However, the success of such a vaccine relies greatly

on its ability to provide protection not only against

present versions of the virus but also the ones that

are likely to emerge in the future. This can be

achieved by identifying antibodies that can recognize

relatively conserved epitopes that are maintained as

such even after the occurrence of considerable

variations (362). Even though several vaccine

clinical trials are being conducted around the world,

pregnant women have been completely excluded

from these studies. Pregnant women are highly

vulnerable to emerging diseases such as COVID-19

due to alterations in the immune system and other

physiological systems that are associated with

pregnancy. Therefore, in the event of successful

vaccine development, pregnant women will not get

access to the vaccines (361). Hence, it is

recommended that pregnant women be included in

the ongoing vaccine trials, since successful

vaccination in pregnancy will protect the mother,

fetus, and newborn.

The heterologous immune effects induced by

Bacillus Calmette Guérin (BCG) vaccination is a

promising strategy for controlling the COVID-19

pandemic and requires further investigations. BCG is

a widely used vaccine against tuberculosis in high-