9th EUROPEAN CONFERENCE on INFECTIONS in LEUKAEMIA

COVID Group

Therapy

▶ VIRTUAL CONFERENCE
From September
16th to 17th 2021

Final revised slide set
post-ECIL meeting

Recommendations summary 1
Treatment of SARS-CoV-2 infection and COVID-19 in haematology patients

<table>
<tr><th>Phase</th><th>Pre-exposure prophylaxis</th><th>Post-exposure prophylaxis</th><th>Mild or moderate COVID-19</th><th>Moderate COVID-19</th><th>Severe COVID-19</th><th>Critical COVID-19</th></tr>
<tr><td>COVID-19 signs or symptoms</td><td>No</td><td>No</td><td>Mild or moderate, no dyspnea, no need for COVID-19-related admission</td><td>Yes, clinical or radiological evidence of LRTD, sat > 90%, but hospital-admitted and receiving O2</td><td>Yes, respiratory failure
Sat < 90% or RR > 30, but some studies considered severe if Sat <94% or <92%</td><td>ARDS, sepsis, septic shock, MV (invasive or non-invasive) or vasopressor therapy</td></tr>
<tr><td rowspan="2">Treatment</td><td rowspan="2">AZD7442 (long acting anti-SARS-CoV-2 MAbs) in not immunised patients at risk for severe COVID-19 provisional B II t</td><td rowspan="2">Anti-S MAbs A II t^</td><td rowspan="2">Anti-S MAbs A II t
or
High titre CVP B II t*

Inhaled IFN b-1a C II t
Molnupiravir provisional B II t
Remdesivir provisional B II t

Dexamethasone D II t

In the absence of other therapeutic options, colchicine C II t</td><td colspan="2">Remdesivir B II t
C/I if seronegative provisional B II t or If seronegative CVP C III*
Dexamethasone A II t</td><td>C/I if seronegative - provisional B II t in NIV (no data in MIV)
Remdesivir D II t
Dexamethasone A II t</td></tr>
<tr><td>If worsening despite dexamethasone and present severe COVID-19-related inflammation**, add the 2nd immunosuppressant B III:
anti-IL-6 (tocilizumab, sarilumab) B II t
or
anti-IL1 (anakinra) C II t
or
JAK –inhibitor (baracitinib/tofacinib) C II t</td><td>If present severe COVID-19- related inflammation**, add the 2nd immunosuppressant A II t:
Anti-IL-6 (tocilizumab, sarilumab) B II t
or
anti-IL1 (anakinra) C II t
or
JAK –inhibitor (baracitinib/tofacinib) C II t</td><td>If present COVID-19-related inflammation**, add the 2nd immunosuppressant A II t:
Anti-IL-6 (tocilizumab, sarilumab) B II t</td></tr>
</table>

^ In patients at high risk for COVID-19 progression, particularly if not vaccinated, vaccine non-responders or not expected to respond to vaccine
* If Anti-S MAbs not available, preferably within 72h from symptom onset
** e.g. CRP > 75 mg/dl in the absence of bacterial coinfection (based on RECOVERY trial, Lancet 2021) or other available inflammation parameters or scores (if not altered due to the underlying haematological disease). The effects of immunomodulatory therapies targeting COVID-19 on the course of disease in already immunosuppressed patients are poorly understood and deserve special consideration.

Anti-S MAbs, monoclonal antibodies against spike protein of SARS-CoV-2; C/I, casirivimab/imdevimab; CVP, convalescent plasma; LRTD, lower respiratory tract disease; MV, mechanical ventilation: MIV, invasive, NIV, non-invasive.

Recommendations summary 2

General ICU management of haematology patients with SARS-CoV-2 infection

- In the absence of trials on hematologic patients with COVID 19 admitted to the ICU, generally accepted measures of intensive care management should be followed **A II t**

This also applies to

1) the timepoint of intubation (which should not be delayed to prolong proning or high-flow nasal oxygen trials in non-responding patients) **A II t**
2) defining the goals of therapy **A II t**

- Appropriate management of infectious complications, including application of diagnostic algorithms in immunosuppressed patients with acute respiratory failure to rule out secondary infections, is mandatory

Recommendations summary 3

What not to use for treatment of SARS-CoV-2 infection in haematology patients

• HCQ/HQ	Should not be used	**D I t (D II t)**
• LPV/r – HQ	Should not be used	**D I t (D II t)**
• Azithromycin	Should not be used	**D I t (D II t)**
• Ivermectin	There is no sufficient high-quality evidence to support its use	**D II t (D III t)**
• Arbidol, favipiravir	There is no sufficient high-quality evidence to support its use	**D II t (D III t)**
• IFN β-1a iv or sc	Should not be used	**D II t**
• Vitamin D	There is no sufficient high-quality evidence to support its use	**D II t**

Recommendations summary 4

Treatment of SARS-CoV-2 infection and COVID-19 in haematology patients - comments

- The population most likely to benefit from MAbs or high titre* CVP is seronegative immunocompromised patients
- The choice of anti-S MAbs should be based on
  - Local availability/national approval
  - Activity against the majority of locally circulating variants (e.g. FDA recommendation: activity against >95% of strains)
  - Combination of anti-S MAbs rather than single agents should be favoured to lower potential of emergence of resistance
- The use of high titre* CVP in severe and critical covid-19 is controversial and should be reserved for setting with no access to MAbs
  - No benefit in the general population
  - More data are needed in HSCT/haematology patients
- If on chronic aspirin treatment, do not discontinue in case of SARS-CoV-2 infection **B III**
- Do not modify ongoing/chronic immunosuppression – **B III**, particularly with ruxolitinib **A III**
- Optimal management of prolonged asymptomatic/mild/moderate COVID-19 is unknown – anti-viral treatments, incl. monoclonals, might be helpful in these patients **C III**
- Use the same standard prophylaxis of thrombosis as in the general population **A II t**
- Maintain correct levels of vitamin D in all patients (patients with adequate levels of vitamin D had better outcomes if infected) **B II t**

*FDA definition

Further research required for treatment of SARS-CoV-2 infection and COVID-19 in haematology patients

- Defibrotide
- Mesenchymal stem cell therapies
- Fluvoxamine