Memoria de la Beca de ampliacion de estudios de la SEFH

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    - Hipertensión Pulmonar
  - REUNION FARMACEUTICOS Tx CARDIOTORACICO. DUBLIN
- HAYFA LYSTER
- SOTPA. SOLID ORGAN TRANSPLANT PHARMACISTS

INTRODUCCIÓN

The **ROYAL BROMPTON AND HAREFIELD TRUST** provides 512 inpatient beds**:**

- 360 are general acute beds,
- 59 paediatric beds and
- 93 critical care beds.

They deliver in the region of 38,619 inpatient admissions and 178,495 outpatient attendances (2014/15).

ROYAL BROMPTON

Established in 1841 for **tuberculosis sufferers**.

- Founded by Philip Rose as a charitable endeavour in the era before universal free healthcare.
- Established Europe's **first cystic fibrosis clinic in 1964** and is the **largest treatment** centre for the condition **in Europe**.
- **Other clinics of respiratory disorders:**
  - **Severe asthma**. Largest asthma clinic in London and the south east, and the largest occupational lung disease service in the UK.
  - **Chronic obstructive pulmonary disorder (COPD**), COPD clinic for patients with bronchitis and emphysema treats patients from all over the UK
  - **Interstitial lung disease (ILD)** Largest ILD clinic in the UK
  - **Pulmonary Hypertension**
  - Allergies
  - Occupational lung disease
  - Sleep disorders
  - Lung cáncer. Largest centre for the surgical treatment of lung cancer.

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HAREFIELD HOSPITAL

Established in **1915** to nurse injured First World War soldiers from **Australia and New Zealand**.

After the war ended, **tuberculosis patients** began to be treated there.

By 1948, it had become part of the **NHS** and its major inroads into heart surgery began, culminating in its **first heart transplant in 1980** and the **world's first heart and lung transplant three years later (1983)**.

- 1,300 staff
- 5 operating theatres and
- 4 catheter laboratories.
- 168 beds, including beds for:
  - cardiac and thoracic surgery
  - cardiology
  - day case unit
  - adult intensive care
  - the transplant unit.
- Pioneer work in the development of '**artificial hearts'** (**LVADs**).
- **Heart attack centre** we deal with heart attack emergencies from outer north-west London, providing primary **angioplasty** in our specialist catheter laboratories. We believe our arrival-to-treatment time of **27 minutes** is one of the fastest in Europe.
- **Minimally invasive surgery** which allows some patients to undergo surgery through a small incision, minimising the impact of the procedure.
- **Major centre for the treatment** of:
  - lung cancer (surgery)
  - chest cancer and oesophagal cancers
  - other chest surgery.

HAREFIELD HOSPITAL. ACTIVIDAD

- Total Nº de camas: 168
- Camas Trasplante pulmonar: 30
- Médicos Consultants de Trasplante pulmonar : 4
- Farmacéutica Consultant Trasplante pulmonar: 1
- Farmacéuticos especialistas: 15
- Nº Trasplante pulmonar 2016: 40 (24 FQ, 6 EPOC, 2 FPI…)
- Nº Trasplante cardiaco 2016: 20
- Consultas externas pacientes Trasplante : 800 (Pulmonar y Cardiaco)

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HAREFIELD HOSPITAL. ACTIVIDAD

Table 7.10 Cardiothoracic transplants from deceased donors, 1 April 2016 - 31 March 2017 (2015-2016), by age group and centre

Transplant centre	Transplant type										TOTAL	
	Heart						Heart- lung		Lung(s)			
	Non-urgent		Urgent		Super-urgent							
Adult												
Birmingham	1	(3)	20	(23)	5	(0)	0	(1)	15	(24)	41	(51)
Glasgow	2	(0)	9	(7)	4	(0)	0	(0)	0	(0)	15	(7)
Great Ormond Street	0	(0)	0	(0)	0	(0)	0	(0)	1	(0)	1	(0)
Harefield	3	(4)	18	(21)	0	(0)	0	(1)	41	(49)	62	(75)
Manchester	5	(2)	20	(27)	3	(0)	1	(2)	33	(21)	62	(52)
Newcastle	5	(4)	23	(19)	0	(0)	0	(0)	33	(42)	61	(65)
Papworth	19	(21)	25	(30)	3	(0)	1	(2)	43	(37)	91	(90)
TOTAL	**35**	**(34)**	**115**	**(127)**	**15**	**(0)**	**2**	**(6)**	**166**	**(173)**	**333**	**(340)**
Paediatric[1]												
Great Ormond Street	3	(3)	11	(12)	0	(0)	0	(0)	8	(7)	22	(22)
Harefield	0	(0)	1	(0)	0	(0)	0	(0)	0	(0)	1	(0)
Newcastle	2	(1)	16	(18)	0	(0)	0	(0)	2	(2)	20	(21)
TOTAL	**5**	**(4)**	**28**	**(30)**	**0**	**(0)**	**0**	**(0)**	**10**	**(9)**	**43**	**(43)**

[1] Paediatric recipients are aged under 16 years at time of transplant

CATEGORÍAS DE FARMACÉUTICOS EN EL NHS

- Pre-Registration
- Rotational
- Clinical
- Specialist
- Senior
- Consultant

Agenda for Change pay bands and spine points from 1 April 2017 (England)

This table shows the values of the Agenda for Change pay spine points for 1 April 2017. Full details of the Agenda for Change pay arrangements are available in the *NHS terms and conditions of service handbook*.

Spine point	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Band 1	REMOVED	£15,404	£15,671																										
Band 2		£15,404	£15,671	£16,104	£16,536	£16,968	£17,524	£18,157																					
Band 3						£16,968	£17,524	£18,157	£18,333	£18,839	£19,409	£19,852																	
Band 4											£19,409	£19,852	£20,551	£21,263	£21,909	£22,128	£22,683												
Band 5																£22,128	£22,683	£23,597	£24,547	£25,551	£26,565	£27,635	£28,746						
Band 6																					£26,565	£27,635	£28,746	£29,626	£30,661	£31,696	£32,731	£33,895	£35,577

Spine point	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Band 7	£31,696	£32,731	£33,895	£35,577	£36,612	£37,777	£39,070	£40,428	£41,787																				
Band 8 Range A								£40,428	£41,787	£43,469	£45,150	£47,092	£48,514																
Band 8 Range B												£47,092	£48,514	£50,972	£53,818	£56,665	£58,217												
Band 8 Range C																£56,665	£58,217	£60,202	£63,021	£67,247	£69,168								
Band 8 Range D																				£67,247	£69,168	£72,051	£75,573	£79,415	£83,258				
Band 9																								£79,415	£83,258	£87,254	£91,442	£95,832	£100,431

Annually earned pay points – see the *NHS terms and conditions of service handbook*.

Capsic

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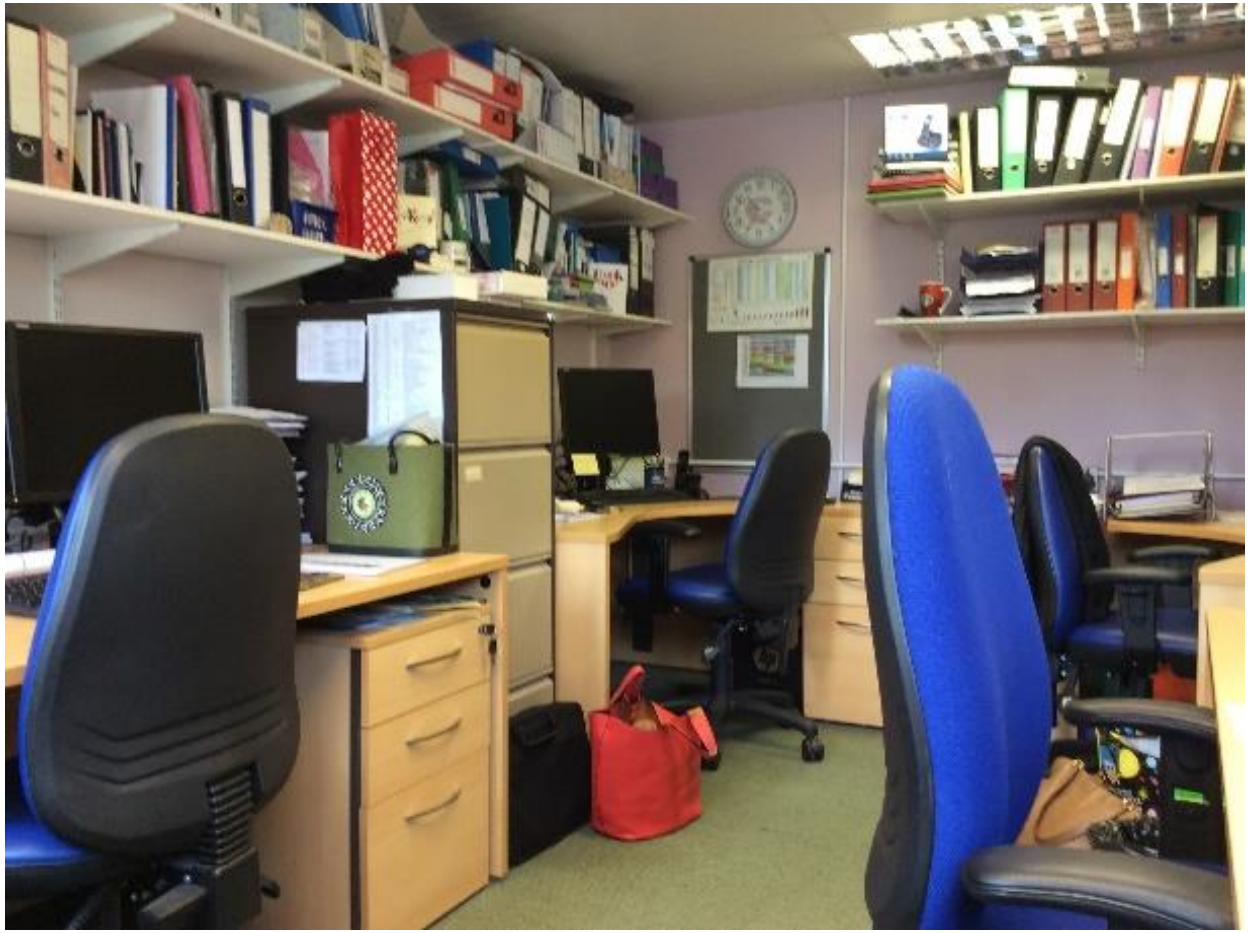
HAREFIELD HOSPITAL. RUTINA DIARIA DE LOS FARMACÉUTICOS

- Revisión y validación de tratamientos de ingresos y cambios de tratamiento de la tarde y la noche anterior
- Handover (resumen de la guardia)
- Pase de visita con el equipo multidisciplinar
- Revisión de los cambios de tratamiento realizados
- Suministro de medicamentos fuera de stock de planta
- Reuniones de trabajo
- Ajuste de dosis de inmunosupresores
- Resolución de consultas
- Búsquedas bibliográficas
- Elaboración de protocolos

HAREFIELD HOSPITAL. SALA DE TRABAJO DE LOS FARMACÉUTICOS



HANDOVER (resumen de la guardia)

- Periodicidad diaria
- Asistentes:
  - Médicos Consultants
  - Médicos Rotational
  - Farmacéuticos
  - Microbiólogos
  - Enfermeras
  - Fisioterapéutas
  - Dietistas
- Información de los medicos de guardia de lo ocurrido durante la tarde-noche a los pacientes ingresados.

PASE DE VISITA

- Periodicidad diaria
- Participantes:
  - Médicos Consultants de Trasplante pulmonar
  - Médicos Rotational
  - Farmacéuticos
  - Enfermeras
- Reunión inicial para revisar la evolución de cada paciente en 24 h
- Revisión de tratamientos (dosis, ajustes, interacciones…), analíticas, pruebas radiológicas, notas de enfermería
- Visita a todos los pacientes ingresados (20 aprox)

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PASE DE VISITA DIARIO. Documentación

Lung Transplant List Wednesday, 31 May 2017

Amy 6121, Jai 6126 MC 5562, Rowan fax 01895 826520 Theatre code 4231 SpR office C13568, Tissue typing 5774, CT room 5049, Portable XR 6124 Immuno lab 5570
TLI: peterhoskin@nhs.net; 07918 375 621 (SpR); 0203 826 2436 (secretary)
REDUCE TACROLIMUS LEVELS WHEN STARTING AZOLES!! Never stop TACROLIMUS (Tue & Fri)
Tac levels 8-13 (normal first 3 months), 5-10 >3 months # Tac levels done daily and sirolimus twice weekly (Mon-Thurs)
All lung transplants need SPECT, HRCT& PFT's on discharge

t	Background	Progress	Immunos	Level Due	Micro with Dates & Abx	Plans/Jobs
Ann nce 20 4	BSSLTx 16/5/17 Alpha-1 AT Anemia	Extubated 17/05 - OK kidney ICU stepdown 18/5 Epidural out 1600pm 19/05 OK liver. Alta el lunes.	Tac MMF Pred	Tac wed	Ceftaz and Teic 16/05	Monitor pain – using TENs Monitor CRP – remains elevated, clinically well
h Egan 60 987	BSSLTx 20/5/17 CF	Apical drains out Left basal drain out 26/05 Alteraos de la vision	Tac Pred MMF	Tac wed		Left PTX – surgical drain inserted, removed 30/5. **Small remaining pneumothorax** Femoral line removed Tuesday Monitor inflammatory markers (improving Tues)
Mills 2 57	BSSLTx COPD 13/05/17	Extubated on NIV 15/05 Stepped down to ward 17/05	Tac MMF Pred	Tac wed	Top Meropenem	CT chest done Tuesday Lung function end of week Aim home early next week
ewis 04	BSSLTx 13/4 for CF Fallo respiratorio tipo 2.	T2RF post transplant requiring NIV Non invasive ventilation Subcutaneous emphesema – daily CXRs Low Hb – ferrinject 25/4. 2 units of blood 29/4 AKI – recurring. SALT r/v – can E+D as normal Distended bowel – ?Functional gastric outflow tracto obstruction. OGD – oesophagitis. Botox given Alta mañana ??	Tac MMF Pred	Tac wed	Ceftazidim BD (renal dosing) – stopped 21/04 Teic 18/04 – 26/4 Colistin 23/04 Meropenem 25/4 Azithro M/W/F Posa 26/4 Anticuerpo trimestral inyecto	**BAL1/5 – scanty pseudomonas aeruginosa** Femoral line removed weekend, CRP improving Abx stopped Tues Monitor inflam markers Lung function requested tues Aim home end of week D/C sum partly done (please add OGD biopsy results and OP OGD/ colonoscopy plan) **Chase OGD biopsy results** **Dropping Hb with oesophagitis on OGD - ?repeat OGD +/- colonoscopy as OP** **RBC transfusions 19/5 and 28/5 – ?repeat HLA needed end of week**
riday 8 952	BSSLTx COPD 21/5/17	Extubated 23/05	Tac Pred MMF	Tac wed	Ceftaz + Teic	Stepped down Monday L chest drain removed but persisteing effusion – to monitor with CXRs
impson 7 64	BSSLTx Alpha-1 AT 09/2016	Reduced Lung function and SOB Timoglobulin. Chest sepsis Evidience of rejection on recent admission – pulsed with Methyl Pred DSA ??	Tac MMF – held Pred	Tac wed	Ceftaz +Teic 18/05	Keep on 1mg/kg steroids ?Bronch on Friday For RATG 30/5/17 after central line insertion
Khan 77	HLTx 7/5/17 Transposition of great arteries, pulm HTN Coag disorder	Alta el viernes.	Tac MMF Pred	Tac wed	Ceftaz and Teic 19/05	Mini-trache not removed tues ?wed High BMs – monitor Now on oral tac **Worsening renal function on PO BD 40mg fruse – ?adjust doses**
axter 899 73	Heart lung transplant 2001	AKI with acidosis Sepsis ?source Alta pronto. ¿?	Siro Pred MMF	Siro wed	Por daño renal con TAC	Abx stopped Tuesday Bisop/ ramipril restarted tues Monitor inflam markers/ U+Es wed Consider home wed/ thurs
Watson 68	BSSLTx CF 10/05/2017	BNO 5-6/7 – gastrograffin started	Tac MMF Pred	Tac wed	Mero +Teic 15/05 23/5 Mero/Teic /Colisitin 25/5 -	Regular birding + saline + carbocisteine Bronch 26/05 – Chase results

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GUIA DE PRESCRIPCIÓN EN TX

ROYAL BROMPTON AND HAREFIELD NHS TRUST

HEART FAILURE & TRANSPLANT PRESCRIBING GUIDELINES

For Adult Patients in the Transplant Unit

23rd EDITION (JULY 2015)

Disclaimer: Information provided within this guideline is with respect to the use at the Royal Brompton and Harefield NHS Foundation Trust. This Guideline is for reference only and for interpretation by clinical healthcare professionals. The authors do NOT accept any responsibilities in any form in relation to the use and interpretation of this document when used outside of the Royal Brompton & Harefield NHS Foundation Trust [1]

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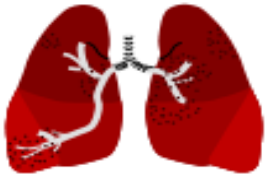
EXAMPLE OF TYPICAL DRUG REGIMEN FOR ADULT HEART-LUNG OR LUNG TRANSPLANT PATIENT



1) **Pre-op** Mycophenolate 1g po 2-4 hrs pre-op
   Tacrolimus 0.05mg/kg po
2) **During surgery** Methylprednisolone 1g iv

3) **Day 1:** (**day the patient returns to ITU after surgery**)
   Methylprednisolone 125mg BD iv
   Mycophenolate 500mg BD po
   Tacrolimus 0.05mg/kg BD po (adjust according to levels)

NB Check patient's records and donor results for CMV & Toxoplasmosis status also commence prophylactic therapy:

- For 72 hours: Tazocin 4.5g TDS iv PLUS Teicoplanin 400mg BD for 3 doses then OD
- in CF and bronchiectetic patients - for 2 weeks (D/W consultant): Tazocin 4.5g TDS iv + Tobramycin 3mg/kg OD iv + Teicoplanin 400mg BD iv for 3 doses then OD (check sensitivities of last sputum culture)
- Amphotericin (Fungizone) 0.5mg/kg (max 25mg) BD nebulised while building works exist
- Aciclovir 200mg QDS, po OR Valganciclovir 450-900mg OD po / Ganciclovir 100-250mg BD iv (depending on CMV status) for 3 (or 6) months – if unknown commence valganciclovir 450mg OD po/ ganciclovir 100mg BD iv
- Co-trimoxazole 480mg OD, po
- Nystatin 1ml QDS, po until eating and drinking
- Ranitidine 50mg TDS, iv
- Ferrous Sulphate 200mg TDS po/ Ferrous fumarate (Fersamel) 10ml BD

4) **Day 2:** Reduce methylprednisolone to 125mg OD, iv , rest as above.

5) **Day 3:** Prednisolone 1mg/kg, po (max 70mg) to reduce by 5mg /day
   Continue prophylactic therapy
   NB If CMV status of donor is still unknown increase valganciclovir to 900mg OD po if recipient is CMV negative!!

6) **By Day 7:** Tacrolimus dose for blood level of 8-13ng/ml
   Mycophenolate 500mg BD po
   Prednisolone 15mg OD po
   Aciclovir 200-800mg QDS, po, OR Valganciclovir 450-900mg OD, po, to continue for three months post-transplant
   Co-trimoxazole 480mg OD, po, indefinitely
   Nystatin 1ml QDS, po until eating and drinking
   Ranitidine 150mg BD, po
   Alendronate 70mg ONCE weekly (unless contraindicated)
   Calcichew D3 forte 2 tabs OD
   Ferrous Sulphate 200mg TDS po

NIVELES DE TACROLIMUS:

- 8-13 ng/ml, 3 primeros meses
- 5-10 ng/ml, a partir del 3º mes

PROFILAXIS CMV:

- Valganciclovir 450mg/900mg OD po for THREE months
- 6 months in CMV D+/R- patients

AMFOTERICINA B:

0.5mg/kg (max 25mg) BD nebulised while building works exist

Combinan **TAC iv y oral** hasta asegurar absorción oral

ANTI-INFECTIVE PROPHYLAXIS

To contain the problem of VRE and other antibiotic-resistant organisms within the unit the antibiotic policy is as follows:

- **Cephalosporins should be avoided whenever possible.**
- **To continue for 72 Hours ONLY**

LUNG Transplantation :

Non-Cystic Fibrosis patients:

Unless there is documented Pseudomonal infection (e.g. CF and bronchiectic), ALL transplants post-operatively should receive for 72 hours ONLY:

- Tazocin 4.5g IV TDS PLUS Teicoplanin 400mg BD for 3 doses then OD
- In penicillin-allergic patients, then,:

  Teicoplanin 400mg IV BD for 3 doses then OD, PLUS

  Ciprofloxacin 400mg IV BD for 72 hours ONLY

Cystic Fibrosis and Bronchiectetic patients:

The appropriate antibiotic regimen is often predetermined during assessment and is written in the medical notes, or is available via the respiratory consultant on-call who can liase with the referring CF centre. When culture results are not available, then prescribe:

- Tazocin 4.5g TDS iv PLUS Tobramycin 3mg/kg OD iv may be used for empirical anti-pseudomonal cover PLUS Teicoplanin 400mg BD for 3 doses then OD iv

- In penicillin-allergic patients, then,:
  - Ciprofloxacin, only IF the organism has documented recent susceptibility, else Chloramphenicol
  - PLUS Tobramycin 3mg/kg OD iv may be used for empirical anti-pseudomonal cover PLUS Teicoplanin 400mg BD for 3 doses then OD iv

Duration of Prophylaxis: Discuss with consultant, usually 2 weeks.

PROPHYLACTIC THERAPY (contd)

CMV and toxoplasmosis prophylaxis:

	Recipient	Donor	Give
CMV 3 months treatment	+	+ OR -	Valganciclovir 450mg od
	-	Unknown	Valganciclovir 450mg od until Donor status clarified
	-	+	Valganciclovir 900mg od (followed by a further 3 months at 450mg OD)
	-	-	Aciclovir 200mg QDS

ANTIFUNGALS – ITRACONAZOLE / FLUCONAZOLE / NYSTATIN

1. NYSTATIN continues as 1ml QDS po, as its action is local.
2. POSACONAZOLE – (IV)

   300mg BD for 24 hours then 300mg OD thereafter via a CENTRAL line, administered over approximately 90 minutes.

   Do NOT administer IV when CrCl <50ml/min, due to cyclodextran content of IV formulation.
3. VORICONAZOLE (iv)–

   Loading dose: 6mg/kg BD for 24 hours, then

   Maintenance dose: 4mg/kg BD for 6-27 days (can reduce to 3mg/kg if dose not tolerated).

   Do NOT administer IV when CrCl <50ml/min, due to cyclodextran content of IV formulation.

   IV administration: in 250ml N/S or 5% glucose, over 2 hours.
4. CASPOFUNGIN (iv) –

   Loading dose= 70mg, followed by:

   50mg OD iv in patients <80kg

   70mg OD iv in patients >80kg

   35mg OD iv in severe liver impairment (Child Pugh C)
5. FLUCONAZOLE – same as the oral dose:

   Prophylaxis: 50mg OD iv

   Treatment: 400mg OD iv

AJUSTE DE DOSIS DE INMUNOSUPRESORES

- Periodicidad diaria
- Asistentes:
  - Médicos Consultants
  - Médicos Rotational
  - Farmacéuticos especialistas en trasplante (Tx)
- Revisión de los niveles de inmunosupresores de los pacientes ingresados.
- Niveles diarios para los recién trasplantados y dos días por semana el resto
- Los niveles de tacrolimus aparecen en la PEA

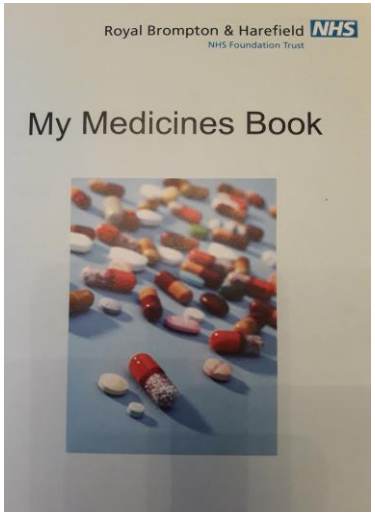
INFORMACIÓN AL ALTA AL PACIENTE TRASPLANTADO

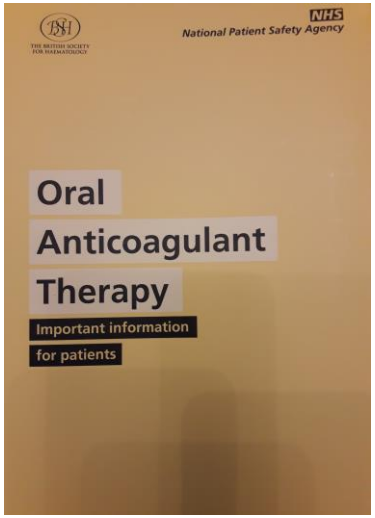
- Realización: Farmacéutico especialista en Tx pulmonar
- Dos semanas tras el trasplante y, al menos, una semana antes del alta
- Dos reuniones en la habitación del paciente
- Información de los medicamentos al paciente trasplantado
  - Para qué sirven
  - Cómo se toman
  - Interacciones
  - Efectos adversos
  - Duracion del tto

- Explicación del “home delivery” de los medicamentos no dispensables en oficina de farmacia tras el trasplante (inmunosupresores, antifúngicos, antivirals, antibióticos inhalados, etc..)

CONSULTA EXTERNA DE ATENCIÓN FARMACÉUTICA

- Realización: Farmacéutico especialista en Tx pulmonar
- Periodicidad: Visitas cada 6 meses
- Tras la visita con el médico
- Nº de pacientes: 20 pacientes/día
- Procedimiemtos:
  - Evaluar adherencia
  - Repaso del diario de medicamentos
  - Repaso de la SPD
  - Problemas relacionados con los medicamentos
  - Efectos adversos
  - Anticoagulación. Libro amarillo
  - Niveles de TAC (cada 2 meses)
  - Recomendaciones al GP (p ej: Ca+vitD)
  - Problemas con Homecare
  - Dudas y consultas
  - Registro en la historia clínica del paciente de la información recogida para ser leída por el médico especialista y por el médico de familia





DISPENSACIÓN AMBULATORIA

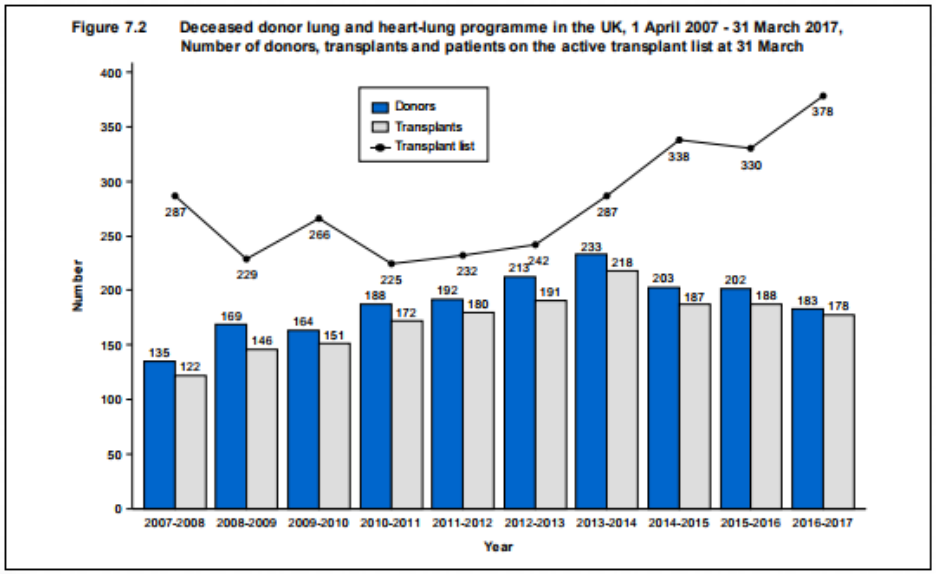
- En la farmacia del hospital se dispensa:
  - medicamentos al alta de los pacientes ingresados y
  - los cambios de tratamiento que se realizan cuando el paciente acude a consulta con el especialista
- Se entregan medicamentos para 15 días de tratamiento (no se fraccionan envases)
- La prescripción médica se envía a HOMECARE (empresa de home delivery) vía fax (prescripción por farmacéutica consultant)
- Homecare envía los medicamentos a la casa del paciente antes de 15 días desde la recepción de la prescripción
- Dispensan farmacéuticos y técnicos tras revision por farmacéutico.
- Robot de dispensación

REVISIÓN DE ANTIMICROBIANOS EN UCI

- Frecuencia semanal
- Asistentes:
  - Microbiólogo Consultant
  - Médicos intensivistas
  - Farmacéutica especialista en antimicrobianos
  - Farmacéutica especialista de UCI
  - Farmacéutica especialista de Trasplante
- Repaso de todos los tratamientos antimicrobianos de los pacientes Trasplantados:
  - Idoneidad
  - Dosis
  - Duración de tto
  - Ajustes
  - Adición de otros antimicrobianos: cambios de tto

MULTIDISCIPLINARY TEAM MEETING (MDT)

- Periodicidad semanal
- Asistentes:
  - Médicos Consultants
  - Médicos Rotational
  - Farmacéuticos
  - Microbiólogos
  - Enfermeras
  - Fisioterapéutas
  - Dietistas
- Discusión de la idoneidad del Trasplante en pacientes en lista de espera



MEDICINES SAFETY MEETING (MSM)

- Periodicidad semestral
- Liderado por Farmacia
- Participantes:
  - Farmacéuticos
  - Médicos
  - Enfermeras
- Se analizan:
  - Errores de medicación
  - Errores de administración
  - Errores de Almacenamiento
  - Problemas de logística
  - Resultados de auditorías
- Se proponen entre todos acciones de mejora

PRESCRIPCIÓN ELECTRÓNICA ASISTIDA: MED CHART

MedChart - Windows Internet Explorer

MedChart
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R39
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Prescribing Medication Chart - [redacted] (MISS)

Alastair Hill (Pharmacist)

Close View Patient Print Reference Viewer Help Lock Logout

[redacted] (MISS), PAS No: 15/06460, NHS No: 444 176 3026, DOB:01-Jun-1987, Age:30 years, Weight:52 kg (19-May-2017), BMI:Unknown, BSA:Unknown

Allergies: Product Allergy to TAZOCIN, Product Allergy to COSMOFER, Substance Allergy to aztreonam, Substance Allergy to ceftazidime, Substance Intolerance to iron - IV iron Add

Meds On Adm - 27 | Scheduled - 23 | Variable Dose - 3 | PRN - 8 | Stat | Discharge - 25 | Summary

Remove Add Quick List Protocol Transfer From Admission Reconciliation Set Source Comment Select All Clear All

Medication	Dose	Details
ADCAL -D3 chewable tablet 25-May-2017 Simran Uppal (Pharmacist)	DOSE: 2 Chewable Tablets Oral Twice A Day (08:00, 18:00)	Sources: Summary care record; Clinic letter; Prescribing Plan: Continue / Change / Cease / Suspend / Withhold To Discharge / Unplanned
azithromycin 250mg Capsule 25-May-2017 Simran Uppal (Pharmacist)	DOSE: 250 mg Oral Once A Day (08:00) On Mon, Wed, Fri Avoid indigestion remedies 2 hours before or after this medicine. Take this medicine on an empty stomach - 1 hour before or 2 hours after food.	Sources: Summary care record; Clinic letter; Plan Status: Continued
colecalciferol Oral Liquid 25-May-2017 Simran Uppal (Pharmacist)	DOSE: 3200 units Oral Once A Day (08:00) Vitamin D	Sources: Summary care record; Clinic letter; Prescribing Plan: Continue / Change / Cease / Suspend / Withhold To Discharge / Unplanned
CREON 10000 capsules of gastro-resistant granules 25-May-2017 Simran Uppal (Pharmacist)	DOSE: 1 to 30 Gastro-Resistant Capsules Oral Three Times A Day (06:00, 12:00, 18:00) with meals	Sources: Summary care record; Clinic letter; Plan Status: Continued
CREON 10000 capsules of gastro-resistant granules Simran Uppal	DOSE: 1 to 30 Gastro-Resistant Capsules Oral When Required (09:29) minimum dosage interval 10 minutes	Sources: Summary care record; Clinic letter; Plan Status: Continued

A list of medications on admission exists.
Medications on admission list is incomplete

Comments: Ohx transferred from ICIP (on the 22.5.17 by Pauline Ly)

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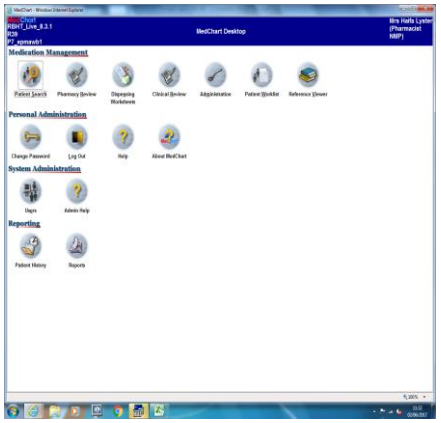

CONCILIACIÓN DE MEDICAMENTOS AL INGRESO

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Admission Reconciliation - [redacted] (MISS)

Alastair Hill (Pharmacist)

Continue Cancel Help Lock

[redacted] (MISS), PAS No: 15/06460, NHS No: 444 176 3026, DOB:01-Jun-1987, Age:30 years, Weight:52 kg (19-May-2017), BMI:Unknown, BSA:Unknown

Allergies: Product Allergy to TAZOCIN, Product Allergy to COSMOFER, Substance Allergy to aztreonam, Substance Allergy to ceftazidime, Substance Intolerance to iron - IV iron

Medications on admission exist

Medications On Admission	Status	Differences	Comment	Plan
ADCAL -D3 chewable tablet DOSE: **2 Chewable Tablets** Oral **Twice A Day** (08:00, 18:00) **Sources:** Summary care record; Clinic letter;	Unplanned			Unplanned
azithromycin 250mg Capsule DOSE: **250 mg** Oral **Once A Day** (08:00) **On Mon, Wed, Fri** Avoid indigestion remedies 2 hours before or after this medicine. Take this medicine on an empty stomach - 1 hour before or 2 hours after food. **Sources:** Summary care record; Clinic letter;	Continued		4 cp SU 31.5.17	
colecalciferol Oral Liquid DOSE: **3200 units** Oral **Once A Day** (08:00) Vitamin D **Sources:** Summary care record; Clinic letter;	Unplanned			Unplanned
CREON 10000 capsules of gastro-resistant granules DOSE: **1 to 30 Gastro-Resistant Capsules** Oral **Three Times A Day** (06:00, 12:00, 18:00) with meals **And** DOSE: **1 to 30 Gastro-Resistant Capsules** Oral **When Required** (09:29) minimum dosage interval 10 minutes with snacks **Sources:** Summary care record; Clinic letter;	Continued	Multi-line order: unable to verify differences.		
dornase alfa Nebuliser Solution DOSE: **2.5 mg** Inhalation **Once A Day** (08:00) DNASE **Sources:** Summary care record; Clinic letter;	Unplanned			Unplanned
ferrous sulphate 200mg Tablet DOSE: **200 mg** Oral **Once A Day** (08:00) **And**	Unplanned			Unplanned

Comment:

Medication Reconciliation Verified Continue Cancel

105%

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CONCILIACIÓN DE MEDICAMENTOS AL INGRESO

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Admission Reconciliation - [redacted] (MISS)

Alastair Hill (Pharmacist)

Continue Cancel Help Lock

[redacted] (MISS), PAS No: 15/06460, NHS No: 444 176 3026, DOB:01-Jun-1987, Age:30 years, Weight:52 kg (19-May-2017), BMI:Unknown, BSA:Unknown

Allergies: Product Allergy to TAZOCIN, Product Allergy to COSMOFER, Substance Allergy to aztreonam, Substance Allergy to ceftazidime, Substance Intolerance to iron - IV iron

Medications on admission exist

DOSE: 2 Capsules Oral Twice A Day (08:00, 18:00)
Sources: Summary care record; Clinic letter;

Inpatient Medications not Sourced from Medications on Admission	Status	Differences	Comment	Plan
ADCAL -D3 chewable tablet DOSE: 1 Chewable Tablet Oral Once A Day (08:00)	New		1 op SU 25.5.17	Add To Meds On Adm
alendronate sodium 70mg Tablet DOSE: 70 mg Oral In The Morning (07:00) On Thu Once weekly on a Thursday	New		1 op SU 31.5.17	Add To Meds On Adm
amphotericin (FUNGIZONE) inhalation DOSE: 25 mg Inhalation Every 12 Hours (06:00, 18:00) Reconstitute a 50mg vial with 10mL of water for injection to produce a 5mg/mL solution. Withdraw the required amount and further dilute if necessary to a minimum of 3mL	New			Add To Meds On Adm
codeine phosphate 30mg Tablet DOSE: 30 to 60 mg Oral When Required (01:29) minimum dosage interval 4 hours up to 240 mg per day	New			Add To Meds On Adm
colistimethate sodium 1million units Nebuliser Solution DOSE: 2 million units Inhalation Twice A Day (08:00, 18:00) COLISTIN NEB 2 MEGAUNITS	New		3op SU 25.5.17	Add To Meds On Adm

Comment

Medication Reconciliation Verified Continue Cancel

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CONCILIACIÓN DE MEDICAMENTOS EN TRANSICIÓN

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Transition Reconciliation - [redacted] (MISS)

Alastair Hill
(Pharmacist)

Continue Cancel

Help Lock

[redacted] (MISS) , PAS No: 15/06460 , NHS No: 444 176 3026 , DOB:01-Jun-1987 , Age:30 years , Weight:52 kg (19-May-2017) , BMI:Unknown , BSA:Unknown

Allergies: Product Allergy to TAZOCIN, Product Allergy to COSMOFER, Substance Allergy to aztreonam, Substance Allergy to ceftazidime, Substance Intolerance to iron - IV iron

Medications on admission exist

Inpatient Medications	Status	Differences	Comment	Plan
ADCAL -D3 chewable tablet DOSE: **1 Chewable Tablet** Oral **Once A Day** (08:00)	New		1 cp SU 25.5.17	Add To Meds On Adm
alendronate sodium 70mg Tablet DOSE: **70 mg** Oral **In The Morning** (07:00) **On Thu** Once weekly on a Thursday	New		1 cp SU 31.5.17	Add To Meds On Adm
amphotericin (FUNGIZONE) inhalation DOSE: **25 mg** Inhalation **Every 12 Hours** (08:00, 18:00) Reconstitute a 50mg vial with 10mL of water for injection to produce a 5mg/mL solution. Withdraw the required amount and further dilute if necessary to a minimum of 3mL	New			Add To Meds On Adm
azithromycin 250mg Capsule DOSE: **250 mg** Oral **Once A Day** (08:00) **On Mon, Wed, Fri** Avoid indigestion remedies 2 hours before or after this medicine. Take this medicine on an empty stomach - 1 hour before or 2 hours after food.	Continued		4 cp SU 31.5.17	
codeine phosphate 30mg Tablet DOSE: **30 to 60 mg** Oral **When Required** (01:29) minimum dosage interval 4 hours up to 240 mg per day	New			Add To Meds On Adm
colistimethate sodium 1million units Nebuliser Solution DOSE: **2 million units** Inhalation **Twice A Day** (08:00, 18:00) COLISTIN NEB 2 MEGAUNITS	New		3op SU 25.5.17	Add To Meds On Adm

Comment

Medication Reconciliation Verified Continue Cancel

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PRESCRIPCIÓN

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Prescribing Medication Chart - [redacted] (MISS)

Alastair Hill (Pharmacist)

Close View Patient Print Reference Viewer Help Lock Logout

[redacted] (MISS), PAS No: 15/06460, NHS No: 444 176 3026, DOB:01-Jun-1987, Age:30 years, Weight:52 kg (19-May-2017), BMI:Unknown, BSA:Unknown

Allergies: Product Allergy to TAZOCIN, Product Allergy to COSMOFER, Substance Allergy to aztreonam, Substance Allergy to ceftazidime, Substance Intolerance to iron - IV iron Add

Meds On Adm - 27 | Scheduled - 23 | Variable Dose - 3 | PRN - 8 | Stat | Discharge - 25 | Summary

Cease Prescribe Quick List Protocol Discharge Transfer From Transition Reconciliation Resupply Assign Source Comment Request Review Select All Clear >>

Medication	Time	May 2017 / Jun 2017 (27 28 29 30 31 01 02 03 04 05 06 07 08 09)	Details
ADCAL -D3 chewable tablet DOSE: 1 Chewable Tablet Oral Once A Day (08:00) 25-May-2017 Sousan Shahi	08:00		Reviewed (Simran Uppal (Pharmacist), 25-May-2017 10:53) Source Not Assigned
alendronate sodium 70mg Tablet DOSE: 70 mg Oral In The Morning (07:00) On Thu Once weekly on a Thursday 01-Jun-2017 Rania Beltmouni (Pharmacist)	07:00		Reviewed (Simran Uppal (Pharmacist), 31-May-2017 15:36) Source Not Assigned Swallow whole with plenty of water whilst sitting or standing. Take on an empty stomach at least 30 minutes before food and other medicines. Remain upright for 30 minutes after taking.
amphotericin (FUNGIZONE) inhalation DOSE: 25 mg Inhalation Every 12 Hours (06:00, 18:00) Reconstitute a 50mg vial with 10mL of water for injection to produce a 5mg/mL solution. Withdraw the required amount and further dilute if necessary to a minimum of 3mL. Indication: Building works prophylaxis 24-May-2017 Sousan Shahi	06:00 18:00		Reviewed (Simran Uppal (Pharmacist), 25-May-2017 10:53) Source Not Assigned
azithromycin 250mg Capsule DOSE: 250 mg Oral Once A Day (08:00) On Mon, Wed, Fri Avoid indigestion remedies 2 hours before or after this medicine. Take this medicine on an empty stomach - 1 hour before or 2 hours after food. Indication: prophylaxis 02-Jun-2017 Rania Beltmouni (Pharmacist)	08:00		Reviewed (Simran Uppal (Pharmacist), 31-May-2017 15:36) Source Not Assigned
colistimethate sodium 1million units Nebuliser Solution DOSE: 2 million units Inhalation Twice A Day (08:00, 18:00) COLISTIN NEB 2 MEGAUNITS	08:00 18:00		Reviewed (Simran Uppal (Pharmacist), 25-May-2017 10:53) Source Not Assigned

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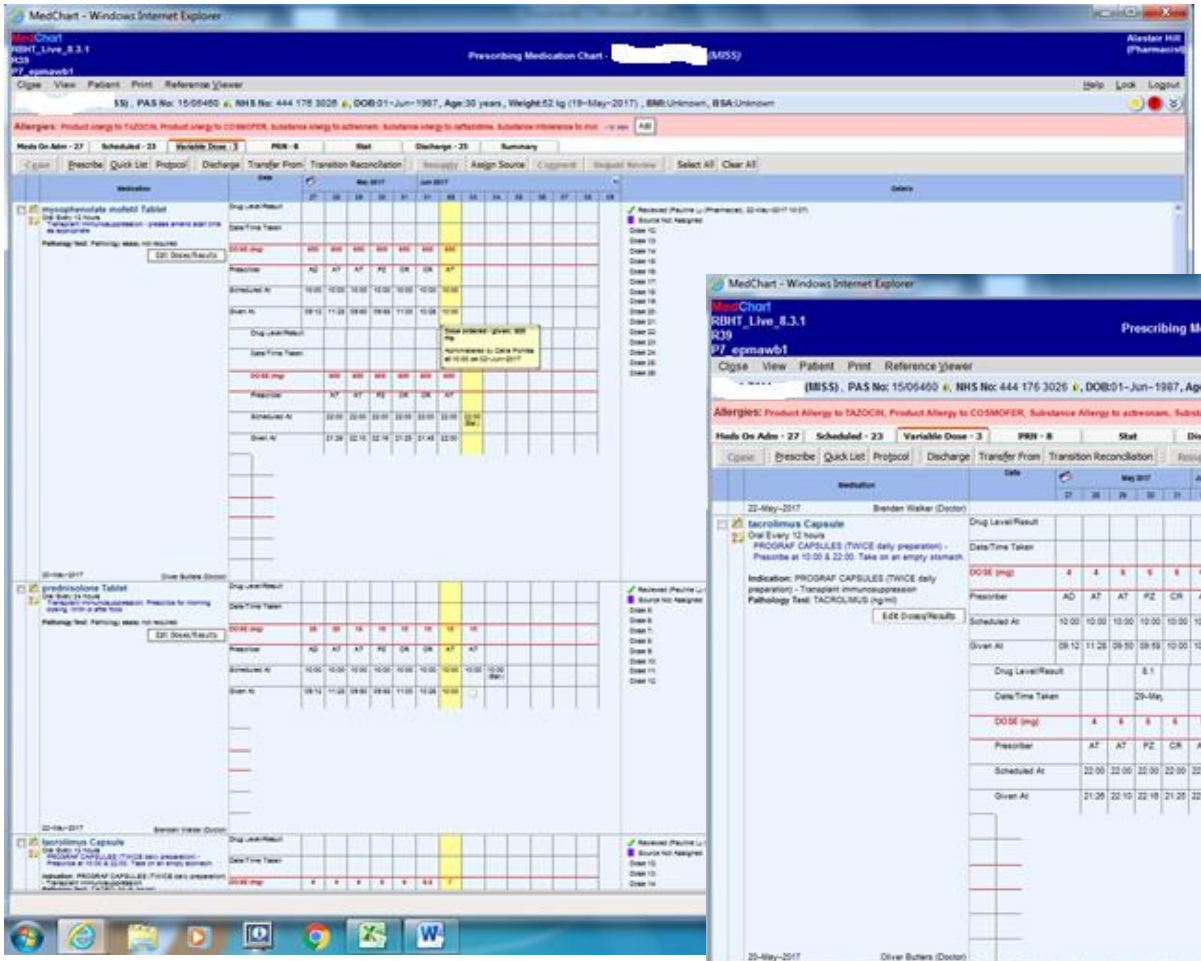
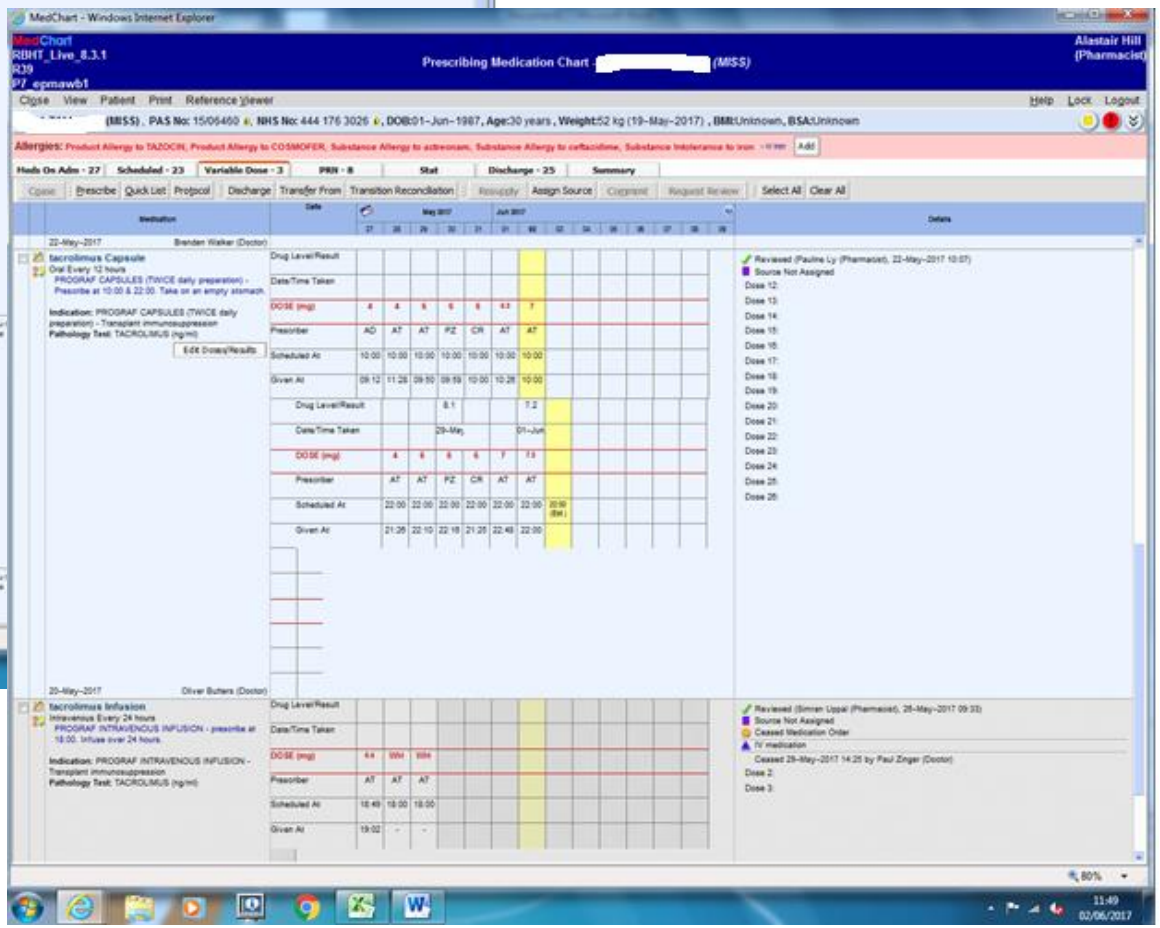
DOSIS VARIABLES





INDUCCIÓN

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Medication Chart History - [redacted] (MISS)

Alastair Hill (Pharmacist)

Close View Patient Print Reference Viewer Help Lock Logout

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Allergies: Product Allergy to TAZOCIN, Product Allergy to COSMOFER, Substance Allergy to aztreonam, Substance Allergy to ceftazidime, Substance Intolerance to iron - IV iron

Display medications for last 12 Months

Meds On Adm | Scheduled | Variable Dose | PRN | Stat | Discharge | Summary

Medication	Dose	Details
methylprednisolone sodium succinate 1g injection 19-May-2017 Brenden Walker (Doctor)	DOSE: 1 g Intravenous Stat (21:18) In theatre	Reviewed (Pauline Ly (Pharmacist), 22-May-2017 10:07) Source Not Assigned IV medication Completed 24-May-2017 20:29
mycophenolate mofetil Tablet 19-May-2017 Brenden Walker (Doctor)	DOSE: 1000 mg Oral Stat (21:20) 2-4 hours pre Tx	Reviewed (Pauline Ly (Pharmacist), 22-May-2017 10:07) Source Not Assigned Completed 20-May-2017 11:38
tacrolimus Capsule Indication: PROGRAF CAPSULES (TWICE daily preparation) - Transplant immunosuppression 19-May-2017 Brenden Walker (Doctor)	DOSE: 2.5 mg Oral Stat (21:21) Pre-transplant	Reviewed (Pauline Ly (Pharmacist), 22-May-2017 10:07) Source Not Assigned Completed 20-May-2017 11:38

105%

VISITAS EXTERNAS

ROYAL BROMPTON

- FIBROSIS QUÍSTICA
- HIPERTENSIÓN PULMONAR

MATER MISERICORDIAE (DUBLÍN)

- REUNIÓN DE FARMACÉUTICOS DE TLASPLANTE CARDIOTORÁCICO

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Cystic Fibrosis strength in numbers

UK Cystic Fibrosis Registry
2015 Annual Data Report
Published August 2016

ROYAL BROMPTON

Fibrosis quística

- Prevalencia UK: 1/2500 (España 1/5000)
- Pacientes ingresados: 20
- Pacientes ambulatorios:
  - Propios: 1000 (600 adultos, 300 niños)
  - Derivados y privados (tb otros países): 1000
- Cistyc Fibrosis Annual Review. National Standard of Care Pacientes adultos
- Pacientes con Ivacaftor: 30 (UK: 439)
- No utilizan Ivacaftor+Lumacaftor
- 50 pacientes FQ trasplantados de pulmón en 2015 (UK)

1.1 Summary of the UK Cystic Fibrosis Registry

	2011	2012	2013	2014	2015
CF patients registered[1] Excluding diagnoses that year	9749	10078 9804	10338 10076	10583 10356	10810 10586
CF patients with "complete" data; n(%)[2]	8679 (89%)	8794 (87%)	9052 (88%)	9432 (89%)	9587 (89%)
Age in years; median[3]	18	18	18	19	19
All newly diagnosed patients[4] **(newborn screening and other)**	261	285	301	291	224
Number of patients born identified by newborn screening[4]	203	213	177	164	112
Age at diagnosis in months; median[3]	3	3	3	2	2
Adults aged 16 yrs and over; %[3]	56.8	57.6	57.6	59.3	59.9
Males; %[3]	53.2	52.9	52.9	53.0	53.0
Genotyped; %[3]	95.6	96.2	97.2	97.7	98.1
Median predicted survival in years (95% Confidence interval)[5]	41.5 (35.7, 46.0)	43.5 (37.8, 49.9)	36.6 (34.4, 41.6)	40.1 (34.6, 46.7)	45.1 (39.9, 49.1)
Total deaths reported (%)[5]	118 (1.2%)	106 (1.1%)	146 (1.4%)	132 (1.2%)	125 (1.2%)
Age at death in years; median (95% CI)[3]	26	28 (25, 29)	29 (27, 31)	28 (25.5, 32)	28 (27, 33)

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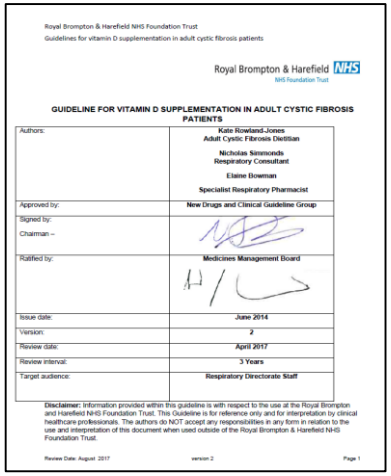
Fibrosis quística. Pacientes ingresados.

- **Diariamente:**
  - Revisión de tratamientos nuevos
  - Conciliación al ingreso
  - Prescripción de medicamentos tras la conciliación (nota informativa avisando que es sin hablarlo con el medico. Sólo farmacéuticos prescriptores)
- **Semanalmente:**
  - Pase de visita conjunto: miércoles. Médicos, enfermeras, farmacéutico, fisioterapeuta, dietista….
  - Revisión de todos los tratamientos en equipo.



Royal Brompton & Harefield NHS Foundation Trust
Guidelines for vitamin D supplementation in adult cystic fibrosis patients

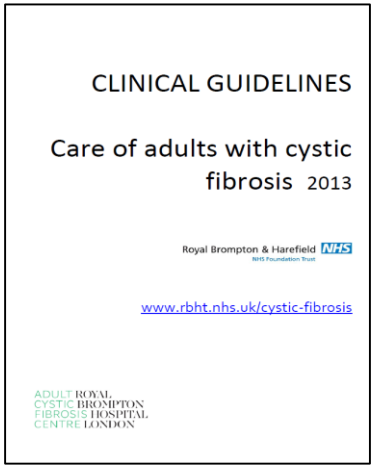
Royal Brompton & Harefield NHS
NHS Foundation Trust

GUIDELINE FOR VITAMIN D SUPPLEMENTATION IN ADULT CYSTIC FIBROSIS PATIENTS

Authors:	Kate Rowland-Jones Adult Cystic Fibrosis Dietitian Nicholas Simmonds Respiratory Consultant Elaine Bowman Specialist Respiratory Pharmacist
Approved by:	New Drugs and Clinical Guideline Group
Signed by: Chairman –	
Ratified by:	Medicines Management Board
Issue date:	June 2014
Version:	2
Review date:	April 2017
Review interval:	3 Years
Target audience:	Respiratory Directorate Staff

Disclaimer: Information provided within this guideline is with respect to the use at the Royal Brompton and Harefield NHS Foundation Trust. This Guideline is for reference only and for interpretation by clinical healthcare professionals. The authors do NOT accept any responsibilities in any form in relation to the use and interpretation of this document when used outside of the Royal Brompton & Harefield NHS Foundation Trust.

Review Date: August 2017 version 2 Page 1



CLINICAL GUIDELINES

Care of adults with cystic fibrosis 2013

Royal Brompton & Harefield NHS
NHS Foundation Trust

www.rbht.nhs.uk/cystic-fibrosis

ADULT CYSTIC FIBROSIS CENTRE ROYAL BROMPTON HOSPITAL LONDON

Clinical Guidelines: Care of Children with Cystic Fibrosis

Royal Brompton Hospital

Royal Brompton & Harefield NHS
NHS Foundation Trust

Available on www.rbht.nhs.uk/childrencf

2017

7th edition

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Available on App Store Google play

ROYAL BROMPTON

Fibrosis quística. Pacientes ambulatorios.

Cystic Fibrosis Annual Review.

- National Standard of Care Pacientes adultos.
- Entrevista con: farmacéutico, psicólogo, fisioterapéuta, dietista, análisis completos, pruebas funcionales……
- Farmacéutico
  - 4 pacientes/ día, 3 días/semana
  - Revisión del tratamiento farmacológico
  - Paciente dice lo que toma y cuándo lo toma
  - Problemas relacionados con los medicamentos, efectos adversos, alergia……
  - Problemas con la conservación de los medicamentos.
  - Problemas con Homecare Delivery
- Médico: 3-4 visitas/año
- 5 enfermeras especializadas

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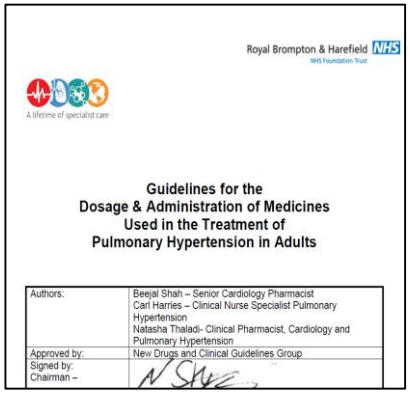
Hipertensión Pulmonar.

- 400 pacientes ambulatorios
- Tratamiento similar excepto:
  - No están autorizados todavía Selexipag y Riociguat
  - No está autorizado Treprostinil
  - 8 pacientes con Epoprostenol
    - 4 enfermeras 1 de ellas de guardia localizada 24 h.
    - Vídeo de elaboración propia



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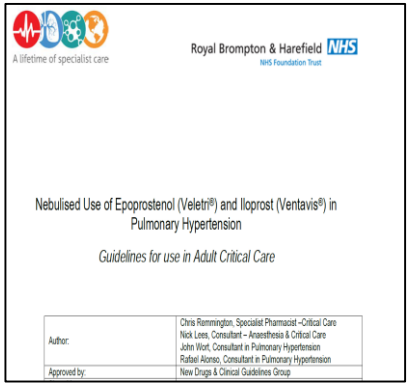
Guidelines for the Dosage & Administration of Medicines Used in the Treatment of Pulmonary Hypertension in Adults

Authors:	Beejal Shah – Senior Cardiology Pharmacist Carl Harries – Clinical Nurse Specialist Pulmonary Hypertension Natasha Thaladi- Clinical Pharmacist, Cardiology and Pulmonary Hypertension
Approved by:	New Drugs and Clinical Guidelines Group
Signed by: Chairman –	



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Nebulised Use of Epoprostenol (Veletri®) and Iloprost (Ventavis®) in Pulmonary Hypertension

Guidelines for use in Adult Critical Care

Author:	Chris Remmington, Specialist Pharmacist –Critical Care Nick Lees, Consultant – Anaesthesia & Critical Care John Wort, Consultant in Pulmonary Hypertension Rafael Alonso, Consultant in Pulmonary Hypertension
Approved by:	New Drugs & Clinical Guidelines Group

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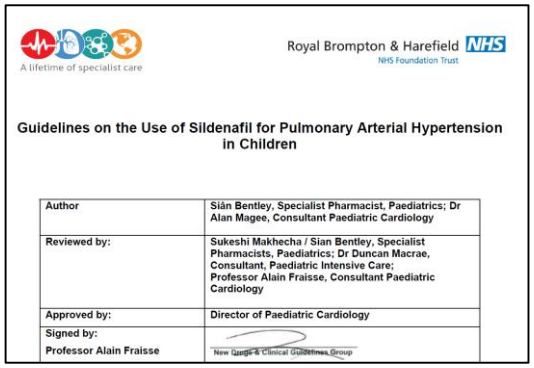
Guidelines for the Use of Generic Sildenafil in Patients With 'Group 3' Pulmonary Hypertension (PH) (PH to respiratory disease and/or hypoxia)

Authors:	Dr Laura Price, Dr John Wort and Dr Colm McCabe - Consultants in PH, RBH Dr Felix Chua – Consultant and clinical lead, ILD Service Saadia Jamil – Senior Cardiology Pharmacist, RBH
Approved by:	New Drugs and Clinical Guidelines Group
Signed by: Chairman – Nicholas Hopkinson	
Ratified by:	Medicines Management Board



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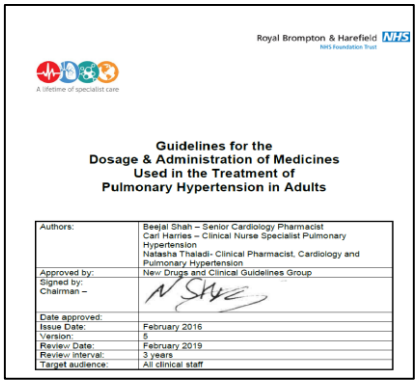
Guidelines on the Use of Sildenafil for Pulmonary Arterial Hypertension in Children

Author	**Siân Bentley, Specialist Pharmacist, Paediatrics; Dr Alan Magee, Consultant Paediatric Cardiology**
Reviewed by:	**Sukeshi Makhecha / Sian Bentley, Specialist Pharmacists, Paediatrics; Dr Duncan Macrae, Consultant, Paediatric Intensive Care; Professor Alain Fraisse, Consultant Paediatric Cardiology**
Approved by:	**Director of Paediatric Cardiology**
Signed by: Professor Alain Fraisse	New Drugs & Clinical Guidelines Group



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Guidelines for the Dosage & Administration of Medicines Used in the Treatment of Pulmonary Hypertension in Adults

Authors:	Beejal Shah – Senior Cardiology Pharmacist Carl Harries – Clinical Nurse Specialist Pulmonary Hypertension Natasha Thaladi- Clinical Pharmacist, Cardiology and Pulmonary Hypertension
Approved by:	New Drugs and Clinical Guidelines Group
Signed by: Chairman –	
Date approved:	
Issue Date:	February 2016
Version:	5
Review Date:	February 2019
Review interval:	3 years
Target audience:	All clinical staff

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GUIDELINES FOR NEBULISED ANTIMICROBIALS IN ADULT PATIENTS WITH NON-CYSTIC FIBROSIS BRONCHIECTASIS

HOST DEFENCE/PHARMACY

Authors:	**Elaine Bowman, Specialist Pharmacist, Respiratory Medicine. Dr Robert Wilson, Dr Michael Loebinger Consultant Physicians, Respiratory Medicine.**
Approved by:	**Anti-Microbial Strategy Group**
Signed by: Chairman – Dr Silke Schelenz	S. Schelenz.
Issue Date:	**October 2016**
Version:	**2**
Review Date:	**September 2019**
Review interval:	**3 years**
Target audience:	**Respiratory Directorate Staff and Pharmacy Staff**

Disclaimer: Information provided within this guideline is with respect to the use at the Royal Brompton and Harefield NHS Foundation

REUNION FARMACEUTICOS DE TRASPLANTE CARDIOTORACICO

Dublin, 19 de mayo de 2017.

Hospital Mater Misericordiae

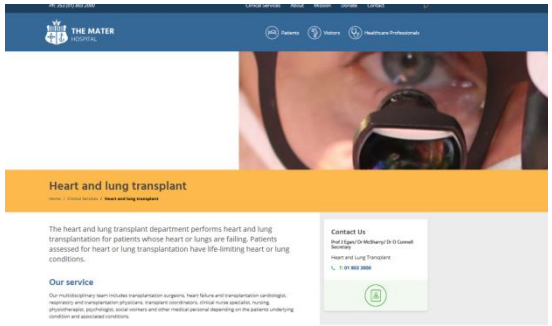
Organizadora: Patricia Ging

Asistentes:

- Farmacéuticos de Trasplante Pulmonar y Cardiaco (Irlanda y UK)

Conferencias:

- Enfermedades congenitas cardiacas. El futuro del Tx cardiopulmonar
- Enfermedades pulmonares intersticiales
- Adherencia al tratamiento
- Fibrosis Quistica y Trasplante pulmonar
- Novedades de la ISHLT
- Ajuste de dosis de medicamentos en ECMO



Novedades ISHLT 2016

Patricia Ging. Representante de farmacéuticos ISHLT.

Farmacéutica Especialista en trasplante pulmonar e Hipertensión Pulmonar en Hospital Matermisericordiae. Dublín

- Supervivencia en CMV D+R-
- Más atención a CMV D-R+
- Potencial secuestro de posaconazol en ECMO
- Ajuste de dosis de Valganciclovir en IR es vital
- Estudio del Brompton sobre variabilidad de niveles de Tacrolimus
- Nueva herramienta para pacientes y conocimiento del tto
- Estudio Bright de adherencia en Tx cardiaco
- Insistir en adherencia al ejercicio
- Embarazo tras Tx
- USA: voriconazol a todos 6-12 meses para evitar Aspergillus

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Haifa Lyster

Harefield Consultant Pharmacist especialista en trasplante pulmonar y ventricular assist devices (VADs)

- Nueva representante de farmacéuticos de Tx en ISHLT
- Representante de farmacéuticos de Tx pulmonar en SOTPA
- Tesis: Ajuste de dosis de medicamentos en ECMO
- Haifa has written a number of chapters on immunosuppression and heart failure, as well as articles in peer-reviewed journals, which include **Transplantation and the Journal of Heart and Lung Transplant.**
- Her current research interests include infections, especially anti-infective biofilm penetration, antifungal drug TDM, hepatic drug handling and renal sparing regimens post-transplantation.

SOTPA

Solid Organ Transplant Pharmacists

The SOTPA group was initiated in early 2013 following recognition that pharmacists working within solid organ transplantation needed a platform to promote networking, education and professional development. It was also recognized that a national Solid Organ Transplant Group would have been beneficial during the preservation solution crisis; this has led to the Group responding to other current challenges within transplant pharmacy, notably the introduction of generics and the move of immunosuppressant prescribing to secondary care. We have recently had confirmation with affiliation to the Royal Pharmaceutical Society and The British Transplant Society (in progress).

ANNUAL MEETING: BIRMINGHAM, November

PHARMACY PROGRAMME

PROGRAMA DIARIO

Week 1 DAY/DATE	MORNING Induction with	Details	AFTERNOON Induction with	Details
Monday 15th May	Rania(pharmacist) Human resources	• Paperwork etc • Re-orientation	Pauline(pharmacist)	ITU Transplant
Tuesday 16th May	Pauline(pharmacist)	• Heart ward round	Pauline(pharmacist) Rania(pharmacist)	ITU Transplant Protocol updates
Wednesday 17th May *AUDIT DAY*	STAR Centre	Lunch lecture 12.30-14:00 Finding Answers to the Gram Negative Threat Prof Livermore	Ali(pharmacist)	Rowan & Homecare service
Thursday 18th May	Kirsty(pharmacist)	Transplant Clinic	Kirsty(pharmacist)	Transplant Clinic
Friday 19th May	All Day Cardiothoracic Transplant Pharmacist Meeting Dublin, Ireland			

PROGRAMA DIARIO

Week 2 DAY/DATE	MORNING Induction with	Details	AFTERNOON Induction with	Details
Monday 22nd May	Pauline(pharmacist)	ITU Transplant & Heart ward round	Pauline(pharmacist)	ITU Transplant
Tuesday 23rd May	Rania(pharmacist) Lunch CPD	• Heart ward round • ITU Transplant • Pre-reg projects	Rania(pharmacist) Rania(pharmacist)	ITU Transplant Protocol updates Project work
Wednesday 24th May	Ali(pharmacist) Dr Fernando Riesgo	Handover Heart Transplant clinic	Ali(pharmacist) Rania(pharmacist)	Rowan & Homecare service Immunosuppression round
Thursday 25th May	Ali(pharmacist)	Tx MDT	Dr Anna Reed	Lung Transplant Clinic
Friday 26th May	Haifa Lyster(pharmacist)	ITU Transplant Project work	Haifa Lyster(pharmacist)	Project work Immunosuppression round

PROGRAMA DIARIO

DAY/DATE	MORNING Induction with	Details	AFTERNOON Induction with	Details
Monday 29th May	BANK HOLIDAY			
Tuesday 30th May	Rania(pharmacist)	• Heart ward round • ITU Transplant • Pre-reg projects	Rania(pharmacist) Rania(pharmacist)	ITU Transplant Protocol updates Project work
Wednesday 31st May	Ali(pharmacist) Dr Fernando Riesgo	Handover Heart Transplant clinic	Ali(pharmacist) Rania(pharmacist)	Rowan & Homecare service Immunosuppression round
Thursday 1st June	Ali(pharmacist)	Tx MDT	Dr Anna Reed	Lung Transplant Clinic
Friday 2nd June	Haifa Lyster(pharmacist)	ITU Transplant Project work	Haifa Lyster(pharmacist)	Project work Immunosuppression round

PROGRAMA DIARIO

Week 4 DAY/DATE	MORNING Induction with	Details	AFTERNOON Induction with	Details
Monday 5th June	Nisha (pharmacist)	ITU Transplant & Heart ward round	Nisha(pharmacist)	ITU Transplant
Tuesday 6th June	Rania(pharmacist) Lunch CPD	• Heart ward round • ITU Transplant • Pre-reg projects	Rania(pharmacist) Rania(pharmacist)	ITU Transplant Protocol updates Project work
Wednesday 7th June	Kirsty(pharmacist)	Transplant Clinic	Kirsty(pharmacist)	Transplant Clinic
Thursday 8th June	Ali(pharmacist)	Tx MDT	Dr Martin Garby	Lung Transplant Clinic
Friday 9th June	Haifa Lyster(pharmacist)	ITU Transplant Project work	Haifa Lyster(pharmacist)	Project work Immunosuppression round

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THANK YOU