Atriva, said: *"The EIB clearly understands the need for an effective antiviral therapy against influenza and COVID-19 and the potential such a treatment holds to help patients around the world. We are grateful for the EIB's support in advancing the clinical development of ATR-002 as an innovative host-targeting therapy against these prevalent and potentially devastating diseases. With the funding from the EIB, we can now take the next development steps – starting a Phase II study in patients with moderate to severe COVID-19 infections, followed by further clinical development work in influenza."* He continued: *"When the coronavirus pandemic hit us all earlier this year, we saw that Atriva's technology had the potential to play an important role in the fight against COVID-19, and we are excited to move forward in this work now. Our ultimate goal, though, is to develop a broad-spectrum antiviral drug that will also be effective against future viral outbreaks."*

ATR-002 has been developed specifically to treat respiratory viral infections by inhibiting MEK, a host cell factor required for the replication of various RNA viruses, including the influenza virus and SARS-CoV-2. Atriva's pre-clinical studies, performed at the Universities of Tübingen and Münster, have demonstrated that MEK inhibition by ATR-002 also prevents SARS-CoV-2 replication.

In addition to its antiviral efficacy, ATR-002 shows a second beneficial effect: the MEK-inhibitor was able to significantly decrease pro-inflammatory cytokine and chemokine expression in cells. Cytokines and chemokines are

proteins that coordinate the immune response throughout the body. In patients with COVID-19, ATR-002 could prevent a cytokine storm and the associated disease progression to a life-threatening condition.

This dual benefit, antiviral activity and immunomodulation, positions ATR-002 as a promising therapeutic candidate. Atriva has filed the respective patents with the European Patent Office. In addition, ATR-002 successfully completed a Phase I clinical trial in 2019 where it demonstrated excellent safety and tolerability in healthy volunteers.

Atriva will receive the EIB loan in three tranches upon the completion of pre-defined milestones. The funds will support the company's R&D for ATR-002, including clinical trial expenses, the technical transfer and manufacturing ramp-up needed to reach a commercial scale, as well as regulatory, intellectual property, pharmacovigilance and market access activities. Atriva will now start a multinational, double-blind, randomised clinical Phase II study in hospitalised patients with moderate to severe COVID-19 infections.

The loan is backed by the [Infectious Diseases Finance Facility](#) (IDFF) set up as part of the EU's [Horizon 2020 programme](#). The IDFF is an example of successful collaboration between the European Commission and the EIB in the face of a health crisis. Through this facility, the EIB has supported European companies with total lending of around €400 million for developing cures, vaccines and diagnostics for various infectious diseases, most prominently the coronavirus.

Background information

The **InnovFin Infectious Diseases Finance Facility** (IDFF) is dedicated to supporting the fight against infectious diseases. This joint European Commission and EIB Group initiative is part of Horizon 2020, the 2014-2020 EU research and innovation programme. The IDFF enables the EIB to provide between €7.5m and €75m of funding to innovative players active in developing vaccines, drugs, medical and diagnostic devices and research infrastructure for combating infectious diseases. The financing mainly goes to projects that have completed the pre-clinical stage and need clinical approval for further development. The IDFF has been increased by €400 million to boost its capacity for tackling the outbreak of the coronavirus. The total EU contribution to the IDFF via Horizon 2020 is estimated at almost €700 million.

About Atriva Therapeutics GmbH

[Atriva Therapeutics](#), founded in 2015, is a biopharmaceutical company specifically pioneering the development of host-targeting antiviral therapies set up by a team of leading scientists in viral research and seasoned industry experts. The company aims to develop new antiviral therapies against different severe respiratory viral infections with a high unmet medical need, such as influenza and COVID-19. Atriva's lead product ATR-002 is a first-in-class host-targeting agent, which inhibits viral replication in influenza and favourably modulates the body's immune response. ATR-002 is under clinical development and has successfully completed a Phase I trial to demonstrate

safety and tolerability in healthy subjects ([NCT04385420](#)). The Company has initiated a Phase II study to evaluate efficacy in hospitalised COVID-19 patients while a Phase II study in influenza is planned to start in early 2021. Atriva Therapeutics is located in Tübingen and Frankfurt, Germany.