

○Michael J SOFIA¹¹Arbutus Biopharma, Inc

Approximately 180 million individuals worldwide are infected with the hepatitis C virus. This virus will ultimately lead to chronic liver disease, liver cirrhosis and eventually hepatocellular carcinoma. Sofosbuvir is a nucleotide prodrug that targets the HCV RNA dependent RNA polymerase (RdRp), an essential enzyme necessary for viral replication. Sofosbuvir ushered in the era of interferon-free therapies for curing HCV and has become the backbone agent in combination regimens for HCV curative regimens. It has been shown to treat a broad HCV patient population including difficult to treat patients. Sofosbuvir based regimens have demonstrated cure rates in excess of 95% with no observed resistance and a stellar safety profile. Sofosbuvir was approved by the US FDA in December 2013 and the EU in January 2014, and since then its use has contributed to the cure of many patients suffering from HCV. This presentation will discuss the discovery and development of sofosbuvir as a treatment for HCV.