好消息！《柳葉刀》：中國疫苗能快速誘發免疫反應

2020年11月18日

權威醫學雜誌《柳葉刀-感染病學》周三發布了一篇關於中國疫苗的同行評議論文。論文稱，初步試驗結果顯示，中國科興生物研發的新冠疫苗「克爾來福」能快速誘導免疫反應，適合在新冠疫情大流行期間緊急使用。

論文評測了該疫苗的一期和二期臨床試驗結果，研究人員表示，該疫苗能夠提供足夠的保護。

本月早些時候，美國輝瑞、Moderna以及俄羅斯的疫苗研發都傳來了利好消息，根據大型後期試驗的中期數據，這些實驗性疫苗的有效性超過90%。

目前，中國企業研發的「克爾來福」和其他四種實驗性疫苗正在進行後期試驗。

The experimental COVID-19 vaccine developed by China's Sinovac Biotech can induce quick antibody responses and is suitable for emergency use, preliminary trial results published in the medical journal The Lancet Infectious Diseases showed on Wednesday.

CoronaVac, Sinavac's vaccine, "was well tolerated and induced humoral responses against SARS-CoV-2, which supported the approval of emergency use of CoronaVac in China and in three phase-3 studies," the findings read.

The study comes hot on the heels of two U.S. drugmakers Pfizer and Moderna as well as Russia that showed their experimental vaccines were over 90 percent effective based on interim data from large, late-stage trials.

CoronaVac and four other experimental vaccines developed in China are currently undergoing late-stage trials to determine their effectiveness in preventing COVID-19.

How good is the experimental vaccine?

該篇論文的作者之一朱鳳才教授表示，**通過間隔14天注射兩劑疫苗的做法，科興疫苗能夠在四周的時間內快速誘導免疫反應。**

研究人員稱，大規模的後期階段試驗，即三期臨床試驗的結果對於確定中國新冠疫苗引發的免疫反應是否能保護人們不受感染來說尤為重要，未來還須研究抗體反應的持續時間。

目前，科興疫苗正在印度尼西亞、巴西和土耳其進行三期試驗，其最終結果將在三期試驗結束之後發布。

The Sinovac findings, published in a peer-reviewed paper in The Lancet Infectious Diseases, came from results in Phase

I and Phase II clinical trials in China involving more than 700 participants.

"Our findings show that CoronaVac is capable of inducing a quick antibody response within four weeks of immunization by giving two doses of the vaccine at a 14-day interval," Zhu Fengcai, one of the authors of the paper, said.

Sinovac is currently running three Phase III trials, in Indonesia, Brazil and Turkey.

Naor Bar-Zeev from Johns Hopkins University, who was not involved in the study, said the results must be interpreted w ith caution until Phase III results are published.

"But even then, after Phase III trial completion and after licensure, we should prudently remain cautious," he said.

"Attractive option"

「克爾來福」並不是中國新冠疫苗研發領域的「獨苗」。

近日發表的這篇同行評議論文表示，中國新冠疫苗應急計劃中由國藥集團相關研究所開發的另外兩種疫苗和中國科興公司的另一種疫苗在一、二期試驗中也被證明是安全的，並可引發免疫反應。

CoronaVac is one of three experimental COVID-19 vaccines China has been using to inoculate hundreds of thousands o f people under an emergency use program.

The two other vaccines in the program, both developed by institutes linked to Sinopharm, and another vaccine from Ca nSino Biologics, were also shown to be safe and triggered immune responses in early and mid-stage trials, according to peer-reviewed papers.

Results of phase II trials unveiled

June 25

Authorized for military use

August 16

Granted the first invention patent by Chinese authorities

Phase III clinical trials overseas: Saudi Arabia, Pakistan, Russia

Sinovac

April 13

Approval for clinical trials

April 16

Phase I/II trials started

June 14

Results of phase I/II trials unveiled

July 22

Authorized for emergency use

Phase III clinical trials overseas: Brazil, Indonesia

Sinopharm

Wuhan Institute of Biological Products

Beijing Institute of Biological Products

April 12

Approval for clinical trials;
Phase I/II trials started

April 15

High-level biosafety production facility constructed

April 27

Approval for clinical trials;
Phase I/II trials started

June 16

Results of phase I/II trials unveiled

June 28

Results of phase I/II trials unveiled

July 1

High-level biosafety facilities and supporting laboratory complex completed

July 22

Authorized for emergency use by Chinese authorities

September 14

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與美國製藥商輝瑞、Moderna研發的新冠疫苗相比，科興的「克爾來福」有自己的優勢。

輝瑞公司的疫苗必須在零下70攝氏度的溫度下儲存和運輸， Moderna公司的疫苗雖然預計能在正常冰箱溫度下穩定保存30天，但如果要保存6個月以上，則也需要零下20攝氏度的儲存環境。而「克爾來福」可以在常溫2到8攝氏度的冰箱中保存並保持穩定長達三年。

"(It) would offer some advantages for distribution to regions where access to refrigeration is challenging," the author said.