SHARED CARE PROTOCOL: ADEFOVIR DIPIVOXIL

NHS GREATER GLASGOW AND CLYDE

NB: This document should be read in conjunction with the current Summary of Product Characteristics (SPC)

DRUG AND INDICATION:

Generic drug name:	**Adefovir dipivoxil**
Formulation:	Tablet containing 10mg adefovir dipivoxil
Intended indication:	Chronic hepatitis B infection in adults with compensated liver disease with evidence of active viral replication, liver inflammation and/or fibrosis.
Status of medicine or treatment:	Licensed medicine. Formulary medicine

RESPONSIBILITIES OF ACUTE CARE/SPECIALIST SERVICE (CONSULTANT):

- Undertake baseline investigations/monitoring and initiate treatment or ask GP to initiate treatment.
- If appropriate, ensure that the patient has an adequate supply of medication (usual minimum of 28 days) until the shared care arrangement are in place
- Dose adjustments

Acute care/specialist service will provide the GP with:

- An initiation letter (which includes diagnosis, relevant clinical information, treatment plan, duration of treatment before consultant review)
- Letter of outpatient consultations, ideally within 14 days of seeing the patient

Acute care/specialist will provide the patient with relevant drug information to enable:

- Understanding of potential side effects
- Understanding of the role of monitoring

RESPONSIBILITIES OF PRIMARY CARE (GENERAL PRACTITIONER):

- To prescribe in collaboration with the acute specialist according to this protocol
- To ensure the continuous prescription of medication until treatment is discontinued at specialist instruction
- In the community Adefovir is distributed via Alcura (tel 01420 543400). Community pharmacies can order direct from this company with delivery the next working day if order is placed before 4pm Monday to Friday.
- Liaison with the hospital specialist in the event of symptoms or abnormal results thought due to this treatment

RESPONSIBILITIES OF PATIENT:

- To attend hospital and GP clinic appointments. Failure to attend appointments may result in medication being stopped
- To report adverse effects to their specialist
- To request repeat prescriptions from the GP prior to current prescription finishing

ADDITIONAL RESPONSIBILITIES:

- None

CAUTIONS:

- Renal impairment: dosage adjustment is recommended for patients with creatinine clearance < 50 ml/min, (see SPC).
- Exacerbations of hepatitis
- Patients with decompensated liver disease: a higher rate of serious hepatic adverse events
- Lactic acidosis and severe hepatomegaly with steatosis
- Liver transplant recipients:
- Co-infection with hepatitis C or D:
- Human immunodeficiency virus (HIV)/HBV co-infected patients
- Pregnancy and breastfeeding

CONTRAINDICATIONS:

- Hypersensitivity to the active substance or to any of the excipients

TYPICAL DOSAGE REGIMEN:

Route of administration:	Oral administration
Recommended starting dose:	10mg every 24 hours with food
Titration of dose:	None
Maximum dose:	10mg daily
Adjunctive treatment regimen:	Sometimes prescribed with Lamivudine
Conditions requiring dose adjustment:	Renal impairment.
Usual response time:	Variable, depends on HBV viral load and host factors
Duration of treatment	Treatment with tenofovir disoproxil fumarate is usually for many years. Treatment may be discontinued if there is HBsAg loss or HBeAg seroconversion.

All dose adjustments or discontinuations will be decided in acute care and directions specified in a medical letter to the GP

SIGNIFICANT DRUG INTERACTIONS:

- Caution if co administered with medicines which reduce renal function or have extensive renal elimination
- Should not be used with tenofovir for Hepatitis B

UNDESIRABLE EFFECTS:

ADR details (where possible indicate if common, rare or serious)	Management of ADR
Weakness, fatigue, headache, dizziness, nausea, vomiting, diarrhoea, abdominal pain, rash	These are the most frequent side-effects with adefovir.
Metabolic disturbance 2er to renal tubular toxicity: Increased creatinine, hypophosphataemia, hypokalaemia. Rarely acute renal failure, acute tubular necrosis, Fanconi syndrome, nephritis, nephrogenic diabetes insipidus. Osteomalacia, manifested as bone pain and possibly contributing to fractures, and myopathy	Renal tubular toxicity occurs in around 1.5% of patients treated with TDF for Hepatitis B and is usually reversible on discontinuation of treatment. Monitoring for renal toxicity will take place in the acute setting

The above list should not be considered exhaustive. For further documented ADRs and details of likelihood etc, see Summary of Product Characteristics or BNF.

BASELINE INVESTIGATIONS (ACUTE SECTOR):

- Urea and electrolytes, eGFR, LFts, HIV test and serum phosphate.

MONITORING (PRIMARY CARE):

- No monitoring is to be undertaken in Primary Care

MONITORING (ACUTE SECTOR):

- The following monitoring is to be undertaken in the acute setting

Monitoring Parameters	Frequency	Laboratory results	Action to be taken
U&Es, LFTs, Phosphate	4 weeks after treatment initiation then every 3 months during first year of treatment, thereafter every 6 months if no abnormalities. More frequent monitoring in patients at higher risk of renal impairment	Falls in eGFR or serum phosphate may indicate toxicity	Discussion with responsible Consultant May require discontinuation
Hepatitis B Viral load	Every 3-6 months		
Hepatitis B e markers	Every 6 months		

PHARMACEUTICAL ASPECTS:

- Shelf life of 2 years.
- Do not store above 30°C. Store in original package to protect from moisture. Keep bottle tightly closed.

COST:

- Approximate cost for 1 patient per year is £3026 (BNF accessed online 02/06/15)
- PLEASE NOTE: All medicines included in a shared care protocol that meet the criteria for a "high cost expensive medicine" and are prescribed in accordance with the shared care protocol are automatically accounted for in the "high cost/ expensive medicines list" for budget-setting purposes. No additional action is therefore required by GPs to request funding. For those medicines which are the subject of a shared care protocol but which do not meet the high cost expensive medicines criteria, transfer of prescribing costs will be considered as appropriate.

INFORMATION FOR COMMUNITY PHARMACISTS:

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ACUTE CARE/SPECIALIST SERVICE CONTACT INFORMATION:

Name	Designation	Acute Site	Department phone number
Dr David Bell Dr Erica Peters	Consultant in Infectious Diseases	Brownlee Centre, Gartnavel General Hospital	0141 301 7489
Prof Peter R Mills Dr Matt Priest	Consultant Gastroenterologist	Gartnavel General Hospital	0141 301 7489
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SUPPORTING DOCUMENTATION:

- NHS GGC Hepatitis B Treatment Guideline, December 2013. http://www.staffnet.ggc.scot.nhs.uk/Info%20Centre/PoliciesProcedures/GGCClinicalGuidelines/GGC%20Clinical%20Guidelines%20Electronic%20Resource%20Direct/Hepatitis%20B%20Infection%20Assessment%20and%20Management%20in%20Adults.pdf