

Título: PATENT INFORMATION FOR RESEARCH, DEVELOPMENT AND INNOVATION IN CHIKUNGUNYA VIRUS

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Resumo:

Chikungunya virus (CHIKV) is an arthropod-borne virus, transmitted by *Aedes* mosquitoes. The CHIKV belongs to the alphavirus genus, with a single-stranded, positive-sense RNA genome. It was first isolated in 1953 from the blood of a febrile individual in Tanzania during a large disease outbreak. After an incubation period, most patients suffer from acute fever, polyarthralgia and myalgia, which have a significant impact on their quality of life. Since 2004, CHIKV has been responsible for over 2 million human infections. The mosquito vectors are globally distributed in tropical and temperate zones, providing the opportunity for CHIKV to continue to expand into new geographic regions. In this context, no vaccine against chikungunya is currently available and, in spite of the fact that several drugs are known to be effective against the virus when tested *in vitro*, no recognized antiviral treatment is now accessible. No bibliometric investigation has been done in the patent literature to guide the researchers and potential readers. The first concrete evidence of a new product, drug or industrial process may be published as patent documents. This work aims to analyze the patent scenario related to Chikungunya virus worldwide. Patent documents were collected with the Questel-Orbit software in May 14th, 2015. The search strategy employed Chikungunya and CHIKV terms in the title, abstract, descriptive report and claims. A total of 298 patent documents were retrieved. The USA was the predominant country considering the priority patent documents (33%), followed by international applications via WIPO (31%), and then India, Europe and China. The 10 highly-productive institutes/companies were from France and USA. Patent documents were divided into four aspects: (1) use for vaccine; (2) use for chemotherapy; (3) use for diagnosis; (4) use for production process. Patent investigation of chikungunya virus can be an extremely important resource for competitive intelligence and research guidance in order to optimize research costs and guide investments. The establishment of vaccines, treatments and diagnosis opportunities were described in patent documents as options for controlling the Chikungunya virus infection.

Palavras-chave: Chikungunya virus, patent, vaccine, treatment

Agência de fomento: sem fomento