



Institut Hospitalo-Universitaire Méditerranée (IHU): Another Variant of SARS-CoV-2



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Vaccine/drug inventors, scientists, the entire international public health fraternity and general populace are facing continuous challenges as new variants of SARS-CoV-2 are emerging and being identified all over the world. Some variants have been labelled as “Variants of Interests (VOIs)” while the others are labelled as “Variants of Concerns (VOCs)” by World Health Organization (WHO) due to their capacity to change or alter the properties of this virus significantly (1,2), another one in this list being the IHU. Variant of Covid-19 detected in France: named as 'IHU' (3), (after Institut Hospitalo-Universitaire Méditerranée Infection research center), B.1.640.2 variant, reported by the investigators at the institute IHU Mediterranee, with at least twelve identified cases, and has supposed to be linked with travel to Republic of Cameroon (an African nation) (4). Until now it has been reported from few other countries too. Though, the health experts said that it's very early to guess or speculate regarding behavior and nature of this variant. Yet-to-be reviewed study, disclosed that IHU has forty-six mutations & thirty-seven deletions leading to 30 amino acid substitutions and twelve deletions. E484K & N501Y mutations are positioned within spike protein and they were also present in Beta, Gamma, Theta and Omicron variants. WHO has labelled “B.1.640.2” as variant under an investigation, keeping a closer eye on IHU (5). As per WHO press brief from Geneva “it's been on our radar” (6). The 1st case was that adult detected positive by the “RT-PCR” through naso-pharyngeal sample in the laboratory in midway of November 2021. This diagnosed case was previously jabbed against the SARS-CoV-2. To date, twelve diagnosed cases are from the same geographical region, an atypical /unusual combination was revealed by qPCR testing that screen for variant related mutations (7). As stated by Feigl-Ding (epidemiologist), new variants will continue to emerge however it doesn't indicate that they would be more perilous. It has not been decided yet that in which category/group this recently observed variant will be placed (4).

Until now, 287 confirmed cases of this IHU have been from France. 16, 17 cases are from Great Britain and Germany respectively. 39 out of 454 genome sequences completed so far in Congo, belong to this B.1.640 lineage (5). Substitution F490S present in IHU, was also present in Lambda variant, whereas substitution P681H was present, which was also

noticed in the Omicron and Lambda variants. Phylogeny done with the nextstrain/ncov tool also indicated that B.1.640 and B.1.640.2 (IHU variants) were closely related between each one but comprised 2 divergent branches (7).

IHU variant could be distinguished by qPCR assay's screening from Delta 184 (L452R-positive) as well as Omicron (negative for S gene detection by the 185 TaqPath COVID-19 assay and L452R-negative) variants that are currently co-circulating world widely. Introduction of IHU from abroad, and its upcoming spread are hard to control and prevent. Genomic surveillance of the SARS-CoV-2 should be accelerated and continued (7). There is a terror that the IHU could possibly be more resilient to all existing vaccines (8). Transmission rates are vital and always under consideration whenever making the travel decisions, yet there are few other factors/aspects to weigh too, as stated by Dr. Leana, medical analyst CNN, and professor of the health management and the policy at G. Washington University (9). CDC, in its travel guidance, has suggested evading international travel/journey unless and until you are fully vaccinated (10).

Getting the complete vaccination and booster dosage is the best recommended approach to decrease one's risk of symptoms, particularly becoming severely ill, if you catch COVID-19. In addition to immunization, certain steps should always be taken to evade both getting infected as well as help to stop transferring this virus to other individuals.

The following actions and measures will certainly help to avert spread of COVID-19, influenza and other coronaviruses.

Always wear face mask. Maintain physical distance. Avoiding crowded places. Getting your vaccination as well as booster dose once you are eligible for that. Socialize outdoors. Minimize touching your mouth, nose and eyes. Close contact with the sick people should be avoided. Stay home whenever you feel sick. Use tissue paper to cover sneeze or cough, then throw that tissue in trash. Regularly wash your hands with the water and soap (11).

Get yourself vaccinated and follow all the general precautionary measures so that you could be at lesser risk of catching different variants of SARS-CoV-2.

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