9th EUROPEAN CONFERENCE on INFECTIONS in LEUKAEMIA

▶ IN-PERSON CONFERENCE
From September
15th to 17th 2022

Final
slide set

UPDATE 2022

COVID19: Clinical symptoms and infection control and the prevention management of positive patient (and positive donor in case HCT)

Marie von Lilienfeld-Toal (Jena, Germany);
Francesco Marchesi (Rome, Italy);
Simone Cesaro (Verona, Italy);
Jan Styczynski (Bydgoszcz, Poland)

In red: modifications in comparison to 2021

COVID-19: clinical symptoms and course of the disease

Typical symptoms in HM patients

UPDATE 2022

- The most common symptoms of COVID-19 in HM patients are similar to the overall population
- With Omicron, cough is the most common symptom (70%), fever around 40% und sore throat around 60%
- Loss of taste/smell is less frequent with Omicron
- Other common symptoms are breathlessness (37-49.3%) and fatigue (20.3-50%)
- Immunosuppressed patients may present atypical symptoms such as diarrhea, vomiting, loss of appetite and confusion
- A severe clinical presentation occurs in about 15-52.4% of cases in HM patients, depending on vaccination status and variant of concern (VOC)
- Critical cases range between 6.9-14% in the most relevant published studies
- The incidence of breakthrough SARS-CoV-2 infections is variable among the published studies, as a consequence of different study designs and circulating VOC. Overall, the estimated incidence of breakthrough SARS-CoV-2 in HM patients ranges between 0.3% and 8%

References. Passamonti, et al. Lancet Haematol 2020; Cattaneo, et al. Cancer 2020; Borah, et al. Blood Cell Molec Dis 2021; Glenthøj, et al. Eur J Haematol 2020; Wood, et al. Blood Adv 2020 Kurderer, et al. Lancet 2020; Lee, et al. Lancet Oncol 2020; Yigenogin, et al. J Med Virol 2021; Regalado-Artamendi, et al. Hemasphere 2021; García Suárez, et al. J Hematol Oncol 2020; Pinana, et al. Exp Hematol Oncol 2020; Sharma, et al. Lancet Haematol 2021; Giesen, et al. Eur J Cancer 2020; Giesen, et al. Eur J Cancer 2021; ElGohary, et al. Hematol Oncol Stem Cell Ther 2020 Ali, et al. Hematol Oncol Stem Cell Ther 2020; Coronavirus disease COVID-19: EBMT recommendations version 15 – February 17, 2021; Ljungman, et al. Leukemia 2021. Vihta medRxiv 2022; Schulze Front Virol 2022; Pagano Blood 2022; Mittelman M, et al. Blood 2022; Maneikis K, et al. Lancet Haematol 2021; Lee LYM, et al. Lancet Oncol 2022; Savini M, et al. Am J Hematol 2022].

COVID-19: clinical symptoms and course of the disease

Update on «long-COVID» in HM patients

UPDATE 2022

- A comprehensive meta-analysis including 31 studies estimated a post-COVID-19 condition prevalence of 0.43% (95%CI: 0.39-0.46) in the overall population

- Data on cancer patients show that post COVID-19 sequaele affect up to 15% of patients with cancer and adversely infuence survival and oncological outcomes and recovery

- Few specific data have been published focusing only on HM patients, showing similar clinical presentation to that observed in the overall population

- Older age, comorbidities, COVID-19 treatment, COVID-19 complications and/or hospitalization occurrence during the acute phase are the main risk factors for long-COVID-19 in cancer patients

- Community-base cohort studies showed that vaccinated people were less likely than unvaccinated people affected by long-COVID. There are not published data about this issue in HM patients

- The incidence and severity of long-COVID in HM patients deserves further investigation

References. Chen et al. J Infect Dis 2022; Pinato et al. Lancet Oncol 2021; Chopra et al. Ann Int Med 2020; Huang et al. Lancet 2021; Cortellini et al. Eur J Cancer 2022; Barbui et al. Blood Cancer J 2021; Ayoubkhani et al. BMJ 2022; Antonelli et al. Lancet Infect Dis 2022; Al-Aly et al. Nat Med 2022

UPDATE 2022

Multisystem inflammatory syndrome in children (MIS-C)

Definitions:
1. World Health Organization (WHO) criteria (MIS-C)
2. Centers for Disease Control and Prevention (CDC) criteria (MIS-C)

MIS-C described and defined but low incidence in pediatric HM

Multisystem inflammatory syndrome in adults (MIS-A)

MIS-A is a rare clinical entity, its long-term sequelae are largely unknown.
MIS-A, reported in 2021-2022, but rare in general population and no description in HM patients yet (Patel et al., 2021; Kunal et al., 2022).

DEFERRAL OF THERAPY

UPDATE 2022

COVID19 symptomatic HCT and HM patients

- For patients planned for allogeneic or autologous HCT or CAR-T and diagnosed with COVID-19, we recommend deferral of conditioning therapy due to high propensity for LRTID and high mortality (**AII-t)**
- In HM patients with COVID-19, we suggest deferral of chemotherapy after assessment of clinical risk/benefit ratio on the patient individual basis (**BIIu)**

Asymptomatic SARS-CoV-2 infection in HCT and HM patients

- In HM patients with asymptomatic SARS-CoV-2 infection and no previous COVID19 disease, we suggest the deferral of HCT, CAR-T therapy, therapy with MoAbs, and other non-cellular therapies after assessment of clinical risk/benefit ratio on the patient individual basis (**BIIu**)

Asymptomatic SARS-CoV-2 infection, but persistently shedding the virus

- In case of patient who became asymptomatic after a previous COVID19 disease but is persistently shedding the virus, we suggest the deferral of HCT, CAR-T therapy, therapy with MoAbs, and other non-cellular therapies after assessment of clinical risk/benefit ratio on the patient individual basis **(BIIu)**

Ljungman et al., Leukemia, 2021; Sharma et al., Lancet Haematol, 2021; Wood et al., Blood Adv, 2020; Hirsch et al., ECIL-8, 2019

DONOR DEFERRALS and cryopreservation

UPDATE 2022

Donor diagnosed with COVID-19	• **7 days after clinical recovery (BIII)** • **For asymptomatic infections, 7 days after the most recent positive test result.**
Contact with a person diagnosed with COVID-19	**For at least 14 days after last contact (BIII)**
Practice good hygiene and socially isolated	**Within 14 days of donation (BIII). Unnecessary travel should be avoided.**

- **If the patient's need for transplant is urgent, the donor is completely well, a test is negative for SARS-CoV-2 and there are no suitable alternative donors, earlier collection may be considered subject to careful risk assessment, ie.7 days post-contact if an asymptomatic donor tests negative.**
- **Cryopreservation of the graft is an option for PBSC from RD and URD (BIII). Cryopreservation of allogeneic HPC grafts is a reasonable option that might be implemented after benefit-risk assessment.**

DONOR TESTING: In the absence of symptoms, testing the donor for SARS-CoV-2 at the point of collection, or testing the donation itself, is not mandatory. Local or country policy can be applied.