

## Letters to the Editor

[The Editor is not responsible for the views expressed by the correspondents]

### Variants of Concern of SARS CoV2: Overview

SIR, — In a span of three years, the SARS CoV2 virus like other influenza viruses underwent many mutations. Since January 2020, WHO has been keeping track of and evaluating the situation of SARS-CoV-2 in partnership with specialist networks, national authorities, institutions and researchers like Pango, GISAID, Nextstrain<sup>1</sup>. Mutations are naturally occurring random phenomena that may make virus more infectious or may lead to pandemic dying out. SARS CoV2 underwent many mutations, some of which were not harmful but few increased the virus's transmissibility, infectiousness and ability to cause severe infection and disease. Those variants which after mutation acquire increased transmissibility, an unfavorable change in epidemiology, or higher virulence as manifested by increasing disease severity or a decline in the efficacy of Public Health and Social Measures, diagnostics, vaccinations or treatments are known as Variants of concern (VOC). The table below gives a list of VOCs updated till date (Table 1)<sup>2</sup>.

**Implications of VOC :** In-depth understanding of variants of concern is important so that early steps in containment of the spread of the virus through various public health and social measures can be initiated. It is important to know whether the new variant escapes the immunity induced by natural infection or vaccination for further research and development of next generation of vaccines with the ability to cover all present and future variants. Also, knowledge of the severity of infection caused by the variant will help in revising the treatment protocol depending on the updated available evidence and prioritize global monitoring and research for timely scientific updates on response to COVID pandemic<sup>1,3</sup>. Various studies have found that even with highly efficacious vaccines not only symptomatic and asymptomatic breakthrough infection but also super spreading

transmission events have occurred. Such breakthrough infections may also be due to new variants not covered by the vaccine<sup>4</sup>. In such scenario of vaccine becoming less efficacious due to new variants, non-pharmaceutical measures like contact tracing and isolation of the cases along with universal infection control measures will be more effective<sup>5</sup>.

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Department of Community Medicine,

Dr D Y Patil Medical College, Hospital and  
Research Centre, Pune

<sup>1</sup>MBBS, Postgraduate Resident

<sup>2</sup>MBBS, MD, DPH, Senior Resident

**Johnson S<sup>1</sup>,**

**Nirankush Borah<sup>1</sup>,**

**Kavita N Thakur<sup>2</sup>,**

**Purna Verma<sup>1</sup>**

Table 1 — SARS-CoV-2 VOC

| WHO label  | Pango lineage | First detected place (Year)            | Date of designation                              | Known attributes   |
|--|---------------|--|--|--|
| <b>Currently circulating variants of concern :</b>     |               |  |  |  |
| Omicron  | B.1.1.529     | Botswana/<br>South Africa<br>Nov. 2021 | VUM:24-NOV-2021<br>VOC: 26-NOV-2021              | • Significant reduction in neutralization by monoclonal antibodies and sera from people who had previously been infected or who had a primary vaccination series. Increased impact on immunity and is causing community transmission.                    |
| <b>Previously circulating variants of concern :</b>    |               |  |  |  |
| Beta   | B.1.351       | South Africa<br>(May 2020)             | VOC: 18-DEC-2022<br>Previous VOC:<br>09-MAR-2022 | • There is 50% increase in transmissibility<br>• Antibodies' neutralization has decreased.<br>• Convalescent and post-vaccination sera had a moderate drop in neutralization.<br>• Severity of infection increased.<br>• Community transmission present. |
| Gamma  | P.1           | Japan/Brazil<br>(Nov-Dec 2020)         | VOC:11-JAN-2021<br>Previous VOC:<br>09-MAR-2022  | • Increased transmissibility.<br>• Some monoclonal antibodies' neutralization was reduced<br>• Convalescent and post-vaccination sera had less neutralization.<br>• Severity of infection increased<br>• Community transmission present.                 |
| Delta  | B.1.617.2     | India<br>(Oct/Dec2020)                 | VOC:11-MAY-2021<br>Previous VOC:<br>07-JUN-2022  | • Transmissibility has increased.<br>• Impact on immunity increased.<br>• Increase severity and hospitalization are possible outcomes as well as decrease in vaccine effectiveness.<br>• Community transmission present.                                 |
| VUM-Variants under monitoring; VOC-Variants of Concern |               |  |  |  |

### My CORONA Diary

SIR, — By Shri Ram's Grace and all of your blessings, I had beaten the Corona virus.

Let me share some good or bad experiences.

It started one day just as a fever, some 99.7°F, took Paracetamol, and considering it could be corona also, took some other medicines also like Ivermectin, Doxycycline, Vitamin C and Zinc.

I am lucky that by Bhagwan Ganpati's grace, I have good friends in the form of Dr. Ameya Joshi at Borivali, Dr. Aditya Agarwal at Bombay Hospital and Dr. Amit Nabar at SL Raheja Hospital who helped me in every step. I discussed with them, they also suspected Corona, and asked to get tests done, SL Raheja was closest to my home, hence went there, Dr Nabar had arranged for the tests even.

Oof, will never forget the big stick entering into my nose, like duty nurse was playing and enjoying inserting that large stick in the nose that today got opportunity.

So much tickling as well as discomfort but have to bear it. Rapid antigen test turned to be positive. I couldn't believe it at once but had to, the whole world was doomed, I thought of writing my will, but postponed it to next day, was depressed and felt completely lost, as if my world had come to an end.

Dr Nabar told to get admitted, I thought I will bluff him and will run away to a place where no one can find me, but ultimately accepted the fact and came back to the hospital for admission.

Admission process was so smooth, I could never expect. All because of tremendous help by TPA department and admin team. I hadn't faced a single hassle, and was shifted to the ward immediately as soon as I returned back with some luggage.

The only best thing which I did on my own was that I didn't treat myself, rather submitted myself to my treating physicians. I am again lucky that I was treated by best of the teams across the city in the form of Dr. Yatin Gadgil and Dr. Paritosh Baghel. Sometimes I feel pity that all of them had to come for rounds in PPE kit which is extremely uncomfortable, and I wished they could take only online rounds daily so that they are not exposed themselves. Hats off to their dedication.

Fever still there, started Favipiravir, lab reports not good, hence started on Remdesivir. When I heard of Remdesivir, again thought I was a gone case, I informed all my relatives, my close people that what they should do if I don't survive and don't return, ultimately gathered courage to get the injection. Luckily the ward staff was very much experienced and inserted the iv cannula in a single prick, and that cannula lasted for whole 5 days, no Thrombophlebitis.

However, ward staff didn't left me and took revenge by filling all the thin sample vials with my blood at the first opportunity.

Thanks to all the staff posted in corona ward, they took all the best possible care for me. I will never forget their tender loving care and humane touch

Luckily, improvement started after Remdesivir, otherwise I would also have been in stats now. People would have been talking; He was a good man, though used to speak more, but good at heart.

However, that stage didn't came, and I was discharged in a week, improved and recovered and off medicines now. Thanks again to all my saviors and corona warriors.

Hats off to all of them.

Apologies for writing a long story but not finding more words to thank them all

PS: 2 doses of Covishield, completed in January and February.

MBBS, MS, MCh

**Ritesh Agrawal<sup>1</sup>**

Consultant, Department of Endocrine Surgery  
Lilavati Hospital and Research Center  
Mumbai, Maharashtra

### Journey of a Novice Academic Writer: Manuscript Writing till Publication

SIR, — Every researcher has to do the core business of Effective scientific writing, however, is very difficult<sup>1</sup>. For academicians it is made compulsory to perform research and publish articles to make

the job efficiency visible<sup>2</sup>. Most authors find it difficult to write the scientific writing. The paper should be linguistically, scientifically and systematically sound, solid and publishable<sup>3</sup>. Writing and publishing an article should be in the academic networks<sup>2</sup>. "Early beginning is half done" so start first, everything will happen eventually. It is worthwhile to spend some time on choosing the most appropriate topic or theme before writing the draft. The following is a structure of writing the manuscript. Introduction: It serves as a 'starting' point. We should spend some time title formulation<sup>3</sup>. Most of the articles are rejected because of lack of research question which is clearly stated. identifiable hypothesis or a question being asked should be mentioned. The introduction gives the passion to work on the paper. The first sentence should have few words from the title. It should be motivational to current investigation. Even before study planning, we should initially start materials and methods section. In a retrospective study, mention the demographics of the patient population and in prospective study, inclusion and exclusion criteria. Elaborate the procedures in order what exactly you did. After should write definitions and criteria, next is data collection: the collection and validation of the data should be described by blinding or intra- and interobserver variability measures. Statistical tests. Results: This includes facts and numbers reporting, data should be summarized, condensed, and displayed transparently. In the prospective study, first describe the study population and then describe the results of the experiments or the sorting of patients into the created categories. Discussion and Conclusion: This summarizes the results particular to study objectives. Stay on topic. We should co-relate interpretations in concert with those of other researchers. Then clinical implications should be followed. Lastly, limitations of the study and end up with summary paragraph<sup>4</sup>. Abstract Writing which is the main story of the scientific paper should be written at the end. Write the abstract in past perfect tense, active voice, without citations. Mention word count and key words for indexing, if asked, preferably confirming to medical subject heading (MeSH) vocabulary<sup>1</sup>. It includes introduction, methods, results, and discussion. First identify journal so that we can get time to format the paper according to instructions given. Read all other articles quickly. Keep the pages turning. Focus more on the first and last paragraphs of the introduction, first sentences of methods and results, first and last paragraphs of the discussion. In final drafting is the paper taking final form. Before uploading the paper should be read quietly and calmly one last time and you can also share it with the contributors<sup>4</sup>. If your paper is not accepted, do not give up. Online publication is cheaper, and gives more visibility and can target many authors at a time. Publication is the cooperative work which includes benefit to the authors, editor and publisher as they do close and team work<sup>2</sup>.

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Department of Microbiology,  
Dr D Y Patil Medical College, Hospital and  
Research Centre, Pune

<sup>1</sup>MBBS, MD (Microbiology), Assistant Professor

<sup>2</sup>MBBS, Junior Resident

<sup>3</sup>MD, Associate Professor

**Jyoti Nitin Ajagunde<sup>1</sup>,**

**Shital Algule<sup>2</sup>,**

**Heer Shah<sup>2</sup>,**

**Nikunja Das<sup>3</sup>,**

**Lekshmi R<sup>2</sup>**