Gefitinib

Indication
Locally advanced or metastatic non-small cell lung cancer with activating mutations sensitive to EGFR-TKI

Regimen details
Gefitinib 250mg orally once daily

Cycle frequency
Continuous treatment, dispense in packs of 30

Number of cycles
Until disease progression or unacceptable toxicity

Administration
Gefitinib is available as 250mg tablets.

The dose should be taken once daily, at the same time each day, either with or without food. If a dose is missed it should be taken as soon as possible, however if it is less than 12 hours until the next scheduled dose the missed should be omitted.

Tablets should be swallowed whole with water or they may be dispersed in non-carbonated water. The tablet should be dropped into half a glass of water (not crushed) and the glass swirled until the tablet has dispersed (this may take up to 20 minutes). The dispersion should be drunk immediately. Patients should be advised to then rinse the glass in approximately another half a glass of water and also consume this. Gefitinib may also be administered via a gastric tube following this method

Pre-medication
None

Emetogenicity
Minimal, no routine antiemetics required

Additional supportive medication
Patients should be supplied with loperamide on commencing treatment. They should be advised to use loperamide immediately at the first sign of diarrhoea and continue for persistent diarrhoea until loose movements cease.

Patients should be advised to use a regular moisturiser from the start of gefitinib treatment to prevent and minimise problems with skin dryness.

Extravasation
N/A

Investigations – pre first cycle

Investigation	Validity period
FBC	14 days
U+E (including creatinine)	14 days
LFT (including AST)	14 days

Investigations –pre subsequent cycles

FBC, U+E (including creatinine), LFT (including AST), chest X-ray and CT scans as clinically indicated
Medical review every 4-6 weeks initially
Review toxicities closely for 2 weeks after commencing therapy

Standard limits for administration to go ahead

None specific but discontinue treatment if toxicity becomes unacceptable or disease progression

Dose modifications

Patients with poorly tolerated diarrhoea or skin adverse reactions may be successfully managed by providing a brief (up to 14 days) therapy interruption followed by reinstatement of the 250 mg dose

Treatment of skin toxicity:
Topical treatment with aqueous cream and hydrocortisone 1% cream for grade 1 or 2 rash
Consider stronger topical steroid for established rash
Oral antibiotics e.g. oxytetracycline 250mg qds may be indicated for superinfected rash

Dose modification for GI toxicity (diarrhoea)
Grade 1 or 2: treat with loperamide
Grade 3: treat with loperamide, withhold dose if no resolution within 24 hours. Restart when symptoms resolved
Grade 4: treat with loperamide; discontinue if no resolution within 24 hours

Keratitis
Patients presenting with signs and symptoms suggestive of keratitis such as acute or worsening: eye inflammation, lacrimation, light sensitivity, blurred vision, eye pain and/or red eye should be referred promptly to an ophthalmology specialist. If a diagnosis of ulcerative keratitis is confirmed, treatment with gefitinib should be interrupted, and if symptoms do not resolve, or if symptoms recur on reintroduction of gefitinib, treatment should be permanently discontinued

Interstitial Lung Disease
Interstitial Lung Disease (ILD) should be considered if a patient develops acute or worsening of respiratory symptoms including cough, dyspnoea and fever. Treatment should be interrupted pending evaluation. If ILD is diagnosed, treatment should be permanently discontinued

Adverse effects –

for full details consult product literature/ reference texts

- **Serious side effects**

Stevens-Johnson syndrome/toxic epidermal necrosis
Interstitial lung disease
GI perforation
Haemorrhage

- **Frequently occurring side effects**

Diarrhoea – may be severe
Nausea, vomiting
Rash
Stomatitis
Epistaxis
Anorexia
Elevated LFTs
Conjunctivitis, blepharitis

- **Other side effects**

Keratitis
Nail infections

Significant drug interactions

– for full details consult product literature/ reference texts

CYP3A4 inducers (e.g. rifampicin, carbamazepine, phenytoin, St. John's wort) may decrease efficacy of gefitinib. Avoid co-administration.

CYP3A4 inhibitors may increase plasma levels of gefitinib. Closely monitor for adverse reactions.

Warfarin INR elevation and increased bleeding has been seen in patients taking warfarin and gefitinib. Close regular monitoring is recommended.

Medications that increase gastric pH (e.g. PPIs, H2 antagonists and antacids): may reduce bioavailability of gefitinib.

NSAIDs, steroids: increased risk of GI perforation

Additional comments

References

Iressa SPC - https://www.medicines.org.uk/emc/product/6602/smpc

SWCN protocol - http://www.swscn.org.uk/guidance-protocols/cancer-protocols/

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.

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