

Big data analysis report for COVID-19 epidemic on April 30, 2020

Most countries in the world have entered the controllable stage of prevention and control of the COVID-19 epidemic; however, there are still many countries in Asia, Europe, North and South America that will have controllable turning points in early May, 2020; the situation in Africa is still unclear.

Brief background

Since April 2020, North America and Europe have become the focus of the global epidemic prevention and control with COVID-19. The Wind data team and Professor George Yuan's big data model team work together to launch analysis reports from time to time and share with you.

Based on the data of COVID-19 epidemic in Asia, Europe, South America and North America (as of April 29 and the analysis results of [1] - [4]) and the iSEIR model (see [5] - [7]), it is concluded that the above-mentioned countries in Asia, Europe, North and South America have entered the stage of comprehensive control before the end of April. But Asia, Europe, North and South America still have time for countries to be controlled in early May. Due to limited defense conditions and insufficient data and information, the situation in Africa remains unclear.

Part I: For the situation before April 30,2020

1) Japan in Asia, the United Arab Emirates, and most countries in Europe (including the United Kingdom, Turkey, Serbia, Ireland, etc.), as well as the United States and Canada in North America have entered into control before April 30. The epidemic stage of COVID-19 means that the inflection point of controlling the epidemic in these countries has appeared around April 25 or before April 29. From May 1, the second half of the controllable stage has been fully entered.

Part II: Forecast Based on April 30,2020

1) Singapore in Asia started from April 9 to April 25, with a daily growth rate of about 10 percent reflecting the rebound of the COVID-19 epidemic. But based on the data from April 29, we analyzed that from April 25, there were controllable turning points. Using the data from April 29 for analysis, we believe that Singapore's efforts to prevent the rebound of the COVID-19 epidemic have entered a comprehensive and controllable stage. From May 1, Singapore officially entered the second half of full control. The successful completion of the fight against the rebound of the COVID-19 epidemic since April 9, 2020 by Singapore is worth learning from the relevant countries or regions around the world.

2) Qatar, Israel, Saudi Arabia and Indonesia in Asia, Ukraine, Belgium and Norway in Europe, Chile and Colombia in South America and other countries have completed the emergence of controllable turning points before April 29, and are now in a controllable stage.

Part III: Based on the prediction of the situation at the beginning of May,2020

1) India and Pakistan in Asia, Russia and Belarus in Europe, Brazil, Ecuador and Peru in South America, and Mexico in North America are looking forward to stable and controllable views in the first week of May. We are also looking forward to all these countries entering the stage of controllable COVID-19 epidemic in early may (before the first weekend).

2) Egypt in Africa expects a stable and controllable view in the first week of May; however, due to the limited defense conditions and insufficient data and information, other situations in Africa are still unclear and need to be observed.

Note: the basic meaning of "control" in the report is that the change number of patients with new needles should not exceed 10% every day, and the balance should be kept stable for 6 consecutive drops.

Contact email of Professor George Yuan: George_Yuan99@yahoo.com and
George_Yuan99@suda.edu.cn

Wind data team contact email: cli@wind.com.cn

Reference:

[1] Big data analysis report of epidemic situation (4.27): there are still many countries without inflection point of epidemic prevention and control, released by wind financial terminal platform, April 19, 2020.

<https://news.windin.com/ns/findsnap.php?sourcetype=1&id=495013852&code=F7A61B9C880D&show=wft&device=android&terminaltype=wft.m&version=20.1.2&lan=cn&share=wechat>

[2] Big data analysis report of epidemic situation (4.21): the turning point of many countries is near, but we should be alert to the rebound. The wind financial terminal platform was released on April 19, 2020.

<https://news.windin.com/ns/findsnap.php?sourcetype=1&id=494455188&code=9269E0C4835D&show=wft&device=android&terminaltype=wft.m&version=20.1.2&lan=cn&share=wechat>

[3] Big data analysis report of epidemic situation (4.18): the turning point of multi-national prevention and control will appear before the end of the month. The wind financial terminal platform will be released on April 19, 2020.

<https://news.windin.com/ns/findsnap.php?sourcetype=1&id=494310739&code=61C29DC98192&show=wft&device=android&terminaltype=wft.m&version=20.1.2&lan=cn&share=wechat>

[4] Big data analysis report on epidemic situation (4.16): the turning point of prevention and control in the United States and Europe has arrived. The wind financial terminal platform was released on April 16, 2020.

<https://news.windin.com/ns/findsnap.php?code=78B810577FA1&sourcename=news.windin.com&ad=0&sitetype=1&sourcetype=1&id=494087487&terminaltype=wft.m&device=ios&version=6.1.0&show=wft&share=wechat>

[5] Yuan GX, Di L, Gu, Y, Qian G, Qian X. The Framework for the Prediction of the Critical Turning Period for Outbreak of COVID-19 Spread in China based on the iSEIR Model. Medrxiv.org. doi: <https://doi.org/10.1101/2020.04.05.20054346>

[6] Yuan GX, Di L, Gu, Y, Qian G, Qian X. The Prediction for the Outbreak of COVID-19 for 15 States in USA by Using Turning Phase Concepts as of April 10, 2020. 2020; 24: Exclusive. Asian-Pacific Biotech News (APBN) <https://www.asiabiotech.com/exclusive/exclusive.html>

[7] Yuan GX, Di L, Gu, Y, Qian G, Qian X. The Prediction for the Outbreak of COVID-19 in European Countries by Using Turning Phase Concepts as of April 9, 2020. 2020; 24: Exclusive. Asian-Pacific Biotech News (APBN) <https://www.asiabiotech.com/exclusive/exclusive.html>