

(Vice Chair)

North Central London Medicines Optimisation Network

JOINT FORMULARY COMMITTEE (JFC) – MINUTES Minutes from the meeting held on 19th May 2022

Present: Prof A Hingorani NCL JFC Chair (Chair)

Dr B Subel NCL JFC Vice Chair
Dr A Worth GOSH, DTC Chair
Dr K Tasopoulos NMUH, DTC Chair

Dr G Smith RFL, DTC Chair Mr A Sell RNOH, DTC Chair Dr A Scourfield UCLH, DTC Chair

Mr S Semple NCL ICS, Interim Chief Pharmacist; GOSH, Interim Chief

Pharmacist

Mr A Shah RNOH, Chief Pharmacist Mr S Richardson WH, Chief Pharmacist

Ms M Singh
NCL CCG, Head of Medicines Management (Barnet)
Ms R Clark
NCL CCG, Head of Medicines Management (Camden)
Mr P Gouldstone
NCL CCG, Head of Medicines Management (Enfield)
Mr A Dutt
NCL CCG, Head of Medicines Management (Islington)

Ms E Mortty NCL CCG, Deputy Head of Medicines Management (Haringey)

Dr S Ishaq WH, Consultant Anaesthetist
Dr M George UCLH, Consultant Pharmacologist
Dr L Waters CNWL, Consultant Physician in HIV

In attendance: Ms S Sanghvi North London Partners, JFC Principal Pharmacist

Mr G Grewal North London Partners, JFC Support Pharmacist
Mr R Rajan North London Partners, JFC Support Pharmacist
Ms S Amin IPMO Programme Team, Lead Pharmacist

Mr G Purohit RNOH, Deputy Chief Pharmacist Ms H Thoong GOSH, Formulary Pharmacist Ms M Kassam MEH, Senior Pharmacist Ms A Sehmi NMUH, Formulary Pharmacist Mr H Shahbakhti RFL, Formulary Pharmacist Ms M Thacker RFL, Clinical Lead Pharmacist Mr A Barron UCLH, Principal Pharmacist Dr R MacLean UCLH, Pharmacology Registrar

Ms S Y Tan NHS London Shared Service, Contract & Commissioning Support Pharmacist

Ms H Weaver NHSE, Specialised Commissioning Pharmacist

Mr H Patel Black Country & West Birmingham CCGs, Associate Director

Ms L De Cock WH, Project Manager

Ms A Drebes RFL, Consultant Haematologist
Ms C Gates UCLH, Anticoagulation Pharmacist
Dr Sarit Ghosh Enfield Unity PCN, Clinical Director

Ms H Williams NHSEI National Specialty Adviser for CVD Prevention

Mr I Man WH, Anticoagulation Pharmacist
Mr C Mitchell NMUH, Consultant Haematologist

Apologies: Prof A Tufail MEH, DTC Chair

Dr M Kelsey WH, DTC Chair

Dr D Roberts Islington Borough, Clinical Director
Dr D Burrage WH, Consultant Clinical Pharmacologist

Dr R Urguhart UCLH, Divisional Clinical Director

Ms K Delargy

Ms L Reeves

Ms N Phul

Ms S Stern

Ms W Spicer

Mr J Harchowal

BEH, Chief Pharmacist

C&I, Chief Pharmacist

MEH, Chief Pharmacist

NMUH, Chief Pharmacist

UCLH, Chief Pharmacist

2. Meeting observers

Prof Hingorani welcomed observers to the meeting.

3. Members' declaration of interests

A register of members' declarations of interest was presented as a new standing item on the agenda. Ms Sanghvi asked members and regular observers to send through any outstanding forms.

4. Minutes of the last meeting

The minutes and abbreviated minutes were accepted as an accurate reflection of the April 2022 meeting.

5. Matters arising

Discussed under agenda item 6.

6. Review of action tracker

6.1 AKIS (diclofenac injection)

In 2019, the Committee reviewed an application to use AKIS® (diclofenac injections) instead of the Voltarol® brand in NCL. The Committee requested JFC Support to liaise with the company to suggest establishing a contract price with LPP to make the cost of AKIS® competitive. JFC Support clarified with LPP that Voltarol® and AKIS® were seen as two separate entities, and would welcome a contract with both brands. JFC Support encouraged the manufacturer to approach LPP to establish a contract; however, the company has not engaged to reach a contract price. Therefore, this action is now closed.

6.2 Sucroferric oxyhydroxide (Velphoro®): primary care prescribing

At the April JFC meeting, the Committee were informed that there is no funding route available which allows recharging of the cost of Velphoro® in primary care. The Committee agreed that cost should not be a sole factor in deciding the place of prescribing, but noted from a safety perspective that monitoring and dose adjustments would still be managed in secondary care and therefore agreed it was appropriate for Velphoro prescribing to be retained in hospital only.

Decision: Approved

Prescribing: Secondary care only **Tariff status**: Excluded from tariff

Funding: NHSE

Fact sheet or shared care required: N/A

6.3 FOC scheme application update: Cladribine for highly-active relapsing-remitting multiple sclerosis in years 3 and 4

At the March JFC meeting, the Committee reviewed cladribine in years 3 and 4 of treatment. The Committee were informed that cladribine use in years 3 or 4 (or beyond) from treatment initiation was being discussed at a national level by NHSE, and decided to defer the decision until more information was available. NHSE specialised commissioning have provided an update that cladribine in years 3 or 4 remain not commissioned with no current plans for a policy. The applicant was encouraged to lead on a policy proposition. NHSE specialised commissioning also stated that cladribine from year 5 onwards remains not commissioned but is subject to a policy proposition.

As there is no policy proposition for the use of cladribine in years 3 or 4, the Committee agreed a decision should be made regarding the FOC scheme for NCL. The Committee reviewed the available evidence and agreed there is some benefit over other available treatments; with no additional safety concerns and no budget impact. The Committee noted that the summary results did not represent the more specific cohort proposed by the applicants and agreed that is plausible for a sub group of patients who are frequent relapsers but have previously responded and tolerated cladribine to regain a response with further therapy.

The Committee discussed concerns that the use of the FOC scheme would preclude the generation of new evidence. Noting that the FOC scheme is in use in other centres in the country; the Committee agreed that local data collection would be advantageous, but ideally the applicants should work with other UK centres to collect data to support a policy proposition and reduce inequity of access in the UK. In terms of cladribine use in year 5 of treatment onwards, NCL Trusts should be notified that this is outside of current commissioning criteria and not supported by the FOC scheme, and therefore there will be a potential cost burden to the Trust.

In summary, the Committee agreed to add cladribine to the NCL Joint Formulary for use in patients who are eligible under the terms of the FOC scheme in years 3 or 4 of treatment for relapsing-remitting multiple sclerosis; applicants should collect data on efficacy and safety in patients who are treated locally, and attempt to collaborate with other UK centres also utilising the FOC scheme for data collection. The applicants should also work with other UK centres in producing a policy proposition for NHSE; data collection should continue until a final decision is made on the policy proposition.

Decision: Approved

Prescribing: Secondary care only

Tariff status: Not routinely commissioned

Funding: N/A – Free of Charge

Fact sheet or shared care required: N/A

Additional information: Applicants should collect data on eligible patients (and attempt to collaborate with other UK centres to collate data). Applicants should pursue a policy proposition to use cladribine in years 3 or 4 of treatment via NHSE; data collection should continue until a final decision on the policy proposition is made by NHSE.

6.4 FOC scheme: olaparib as adjuvant therapy for triple-negative BRCA-mutated early breast cancer with residual disease following neoadjuvant chemotherapy

At the April JFC meeting, the Committee considered a FOC scheme for olaparib for high-risk BRCA-mutated HER-2 negative early breast cancer. The Committee deferred the decision for the cohort of patients with triple-negative BRCA-mutated early breast cancer with residual disease following neoadjuvant chemotherapy, and requested further information from NCL specialists as to why olaparib is preferred over capecitabine, and to determine use of the olaparib FOC scheme in other London specialist centres.

JFC Support liaised with Royal Marsden Hospital, where the FOC scheme had recently been approved; olaparib is preferred in the BRCA-mutated cohort due to a favourable tolerability profile compared to capecitabine. Further information was also sought from NCL specialists, who stated that capecitabine was not standard of care when the OlympiA trial was setup and hence not used as a comparator. In the pivotal trial which investigated capecitabine (CREATE-X), 'disease-free survival' was significantly improved in the triple-negative breast cancer (TNBC) cohort, although a very small proportion of these patients had BRCA-mutations; therefore, the effect of capecitabine in BRCA-mutated cohort is less certain. However, in OlympiA, there was significant improvement in 'invasive disease or death' with olaparib in the TNBC cohort, of which all patients had a BRCA-mutation – therefore there is more certainty of the effect of olaparib in the BRCA-mutated TNBC cohort.

Additional evidence was provided from a randomised open-label study by Robson et al, of olaparib for metastatic breast cancer with germline BRCA mutation. Patients with BRCA mutated HER-2 negative metastatic breast cancer who received no more than 2 previous chemotherapy regimens were randomised 2:1 to olaparib monotherapy or standard therapy. In the standard therapy group, 45% of patients had received capecitabine as the comparative therapy. Median progression free survival was significantly longer with olaparib compared to standard therapy (7.0 months vs 4.2 months; HR = 0.58 [95% CI 0.43 to 0.80]). There were also lower grade 3 adverse events and discontinuation rates with olaparib compared with standard therapy, although overall survival did not differ between groups.

Finally, NCCN acknowledges there is no data to choose between capecitabine and olaparib – but does include olaparib as a therapeutic option. Therefore, specialists requested that olaparib is made available in this cohort. Patients who fail on one treatment would not automatically be eligible for the other therapy; patients who fail on olaparib would progress to chemotherapy, and patients who fail on capecitabine may be eligible for FOC olaparib in the metastatic setting.

The Committee discussed the newly presented information and agreed the evidence and clinical rationale supported use of olaparib for this indication.

In summary, the Committee agreed to add olaparib to the NCL Joint Formulary for triple-negative BRCA-mutated early breast cancer with residual disease following neoadjuvant chemotherapy under the FOC scheme.

Decision: Approved

Prescribing: Secondary care only **Tariff status**: N/A – Free of Charge **Funding**: N/A – Free of Charge

Fact sheet or shared care required: N/A

6.5 Sodium zirconium cyclosilicate (Lokelma®) for chronic hyperkalaemia

At the April JFC meeting, the Committee deferred the decision to use Lokelma® to treat hyperkalaemia in several indications, as it was unclear which indications were within the scope of the NICE TA, and the budget impact to NCL for patients falling outside the NICE TA criteria. JFC Support worked with the applicant to clarify the proposed indications, with some amendments made to align with the NICE TA.

Four of the applicants' proposed indications were considered to align with one of the NICE TA indications:

- The NICE TA indication of "use in emergency care for acute life-threatening hyperkalaemia alongside standard care" in patients with a serum potassium level ≥6.0 mmol/L was considered to be an overarching indication which covered the applicants' requested indications of "patients with haemodialysis access failure", "patients on dialysis with spikes in potassium levels" and "patients with acute kidney injury"
 - Use in patients with a potassium level 5.5-5.9 mmol/L was considered to be very infrequent and would only be used in individual cases; therefore, the applicant had agreed to review these on a case-by-case basis, and if needed can be reviewed for local use.
- The NICE TA indication of "persistent hyperkalaemia and CKD (stage 3b to 5) or heart failure, if they have confirmed serum potassium of at least 6.0mmol/L and because of hyperkalaemia are not taking an optimised dose of RAASi and are not on dialysis" in patients with a serum potassium level ≥6.0 mmol/L was considered to be similar to the applicants requested indication; the applicant had amended their requested indication for CKD/HF patients only to mirror the NICE TA indication.

Two of the applicants' proposed indications were considered to sit outside of the NICE TA:

- "Use in post-renal transplant patients with a serum potassium ≥6 mmol/L": The applicant agreed that prescribing should be retained by Trusts as monitoring would also be retaubed. The duration of treatment was clarified to be approximately 6 months, at which point patients are either reassessed for dialysis or re-transplanted. The applicant estimated use in 4-5 patients across NCL per annum, costing between £5,000 and £9,500 per annum to NCL Trusts.
- "Use in patients who require hospital transfer with a serum potassium ≥5.5 mmol/L": A lower serum potassium threshold was retained as Lokelma is proposed for use in patients with mild hyperkalaemia who are awaiting transfer to a tertiary centre; Lokelma would be used to control the serum potassium to prevent the patient going into severe hyperkalaemia which would otherwise prevent patient transfer. The duration of treatment was estimated to be 3 days. The applicant estimated use in 20-30 patients across NCL per annum, costing £2,800 per annum to NCL Trusts.

The Committee considered the updated indications and budget impact. There was general support for all indications, although the Committee requested that the criteria for the use of Lokelma® for patients requiring hospital transfer be amended to clarify that this was to support the transfer of patients to renal dialysis units only. The serum potassium thresholds should also be accurately reflected in the indications on the NCL Joint Formulary. The Committee also agreed that the use of Lokelma to treat persistent hyperkalaemia in patients with CKD or heart failure can be transferred to primary care (in line with the updated NICE TA); this will be deferred to the NCL shared care group to consider development of an interface document.

In summary, the Committee agreed to add Lokelma® for the treatment of hyperkalaemia, as per the indications outlined below.

Indications:

- i. Patients with haemodialysis access failure (e.g., due to blocked or infected line) and hyperkalaemia with serum potassium ≥6.0 mmol/L
- ii. Patients on haemodialysis with spikes in potassium levels (in liaison with parent dialysis team) and hyperkalaemia with serum potassium ≥6.0 mmol/L
- iii. Patients with acute kidney injury (AKI) and hyperkalaemia with serum potassium ≥6.0 mmol/L
- iv. Post-renal transplant patients and hyperkalaemia with serum potassium ≥6.0 mmol/L
- v. Patients who require hospital transfer to a renal dialysis unit who have established haemodialysis or are awaiting to commence haemodialysis and hyperkalaemia with serum potassium ≥5.5mmol/L
- vi. For patients with persistent hyperkalaemia and chronic kidney disease (stage 3b to 5) or heart failure, if they have confirmed serum potassium ≥6.0 mmol/L and because of hyperkalaemia are not taking an optimised dose of RAAS inhibitor and are not on dialysis

Decision: Approved

Prescribing: Indications (i) to (v) - secondary care only; indication (vi) - secondary care initiation, primary care

continuation

Tariff status: In tariff Funding: Trust and CCG

Fact sheet or shared care required: For indication (vi) – deferred to the NCL shared care group to consider

development of an interface document.

6.6 Baricitinib for COVID-19

The Committee noted that the NHSE interim commissioning policy to use baricitinib for adults and children aged 2 years and older hospitalised due to COVID-19 was approved via Chair's action; NCL Trusts were notified of the approval to allow implementation without any undue delay.

Decision: Approved

Prescribing: Secondary care only **Tariff status**: Excluded from tariff

Funding: NHSE

Fact sheet or shared care required: $\ensuremath{\text{N/A}}$

7. JFC Outstanding Items & Work Plan

These items were included for information only. Any questions should be directed to Ms Sanghvi.

8. Local DTC recommendations / minutes

DTC site	Month	Drug	Indication	JFC outcome
UCLH	Feb 2022	Hydroxoco- balamin (vitamin B12)	For patients with inherited intracellular disorders of cobalamin metabolism (cobalamin defects)	Decision: Added to the NCL Joint Formulary Prescribing: TBD (see below) Tariff status: In tariff Funding: Trust and CCG Fact sheet or shared care required: No Additional information: Suitability of transfer to primary care to be considered within JFC review of BIMDG formulary
UCLH	Feb 2022	Foetal analgesia (fentanyl, vecuronium and atropine)	Use in MMC, EXIT, FETO, shunts, feticide and intrahepatic in-utero transfusion procedures	Decision: UCLH only Prescribing: Secondary care Tariff status: In tariff Funding: Trust Fact sheet or shared care required: No

UCLH	Feb 2022	FOC scheme: Trametinib [†]	Refractory, multi-focal or high-risk Langerhans cell histocytosis	Decision: UCLH only Prescribing: Secondary care Tariff status: N/A – Free of charge Funding: N/A – Free of charge
				Fact sheet or shared care required: No

[†] The relevant commissioner should be notified in line with NCL Free of Charge scheme guidance. Approval is conditional on the provision of a free of charge scheme agreement and funding statement

8.1 Intranasal dexmedetomidine for sedation in paediatrics

This item was deferred and a rapid review was requested to assess possible safety implications.

9. New Medicine Reviews

9.1 DOACs in atrial fibrillation

The Committee considered an application from NCL CCG for edoxaban to be become the preferred DOAC (direct acting oral anticoagulant) in NCL for the management of non-valvular atrial fibrillation (NVAF) in:

- 1. Patients being newly initiated on a DOAC, where clinically appropriate, in primary and secondary care (from June 2022 onwards), and
- 2. Low risk patients currently taking a different DOAC, where clinically appropriate, in primary care only (from September 2022 onwards), as part of a managed DOAC switching scheme.

The proposal had been presented following NHSE commissioning recommendations and the national DOAC procurement framework (Jan 2022) which placed edoxaban as the first line DOAC in NVAF where clinically appropriate on the grounds that: (1) it now has the lowest acquisition cost of all DOACs, and (2) that the NICE guideline NG196 (April 2021) concluded that: 'Apixaban, dabigatran, edoxaban and rivaroxaban are all recommended as options, when used in line with the criteria specified in the relevant NICE technology appraisal guidance'.

The Committee heard that there were no direct comparisons between the different DOACs on safety and effectiveness at the time of discussion, although a clinical trial examining this question has completed recruitment but has yet to report. The Committee heard that all DOACs (edoxaban, rivaroxaban, apixaban and dabigatran) have NICE TAs for the management of NVAF and all are recommended as treatment options in NG196.

The Committee considered the evidence from the network meta-analysis (NMA) by Lopez-Lopez et al (2017) conducted as a NIHR Health Technology Assessment (with the JFC Committee Chair being one of its co-authors). The authors of the NMA concluded apixaban to be the most cost-effective option for patients with NVAF, with apixaban appearing to have the best overall performance of all the DOACs against the common comparator warfarin and the lowest odds for major bleeding. It was noted that the conclusions of the NMA had initially been endorsed in the draft NICE AF guideline review but that this conclusion was overturned following stakeholder feedback (including by the manufacturers of the various DOACs other than apixaban, and by certain patient groups and expert organisations). Having initially considered the NMA to be 'a high-quality analysis of the important data' and was 'appropriate to produce an evidence-based guideline relevant to the NHS', the NICE guideline group subsequently expressed concern regarding the validity of the assumptions underlying NMA. The final NICE AF guideline concluded that all DOACs were cost effective compared to warfarin and recommended all DOACs as first line options.

The Committee also heard from Ms. Williams (Consultant Pharmacist and National Specialty Advisor for Cardiovascular Disease Prevention) about the background to the NHSE commissioning recommendations that edoxaban be placed as the first line DOAC in NVAF where clinically appropriate in the light of the negotiated reduction in its acquisition cost, and in the context of the continued growth in numbers and spend on DOACs (c10% annually in NCL). The Committee also heard about the release of a primary care network investment and impact fund (IIF) indicator which provides an incentivised payment for GPs to prescribe edoxaban in NVAF. Ms. Williams reported that the NHSE commissioning recommendations had been discussed with the National Clinical Directors for Stroke, Cardiovascular Disease Prevention and Heart Disease and had their approval. Ms. Williams also reported that in many regions edoxaban was already being prescribed first line in NVAF.

With regards to the national commissioning recommendations, the Committee noted that there is an expectation that some of the savings released from this programme should be reinvested into cardiovascular services. The 'Protect, Detect, Perfect' schemes, endorsed by the Academic Health Science Networks and supported financially by the manufacturer of edoxaban (Daiichi Sankyo) promote additional screening to identify undiagnosed AF patients. However, it was also noted also that the National Screening Committee does not recommend population or opportunistic screening for NVAF as the evidence supporting anticoagulation for screen-detected as opposed to clinically symptomatic AF is unclear.

The Committee reviewed the draft position statement which outlined the criteria for initiation of new patients on edoxaban, and potential criteria for identifying low risk groups of patients with NVAF receiving a different DOAC who might be considered for a switch to edoxaban for NVAF. It was noted that NCL haematologists, stroke, cardiology and care of elderly physicians, GPs and specialist pharmacists had been consulted on the content of the position statement and that the proposal had the support of the NCL Cardiovascular Disease and Stroke Network.

The Committee heard from Dr Drebes (Consultant Haematologist, RFL) who expressed concerns regarding patient safety should a switching programme be approved, and the complexities involved in undertaking such a programme, she also highlighted the importance of excluding any high-risk patients.

In camera, considering all the evidence together, the NICE guideline statement that 'Apixaban, dabigatran, edoxaban and rivaroxaban are all recommended as options, when used in line with the criteria specified in the relevant NICE technology appraisal guidance', the Committee were satisfied that edoxaban is sufficiently safe and effective to be placed first line in light of its reduced acquisition cost and were supportive of Phase 1 of the proposal, i.e. edoxaban becoming the preferred DOAC in NCL for the prevention of stroke in NVAF, where clinically appropriate, in primary and secondary care in agreement with the prescribing criteria proposed for initiation in the draft position statement.

With regards to Phase 2 of the proposal, i.e. switching existing low risk DOAC patients to edoxaban in primary care, the Committee was supportive of the proposal in principle, subject to a final review of the criteria for excluding high risk patients and oversight of the implementation plan for switching. The Committee highlighted the importance of being assured that any medicine safety risks associated with the switching programme should be appropriately mitigated to avoid the introduction of harm to patients and were supportive of a coordinated approach to help manage this. The Committee noted that the detail of the implementation plan, funding and other operational issues will be managed by the NCL edoxaban working group in liaison with the NCL Cardiovascular and Stroke Network. It was proposed to bring the final review of Phase 2 back to the Committee at a dedicated JFC meeting.

Decision:

Phase 1 approved (i.e. edoxaban to become the preferred DOAC for new initiations in NVAF in primary and secondary care, in line with the criteria outlined in the position statement).

Phase 2 (i.e. switching existing low risk DOAC patients to edoxaban in primary care) deferred pending final review of the criteria to exclude high risk patients and oversight on the implementation plan.

Actions:

- 1) Finalise the criteria for excluding high risk patients from switching from another DOAC to edoxaban.
- 2) Review of the implementation plan for DOAC switch.

9.2 DOACs to treat VTE in patients with active cancer (Applicant: Dr A Drebes, RFL)

The Committee considered an application for the use of DOACs (apixaban, rivaroxaban or edoxaban), factor Xa inhibitors, for the treatment of deep vein thrombosis (DVT) or pulmonary embolism (PE) in patients with active cancer. NICE guidance recommends the use of DOACs in this indication ahead of other anticoagulants, although the current formulary choice in NCL is low molecular weight heparins (LMWH).

The evidence base underpinning NICE NG158 was discussed with the Committee. The NICE Committee reviewed 3 studies for the initial treatment of VTE, 16 studies compared regimens for extended VTE treatment and 13 studies for the initial treatment of VTE in patients with cancer. In the subgroup analysis of

anticoagulants used to treat DVT in the cancer population, rivaroxaban had the lowest number of VTE recurrences, whilst apixaban had the lowest number of major bleeding events. Edoxaban had the highest number of major bleeding events. LMWH were the most expensive treatment, whilst apixaban produced the most QALYs with an ICER of £12,727/QALY compared to LMWH/vitamin K antagonist (VKA). Similar results were observed in the subgroup analysis of anticoagulants used to treat PEs in the cancer population (rivaroxaban had the lowest number of VTE recurrences; apixaban had the lowest number of major bleeding events; edoxaban had the highest number of major bleeding events). LMWH again was the most expensive treatment, and apixaban produced the most QALYs with an ICER of £15,378/QALY compared to rivaroxaban. It was noted that these cost calculations did not reflect DOAC prices under the recent framework.

In terms of safety, the DOACs have a well-known safety profile and are used extensively for non-cancer related VTE treatment. DOACs would be used in caution in some types of cancer types with a higher bleeding risk (e.g., in GI cancers). As the NICE evidence review found a lower risk of major bleed with apixaban, this would be the preferred treatment option if appropriate, in line with current NCL VTE position statement, although the choice would be tailored to the patient (based on factors such as the type of cancer, interactions with systemic anti-cancer therapy, compliance etc).

In terms of budget impact, NICE estimates consider apixaban to be the most cost-effective treatment in treatment of both DVT and PE in the cancer subgroup. An estimated 160 to 210 patients may be eligible for treatment in NCL; for up to 6 months of initial treatment, LMWH could cost up to £308,000, whereas DOACs could cost up to £71,400 – leading to a substantial cost saving if DOACs were approved. DOACs may also lead to reduced district nurse referrals for administration as compared with LMWH. In terms of convenience, DOACs would be a more convenient option as an oral therapy compared to LMWH, and requires less monitoring compared with VKAs. DOACs also use less plastics compared to LMWHs.

The Committee heard from Dr Drebes that the exact pathway would require LMWHs being initiated in the first instance by the oncology consultant as this is the safest option for immediate treatment; the patient would be reviewed by the anticoagulation service within two weeks to consider a switch to a DOAC. There is a specific antidote available for GI bleeds associated with apixaban or rivaroxaban, and otherwise there is good experience with using prothrombin complex concentrate.

In camera, the Committee agreed with the convenience provided by DOACs over LMWH and were persuaded by the evidence review and economic analysis produced by NICE. The Committee were informed of the guidance produced by RFL to outline clinical particulars with DOAC use in cancer patients (e.g., indications, cautions and interactions), and encouraged other NCL Trusts to adopt similar guidance. The NCL position statement for the choice of DOAC for VTE treatment and the NCL DOAC prescribing guidance for AF and VTE should be updated to reflect the JFC decision.

In summary, the Committee agreed to add apixaban, rivaroxaban and edoxaban to the NCL Joint Formulary for the treatment of VTE in patients with active cancer.

Decision: Approved

Prescribing: Secondary care initiation; primary care continuation

Tariff status: In tariff **Funding**: Trust and CCG

Fact sheet or shared care required: The NCL DOAC prescribing guidance and NCL position statement for the choice of DOAC for VTE treatment to be updated.

10. Any other business

The Committee agreed the June 2022 meeting could be moved forward by one week.

11. Next meeting

Thursday 23rd June 2022