INTISARI

Corona Virus Disease 2019 (COVID-19) adalah penyakit endemik yang disebabkan oleh virus SARS-COV-2 ditemukan pertama kali pada akhir bulan Desember 2019 di Wuhan, Cina. Banyak peneliti mencoba untuk meneliti calon obat sebagai terapi COVID-19. *Food and Drug Administration* (FDA) menetapkan remdesivir sebagai *Emergency Use Authorization* (EUA). Namun hasil penelitian yang telah ada masih bertentangan penggunaan remdesivir untuk pasien COVID-19. *Review* ini bertujuan untuk mengetahui efektivitas dan keamanan remdesivir pada pasien COVID-19.

Metode *review* yang digunakan yaitu *narrative review*. Artikel ditelusuri dengan *database* elektronik yang meliputi *Scopus, Cochrane Library, Sage Journals,* dan *Pubmed*. Pencarian menggunakan kata kunci berupa *COVID-19, remdesivir, effectiveness or efficacy,* dan *safety*. Artikel diinklusi dengan kriteria rancangan studi observasional dan eksperimental memuat efektivitas atau keamanan remdesivir yang dipublikasi hingga Desember 2021.

Jumlah artikel dengan pencarian dari 13 Januari 2022 hingga 2 Februari 2022 yaitu 413 artikel. Terpilih sebanyak 12 artikel sesuai kriteria inklusi dan ekslusi untuk dikaji. Hasil *review* menunjukkan status klinis lebih baik setelah pengobatan remdesivir 5 hari, waktu pemulihan/perbaikan klinis pada rentang 10-15 hari, dan persentase kematian rendah antara 1%-18,9%. Kejadian efek samping yang sering muncul yaitu peningkatan aminotransferase pada organ hati, mual, diare, dan konstipasi pada gastrointestinal dan *acute kidney injury* (AKI) pada organ ginjal.

Kata kunci: COVID-19, remdesivir, efektivitas, keamanan

ABSTRACT

Corona Virus Disease 2019 (COVID-19) is an endemic disease caused by the SARS-COV-2 virus which was first discovered in late December 2019 in Wuhan, China. Many researchers are trying to research drug candidates as COVID-19 therapy. *Food and Drug Administration* (FDA) set remdesivir as *Emergency Use Authorization* (EUA). However, the results of existing studies still contradict the use of remdesivir for COVID-19 patients. The aim of this study is to determine the effectiveness and safety of remdesivir in COVID-19 patients.

The research was conducted using a narrative review method. Articles are searched with electronic databases including *Scopus, Cochrane Library, Sage Journals, and Pubmed*. Search using keywords such as *COVID-19, remdesivir, effectiveness or efficacy, and safety*. Articles included in the observational and experimental study design criteria included the effectiveness or safety of remdesivir published until December 2021.

The number of articles with searches from January 13, 2022, to February 2, 2022, is 413 articles. A total of 12 articles were selected according to the inclusion and exclusion criteria for review. The results of the review showed better clinical status after 5 days of remdesivir treatment, recovery time/clinical improvement in the range of 10-15 days, and a low mortality percentage between 1%-18,9%. The side effects that often occur are increased aminotransferases in the liver, nausea, diarrhea, and constipation in the gastrointestinal tract, and acute kidney injury (AKI) in the kidneys.

Keywords: COVID-19, remdesivir, effectiveness, safety