

## DBT-ICGEB researchers open a way to predict Chikungunya progression



New Delhi, June 03: People infected with chikungunya virus have a sudden onset of high fever, headache, rashes, and intense body pain that is generally associated with swollen joints called arthritis. While the fever usually gets over in about a week, some patients progress to a chronic stage of the disease with severe joint swelling. An understanding of who are more likely to develop these long-lasting symptoms, and why only some develop these varied long-term sequelae is needed to improve patient care as well as for developing better biomarkers and vaccines.

In a study conducted at the Department of Biotechnology's International Centre for Genetic Engineering and Biotechnology (DBT-ICGEB), over 500 chikungunya suspected patients were studied and a long-term health monitoring of a subset of the patients for over two years, suggest that patients who fail to develop IgG antibody or neutralizing IgM antibodies during the initial fever phase are at a highest risk for developing severe joint swelling and pain that can continue for weeks, months, or even years.

The findings open novel avenues to improve patient care by identifying biomarkers that can predict who is more likely to develop chronic disease. Additionally, the study reveals key immune players that are involved in protection against developing long-term chikungunya disease- an understanding of which is important for chikungunya vaccine development and evaluation.

Website of DBT-ICGEB: <https://www.icgeb.org/>

Tel: +91-11-26741358/1007,

E-mail: [icgeb@icgeb.res.in](mailto:icgeb@icgeb.res.in)