Singapore: In the battle against Ebola, incentives from government and healthcare policymakers have been vital for advancing the current treatment pipeline, by mitigating the risk and up-front costs from pharmaceutical companies, commented research and consulting firm GlobalData.

Dr Daian Cheng, analyst-infectious disease, GlobalData, stated that despite a clear need for novel therapeutic approaches to combat Ebola, the infection has not represented an attractive investment for pharmaceutical companies due to its low incidence and the occurrence of outbreaks in countries that cannot afford expensive medicines.

Dr Cheng says, "These two factors drastically reduce the ability of drug developers to recoup their research and development (R&D) costs. So far, clinical-stage experimental treatments for Ebola have all been advanced, at least in part, with the financial support of public entities, and the contribution of public resources to R&D has only increased as fears of the virus have spread."

Dr Cheng notes that the most advanced Ebola pipeline candidate is GlaxoSmithKline’s (GSK) therapeutic vaccine, cAd3-ZEBOV. This treatment was originally developed jointly by the US National Institute of Allergy and Infectious Diseases and Okairos, which was acquired by GSK in 2013.

Dr Cheng further mentioned that GSK’s vaccine contains a chimpanzee-derived adenovirus vector that carries a single Ebola viral gene and targets the Ebola Zaire strain, which is responsible for the current outbreak.

"A Phase I study in healthy UK volunteers started in September and the initial manufacturing costs are being supported by a recently-formed international consortium of government bodies and leading research institutions. This is headlined by a joint $4.5 million grant from the Wellcome Trust, the Medical Research Council, and the UK Department for International Development."

The analyst adds that experts are hopeful for data on cAd3-ZEBOV’s safety and dosing in healthy volunteers to be available by the end of this year. Other pharmaceutical companies with promising Ebola treatments that are partially supported by
public funding include Johnson & Johnson, Mapp Biopharmaceutical, and NewLink Genetics.

"Ultimately, more partnerships between public entities and pharmaceutical companies are needed to bring to market novel therapies that combat neglected diseases, particularly those which, like Ebola, affect resource-deprived regions of the world," Dr Cheng concluded.