Published online: 2020-05-26

Editorial

Bibliography
DOI https://doi.org/10.1055/a-1182-5301
published online May 26, 2020 | Planta Med 2020; 86: 1
© Georg Thieme Verlag KG Stuttgart · New York |
ISSN 0032-0943

Dear Readers,

The disease COVID-19 affects us all and we see the influence of the virus SARS-CoV-2 on our life, society, and economy. A look at the recent past shows that the current pandemic is not a single event in the history of virus infections. For example, the Spanish flu (1918–1920), with an estimated 17–100 million deaths, is only 100 years old. Until today, more Influenza outbreaks were reported (e.g., London, 1972–1973) and we were lucky that others like the avian flu (pandemic since 1997) have not crossed the species border so far. Far more dramatic is the infection with HIV, which has led to the HIV/AIDS pandemic since 1983. Far unnoticed is the high number of infections with hepatitis and papilloma viruses, which have also reached pandemic proportions. Further waves of infection with poliovirus (measles), which have been increasing locally at a worrying rate for years, and the repeated occurrence of Ebola and Dengue show that viral diseases are a challenge for medicine.

Although viruses are biologically considered relatively simple and primitive, the development of drugs and vaccines is very complex. The reasons are manifold and certainly lie in the infection cycle of the virus and the associated pathogenicity to cause massive damage to our immune system. Compared to other diseases, moderate success has been achieved in the development of antiviral drugs with natural products (e.g., lignans). Here, vaccination and highly active synthetic antivirals play an important role, and infections like HIV, hepatitis, and papilloma warts have benefited. Nevertheless, natural substances play a prominent role in the search for antiviral drugs. This is due to the great structural diversity and unusual activity resulting from evolution and multiple adaptations in the plant-pathogen relationship.

We as editors at Planta Medica are always happy to see contributions from you that address this exciting question and investigate new natural compounds, extracts, and innovative molecular biological concepts to combat viruses. You present us with natural compounds that are diverse, such as polysaccharides, lignans, terpenes, and alkaloids, but also concepts from traditional medicine such as TCM that show an enormous potential. From the many publications of the last 5 years, we have selected the most important ones for you, which reflect the importance of natural substances. We are also very pleased that under the guidance of Prof. Dr. Andreas Hensel, we have been able to gather renowned experts who thankfully give a perspective on the current situation with SARS-CoV-2 and the use of antiviral natural substances.

Stay healthy!

Oliver Kayser
Robert Fürst

This document was downloaded for personal use only. Unauthorized distribution is strictly prohibited.