

# North Central London Medicines Optimisation Network

# JOINT FORMULARY COMMITTEE (JFC) - MINUTES

Minutes from the meeting held on Monday 16 July 2018 G12 Council Room, South Wing, UCL, Gower Street, London WC1E 6BT

Present: Prof L Smeeth NCL JFC Vice-Chair (Chair)

Mr C Daff NHS Barnet, Head of Medicines Management
Ms P Taylor Haringey CCG, Head of Medicines Management

Dr D Hughes RFL, Consultant Haematologist

Mr T Dean Patient Partner
Dr R Sofat UCLH, DTC Chair
Dr M Kelsey WH, DTC Chair

Mr P Gouldstone Enfield CCG, Head of Medicines Management

Ms W Spicer RFL, Chief Pharmacist Mr S Richardson WH, Chief Pharmacist

Ms K Delargy BEH, Deputy Chief Pharmacist

Dr R Woolfson RFL, DTC Chair

Dr S Ishaq WH, Consultant Anaesthetist
Mr G Purohit RNOH, Deputy Chief Pharmacist

In attendance: Mr A Barron NCL JFC, Support Pharmacist

Dr P Bodalia UCLH, Principal Pharmacist UCLH, Clinical Pharmacologist Dr H Amer Ms I Samuel RFL, Formulary Pharmacist Ms S Sanghvi UCLH, Formulary Pharmacist Ms M Bhogal NMUH, Formulary Pharmacist Mr J Flor WH, Formulary Pharmacist Ms M Dalal NHNN, Clinical Pharmacist Dr S Ward RFL. Consultant Intensivist Mr B O'Farrell RFL, ITU Pharmacist Dr R Shulman **UCLH**, ITU Pharmacist

Apologies: Dr R MacAllister NCL JFC Chair

Dr R Urquhart UCLH, Chief Pharmacist

Mr S Semple MEH, Interim Chief Pharmacist

Dr M Dhavale Enfield CCG, GP Clinical Lead Medicines Management
Mr A Dutt Islington CCG, Head of Medicines Management

Dr T Rashid NHS Haringey, GP Clinical Lead Medicines Management
Dr A Stuart Camden CCG, GP Clinical Lead Medicines Management

Ms R Clark Camden CCG, Head of Medicines Management

Mr G Kotey NMUH, Chief Pharmacist

Dr A Bansal Barnet CCG, GP Clinical Lead Medicines Management
Dr A Mian NMUH, Clinical Director for Specialty Medicine

Dr A Sell RNOH, DTC Chair Prof A Tufail MEH, DTC Chair

Mr A Shah RNOH, Chief Pharmacist
Dr F Gishen RFL, Palliative Care Consultant

Ms L Reeves C&I, Chief Pharmacist
Ms M Kassam MEH, Formulary Pharmacist

Ms K Davies NEL CSU, Deputy Director Medicines Management

Ms A Fakoya NEL CSU, Senior Prescribing Advisor

### 2. Meeting observers

Ms M Dalal was welcomed as an observer to the meeting.

### 3. Minutes of the last meeting

The minutes and abbreviated minutes were accepted as accurate reflections of the June meeting.

# 4. Matters arising

There were no matters arising from the minutes.

# 5. JFC Work Plan & outstanding actions

# 5.1 Outstanding actions

See agenda item 7.1, 7.2 and 7.4 for outstanding action 'UMC to review the risk-benefit of CDT for DVT, high risk PE and intermediate risk PE and report back to JFC'.

#### 5.2 **JFC Work Plan**

This item was included for information only. Any questions should be directed to Mr Barron.

### 6. **Declarations of relevant conflicts of interest**

There were no declarations of interest from Committee members or applicants.

# 7. Local DTC recommendations / minutes

# 7.1 Approved

DTC site	Month	Drug	Indication	JFC outcome
UCLH	May-18	Lidocaine infusion	Chronic pain	Decision: UCLH and RFL only ‡ Prescribing: Secondary care only Tariff status: In tariff Funding: Trust Fact sheet or shared care required: No
UCLH	Jun-17	Lidocaine infusion	Perioperative pain	Decision: UCLH only ‡ Prescribing: Secondary care only Tariff status: In tariff Funding: Trust Fact sheet or shared care required: No
UCLH	May-18	Catheter Directed Thrombolysis	Iliofemoral DVT with (1) May-Thurner syndrome OR extensive clots AND (2) who have severe symptoms despite 5-7 days anticoagulation OR where a limb is threatened	Decision: RFL and UCLH only § Prescribing: Secondary care only Tariff status: In tariff Funding: Trust Fact sheet or shared care required: No
UCLH	May-18	Catheter Directed Thrombolysis	Paget-Schroetter Syndrome	Decision: RFL only (recommend patients are referred to RFL where the majority of cases are treated and where concomitant surgical intervention can be considered) Prescribing: Secondary care only Tariff status: In tariff Funding: Trust Fact sheet or shared care required: No
UCLH	May-18	Catheter Directed Thrombolysis	Upper Limb Central Venous Catheter (CVC) Related Thrombosis – last line in accordance with Trust guideline	Decision: UCLH only § Prescribing: Secondary care only Tariff status: In tariff Funding: Trust Fact sheet or shared care required: No

‡ Lidocaine infusion requires individual DTC approval to ensure risk-minimising guidelines and preassessment forms are available locally. Trusts wishing to offer this treatment may contact UCLH to ask for their protocols to be shared.

§ All decisions relating to catheter directed thrombolysis made with the caveat that approved uses of CDT must take place within the governance framework outlined. UCLH DTC requested that an update on the guidelines, pathways and outcomes from the registry are submitted by the applicants on a 6-monthly basis and set a deadline of 1 year for these to be established within practice. Enrolment of eligible patients into clinical trials of CDT to inform the evidence base should supersede approved use outside of a trial setting.

#### 7.2 Not approved

DTC site	Month	Drug	Indication	JFC outcome
UCLH	May-18	Catheter Directed Thrombolysis	Massive PE <sup>†</sup>	Decision: Not approved. Systemic thrombolysis is indicated.

<sup>†</sup> Massive or high risk PE is acute PE with sustained hypotension (SBP ≤ 90 mm Hg for at least 15 min or requiring inotropic support, not due to a cause other than PE, such as arrhythmia, hypovolemia, sepsis, or LV dysfunction), pulselessness or persistent profound bradycardia (pulse < 40 bpm), with signs or symptoms of shock.

#### 7.3 Approved under evaluation

DTC site	Month	Drug	Indication	JFC outcome
UCLH	May-18	Lidocaine infusion	Intractable headache	Decision: Approved under evaluation at UCLH only; 'n of 1' design, review at 12 months by UCLH DTC Prescribing: Secondary care only Tariff status: In tariff Funding: Trust Fact sheet or shared care required: No

# 7.4 In progress

DTC site	Month	Drug	Indication	JFC outcome
RFL	May-18	Omacor	Hypertriglyceridaemia	In progress†
UCLH	May-18	Catheter Directed Thrombolysis	Intermediate Risk PE	Deferred pending clarification of patient cohort and referral pathway.
				RFL have approved CDT for this indication and have a guideline 'Acute Pulmonary Embolism: Systemic thrombolytic management and Catheter Directed Thrombolysis for Adults'
UCLH	May-18	Catheter Directed Thrombolysis	Stent re-thrombosis	Deferred (non-formulary until clarification on use). RFL do not use CDT for this indication.

<sup>†</sup> The RFL May 2018 minutes are in the process of being amended therefore are not included in the JFC agenda stack. RFL and JFC await a prescribing protocol for Omacor from Dr Nair (Consultant Chemical Pathologist, RFL). An action plan, which incorporates advice from the NHSE/NHS Clinical Commissioners 'Items which should not be routinely prescribed in Primary Care' and the RFL prescribing protocol, will be developed by the NCL Medicines Efficiency Programme workforce and brought to JFC for consideration/approval.

#### 8. New Medicine Reviews

# 8.1 Dexmedetomidine for sedation of adult ICU patients (Applicant: Dr S Ward, RFL; Presented by: Mr B O'Farrell)

The Committee considered an appeal to use dexmedetomidine, a centrally acting pre-synaptic  $\alpha_2$  receptor agonist, for adult ICU patients who meet one of the below criteria:

- As an alternative to clonidine [off-label indication], propofol, midazolam, or lorazepam in ICU
  patients with CAM ICU +ve agitated delirium requiring light sedation (RASS 0 to -3)
- To facilitate non-invasive ventilation (NIV) on ICU, where light sedation is required to prevent the need for intubation or re-intubation
- As an adjunct for sedating intubated patients who are difficult to manage (alcohol/drug dependence, combative) where propofol or benzodiazepines have failed to achieve the target sedation level

By way of background, the Committee heard sedation is needed for ICU patients to tolerate organ systems support and associated nursing care. Light sedation is indicated for the majority of cases as it is associated with superior outcomes. Current agents used for sedation include propofol, midazolam and clonidine [off-label; centrally acting pre-synaptic  $\alpha_2$  receptor agonist], or a combination of these. The similar mechanism of action of clonidine and dexmedetomidine makes clonidine the obvious comparator, however the evidence-base for clonidine used in this setting is extremely limited. Dexmedetomidine is more selective to the  $\alpha_2$  receptor than clonidine, has a shorter half-life (1.9-2.5hrs vs. 10-41hrs) and is exclusively metabolised by the liver (60% of clonidine is excreted unchanged in the urine). Dexmedetomidine is recommended in the international guidelines for Pain Agitation and Delirium, Intensive Care Society, and by the Scottish Medical Consortium (2012) and All Wales Medicines Strategy Group.

Data for general use of dexmedetomidine in ICU was meta-analysed by NIHR which found dexmedetomidine (vs. 'any' other sedative) was associated with no impact on mortality (RR=1.03 [95% CI: 0.85 to 1.24]), a reduction in length-of-stay in ICU of -1.26 days (95% CI: -1.96 to -0.55) and no impact on the duration of mechanical ventilation (RR= -0.3 days [95% CI: -1.7 to 1.11]) however a significant decrease in duration of mechanical ventilation was reported in the Cochrane review where dexmedetomidine was associated with a 22% reduction in the mean duration of mechanical ventilation (95% CI 10% to 33%,p=0.001); four studies, 1120 participants). Dexmedetomidine was also associated with an increased risk of bradycardia (RR=1.88 [95% CI: 1.28 to 2.77]) and a trend towards reduced delirium (RR=0.88 [95% CI: 0.65 to 1.06]); this result did not reach statistical significance in the metaanalysis however the reported result was influenced heavily by inclusion of the Ruokenen study where dexmedetomidine was associated with increased delirium (43.9% dex vs 25% control; p=0.035). In the Ruokenen study the outcome measure used for delirium was a composite endpoint of "CAM-ICU and adverse events of delirium and confusion"; when the actual proportion of patients with CAM-ICU +ve delirium was compared, the groups were comparable (7% dex vs 17.9% standard care). The metaanalysis was robust in its design however was not specific to the population of interest in this application. Similar findings were reported in the Cochrane meta-analysis.

The supportive data for <u>CAM ICU +ve agitated delirium</u> comes from a double-blind, placebo-controlled, randomised controlled trial (n=71). Intubated patients with CAM-ICU +ve delirium who could not be extubated due to severity of agitation and delirium were eligible for the study. Patients who had dementia or a head injury as the cause of their altered mental state were excluded. The use of clonidine was not permitted however no other aspect of patient care was constrained. The primary endpoint was 'the number of ventilator-free hours' during ICU admission. Although a target sample size was calculated, insufficient patients were recruited due to the sponsor withdrawing funding. At baseline there were numerical differences in the duration of intubation prior to enrolment, concurrent pharmacotherapy and the proportion of emergency ICU admission; however this might be expected due to the small sample size. One patient from each arm withdrew their consent to use data and one patient allocated to the dexmedetomidine arm discontinued treatment as they met an exclusion criterion. Results showed patients randomised to dexmedetomidine had superior 'ventilator free hours in the 7 days following randomisation' compared with placebo; +17hrs (95% CI: 4 to 33.2 hrs). Similarly, use of dexmedetomidine reduced the time to extubation (-19.5 hrs [95% CI: -5.3 to -31.1hrs]), reduced time to resolution of delirium (-16hrs [95% CI: -3 to -28hrs]) and reduced the use of antipsychotics (36.8% vs. 65.6%; p=0.02). The study was at risk of bias as the pharmacist or nurse required to prepare the study drug syringes was unblinded, and dexmedetomidine lowers BP which could be observed. A three-armed study of dexmedetomidine, clonidine and placebo would have been more informative.

Supportive data for the *non-invasive ventilation (NIV)* cohort comes from two prospective studies. The Committee reviewed the most recent of the two; an unblinded, active-comparator randomised controlled trial to compare dexmedetomidine to midazolam. Adults with acute cardiogenic pulmonary oedema who were failing NIV due to patient refusal because of discomfort, claustrophobia or agitation were eligible for the study. The primary endpoint was the need for endotracheal intubation (ETI) and mechanical ventilation at any time during the study. Baseline characteristics were reasonably well balanced between arms. No patients withdrew from the study after randomisation. Results showed patients randomised to dexmedetomidine were less likely to need ETI than those randomised to midazolam (21.2% vs. 44.8% [p=0.043]). The LOS was also shorter (4.9 vs. 8.5 days [p=0.042]). Limitations of the study were the small sample, the approach to blinding was unstated and the lack of a sample size calculation. A three-armed study of dexmedetomidine, clonidine and placebo would have been more informative.

### There were no data for *patients who are difficult to manage*.

In terms of safety, the Committee heard there were no comparative data for dexmedetomidine and clonidine. Dexmedetomidine has similar rates of hypotension and hypertension compared with midazolam and propofol, however is associated with a higher incidence of bradycardia (RR=1.88). A costanalysis of drug acquisition costs showed dexmedetomidine cost up to £1,000 per patient more than off-label clonidine (£1,127 vs. £60). Patient numbers across NCL were estimated to be 218 to 273 therefore, based on 5 days of treatment per patient, the budget impact for NCL could be up to £300,000. The availability of a generic alternative may reduce overall costs. These costs were theoretically offset by a reduction in ICU stay of -1.26 days, as reported by NIHR; the Committee expressed a high degree of scepticism as to whether this cost-offset would be realised because (i) absolute differences are often smaller in the real-world setting, (ii) it is unlikely the beds would be allocated or occupied so quickly, or (iii) an empty bed is not 'zero cost' (ICU staffing costs are unlikely to change, machine acquisition costs and maintenance costs remain similar).

The Committee heard from Dr Ward that a key complication for patients at RFL is delirium; using dexmedetomidine may allow ICU to remove blocks of care (e.g. intubation) which increases the efficiency of the ICU. Improving efficiency is considered important on a backdrop of limited ICU doctors and nurses and pressure on bed space. The committee also heard about two cases where dexmedetomidine had been used to manage patients with CAM-ICU+ve delirium where all other agents had failed. Both patients had resolution of delirium within 48 hours of starting dexmedetomidine and were both successfully weaned from the ventilator – dexmedetomidine reduced both duration of mechanical ventilation and ICU length of stay for both these patients and led to a significant improvement in their agitation and delirium.

In camera, the Committee noted differences in the indications and place in therapy of dexmedetomidine across NCL; RFL would use in line with the indications proposed, UCH & WH would limit for patients unable to tolerate clonidine, UCH might use for "terminal phase of weaning off sedation as an alternative to propofol if haemodynamically compromised" and NHNN would use dexmedetomidine to replace all clonidine use. On balance, the Committee agreed the presented evidence supported the use of dexmedetomidine for difficult to manage patients on ICU however the incremental cost potentially prohibited its use. The Committee required: (i) specialists in NCL to agree a list of indications for dexmedetomidine, clearly describing its role relative to clonidine; (ii) identify methods for limiting and monitoring its use and (iii) for 'CAM ICU +ve agitated delirium' the role of antipsychotic agents (e.g. haloperidol) should be made explicit. The Committee agreed with Dr Shulmans suggestion to refer this request to the 'North East and North Central London Adult Critical Care Network' for consideration. The proposed NCL criteria should be presented to JFC for approval.

Decision: Deferred

# 8.2 Liraglutide 1.8 mg for reduction of adverse cardiovascular outcomes in patients with type 2 diabetes (Applicant: Dr S Naik [UCLH], Dr M Cohen [RFL])

The Committee considered an application to use liraglutide 1.8 mg for the reduction of adverse cardiovascular outcomes in patients with type 2 diabetes, only for those who fulfil NICE guidance for the use of a GLP-1RA and who have established cardiovascular disease. The GLP-1RAs available in NCL are liraglutide 1.2 mg and dulaglutide. NICE criteria for GLP-1RA are HbA1c ≥ 58mmol/mol or other higher level agreed with the individual) and **either** of the following criteria are met:

- Body mass index (BMI) ≥ 35 kg/m2 in those of European descent with appropriate adjustment for other ethnicities (≥32 kg/m2 for South Asian, Chinese, African Black and African-Caribbean) and specific psychological or medical problems associated with high body weight
- BMI < 35 kg/m2 and</li>

- therapy with insulin would have significant occupational implications (e.g. Class 2 driver, working at heights), OR
- weight loss would benefit other significant obesity-related comorbidities (including sleep apnoea, non-alcoholic fatty liver disease [NAFLD], CKD secondary to obesity, musculoskeletal issues due to obesity)

The LEADER study (n=9,340) was a multicentre, double-blind, randomised-controlled trial of liraglutide 1.8 mg vs placebo with a mean follow up of 3.8 years. Patients were eligible if they had an HbA1c ≥ 7.0% irrespective of the degree of antihyperglycaemic agent pre-treatment, and either age ≥ 50 years with at least one coexisting CV condition, or age ≥ 60 years with at least one CV risk factor. Patients were randomised 1:1 to liraglutide or placebo; both treatments were initiated at 0.6 mg and titrated up to a maximum of 1.8 mg if tolerated. Increasing background therapies was permitted in both arms. The primary composite outcome was first occurrence of death from cardiovascular causes, non-fatal myocardial infarction, or non-fatal stroke. At baseline, both arms were well balanced. Completion rates were high (97.0% with liraglutide and 96.6% with placebo). Results showed a relative risk reduction of 13% for the primary composite outcome (HR 0.87 [95% CI: 0.78 to 0.97]) for liraglutide 1.8 mg vs placebo. This result was driven by reductions in CV-mortality (HR = 0.78 [95% CI: 0.66 to 0.93]) and MI (HR = 0.86 [95% CI: 0.73 to 1.00]). A pre-specified subgroup analysis suggested the treatment effect was greatest amongst the 80% of the trial population who had established CVD. Study strengths are the large size and clearly defined primary outcome, which was met. The limitations are the inclusion of patients with both established CVD and CV risk factors at different age cut-offs and, importantly, no 1.2 mg dose comparator arm to establish the relative treatment effects vs. current practice.

In terms of safety, the liraglutide was associated with a lower risk of severe hypoglycaemia (rate ratio 0.69 [95% CI: 0.51 to 0.93]) but a higher risk of adverse event leading to permanent discontinuation of trial regimen. The incremental cost of liraglutide 1.8 mg to current practice (liraglutide 1.2 mg and dulaglutide) is £477.42 per patient per annum. It is difficult to estimate the number of patients who would be eligible for liraglutide 1.8 mg under this application however best estimates are that between 29% and 39% of those prescribed a GLP-1RA have established CVD; the budget impact is therefore expected to be between £595,000 and £729,000.

Given the lack of a 1.2 mg liraglutide comparator arm, the Committee considered the possible mechanism of action of liraglutide in preventing CVD; a pleiotropic 'off-target' effect could not be excluded however a reduction in cardiovascular risk factors such as blood pressure and weight (possibly HbA1c) were thought to be most likely. Liraglutide 1.2 mg is known to reduce BP and weight compared with placebo however liraglutide 1.8 mg has a marginally greater effect (LEAD3 trial). The Committee took the view that liraglutide 1.2 mg would likely have some effect on CV outcomes and the difference between liraglutide 1.2 mg and 1.8 mg was unlikely to be significant. Given the uncertain mechanism of action, the Committee took the view that patients with established CVD should continue to have their risk factors aggressively modified with proven therapies e.g. lifestyle modification, up-titrated ACE inhibitors, beta-blockers and statin therapy.

The Committee heard NCL had the highest GLP-1RA use per 1,000 patients with type 2 diabetes compared with other regions of London and there was considerable uncertainty as to whether this expenditure was offering good value. Audits in Barnet have revealed prescribing is commonly not compliant with NICE continuation criteria at 6 months, meaning real-world use is not cost-effective, however it is very difficult to withdraw treatment in those individuals who miss their treatment goals. The application was considered unusual as it would create inequity amongst patients with type 2 diabetes and established CVD as only a proportion would be eligible for a GLP-1RA (as determined by BMI ≥35 or where insulin would have significant occupational implications). Liraglutide is not licensed for the secondary prevention of cardiovascular disease.

In summary, liraglutide 1.8 mg for reduction of adverse cardiovascular outcomes in patients with type 2 diabetes, only on those who met the NICE eligibility criteria for a GLP-1RA, was considered inequitable and not a cost-effective use of NHS resources. The incremental benefit of liraglutide 1.8 mg (as compared with liraglutide 1.2 mg) was considered marginal at best and did not justify the substantial incremental cost given the low cost of established alternative approaches to modify patients' cardiovascular risk.

Decision: Not approved

Post meeting note: NICE have confirmed the GLP-1RA and SGLT2 CV safety studies will be considered as part of the NICE NG28 update. There is no timeline for this update at present.

In March 2016 the Committee added dulaglutide once-weekly to the NCL Joint Formulary for patients who met the NCL/NICE eligibility criteria for a GLP-1RA. Dulaglutide and liraglutide 1.2 mg were given equal weighting on the NCL Joint formulary. NCL clinicians had requested a 6-month evaluation period to confirm a positive real-world experience with dulaglutide before JfC removed exenatide once-weekly from the formulary. The Committee reviewed data for the use of dulaglutide in NCL which showed extensive use of this agent. The Committee noted the introduction of dulaglutide had significantly increased the number of patients prescribed a GLP-1RA and therefore had not delivered cost-minimisation as anticipated. The Committee agreed to add dulaglutide and remove exenatide MR from the NCL Joint Formulary and to review the appropriateness of increase in usage via the MEP / JfC partnership.

# 10. UPDATE: Biosimilar trastuzumab for indications where originator trastuzumab (Herceptin®) is commissioned

In April 2018 the Committee reviewed three biosimilar trastuzumab medicines; Herzuma® (Napp), Ontruzant® (MSD) and Kanjinti® (Amgen). The Committee approved Herzuma for use in NCL as all were equivalent in terms of safety and efficacy and Herzuma was the least expensive. As a consequence of the London Procurement Partnership tendering process, Ontruzant is now the preferred biosimilar trastuzumab in NCL. The Committee agreed to add Ontruzant to the NCL Joint Formulary. Procurement departments within each provider Trust should contact MSD to ensure they can meet their demand.

### 11. Interim Position statement: Freestyle Libre

The position statement was approved subject to updating the wording around the eligibility criteria. It was requested that NCL stakeholders maintain efforts to introduce Libre in NCL as other regions in London had already completed this work.

#### 12. Interim Position statement: Liothyronine

The position statement was approved subject to clarifying that patients who were newly initiated on liothyronine treatment in private health clinics should have ongoing prescriptions provided by their private doctor. NHS GPs should not take on prescribing for these patients.

## 13. Tenure of Chair (discussion of Survey Monkey results)

Following a review of the JfC Terms of Reference at the last meeting it was agreed that an online survey should be created to acquire views from the Committee members in a confidential manner regarding tenure of Chair. The Committee reviewed the results noting that 17 members responded (1 was excluded on the basis that it was a deputy chief pharmacist and chief pharmacist from same organisation) leaving 11 respondents from secondary care, 4 from primary care and 1 respondent which did not leave a name.

After an extensive discussion, the following was agreed:

- The position of Chair is subject to an application process and carries a 3 year initial term.
- At the end of the first term, the Committee may vote to extend the tenure for one additional term otherwise the position will be re-advertised.
- At the end of the second term, the position of Chair will be re-advertised; if no-one suitable is identified the Committee may vote to allow the incumbent to continue for up to one additional term whilst a suitable candidate is found.
- The Chair should give 6 month notice of their intention to terminate their tenure except in circumstances of ill health.
- In exceptional circumstances, the Committee may vote to terminate the tenure of the Chair; this will be communicated in writing. If necessary the employing organisation's HR department would be informed.

Dr Bodalia explained that the JfC does not directly employ the Chair; rather the position of Chair is available in the form of a professional secondment. The position of Chair is remunerated to cover the commitment for relevant activities as specified within the Job Description (including agenda planning, review of trial data supporting new medicine applications, approval of minutes and documents, etc.). JfC funds are paid to the Chair's employing organisation to pay for backfill as required up to 0.15 WTE.

#### 14. Next meeting

Monday 20 August 2018, G12 Council Room, South Wing, UCL, Gower St. WC1E 6BT

# 15. Any other business

Nil