Zika virus infection, an emerging viral disease of international concern



https://en.wikipedia.org/wiki/Aedes_aegypti

On February 1st, the World Health Organization has declared that the recent cluster of microcephaly cases and other neurological disorders reported in Brazil, following a similar cluster in French Polynesia in 2014, constitutes a Public Health Emergency of International Concern. The suspected link between the Zika virus and two neurological disorders, the birth defect microcephaly and Guillain-Barre syndrome, could be confirmed within weeks, the World Health Organisation (WHO) said on Friday 12 February in a press conference.

Two Zika vaccine candidates seem to be more advanced: one from the U.S. National Institutes of Health (NIH) and one from the Indian company Bharat Biotech. The NIH is working on a DNA-based vaccine. Bharat Biotech said last week that its candidate vaccine would be subjected to pre-clinical toxicity studies imminently.

Dr. Krishna Ella, Chairman and Managing Director of Bharat Biotech said that one of the two company's candidates is in advanced stage of development and pre-clinical studies will be concluded in the next five months, after which the process for regulatory approval will commence.

Zika virus infection is a viral disease transmitted through the bite of an infected Aedes mosquito, which also transmits diseases like dengue fever and chikungunya. Zika infection doesn't cause much harm, most infected individuals are symptomless, and those who experience fever or red rash often recover within a few days. What has raised alarm is its link to the serious neurological birth defects known as microcephaly. World Health Organization has revealed 22 countries and territories from

where local transmission of Zika virus has been reported, and microcephaly in the newborn and other neurological syndromes (Guillain Barre Syndrome) have been found temporally associated with Zika virus infection.

About 15 companies/groups have announced so far have just started working on Zika vaccine.

For more information see articles below

http://www.who.int/mediacentre/news/statements/2016/1st-emergency-committee-zika/en/

http://www.who.int/mediacentre/factsheets/zika/en/

http://www.reuters.com/article/us-health-zika-idUSKCN0VL0TQ

http://in.reuters.com/article/health-zika-vaccine-idINKCN0VC12U

http://www.bloomberg.com/news/articles/2016-02-12/who-says-indian-company-nih-have-lead-inzika-vaccine-work

http://qz.com/609291/this-indian-biotech-firm-is-the-worlds-first-to-ready-a-zika-vaccine-for-testing/

http://www.thehindu.com/sci-tech/health/bharat-biotech-seeks-govt-approval-of-two-zika-vaccinecandidates/article8188330.ece

http://www.sciencealert.com/an-indian-company-says-they-have-2-zika-vaccines-ready-for-preclinical-trials

http://www.ibtimes.co.uk/zika-virus-indian-company-claims-have-two-vaccines-pandemic-linkedmicrocephaly-1541644

http://www.abc.net.au/news/2016-02-04/zika-virus-vaccine-indian-biotech-company/7139904

http://www.who.int/topics/zika/en/

http://www.huffingtonpost.in/2016/02/07/zika-virus_0_n_91

<u>http://indianexpress.com/article/india/india-news-india/hyderabad-lab-claims-breakthrough-in-developing-zika-vaccine/</u>