Shared Care Guidelines for Immunosuppressive Treatment for Paediatric Nephrotic Syndrome

July 2020

Review: July 2023

Endorsed for use within North Tyneside, Northumberland, Newcastle and Gateshead by the North of Tyne and Gateshead Area Prescribing Committee	
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An electronic version of this document can also be viewed / downloaded from the North of Tyne & Gateshead Area Prescribing Committee's Website
http://www.northoftyneapc.nhs.uk

Contents

A. Introduction to paediatric nephrotic syndrome

Nephrotic syndrome in children is often a chronic, remitting disease with a large disease burden. Depending on age of presentation and histology type around 20% will fail to respond to steroids alone. Of steroid sensitive children, up to 80% will relapse, with 35-50% relapsing frequently or become steroid dependent. Second, third or fourth line steroid sparing agents are often required to avoid the adverse effects of steroids. This condition often results in frequent hospital admissions to manage relapses and intensive immunosuppression therapy to maintain remission. The amount of immunosuppression required is often in excess of that required for transplantation.

Patients who fail to respond to steroids have a worse prognosis with a high incidence of progressing to chronic renal failure or requiring nephrectomy to reduce the harm of nephrosis.

The Paediatric Nephrology Department at the Great North Children's Hospital in Newcastle provides a tertiary nephrotic syndrome service to children and adolescents in the Northern region. It is one of 13 UK tertiary paediatric nephrology centres. At any time, we manage >100 patients requiring treatment in excess of steroids treatment alone.

The service provides dedicated nephrotic nurses for management and coordination of care, access to 24 hour telephone contact and open access for relapses and any medical issues to our unit. We also coordinate open access and admission to local general paediatric units in the event of patients being unwell. A consultant paediatric nephrologist and renal nurse are always on service to support this specialist service.

Nephrotic patient clinic

Patients can be referred directly by primary or secondary care. Our service provides:

- Diagnostic service including appropriate histology and genetic analysis
- Holistic education of families to aid self management
- Management of relapses and complications of nephrotic syndrome
    - Thrombosis risk
    - Intravascular volume depletion
    - Long term cardiovascular risk
- Monitoring and modification of immunosuppressive therapy to reduce relapses
- Prevention and management of complications of treatment:
    - Infection
    - Growth and obesity
    - Steroid side effects
    - Nephrotoxicity
- Shared care with other specialists for those with co-morbidities
- Compliance with medication and follow up care
- Psychosocial issues are well supported with our dedicated team of specialist nurses, renal psychologists, play therapists and social worker
- Dietetic support
- Access to partake in local and national research studies

There are regular specialised nurse led clinics held in Newcastle, Middlesbrough, North Tees, and Carlisle. Education about this chronic condition is critical to avoid complications. This may include visits to home, school, nursery and to other care givers (eg grandparents).

Patients undergoing relapses can often be managed with rapid access day unit reviews and frequent telephone support. This reduces the burden of prolonged in-patient stays.

What happens at follow up appointments?

The majority of our patients will have steroid sensitive nephrotic syndrome. In the long term, the majority of these patients will grow out of their condition and stop or have fewer relapses. However, the patient journey is often long. Most children present before the age of 5 and will not out grow their condition until well into adolescence. The long term goal of treatment is to reduce the frequency of relapses with immunosuppression while minimising drug side effects. Some will require multidiscipline support for transition to adult services.

Steroids are the mainstay of treatment during relapses, to minimise steroid side effects, a variety of steroid sparing agents are available. Each has their unique spectrum of possible adverse and late effects.

At follow up clinics patients can expect:

- Measurement of growth and blood pressure
- To see a specialist paediatric nephrotic nurse +/- paediatric nephrologist
- Review of medications
- Monitoring for late effects (e.g. steroid induced cataracts or obesity)
- Measurement of appropriate blood parameters as necessary, e.g. serum creatinine, electrolytes, LFT, FBC, and trough levels of tacrolimus
- To access psychosocial support that can impact on treatment compliance or quality of life
- To access specialist renal dietetic support to improve compliance with dietary restrictions associated with relapse and to provide advice to minimise weight complications associated with steroid treatment

To minimise time off school or travel, the nephrotic nurses may arrange for blood tests to be performed locally either at the local hospital or at the GP practice. The paediatric renal team will retrieve and review these results in a timely manner.

Following the clinic visit or blood tests:

- Blood results will be reviewed by the team
- Any abnormal results requiring action, or treatment changes, will be communicated to the patient by telephone, letter, or at a new appointment
- Following significant issues or significant changes to medication, a letter will be sent to the patient's GP, local paediatrian and parents

Shared care of nephrotic patients

All patients are followed in the nephrotic service until off medication and relapse free (for a period of time – average three years) or until transition to adult nephrology around age 16-18. The nephrotic service will monitor and adjust immunosuppressive treatment. We will initiate prophylaxis against opportunistic infection, and any treatments for the prevention of late effects such as cardiovascular diseases. Our current guidelines are listed below, and specific responsibilities enumerated in the guideline for each immunosuppressive drug.

Patients will continue to receive primary care from their own GP. Specific Primary Care responsibilities are listed in the guideline for each immunosuppressive drug.

Please note that:

- The paediatric renal team can be contacted at any time for advice (see 'Contacts' page 21)
- There are many important drug interactions with immunosuppressive medications, listed in the guideline for each drug
- **Abrupt withdrawal or changes to immunosuppressive treatment may lead to nephrotic relapse**

B. Treatment Protocol

Treatment of initial presentation

Steroids are the mainstay of treatment for the initial presentation and any subsequent relapses. Current evidence suggests longer initial course of steroids are superior to shorter duration course to reduce incidence of subsequent relapses.

Prednisolone 60mg/m^2 daily for 4 weeks (max 80mg) then
Prednisolone 40mg/m^2 alternate days (max 60mg) for a further 4 weeks

Then stop with active monitoring for relapse.

The following are also required at presentation and during each relapse:

1. PHENOXYMETHYLPENICILLIN

This should be given as prophylaxis against pneumococcal infection.

Give:	1 - 5 years of age	125mg bd
	> 5 years	250mg bd

Stop when urine protein free for 3 days

*2. OMEPRAZOLE**

Omeprazole* should be given for the full 8 weeks of steroid treatment in order to reduce gastric symptoms. It is not always necessary during treatment for a relapse.

Child 1 month–1 year

700 micrograms/kg once daily, increased if necessary to 3 mg/kg once daily (max. per dose 20 mg).

Child 2–17 years (body-weight 10–19 kg)

10 mg once daily, increased if necessary to 20 mg once daily.

Child 2–17 years (body-weight 20 kg and above)

20 mg once daily, increased if necessary to 40 mg once daily.

**Only while the manufacturing problem with ranitidine persists.*

3. LOW SALT DIET

This is employed to help prevent excess thirst and fluid retention. Stop when the urine is protein free for 3 consecutive days. (Fluid restriction is only considered if a child continues to gain weight despite a low salt diet and is clinically euvolaemic, children will be admitted to hospital if this is required). Our renal dietician will offer support.

Treatment of relapses

Duration of steroid treatment is different from treatment of an initial presentation.

> Prednisolone 60mg/m^2 daily (max 80mg) until proteinuria free for 3 days then
> Prednisolone 40mg/m^2 alternate days (max 60mg) for a further 4 weeks

then stop, or revert to previous maintenance steroid dose as directed by nephrotic team. Occasionally a longer duration of steroid treatment is given for a relapse depending on clinical need.

Individualised protocol for every patient

For patients who frequently relapse or become steroid dependent, individualised immunosuppression plans are drawn up based on their clinical status, compliance with treatment, infection history, histology findings (if appropriate) and on the best available evidence.

First line	Maintenance alternate day prednisolone
Steroid sparing agents	Levamisole (unlicensed) Intravenous cyclophosphamide (given in hospital for 6 months) Tacrolimus Mycophenolate Mofetil (MMF) Intravenous Rituximab (given in hospital only)

Maintenance alternate day prednisolone

The dose required for this maintenance regimen varies enormously. The aim is to keep the child on the lowest dose of maintenance steroids that keeps them relapse free. Alternative day prescribing reduces adverse steroid events.

Doses up to 0.5mg/kg alternate day can be used however, if the maintenance dose needed exceeds 0.5mg/kg on alternate days, steroid side effects are likely. We would usually introduce a 2nd line steroid sparing agent.

Drug dosing and monitoring

Initial doses and recommended monitoring for each drug are shown in the shared care guideline. The required dose of tacrolimus varies substantially from patient to patient, and is determined by measurement of whole blood drug levels performed immediately before a dose (that is, a 'trough' level. Target drug levels are aimed to balance adequate immunosuppression with minimising side effects (particularly nephrotoxicity).

The target levels for tacrolimus is 3-5ng/ml but maybe individualised, depending on clinical needs. Doses are adjusted in the nephrotic clinic.

Patients on tacrolimus will have regular creatinine checked and the need for renal biopsy to monitor for nephrotoxicity, is reviewed every 3-5 years.

There are many important drug interactions with all immunosuppressions. The most important are listed in the shared care guideline for each drug, great care is needed when prescribing for these patients. Other information is available in the BNF or BNFC.

Please contact us before prescribing new medication as we may need to arrange for additional monitoring of blood levels.

C. Prophylactic Treatment

1. Anti-microbial prophylaxis

Patients on multiple immunosuppression are at increased risk of infection. Please contact us straight away if there is chickenpox contact or infection as treatment may be required.

Most of the excess risk is related to opportunistic infection with fungi (*Candida spp, Pneumocystis jirovecii*), viruses (CMV, VZV and other herpes viruses) and occasionally TB.

Immunosuppressive treatment does not seem to dramatically increase the risk of common bacterial infections, although when patients develop such infections they are more severe.

Pneumocystis jirovecii risk Patients on the following medication receive **co-trimoxazole** 12mg/kg once daily max 960mg. Please round to nearest tablet (480mg or 960mg) or ml (240mg/5ml or 480mg/5ml).

- IV cyclophosphamide - during 6 month course and for further 2 months
- Mycophenolate mofetil and tacrolimus

Once stable and off prednisolone, selected patients reduce co-trimoxazole prophylaxis to three times per week

2. Immunisation.

Patients on immunosuppressive treatment should NOT receive any live vaccines. Examples of live vaccines include oral polio vaccine (OPV), nasal flu vaccine, BCG, Yellow Fever and the MMR vaccine.

All nephrotic recipients should receive the annual **Inactive Influenza injection**

Pneumococcal vaccine should be given.

Infants
Ensure patients have received their routine infant immunisation program which includes Prevenar-13 valent conjugate vaccine.

After 2 years
All children with nephrotic syndrome should receive an additional wider 23 serotype polysaccharide pneumococcal vaccine (Prevenar 23) after their 2nd birthday.
(Ensure not given within 1 year of routine immunisation)

Tacrolimus shared care guideline

Introduction

Tacrolimus (Adoport) is a calcineurin inhibitor. It has few cosmetic side effects but may cause hyperlipidaemia. It can be nephrotoxic so survelliance monitoring by biopsy is required. There is significant variation in bioavailability between brands so always prescribe using the brand name.

Liquid preparations: Dose changes are frequent after starting and during acute diarrhoeal episodes. Changes of doses are usually communicated to the parents by phone after drug levels are available from the laboratory. To avoid harm, it is **essential that the concentration and formulation of liquid preparations never change**. Patients will be on 1mg/ml preparations to minimise errors. This must also be prepared by a specials manufacturer using an identical formulation to that supplied by the hospital. This formulation must be made with tacrolimus powder suspended in 50:50 Oraplus and Orasweet SF. The hospital purchases this product from Newcastle Specials. (Contact information at end of document)

Responsibilities of Nephrology Team

- Assessment of the patient as suitable for this treatment
- Provision of information regarding immunosuppression, especially the risks and side effects, before commencing mediation
- Indefinite follow-up of the patient and monitoring of immunosuppressive treatment while on treatment for nephrotic syndrome
- Consideration of prophylaxis against opportunistic infection
- Provide 24 hour telephone advice and access to paediatric care for any medical concerns or infections
- Request participation in a shared care arrangement from the patient's GP when the patient's treatment has been stabilised and a shared care arrangement is clinically appropriate
- Communication regarding management plan with GP

Responsibilities of GP

- To contact the paediatric renal team to confirm that he/she is happy to accept the shared care arrangement within 28 days of receiving the request
- Communication with the paediatric renal team should the patient relapse or develop intercurrent illness
- Prescription of tacrolimus medication by brand
- Avoid all live vaccines

Responsibilities of Patient and family

- Compliance with urine checking for relapse, prescribed medications, dietary advice and regular clinic attendance
- To contact the paediatric renal team should they relapse, become unwell or be in contact with infectious diseases such as chickenpox

Tacrolimus

Indication	Immunosuppressive therapy to prevent relapse of nephrotic syndrome
Formulation and strengths available	Adoport Capsules 0.5mg, 1mg & 5mg Liquid 1mg/ml (unlicensed)
Costs	https://www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/drug-tariff Liquid 1mg/ml (Unlicensed – The price of specials in primary care varies depending on which specials manufacturer is used)
Dose	Initiation in hospital. Maintenance dose determined by trough (pre-dose) measurement of whole blood tacrolimus level. Target level usually 5-7ng/L but may be modified depending on clinical needs
Usual Dose Range	0.5mg bd up to 10mg bd
Likely duration of treatment	As long as treatment is considered appropriate by specialist
Contraindications	Known hypersensitivity to tacrolimus
Warnings	Breast feeding is contraindicated. May be used during planned pregnancy under specialist advice. **Avoid all live vaccines**
Side Effects (Full list in BNF)	Nephrotoxicity, hyperkalaemia Metabolic: hypertension, hyperlipidaemia, hyperuricaemia & diabetes Cosmetic: alopecia Neurological: tremor, dysaesthesia, rarely peripheral neuropathy Increased susceptibility to infection Increased risk of malignancy Rarely hypertrophic cardiomyopathy (only reported in children)
Common drug Interactions (Full list in BNF)	**Tacrolimus metabolism is inhibited (and toxicity enhanced) by:** Macrolide antibiotics (e.g. erythromycin, clarithromycin & azithromycin) Azole antifungal drugs (e.g. fluconazole, itraconazole, clotrimazole) Calcium antagonists (e.g. diltiazem, verapamil & lercanidipine – less so other dihydropyridine drugs) Grapefruit juice **Tacrolimus metabolism is induced (and efficacy reduced) by:** Anticonvulsants (carbamazepine, phenytoin & phenobarbitone) Some antibiotics (rifampicin & rifabutin) St Johns Wort **Nephrotoxicity enhanced by all NSAIDs**
Monitoring	FBC, U&E, LFT, tacrolimus trough levels monitored every 3 months and glycosuria and BP in nephrotic clinic. Need for renal biopsy reviewed every 3 to 5 years or earlier if clinically indicated

Mycophenolate mofetil (MMF) shared care guideline

Introduction

MMF blocks both T and B lymphocyte proliferation by inhibiting purine nucleotide synthesis. Most cell types can synthesise purines using either a *de novo* or a scavenger pathway. In contrast, rapidly proliferating lymphocytes rely on the scavenger pathway. MMF inhibits the rate limiting enzyme of this pathway (inosine monophosphate dehydrogenase - IMPDH), and for this reason is a relatively specific immunosuppressive drug. Other bone marrow-derived cells can be susceptible to MMF, and anaemia, neutropaenia and thrombocytopaenia are possible side effects.

MMF is a pro-drug, and rapidly metabolised to the active compound mycophenolic acid (MPA) in the liver. MPA is excreted in bile, and undergoes entero-hepatic recirculation. As a result, the concentration of MPA in the intestinal lumen is high. This accounts for diarrhoea, which is the other important side effect of MMF. Generic preparations of MMF (Cellcept®) are available. .

Responsibilities of Nephrology Team

- Assessment of the patient as suitable for this treatment
- Provision of information regarding immunosuppression, especially the risks and side effects, before commencing mediation
- Indefinite follow-up of the patient and monitoring of immunosuppressive treatment while on treatment for nephrotic syndrome
- Consideration of prophylaxis against opportunistic infection
- Provide 24 hour telephone advice and access to paediatric care for any medical concerns or infections
- Request participation in a shared care arrangement from the patient's GP when the patient's treatment has been stabilised and a shared care arrangement is clinically appropriate
- Communication regarding management plan with GP

Responsibilities of GP

- To contact the paediatric renal team to confirm that he/she is happy to accept the shared care arrangement within 28 days of receiving the request
- Communication with the paediatric renal team should the patient relapse or develop intercurrent illness
- Prescription of mycophenolate mofetil medication
- Avoid all live vaccines

Responsibilities of Patient and family

- Compliance with urine checking for relapse, prescribed medications, dietary advice and regular clinic attendance
- To contact the paediatric renal team should they relapse, become unwell or be in contact with infectious diseases such as chickenpox

Mycophenolate Mofetil (MMF)

Indication	Immunosuppressive therapy to prevent relapse of nephrotic syndrome
Formulation and strengths available	250mg capsules & 500mg tablets or oral suspension (1000mg / 5ml)
Costs (	https://www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/drug-tariff
Dose	Initiation in hospital. Dose usually 600mg/m^2 bd but may be reduced depending on side effects. Occasionally total daily dose is divided to 4x/day to manage abdominal side effects
Usual Dose Range	500 to 2000mg daily in divided doses
Likely duration of treatment	As long as treatment is considered appropriate by specialist
Contraindications	Known hypersensitivity to mycophenolic acid. Pregnancy and breast feeding
Warnings	Active gastro-intestinal disease. Side effects may be more common in children and the elderly **Avoid all live vaccines** If found to be pregnant, switch to alternative medication
Side Effects (Full list in BNF)	Myelosuppression Gastro-intestinal toxicity, particularly diarrhoea Increased susceptibility to infection Increased risk of malignancy
Common drug Interactions (Full list in BNF)	Antacids and colestyramine reduce MMF absorption Aciclovir & valganciclovir may increase risk of myelosuppression; plasma levels of aciclovir and valganciclovir increased by MMF
Monitoring	FBC 2 weeks after starting then 3monthly, and BP in nephrotic clinic.

Levamisole shared care guideline

Introduction

Levamisole is known as an immunomodulating rather than immunosuppressive agent. It has been hypothesized to normalise deficient cell-mediated immunity and enhance T- cell responses by stimulating T-cell activation and proliferation. Levamisole has been shown to induce a significant number of complete remissions, reduce the steroid requirements necessary to induce such a remission and decrease the incidence of relapse of the disease.

The main serious but rare side effect is reversible leukopenia and agranulocytosis. Agranulocytosis is attributed to antibody formation and absorption of immune complexes. This process initiates complement activation and cell lysis; levamisole itself does not directly damage granulopoiesis. Therefore essential FBC monitoring is organised by our service.
Note: This is an unlicensed medicine.

Responsibilities of Nephrology Team

- Assessment of the patient as suitable for this treatment
- Provision of information regarding immunosuppression, especially the risks and side effects, before commencing mediation
- Indefinite follow-up of the patient and monitoring of immunosuppressive treatment while on treatment for nephrotic syndrome
- Consideration of prophylaxis against opportunistic infection
- Provide 24 hour telephone advice and access to paediatric care for any medical concerns or infections
- Request participation in a shared care arrangement from the patient's GP when the patient's treatment has been stabilised and a shared care arrangement is clinically appropriate
- Communication regarding management plan with GP

Responsibilities of GP

- To contact the paediatric renal team to confirm that he/she is happy to accept the shared care arrangement within 28 days of receiving the request
- Communication with the paediatric renal team should the patient relapse or develop intercurrent illness
- Prescription of levamisole medication
- Avoid all live vaccines

Responsibilities of Patient and family

- Compliance with urine checking for relapse, prescribed medications, dietary advice and regular clinic attendance
- To contact the paediatric renal team should they relapse, become unwell or be in contact with infectious diseases such as chickenpox

Levamisole

Indication	Immunomodulatory therapy to prevent relapse of nephrotic syndrome
Formulation and strengths available	50mg tablets Tablets can be crushed and dispersed in water as required
Costs	Unlicensed - available via medicine importation company
Dose	2.5 mg/kg (max. 150 mg) on alternate days
Usual Dose Range	25 to 150mg on alternative days
Likely duration of treatment	As long as treatment is considered appropriate by specialist
Contraindications	Known hypersensitivity to levamisole Known blood disorders
Warnings	**Avoid all live vaccines** If found to be pregnant, switch to alternative medication Increase seizures in epilepsy
Common drug Interactions	Few adverse experiences have been reported during the treatment of frequently relapsing steroid-responsive nephrotic syndrome in children. The most common side effects are mild and include: skin rash, headaches, vomiting, flu like syndrome, nausea, transient hematuria and decreased neutrophil levels. Rare cases of fixed drug eruption have also been observed. Taste disorder. Seizures. A few cases of agranulocytosis have been observed.
Drug Interactions	Alcohol, possibility of disulfiram-like reaction May potentiate effect phenytoin or warfarin
Monitoring	FBC monitoring will be arranged monthly for 3 months after starting and then yearly)

Prednisolone prescribing information

Shared care agreement not necessary for prednisolone

Introduction

Corticosteroids are the mainstay of treatment for nephrotic syndrome. They act to inhibit the immune system at multiple levels. High doses are required to treat relapses.

The side effects of high dose long term corticosteroid use are well known (see below) and are the cause of potential morbidity in the long term. Our management strategy aims to reduce the frequency of relapses so minimising cumulative corticosteroid exposure. Side effects are monitored in the nephrotic clinics.

Responsibilities of Nephrology Team

- Assessment of the patient as suitable for this treatment
- Provision of information regarding immunosuppression, especially the risks and side effects, before commencing mediation
- Indefinite follow-up of the patient and monitoring of immunosuppressive treatment while on treatment for nephrotic syndrome
- Consideration of prophylaxis against opportunistic infection
- Provide 24 hour telephone advice and access to paediatric care for any medical concerns or infections
- Request participation in a shared care arrangement from the patient's GP when the patient's treatment has been stabilised and a shared care arrangement is clinically appropriate
- Communication regarding management plan with GP

Responsibilities of GP

- To contact the paediatric renal team to confirm that he/she is happy to accept the shared care arrangement within 28 days of receiving the request
- Communication with the paediatric renal team should the patient relapse or develop intercurrent illness
- Prescription of medication
- Avoid all live vaccines

Responsibilities of Patient and family

- Compliance with urine checking for relapse, prescribed medications, dietary advice and regular clinic attendance
- To contact the paediatric renal team should they relapse, become unwell or be in contact with infectious diseases such as chickenpox

Prednisolone

Indication	Immunosuppressive therapy to treat and prevent relapse of nephrotic syndrome
Formulations and strengths available	1mg, 5mg & 25mg tablets (plain or enteric coated) 5mg soluble tablets
Cost	https://www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/drug-tariff
Dose Range	2.5mg alternate day to 80mg daily depending on treatment regime and disease course (see pages 5-7)
Likely duration of treatment	As long as treatment is considered appropriate by specialist
Contraindications	Known hypersensitivity to prednisolone
Warnings	Prolonged treatment with corticosteroids leads to adrenal suppression. Abrupt withdrawal of prednisolone in patients on long-term treatment can lead to a hypo-adrenal crisis, and precipitate an episode of acute rejection. **Avoid all live vaccines**
Side Effects (Full list in BNF)	Metabolic: hypertension, hyperlipidaemia, diabetes, weight gain Musculoskeletal: osteoporosis and avascular necrosis Increased risk of peptic ulceration Skin thinning and easy bruising Increased susceptibility to infection Increased risk of malignancy Cataracts
Drug Interactions	Prednisolone and other corticosteroids are metabolised by multiple pathways, principally in the liver. Although drugs that either induce or inhibit these pathways will influence steroid metabolism, the prednisolone dose is not usually adjusted.
Monitoring	Glycosuria, eyes and BP in Nephrotic Clinic

E. Contacts

1. Urgent advice and referrals

Phone advice is available during office hours from the **Paediatric nephrotic specialist nurse** on 0191 2829599 and 0191 2829835

There is always an on-service **Consultant Paediatric Nephrologist** responsible for all acute referrals and in-patient nephrology. The on-call Consultant can be contacted via the Hospital **Switchboard (0191 233 6161)**.

There is always a **Paediatric renal specialist nurse** on-call day or night, contactable via switchboard.

2. Contact numbers

Paediatric nephrotic nurse specialists	0191 282 9599 0191 282 9835
Departmental secretaries	0191 282 4076
Pharmacy (Medicine Information)	0191 282 5398
Departmental email contact	PaediatricNephrologyCalendar@nuth.nhs.uk

Guideline written by:

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Private and Confidential

Shared Care Request/Confirmation

- Specialist Prescriber to complete first section of form and send to patient's GP.
- GP to complete second section of form and return to specialist prescriber within 28 days
- A copy of the full shared care guideline can be viewed at www.northoftyneapc.nhs.uk

Specialist Prescriber	
Department	
Hospital	
Telephone	
Patient details (use hospital label if preferred)	
Name	
Address	
Postcode	
NHS or Hosp reg no	**Male / Female DoB**

Treatment Requested for Prescribing in Accordance with an Approved Shared Care Arrangement					
Drug Information					
Name/Formulation		**Dose**		**Frequency**	
Name/Formulation		**Dose**		**Frequency**	
Name/Formulation		**Dose**		**Frequency**	
Indication					
Other information (if appropriate)					
Signed (Specialist Prescriber)	**Name (Print)**	**Date**			

To be completed by GP	**Please tick one box**
I ACCEPT the proposed shared care arrangement for this patient	□
I ACCEPT the proposed shared care arrangement with the caveats below	□
I DO NOT ACCEPT the proposed shared care arrangement for this patient	□
My caveats/reason(s) for not accepting include:	
Signed **Name (print)**	**Date**