

Pharmaceutical Analysis in COVID-19 pandemic era

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EDITORIAL

Current crisis is more than profound that has affected scientific research due to the unprecedented conditions. Pharmaceutical analysis among other topics in bioanalysis has been playing a vital role in the recent research needs. Nobody can deny that COVID-19 pandemic has changed our everyday life in a dramatic way. At first, we had to be familiar that our first concern would be to stay healthy and avoid contamination. Then, we had to learn how to work in a remote way. Later on, we had to accept the fact that wearing masks would be the normal view not only in the offices, but also in the streets. And since, the worst scenario is not been removed yet, we have adopted the fact that the initial fear has come to stay for a prolonged timespan. For more than six months now, we are counting the deaths globally, we read the predictions, we are happy to have survived, but there is still a high risk of contamination each and every day, no matter how much we reduce or change our activities. From the first moment all attention is focused to the pharmaceutical industry, expecting the good news about an effective vaccine or an efficient drug. Undoubtedly, top priority in pharmaceutical industry is to search for an effective vaccine, hopefully in 2021 [1]. In the meantime the whole world is wishing for efficient drugs that could act against severe acute respiratory syndrome coronavirus 2 also known as SARS-CoV-2. Several drugs such as chloroquine/hydroxychloroquine, colchicine, even cannabis constituents were proposed as candidates for COVID-19 disease's treatment. Already existing pharmaceuticals were examined with regards to their potential efficacy. This would save time and money of course, while new drugs would obviously require much more time and higher costs. Regardless the case analytical methods are the necessary tools to give the answer to the researchers. Therefore, the analytical scientists are asked to be ready to perform at their best to develop and validate methods for all drugs under investigation [2]. Researchers working in R&D of pharmaceutical companies, analytical chemists working in Quality control and quality assurance laboratories, chemists in bioanalytical laboratories have one thing in common. They are all

using analytical instrumentation to give fast and reliable answers to all analytical problems.

The discovery of the most efficient drugs against SARS-CoV-2 is at the forefront of researchers in pharma industry. Unfortunately, no one can predict when new drugs will reach the market.

Development processes take time. They are standardized and cannot be altered due to the global pressure for results. During all drug development steps, the contribution of analytical chemists is of utmost importance [3]. Novel drugs will need the development and validation of powerful analytical methods.

But even previously tested drugs will have to be re-investigated under current conditions. Therefore, even pre-existing analytical methods must be re-examined, optimized and re-validated. Moreover, the analysis of biological fluids, especially blood serum after drug administration requires sample preparation using modern pre-treatment techniques to be compatible with modern sophisticated analytical instrumentation. The future of the humanity nowadays lays at the epidemiologists and the infectious disease specialists, so that the spread of the disease is slowed down. However pharmaceutical industry has the key role to the circulation of vaccines and drugs and pharmaceutical analysis will always play a significant role in the development and evaluation of the effective medicines.

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