

International Conference on
BIOINFORMATICS & SYSTEM BIOLOGY
&
3rd International Conference on
SURGERY & ANAESTHESIA

March 20-21, 2019 | Singapore City, Singapore

Molecular docking studies of compounds from medicinal plants on Lassa fever virus

Ohaeri Uchechukwu, Ubani Amaka and Nathan Shehu
University of Jos, Nigeria

Lassa fever is an acute viral zoonotic illness caused by Lassa virus, a member of the *Arenaviridae* family and responsible for a severe haemorrhagic fever characterized by fever, sour throat, muscle pain, nausea. In our studies, we carried out molecular docking studies of some selected compounds from medicinal plants known to have been beneficial in the treatment of hepatitis C, on Lassa fever virus using PyRx docking tool, for impaling the futuristic approach of developing preventive measures against Lassa fever disease. Structures of 10 known medicinal plants which have been proven to be beneficial in the treatment of

hepatitis C was downloaded from the PubChem database and docked on the Lassa fever virus nucleoprotein (downloaded from the protein databank database) using PyRx docking tool. From the docking result it was observed that the 10 medicinal plants that were docked on the Lassa fever virus nucleoprotein have low docking energy and thus have potential to inhibit the activity of nucleoprotein of Lassa virus. In conclusion, the results indicate that the docked medicinal plants have effective antiviral activities against Lassa virus.

ohaeri.ucheckukwu@yahoo.com