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Editorial Open Access

Advanced Technology in Clinical Microbiology for the Diagnosis and Prevention of Viral Diseases

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Editorial

The recent emergence of new viral agents together with the re-emergence of known viruses is now recognized as an urgent threat to public health [1,2]. These dangerous viruses include severe acute respiratory syndrome-associated coronavirus, influenza A strains, west nile virus (WNV), human metapneumovirus, Japanese encephalitis virus (JEV), dengue virus, hantaviruses, tick-borne encephalitis virus (TBEV) and ebola virus. Emerging diseases also include variant Creutzfeldt-Jakob disease (vCJD), previously defined as an atypical slow virus disease, which is caused by a prion agent. Global health has been threatened by recent outbreaks of emerging viruses, which are mostly zoonotic pathogens that comprise 75% of human emerging diseases [3].

Given the current situation, early detection and surveillance of zoonotic pathogens is becoming increasingly important. Specific and efficient countermeasures are also needed to treat and prevent the spread of these pathogens in human and animal populations. Recent developments of molecular techniques have provided innovative diagnostic procedures [4-6]. These new techniques have also contributed to the establishment of clinical treatments as well as the prevention of viral spread by disinfection, sterilization and antisepsis. As such, these advances need to be highlighted and discussed. Areas expected to benefit from the new techniques include virology, public health, biosafety, medical technology, health science and veterinary medicine.

We have been involved in this field of research for over a decade [7-10]. The new technologies and novel findings referred to above can be found in our journal, "Clinical Microbiology: open access", which provides an excellent platform for advancements in the diagnosis and prevention of infectious diseases [11-14]. We hope that readers will enjoy our journal and obtain useful information for their own research, and be inspired by new ideas for future investigations.

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