Chapter 2
Modelling the Impact of Nationwide BCG Vaccine Recommendations on COVID-19 Transmission, Severity and Mortality

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Abstract Coronavirus Disease 2019 (COVID-19) is declared as pandemic on 11 March 2020 by World Health Organization (WHO). There are apparent dissimilarities in incidence and mortality of COVID-19 cases in different parts of world. Developing countries in Asia and Africa with fragile health system are showing lower incidence and mortality compared to developed countries with superior health system in Europe and America. Most countries in Asia and Africa have national Bacillus Calmette-Guerin (BCG) vaccination programme, while Europe and America do not have such programme or have ceased it. At present, there is no known Food and Drug Administration (FDA)-approved treatment available for COVID-19 disease. There is no vaccine available currently to prevent COVID-19 disease. As mathematical modelling is ideal for predicting the rate of disease transmission as well as evaluating efficacy of possible public health prevention measures, we have created

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21