

## Systemic Anti Cancer Treatment Protocol

**Talimogene laherparepvec**

**PROTOCOL REF: MPHATALIA  
(Version No: 1.0)**

**Approved for use in:**

Treatment of adults with Stage IIIB, IIIC and IVM1a unresectable melanoma that is regionally or distantly metastatic with no bone, brain, lung or other visceral disease

**Dosage:**

**Dose to be determined prior to each administration**

Treatment visit	Treatment interval	Maximum total injection volume	Dose concentrations	Prioritisation of lesions to be injected
Initial		Up to 4 mL	$10^6$ (1 million) PFU/mL	<ul style="list-style-type: none"> <li>Inject largest lesion(s) first.</li> <li>Prioritise injection of remaining lesions based on lesion size until maximum injection volume is reached.</li> </ul>
Second	3 weeks after initial treatment	Up to 4 mL	$10^8$ (100 million) PFU/mL	<ul style="list-style-type: none"> <li>First inject any new lesions (lesions that may have developed since initial treatment).</li> <li>Prioritise injection of remaining lesions based on lesion size until maximum injection volume is reached.</li> </ul>
All subsequent treatment visits (including re-initiation)	2 weeks after previous treatment	Up to 4 mL	$10^8$ (100 million) PFU/mL	<ul style="list-style-type: none"> <li>First inject any new lesions (lesions that may have developed since previous treatment).</li> <li>Prioritise injection of remaining lesions based on lesion size until maximum injection volume is reached</li> </ul>

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## Administration:

Treatment should only be administered by clinicians/nurses with specialist training.

Administration will be via intralesional injection into cutaneous, subcutaneous, and/or nodal lesions that are visible, palpable or detectable by ultrasound guidance.

The volume to be injected into each lesion is dependent on the size of the lesion and should be determined according to the table below. **The total injection volume for each treatment session should not exceed 4 mL**

### *Injection volume based on lesion size*

Lesion size (longest dimension)	Injection volume
> 5 cm	up to 4 mL
> 2.5 cm to 5 cm	up to 2 mL
> 1.5 cm to 2.5 cm	up to 1 mL
> 0.5 cm to 1.5 cm	up to 0.5 mL
≤ 0.5 cm	up to 0.1 mL

Each vial of  $10^8$  (100 million) PFU/mL, and  $10^6$  (1 million) PFU/mL contains 1ml deliverable volume of talimogene laherparepavec.

Vials will be removed from stored temperature (-70°C) and thawed at room temperature (20 to 25 °C) for 30 mins in pharmacy.

Administration should take place as soon as possible when treatment has been released from pharmacy.

Maximum storage time in vial plus syringe after thawing cannot exceed the following:

17 hours (2.5 hours in syringe) up to 25°C  $10^6$  (1 million) PFU/mL

85 hours (4 hours in syringe) up to 25°C  $10^8$  (1 million) PFU/mL

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Patients may experience increase in size of existing lesion(s) or the appearance of a new lesion prior to achieving a response. As long as there are injectable lesion(s) treatment should be continued for at least 6 months unless the patient is no longer clinically benefitting or that other treatment is required.

Treatment may be reinitiated if new lesions appear following a complete response.

Healthcare professionals who are immunocompromised or pregnant should not administer Talimogene laherparepvec and should not come into direct contact with the injection site(s) or body fluids of treated patients.

### Investigations:

Investigation	Baseline	Each cycle	Every 12 weeks	Follow-up
Informed Consent	√			
Medical review – including measurement of injectable lesions	√	As indicated	√	√
Nursing review		√		
Weight	√		√	√
Imaging – CT chest, abdo, pelvis and other known sites of disease	√		√	√
FBC	√	√	√	√
U & E, LFTs	√	√	√	√
Coagulation	√	As indicated	As indicated	As indicated
Blood pressure and temperature measurement	√	√	√	√
Toxicities documented	√	√	√	√
PS recorded	√	√	√	√
Volume of treatment to be administered will be determined by dermatological exam prior to each cycle	√	√	√	√

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### **Main Toxicities:**

The most commonly reported adverse reactions ( $\geq 25\%$ ) were fatigue, chills, pyrexia, nausea, influenza-like illness, and injection site pain

Ninety eight per cent (98%) of reported adverse reactions were mild or moderate in severity. The most common grade 3 or higher adverse reaction was cellulitis.

### **Dosing in hepatic renal impairment:**

No adjustment in dosage is necessary for patients with hepatic or renal impairment.

### **Drug interactions**

No interaction studies have been conducted with Talimogene laherparepvec.

Acyclovir and other anti-viral agents may interfere with the effectiveness of treatment if administered systemically or topically directly to the injection site.

### **Additional Information**

**Batch numbers of each vial at each visit must be recorded**

### **References:**

Imlygic, summary of Product Characteristics, Amgen Novartis Pharmaceuticals UK Ltd. 30/06/2014. Available from [www.medicines.org.uk/emc/medicine](http://www.medicines.org.uk/emc/medicine). Last updated 28/07/16.

Imlygic pharmacist dossier 2016 Amgen

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