

## POSTER 44

### TSG101 ANTIBODY TARGETING: OPPORTUNITIES FOR BROAD-SPECTRUM TARGETING OF MULTIPLE DRUG-RESISTANT VIRUS TYPES

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Viral infection remains a major global public health problem, in part because of the ability of the virus to elude antiviral therapies. Most conventional drugs were designed to directly target virus-encoded mechanisms. However, there is increasing appreciation that certain host-encoded molecules are comparably important for the viral life cycle and could therefore represent potential antiviral targets. Prominent among these is TSG101, a cytoplasmic molecule that is “hijacked” by many different virus types and used to facilitate viral budding and release. In our present report, we demonstrate that TSG101 is uniquely exposed on the surface of cells that have been infected with HIV, influenza (seasonal and pandemic), Ebola, RSV, HSV-I, -II and many other virus types. We also demonstrate the development of a monoclonal antibody, CB8-2, which can efficiently eliminate cells that have been infected with these viruses. We further show that TSG101 antibodies are comparably effective when targeting drug sensitive and drug-resistant variants of HIV, influenza and other virus types. Altogether, these studies demonstrate the potential of TSG101-directed antibodies to combat drug-resistant viral strains.