

## **Voriconazole Healthcare Professional Checklist**

Please complete this Checklist at each visit with your patient being treated with Voriconazole. Each of the three sections includes important risk information followed by a series of check boxes to help in the management of your patient for whom you have prescribed Voriconazole.

### **A) Minimising the Risk of Phototoxicity and Squamous Cell Carcinoma**

- Voriconazole has been associated with phototoxicity and pseudoporphyria. It is recommended that all patients, including children, avoid exposure to direct sunlight during Voriconazole treatment and use measures such as protective clothing and sufficient sunscreen with high sun protection factor (SPF)
- The frequency of phototoxicity reactions is higher in the paediatric population. As an evolution towards Squamous Cell Carcinoma (SCC) has been reported, stringent measures for the photoprotection are warranted in this population of patients. In children experiencing photoaging injuries such as lentigines or ephelides, sun avoidance and dermatologic follow-up are recommended even after treatment discontinuation.
- Squamous cell carcinoma (SCC) of the skin has been reported in patients taking voriconazole, some of whom have reported prior phototoxic reactions.
- If phototoxic reactions occur, multidisciplinary advice (e.g., a consultation with a dermatologist) should be sought for the patient. Voriconazole discontinuation and use of alternative antifungal agents should be considered.
- Dermatologic evaluation should be performed on a regular basis whenever Voriconazole is continued, despite occurrence of phototoxicity-related lesions, to allow early detection and management of premalignant lesions.
- Voriconazole should be discontinued if premalignant skin lesions or skin SCC are identified
- SCC has been reported in relation with long-term Voriconazole treatment. Treatment duration should be as short as possible. Long-term exposure (treatment or prophylaxis) greater than 180 days (6 months) requires careful assessment of the benefit risk balance and physicians should therefore consider the need to limit the exposure to Voriconazole.
- For prophylaxis use, dose adjustments are not recommended in the case of lack of efficacy or treatment-related adverse events. In the case of treatment-related adverse events, discontinuation of voriconazole and use of alternative antifungal agents must be considered.

Refer to the Summary of Product Characteristics for full prescribing information.

**Please review and answer the questions below for each patient receiving Voriconazole:**

<p><b>Has your patient developed phototoxicity?</b>  <i>If YES, please refer to the Summary of Product Characteristics (SmPC) for guidance.</i></p>	<p>YES <input type="checkbox"/>          NO <input type="checkbox"/></p>
<p><b>Have you arranged regular dermatologic evaluation for the patient if he/she presented with phototoxicity?</b>  <i>If YES, please refer to the SmPC for further details.</i>  <i>If NO, regular dermatologic evaluation should be arranged promptly. Please refer to the SmPC for further details.</i></p>	<p>YES <input type="checkbox"/>          NO <input type="checkbox"/></p>
<p><b>In case of phototoxicity, did you consider discontinuing treatment with Voriconazole?</b>  <i>If YES, please refer to the SmPC for further advice.</i>  <i>If NO, Voriconazole discontinuation and use of alternative antifungal agents should be considered.</i>  <i>Please refer to the SmPC for further details.</i></p>	<p>YES <input type="checkbox"/>          NO <input type="checkbox"/></p>
<p><b>In case of pre-malignant skin lesions or SCC, did you discontinue treatment with Voriconazole?</b>  <i>If NO, Voriconazole should be discontinued. Please refer, to the SmPC for further advice.</i></p>	<p>YES <input type="checkbox"/>          NO <input type="checkbox"/></p>

**B) Important Information regarding Voriconazole and liver function monitoring**

Patients receiving Voriconazole must be carefully monitored for hepatic toxicity:

- Clinical management should include laboratory evaluation of hepatic function (specifically AST and ALT) at the initiation of treatment with Voriconazole and at least weekly for the first month of treatment. If there are no changes in these liver function tests (LFTs) after one month, monitoring frequency can be reduced to monthly.
- If the LFTs become markedly elevated, Voriconazole should be discontinued, unless the medical judgment of the risk-benefit balance of the treatment for the patient justifies continued use.
- There are limited data on the safety of Voriconazole in patients with abnormal LFTs (aspartate transaminase [AST], alanine transaminase [ALT], alkaline phosphatase [AP], or total bilirubin >5 times the upper limit of normal).
- Voriconazole has been associated with elevations in LFTs and clinical signs of liver damage, such as jaundice, and must only be used in patients with severe hepatic impairment if the benefit outweighs the potential risk.
- It is recommended that the standard loading dose regimens be used but that the maintenance dose be halved in patients with mild to moderate hepatic cirrhosis (Child-Pugh A and B) receiving Voriconazole.
- Voriconazole has not been studied in patients with severe chronic hepatic cirrhosis (Child-Pugh C)
- For prophylaxis use, dose adjustments are not recommended in the case of lack of efficacy or treatment-related adverse events. In the case of treatment-related adverse events, discontinuation of Voriconazole and use of alternative antifungal agents must be considered.

Please review and answer the questions below for each patient receiving Voriconazole:

<p><b>Have you recently checked liver function test (LFT) results for your patient?</b>  <i>If YES, use these results to closely monitor hepatic drug toxicity. Please refer to the Summary of Product Characteristics (SmPC) for guidance.</i></p>	<p>YES <input type="checkbox"/>          NO <input type="checkbox"/></p>
<p><b>Does your patient have hepatic cirrhosis?</b>  <i>If YES, dose adjustment is advised. Please refer to the SmPC for details</i></p>	<p>YES <input type="checkbox"/>          NO <input type="checkbox"/></p>
<p><b>Have you arranged for routine monitoring of LFTs for your patient at least weekly for the first month of treatment while he/she is receiving treatment with Voriconazole?</b>  <i>If YES, please refer to the SmPC for further details.              If NO, routine monitoring should be arranged <u>promptly</u>. Please refer to the SmPC for further details</i></p>	<p>YES <input type="checkbox"/>          NO <input type="checkbox"/></p>

**C) Discussion with your patient**

**Regarding phototoxicity and skin SCC**

<b>Have you discussed</b> the risks of phototoxicity and skin SCC with Voriconazole and the need for regular dermatological evaluation (if phototoxicity occurs)?	YES <input type="checkbox"/> NO <input type="checkbox"/>
<b>Have you discussed</b> the need to avoid sunlight and sun exposure (including use of protective clothing and sufficient sunscreen with high sun protective factor [SPF]) during treatment with Voriconazole?	YES <input type="checkbox"/> NO <input type="checkbox"/>
<b>Have you discussed</b> the signs and symptoms of phototoxicity that warrant contacting the doctor immediately?	YES <input type="checkbox"/> NO <input type="checkbox"/>
<b>Have you given</b> the patient a <b>Patient Alert Card</b> that was provided to you in the package?	YES <input type="checkbox"/> NO <input type="checkbox"/>
<b>Have you discussed</b> with caregivers/parents of your paediatric patients, who experience photoaging injuries, the need to avoid all sun exposure and have follow-up dermatologic evaluations even after Voriconazole treatment is discontinued?	YES <input type="checkbox"/> NO <input type="checkbox"/>

**Regarding hepatotoxicity**

<b>Have you discussed</b> the risk of liver toxicity with Voriconazole and the need for periodic monitoring of liver function?	YES <input type="checkbox"/> NO <input type="checkbox"/>
<b>Have you discussed</b> the signs and symptoms of liver injury that warrant contacting the doctor immediately?	YES <input type="checkbox"/> NO <input type="checkbox"/>

**Please retain the completed checklist in patient's medical record.**

**Please report any suspected adverse drug reactions related to Voriconazole in the usual way or by using the MHRA Yellow Card Scheme, Website:  
[www.mhra.gov.uk/yellowcard](http://www.mhra.gov.uk/yellowcard).**