UNIVERSITY OF GDANSK

TECHNOLOGY TRANSFER OFFICE

TECHNOLOGICAL OFFER
No. 034/2017/1

OLIGONUCLEOTIDES FOR DETECTION AND DIFFERENTIATION OF INFLUENZA VIRUS STRAINS SUSCEPTIBLE AND RESISTANT TO OSELTAMIVIR

Authors

Prof. Bogusław Szewczyk
Dawid Nidzworski, PhD
Marcin Hołysz, PhD

Intercollegiate Faculty of Biotechnology
University of Gdańsk
Medical University of Gdańsk

Commercialization opportunities

- Licensing agreement
- Transfer of ownership
- Spin off

IP Status

The invention was submitted for patenting according to Polish (P.402673) procedures.

Implementation progress

TRL 4
Technology validated in laboratory conditions

Influenza A virus (avian influenza virus) is one of the most common pathogens infecting millions of people and animals (particularly birds) every year. Due to its high variability, the virus is capable of giving rise to not only local epidemics, but also pandemics on a global scale. Pandemic of so-called avian influenza which ocurred in the first decade of the 21st century caused economic losses estimated at several billion euros.

Oseltamivir, more commonly known under its trade name „Tamiflu", gained particular popularity due to avian influenza, and has been included in the World Health Organization's list of essential medicines.

As Tamiflu is now widely used throughout Europe, it is becoming increasingly important to identify and distinguish between influenza strains susceptible and resistant to Oseltamivir. This differentiation is particularly important while dealing with resistant strains, in which case administration of the drug will not only not yield any positive effects, but may result in the emergence of a new influenza strain resistant to the drug.

Developed diagnostic method based on real-time PCR, provides effective tool for identification of influenza virus (IV) as well as determination of its resistance or susceptibility to treatment.

Technology Transfer Office

biuro@ctt.ug.edu.pl
58 523 33 74
58 523 33 75
ul. Jana Bażyńskiego 1a
80-309 Gdańsk

Fundusze Europejskie Inteligentny Rozwój
INKUBATOR INNOWACYJNOŚCI+
Ministerstwo Nauki i Szkolnictwa Wyższego
Unia Europejska Europejski Fundusz Rozwoju Regionalnego