the usual treatment consists of (1) antipyretics to reduce the fever and (2) the use of intravenous immunoglobulin (ivig) to reduce inflammatory cytokine production [339, 348, 349]. in the early stages of infection, with no obvious clinical problems, the fever is usually not very high (less than 39.0 °c, which usually occurs on the second day of illness. the fever reaches a plateau after about 4 days and lasts for 2 to 6 days. when the fever becomes severe, especially when accompanied by other symptoms such as tachycardia, hyperventilation, tachypnea, and headache, such a condition is called bacterial sepsis [339]. the level of activity of children during the weaning process has been shown to be related to adverse outcomes; however, there is no agreement on how best to wean patients from ventilation. in practice, the process of weaning is not easily captured using a standardised description of sedation and weaning protocols [349]. some studies suggest that a standardised protocol to wean children on invasive ventilation is helpful in reducing time spent on ventilation [350, 351]. in one study, no age-related differences were detected in the duration of weaning; however, duration of weaning increased from days 7 to 13 in infants, days 2 to 5 in children, and days 7 to 9 in adults [349]. weaning from mv in children should be individualised based on symptoms, indications for weaning, and the patient’s caregiver’s comfort level [349]. there are limited data available on the risks and benefits of sedation-free weaning, and published data on weaning from invasive ventilation are lacking [352, 353]. although several techniques such as neuromuscular blockades, continuous positive airway pressure (cpap), or noninvasive ventilation (niv), have been used to assist with weaning from mv, several of these techniques do not have enough supporting evidence to recommend them [351, 354]. data on the efficacy and safety of high-flow nasal cannula support for weaning from invasive mv are lacking and must be interpreted with caution [355, 356]. one study suggests that noninvasive positive pressure ventilation (nppv) has a good safety profile and may be useful for weaning from invasive mv in children [353]. use of nppv as an adjunct to invasive ventilation is understudied and not recommended. the risk of complications of cpap in patients who are not on invasive ventilation is unknown, and lack of data means that cpap cannot be recommended for patients on noninvasive mv, although any serious complications are reported to be very rare [357]. other possible sedation-free weaning techniques include use of dexmedetomidine infusion to facilitate weaning from mv in a paediatric patient population [358]. more research is required on this technique, and there are not sufficient data to recommend its use for any age groups. the use of spontaneous ventilation, no sedation sedation regimen, noninvasive ventilation, high-flow nasal cannula, and other techniques to facilitate weaning may be used in a sedation-free weaning protocol. these techniques are currently understudied and not recommended.

routine clinical monitoring of adverse event and serious adverse events (ae and sae) from the investigational drug was as per the event monitoring protocol developed by covidien. participants in clinical trials are encouraged to report suspected or confirmed non-serious adverse events to the study investigator, the sponsor, and/or regulatory authorities. serious adverse events are defined as any serious adverse events (sae) not mentioned in the protocol as expected to occur during the study. once the participant dies, or there is a confirmed diagnosis of death due to covid-19, the trial sponsor is notified of the death and this constitutes an sae. all types of aes are considered as serious if they result in persistent or significant disability or death. in all such cases, the medical team decides whether to continue treatment or withdraw patients from the study. informed consent is obtained from the patient or a legal guardian. sars-cov-2 is a single-stranded, enveloped, positive-sense rna virus of approximately 50 kb [4]. the first case of covid-19 was reported from wuhan, china, in december 2019 [5], and was successfully isolated and characterized as a novel beta-coronavirus by chinese scientists. the genetic analysis showed that this novel coronavirus has the highest level of nucleotide identity to bat sars-like coronavirus in the sars-cov lineage, implying that the sars-cov-2 originated from bats. more recently, a novel cov species called the middle eastern respiratory syndrome coronavirus (mers-cov), which has similar genetic identity to sars-cov-2, was isolated in 2012 [6]. 5ec8ef588b