

# IMPORTANT POINTS TO REMEMBER BEFORE, DURING AND AFTER TREATMENT

This medicinal product is subject to additional monitoring. This will allow quick identification of new safety information. Healthcare professionals are asked to report any suspected adverse reactions.

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#### CONSIDERATIONS IN FINGOLIMOD PATIENT SELECTION

Fingolimod is suitable for adult patients for the treatment of highly active relapsing remitting multiple sclerosis (RRMS). While many patients may be suitable for treatment, the following section highlights patients in whom Fingolimod is contraindicated or not recommended.

#### Considerations for treatment initiation

Fingolimod causes transient heart rate reduction and may cause AV conduction delays following initiation of treatment. All patients should be monitored for a minimum of 6 hours on treatment initiation. Below is a brief overview of monitoring requirements. Refer to page 4 for more information

#### **Appropriate**

Eligible adult patients with highly active RRMS who have not responded to a full and adequate course of at least one disease modifying therapy or those with rapidly evolving, severe RRMS.

#### CONTRADICTIONS

- Known immunodeficiency syndrome;
- Patients with increased risk for opportunistic infections, including immunocompromised patients (including those currently receiving immunosuppressive therapies or those immunocompromised by prior therapies);
- Severe active infections, active chronic infections (hepatitis, tuberculosis);
- Known active malignancies;
- Severe liver impairment (Child-Pugh class C);
- In the previous 6 months, myocardial infarction (MI), unstable angina pectoris, stroke/transient ischaemic attack (TIA), decompensated heart failure (requiring inpatient treatment), or New York Heart Association (NYHA) class III/IV heart failure;
- Severe cardiac arrhythmias requiring anti-arrhythmic treatment with class Ia or class
   III anti-arrhythmic medicinal products;
- Second-degree Mobitz type II atrioventricular (AV) block or third-degree AV block, or sick-sinus syndrome, if they do not wear a pacemaker;
- Patients with a baseline QTc interval ≥500 msec;
- Pregnant women and women of childbearing potential not using effective contraception;
- Hypersensitivity to the active substance or to any of the excipients

#### **NOT RECOMMENDED**

Consider only after performing benefit/risk analysis and consulting a cardiologist

Consult cardiologist regarding appropriate first-dose monitoring

Bradyarrhythmia (including the following: second-degree Mobitz type II or higher atrioventricular (AV) block, sick sinus syndrome, sinoatrial heart block, history of symptomatic bradycardia), significant QT-interval prolongation (>470 msec [females] or >450 msec [males]), severe untreated sleep apnoea, significant cardiovascular disease (including the following: ischaemic heart disease [including angina pectoris], history of myocardial infarction, congestive heart failure, history of cardiac arrest), uncontrolled hypertension, cerebrovascular disease, or recurrent syncope.



At least overnight extended monitoring is recommended

Consult cardiologist regarding possibility of switching to non-heart-rate-lowering drugs

Taking beta-blockers, heart-rate-lowering calcium channel blockers (including verapamil, diltiazem, or ivabradine), or other substances that are known to lower the heart rate (including digoxin, anticholinesteratic agents, or pilocarpine).



If change in medication is not possible, extend monitoring to at least overnight

## PHYSICIAN CHECKLIST-RECOMMENDED STEPS TO MANAGING PATIENTS ON FINGOLIMOD

The checklist and schematic that follow are intended to assist in the management of patients on Fingolimod. Key steps and considerations while starting, continuing, or discontinuing treatment are provided.

	Prior to initiating treatment				
	Before initiating treatment, a baseline MRI should be available (usually within three months) as a reference				
	Medical evaluation of the skin is recommended at initiation of treatment as cases of BCC have been reported in patients receiving Fingolimod. The patient should be referred to a dermatologist if suspicious lesions, potentially indicative of basal cell carcinoma or other cutaneous neoplasms (including malignant melanoma, squamous cell carcinoma, Kaposi's sarcoma and Merkel cell carcinoma), are detected				
	Ensure patients are not concomitantly taking Class Ia or Class III antiarrhythmedicines				
	Conduct baseline electrocardiogram (ECG) and blood pressure measurement				
	Treatment with Fingolimod is not recommended in the following patients, unless anticipated benefits outweigh the potential risks:  • Those with bradyarrhythmia¹, significant cardiovascular disease², significant QT-interval prolongation, uncontrolled hypertension, cerebrovascular disease, severe untreated sleep apnoea, or a history of recurrent syncope  • Seek advice from a cardiologist regarding the most appropriate monitoring at treatment initiation; at least overnight extended monitoring is recommended.  • Those receiving concurrent therapy with beta-blockers, heart-rate-lowering calcium channel blockers (eg, verapamil, diltiazem, ivabradine), or other substances which may decrease heart rate (eg, digoxin, anticholinesteratic agents, pilocarpine)  • Seek advice from a cardiologist regarding a switch to non-heart-rate-lowering medicinal products prior to initiation of treatment.  • If heart-rate-lowering medication cannot be stopped, seek advice from a cardiologist regarding the most appropriate monitoring at treatment initiation; at least overnight extended monitoring is recommended.				
	Avoid co-administration of anti-neoplastic, immunomodulatory or immunosuppressive therapies due to the risk of additive immune system effects. For the same reason, a decision to use prolonged concomitant treatment with corticosteroids should be taken after careful consideration				
	Obtain recent (within 6 months) transaminase, and bilirubin levels				
	Obtain recent (within 6 months or after discontinuation of prior therapy) full blood count				

Confirm a negative pregnancy test result

	Counsel on the need for effective contraception in women of childbearing age due to teratogenic risk to foetus		
	Delay initiation of treatment in patients with severe active infection until resolved		
	Check varicella zoster virus (VZV) antibody status in patients without a healthcare professional confirmed history of chickenpox or documentation of a full course of varicella vaccination. If negative, a full course of vaccination with varicella vaccine is recommended and treatment initiation should be delayed for 1 month to allow full effect of vaccination to occur		
	Conduct an ophthalmologic evaluation in patients with history of uveitis or diabetes mellitus		
	Provide patients, caregivers and/or parents with a Patient Reminder Card, and ensure that they have understood the content		
sinoat ² signi	yarrhythmia includes the following: second-degree Mobitz type II or higher AV block, sick sinus syndrome, rial heart block, history of symptomatic bradycardia ficant cardiovascular disease includes the following: ischaemic heart disease (including angina pectoris), y of myocardial infarction, congestive heart failure, history of cardiac arrest.		
During treatment			
	<ul> <li>Conduct a full ophthalmologic evaluation at 3 to 4 months after starting treatment</li> <li>Conduct periodic ophthalmologic evaluations in patients with history of uveitis or diabetes mellitus</li> <li>Counsel patients to report any visual disturbance during treatment</li> <li>Evaluate the fundus, including the macula, and discontinue treatment if macular oedema is confirmed</li> </ul>		
	<ul> <li>Counsel patients to report signs and symptoms of infection</li> <li>Prompt antimicrobial treatment should be initiated if indicated</li> <li>Perform prompt diagnostic evaluation in patients with symptoms and signs (e.g. headache accompanied by mental changes such as confusion, hallucinations, and/or personality changes) consistent with cryptococcal meningitis. If cryptococcal meningitis is diagnosed, Fingolimod should be suspended and appropriate treatment should be initiated. A multidisciplinary consultation (i.e. infectious disease specialist) should be undertaken if re-initiation of Fingolimod</li> </ul>		

 Progressive multifocal leukoencephalopathy (PML) has been reported under Fingolimod treatment since marketing authorisation. Be vigilant for clinical symptoms or MRI findings that may be suggestive of PML. MRI imaging may be considered as part of increased vigilance in patients considered at increased risk of PML. If PML is suspected, MRI should be performed immediately for diagnostic purposes and treatment with Fingolimod should be suspended until

PML has been excluded
- Suspend treatment during serious infections

is warranted

Check full blood count periodically during treatment, at month 3 and at least year thereafter, and interrupt	
Check liver transaminases at months 1, 3, 6, 9, and 12 and periodically thereafter, or at any time there are signs or symptoms of hepatic dysfunction  - Monitor more frequently if liver transaminases rise above 5 times the ULN, and interrupt treatment if liver transaminases remain elevated above this level until recovery.	
During treatment and for up to 2 months after discontinuation  Vaccinations may be less effective  Live attenuated vaccines may carry a risk of infection and should be avoided	
Pregnancy tests should be repeated at suitable intervals. Discontinue treatment if a patient becomes pregnant. Physicians may also enroll a pregnant MS patient under their care in the Fingolimod pregnancy registry by dialing 1-855-627-2261 or mailing safety.canada@marcanpharma.com	
Cases of basal cell carcinoma (BCC) have been reported in patients receiving Fingolimod. Vigilance for skin lesions is warranted and a medical evaluation of the skin is recommended after at least one year and then at least yearly taking into consideration clinical judgment. The patient should be referred to a dermatologist if suspicious lesions are detected	
Cases of seizure, including status epilepticus, have been reported. Vigilance for seizures, especially in those patients with underlying conditions or with a pre-existing history or family history of epilepsy, is recommended	
Reassess on an annual basis the benefit of Fingolimod treatment versus risk in each patient	
After treatment discontinuation	
Repeat first-dose monitoring as for treatment initiation when treatment is interrupted for:  One day or more during the first 2 weeks of treatment  More than 7 days during weeks 3 and 4 of treatment  More than 2 weeks after 1 month of treatment	
Counsel patients to report signs and symptoms of infection immediately to their prescriber for up to 2 months after discontinuation	
Instruct patients to be vigilant for signs of meningitis infection	
Inform women of childbearing potential, including female adolescents, that effective contraception is needed for 2 months after discontinuation. For female adolescents, please also inform their parents and other caregivers	

Vigilance for the possibility discontinuation of treatment is rec		exacerbation of disease following						
TREATMENT INITIATION ALGORITHM								
All patients will need to be monitored for at least 6 hours during treatment initiation, as described in the algorithm below. In addition, for patients in whom Fingolimod is not recommended (see page 2), advice should be sought from a cardiologist regarding appropriate monitoring; at least overnight monitoring is recommended for this group.								
Monitor for a minimum of six hours								
<ul> <li>Perform ECG and BP measurement</li> <li>Monitor for a minimum of 6 hours for signs and symptoms of bradycardia, with hourly pulse and BP checks. If patient is symptomatic, continue monitoring until resolution         <ul> <li>Continuous (real-time) ECG is recommended throughout the 6-hour period</li> <li>Perform ECG at 6 hours</li> </ul> </li> </ul>								
	<b>T</b>							
Did the patient require pharmacologic intervention at any time during the monitoring period?								
NO V		YES						
Did third degree AV block occur at any time during the monitoring period?		Monitor overnight. First dose monitoring should be repeated after the second dose of fingolimod						
NO	ES							
at the end of the monitoring period, have any of the following criteria been met? • HR < 45 bpm • ECG shows new-onset second-degree or higher AV block or QTc interval ≥500 msec	YES	Extend monitoring at least overnight, until the findings have resolved						
NO								
At the end of the monitoring period, is the HR the lowest since the first dose was administered?	YES	Extend monitoring for at least 2 hours and until heart rate increases						
NO <del></del>								

First dose monitoring is complete