

CStone receives IND approval in China for HDAC6 inhibitor CS3003

13 March 2019 | News

CS3003 is a small molecule inhibitor that selectively targets histone deacetylase 6 (HDAC6)



CStone Pharmaceuticals announced that the National Medical Products Administration (NMPA) recently approved company's histone deacetylase 6 (HDAC6) selective inhibitor CS3003 for Phase I clinical trial in China.

Dr. Frank Jiang, Chairman and CEO, commented: "CS3003 is the ninth drug candidate of CStone with Investigational New Drug approval obtained in China. At present, there are no similar domestic and foreign products approved. We believe that CS3003 has the potential to become the first-in-class HDAC6-selective inhibitor in the world. We look forward to bringing a novel and effective treatment option to cancer patients."

Dr. Jon Wang, Chief Scientific Officer of CStone said, "The selective inhibition of HDAC6 has the potential to produce better efficacy in multiple myeloma either as monotherapy or in combination with current standard of cares. Furthermore, preclinical data and early clinical studies of similar products in the same class have indicated that CS3003 has better safety profile than pan-HDAC inhibitors and the potential to develop combination therapies with immune checkpoint inhibitors for the treatment of multiple types of solid tumors."

CS3003 is a small molecule inhibitor that selectively targets histone deacetylase 6 (HDAC6). Unlike the other HDAC family members, HDAC6 is mainly located in the cytoplasm and has little effect on DNA histone acetylation. HDAC6 inhibition can enhance acetylation of cytoplasmic tubulin and lose the capability to clear unfolded or misfolded proteins, thereby promoting cell apoptosis. Selective inhibition of HDAC6 produces better efficacy in multiple myeloma and has improved safety profile over pan-HDAC inhibitors. CS3003 also has the potential to be combined with PD-(L)1 antibody drugs in solid tumors to expand the clinical efficacy of immunological checkpoint inhibitors.