

Immunocompromised Individuals with Breakthrough Infection of COVID-19

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Due to being at a high risk for progression to severe COVID-19 infection of the immunocompromised persons, the relationship of immunomodulatory and immunosuppressive medications with responses to a SARS-CoV-2 (COVID-19) mRNA vaccine receiving only a single dose is currently being investigated and suggested that vaccinated immunocompromised individuals should consider continuing non-pharmaceutical interventions, such as physical (social) distancing, facial mask wearing, and avoiding crowded settings [1]. This finding also occurred in some individuals with autoimmune suppression, solid organ transplantation, and chronic inflammatory disease [2-5]. In immunocompromised patients, COVID-19 (SARS-CoV-2) vaccines seems to be the most critical measure to protect household members and individuals from COVID-19 (SARS-CoV-2) acquisition [6].

In conclusion, to our knowledge, breakthrough infections can occur regardless of active treatment status in the immunocompromised persons and that there may be additional vulnerable immunocompromised population that could benefit from increased protection.

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