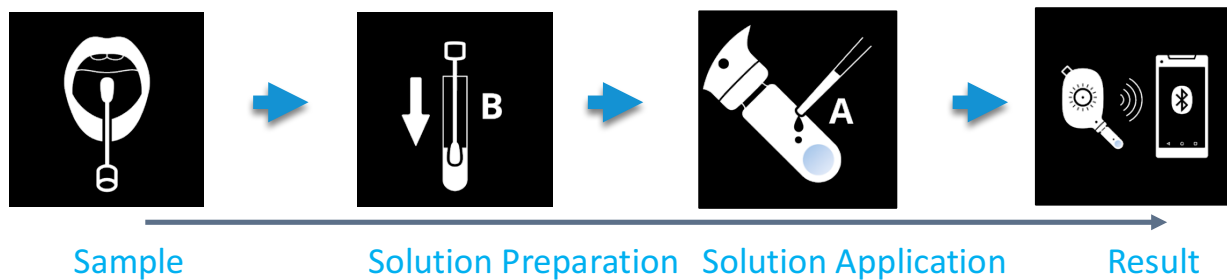


Detection of influenza virus by smartphone

Influenza is a contagious disease caught by humans and caused by viruses belonging to the family *Orthomyxoviridae*. Each year the Influenza 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 influenza 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.

In our labs, we have developed a single-use test for detection of influenza virus, the universal reader (ready to detect other pathogens and biomarkers) and user friendly mobile application which helps in whole procedure of analysis.



The sensitivity of the test allows to detect 5-10 virus particle in samples. Also the universality of the assay was confirmed analyzing different strains of influenza A and B viruses.

Flu SensDx is going to contribute to the reduction or even complete elimination of numerous

- public health-related problems, including:
- lack of virus diagnostics during epidemiological seasons,
- lack of efficient, rapid, sensitive and inexpensive test allowing to diagnose influenza virus infection during a visit to a primary care physician,
- lack of sufficient epidemiological data regarding the spreading of the influenza virus,
- growing drug resistance, particularly among children,
- significant economic losses related to the reimbursement of medically unjustified antibiotic therapy

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