' D Z L G 1 L G] Z R Uroldgy (Sunnyvale) 2018, Volume 8
DOI: 10.4172/2161-1165-C1-019

8th International Conference on

Epidemiology & Public Health

September 17-19, 2018 | Rome, Italy

The new device for monitoring of epidemiology of upper respiratory tract infections

In uenza is a contagious disease caught by humans and caused by viruses belonging to the family Orthomyxoviridae. Each year the In uenza virus infects millions of people and kills hundreds of thousands of them. Economic losses caused by employee absenteeism are counted in the hundreds of millions of dollars a year. In order to successfully treat in uenza virus infections, it is necessary to detect virus during the initial development phase of the infection when tens to hundreds of viruses are present in the pharynx of the patient. Streptococcus pyogenes belongs to the family Streptococcaceae and is one of the most popular pathogen causing bacterial infections of upper respiratory tracts. e early symptoms of infections of in uenza virus and Streptococcus pyogenes are very similar and there is a huge problem to recognize and distinguish those pathogens and start appropriate treatment. Here, we present results of pre-clinical study of novel mobile technology for detection of in uenza virus and Streptococcus. Our team developed single-use biosensor (MultiSensDx), universal reader and mobile application for early detection of two types of pathogens in only 5 minutes. Our technology is a useful tool in telediagnostic procedure and may be an internal part of many telecommunication platforms. We strong believe that this solution will have a huge impact on Public Health in the near future. In our labs, we have developed a single-use test for detection of in uenza virus, the universal reader (ready to detect other pathogens and biomarkers) and user friendly mobile application which helps in whole procedure of analysis.

Complete system for introduction to telecommunications platforms

Recent Publications

1. Nidzworski, D., Siuzdak, K., Niedzia kowski, P., Bogdanowicz, R., Sobaszek, M., Ryl, J., Weiher, P., Sawczak, M., Wnuk, E Goddard III, W.A., Jaramillo-Botero, A., Ossowski, T. 2017. A rapid-response ultrasensitive biosensor for in uenza virus