North West Coast
Strategic Clinical Networks

Pemetrexed

INDICATION: Locally advanced or metastatic NSCLC (predominantly non-squamous histology):

- maintenance treatment in patients whose disease has not progressed immediately following platinum based chemotherapy
- 2nd line treatment (**not** NICE approved)

Prior to a course of chemotherapy

- Baseline bloods: FBC, U&E, LFT, Ca,
- Creatinine clearance
- Premedication with Folic Acid and Vit B12 as detailed below
- Written informed consent for course

Prior to each cycle

- FBC, U&E, LFT, Ca
- Creatinine clearance > 45ml/min
- Monitor response to treatment as clinically indicated

Pemetrexed* **500mg/m^2** **In 100ml 039% sodium chloride**

Repeated every 21 days for 4-6 cycles (2nd line treatment) or until disease progression (maintenance treatment)

* **Folic acid 400µg orally daily beginning 1-2 weeks prior to the first dose of Pemetrexed, continuing 3 weeks after the last dose of Pemetrexed.**

Vitamin B12 1000µg IM injection 1-2 weeks prior to the first dose of pemetrexed and repeated with every 3rd dose of pemetrexed until 3 weeks after the last dose of pemetrexed.

Dexamethasone 4mg BD should be taken the day before, the day of and the day after treatment.

NSAIDs and salicylates should be stopped 2 days before treatment and not restarted until 2 days after
- **Naproxen and nabumetone should be stopped 5 days before treatment**
- **Piroxicam should be stopped 8 days before treatment**

Dose modification for haematological toxicity

• **Neutrophils > 1.5 AND Platelets > 100**	**Proceed with full dose**
• **Neutrophils 1.0-1.5**	**Discuss with consultant**
• **Neutrophils < 1.0 OR Platelets < 100**	**Defer 1 week or until recovery**

Dose modification for neuropathy	
• **Grade 3+**	**Stop Pemetrexed**
Dose modification for mucositis	
• **Grade 3+**	**Wait until recovery, then restart at 50% Pemetrexed,**
Dose modification for other toxicities	
• **Any other grade 3+**	**Stop until recovery, then restart at 75% of Pemetrexed**

If any grade 3-4 toxicities recur after 2 dose modifications stop treatment

Expected toxicities:	
Myelosuppression	**Nausea & vomiting (mild)**
Diarrhoea or constipation	**Peripheral neuropathy**
Mucositis	

This protocol has been reviewed by the Lancashire & South Cumbria Lung Oncology Consultants' Group and responsibility for the protocol lies with the Head of Service.

Date: **February 2019**
Next review: **February 2021**