

Epigenetic drugs for the treatment of Covid-19 disease and other viral infections

Introduction

In order to respond effectively to the current Covid-19 outbreak, Istituto Europeo di Oncologia (IEO) has established a new line of research aimed at identifying **new potential therapeutics for SARS-CoV-2-infected patients**.

Medical Need

Covid-19 outbreak has been declared pandemic by the WHO in March 2020, becoming a world health emergency heavily affecting both human health and world economy. Global coronavirus infections have passed 44 million and the global coronavirus death toll is 1,167,634 according to researchers at Johns Hopkins University (October 2020). **Effective and strong measures have to be urgently adopted** in order to contain the spread of the epidemic.

Solution

The Epi-Drugs research program has been recently established by IEO to contribute containing the spread of the current Covid-19 pandemics. Based on the **drug repurposing approach**, the program aims at reaching the Covid-19 patients as quickest as possible, through the repurposing of already-available epigenetic drugs, either approved or in late-stage development (i.e. **IEO proprietary compounds and their combinations**). Epigenetic drugs that are effective against the virus replicative cycle have been identified, and are currently under validation in murine coronavirus infection models to prove their efficacy, especially in the early phases of the infection. In addition, the program involves the development of a **screening method for new epigenetic drugs** and targets that will help to design more effective therapies in the expectation of any future viral pandemics.

Advantages

- **Reduced time and costs** associated with the antiviral drug development;
- **Proprietary** epigenetic compounds under preclinical evaluation for other indications;
- Established network with national and international players on the front lines against Covid-19.

Opportunity

Istituto Europeo di Oncologia is seeking industrial partners and/or investors interested in the preclinical and clinical development of IEO proprietary compounds for treatment of Covid-19 disease and other viral infections.

Principal Investigators



Pier Giuseppe Pelicci, MD PhD

IEO Research Director

- Prominent Scientist in Oncology
- Worldwide leader in Leukemia



Luca Mazzarella MD PhD

Clinical Scientist

- Expert in chromatin modifiers as therapeutic targets in cancer



Saverio Minucci, MD

Drug Discovery & Immunotherapy Unit Director

- Over 15-years experience in discovery of targeted cancer drugs
- Expert in chromatin alterations in tumorigenesis

References

Patent Application: IT-102020000007873.