

**COVID-19 (coronavirus) advice for patients with Chronic Myeloid Leukaemia receiving tyrosine kinase inhibitor therapy**

* Expert opinion from the NCRI CML Subgroup, updated August 2021
* **UK government advice is listed here:**

<https://www.nhs.uk/conditions/coronavirus-covid-19/>

https://www.gov.uk/government/publications/covid-19-guidance-on-social-distancing-and-for-vulnerable-people/guidance-on-social-distancing-for-everyone-in-the-uk-and-protecting-older-people-and-vulnerable-adults

* **For specific questions regarding your condition and treatment, please contact your CNS or your CML specialist.**

**Are CML patients at higher risk for a more severe COVID-19 infection?**

* Patients with CML do not appear at higher risk of getting COVID-19.
* CML patients can be at a higher risk of COVID-19 infection if they are older (age over 70 years), have other medical conditions or are receiving other treatment which will suppress the immune system.
* The CANDID study (an initiative by the International CML Foundation to analyse the characteristics of COVID-19 in CML patients) represents the largest global study to date and shows that symptomatic COVID-19 is mild to moderate in around 80% of CML patients. The main factors associated with a higher mortality rate are older age (over 65 years) and COVID-19 severity. 684 cases have been reported as of May 2021. Further data are needed to more accurately evaluate independent risk factors, the impact of COVID-19 and the influence of TKI therapy.
* Having a diagnosis of CML or being treated with TKI therapy does not convincingly cause clinically significant immune suppression.
* Gov.uk has placed patients with CML in the category of ‘clinical conditions which put people at even higher risk of severe illness from COVID-19’ and therefore CML patients will have full access to government support services as a result.
* In our specialist opinion, the diagnosis of CML or treatment for CML alone does not clearly fall in the ‘higher risk of severe illness from COVID-19’ category.
* The life expectancy of CML patients is currently approaching that of the general population. The decision to place CML patients on TKI therapy in the high-risk category for COVID-19 infection must not have a negative impact on Covid- 19 treatment related decisions, due to their excellent outcome.
* Patients should not interrupt or reduce their TKI medication without the advice of their CML specialist team.
* The preliminary findings on responses to either SARS‐CoV‐2 BNT162b2 (Pfizer) or AstraZeneca-Oxford vaccine demonstrate the immunogenicity of a single dose of either vaccine in most patients with CML, with anti‐Spike immunoglobulin G (‘‘antibodies’’) detected in 75% to 87.5% patients after vaccination, and a T-cell response in 93%. We believe these are encouraging results in contrast to those seen in patients with solid tumour or lymphoid haematological malignancies. These initial findings however are from two small scale studies including 16 and 12 patients with CML respectively, and further assessments after a second vaccine injection and on larger numbers of patients will be important for definitive conclusions. (Harrington *et al*, BJHaem 2021; Chowdhury *et al*, BJHaem 2021). CML patients should continue to be encouraged to receive Covid vaccines unless there are other unrelated contraindications.