Hepatobiliary (HPB) Oncology & Neuroendocrine Tumour Service
Operational Structure

Hepatobiliary (HPB) Oncology

All new HPB patients (including cancers of the pancreas, liver [hepatocellular carcinoma], bile ducts [cholangio-carcinoma], gallbladder, and ampulla) are discussed and assessed through one of two specialist HPB MDTs (at Manchester Royal Infirmary and North Manchester General Hospital) serving the Greater Manchester population of 3.2 million.

Patients undergoing surgery do so at one of these surgical sites.

Where systemic anticancer therapy (SACT) is indicated, patients are referred to the HPB Oncology team for assessment and treatment. New patients are seen either at North Manchester General Hospital or the Christie.

There is a core clinical team that deals with HPB Oncology.

Personnel

<table>
<thead>
<tr>
<th>Consultants (Medical Oncology)</th>
<th>Dr Lubna Bhatt</th>
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<tbody>
<tr>
<td>Consultants (Clinical Oncology)</td>
<td>Lynne McCallum</td>
</tr>
<tr>
<td>Clinical Nurse Specialist</td>
<td>Christina Rigby</td>
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<tr>
<td>Nurse Clinician</td>
<td>Dr Lubna Bhatt</td>
</tr>
<tr>
<td>Clinical / Research Fellows</td>
<td>Dr Angela Lamarca</td>
</tr>
<tr>
<td>Clinical Trial Coordinators</td>
<td>Dr Angela Lamarca</td>
</tr>
<tr>
<td>Research Nurses</td>
<td>Aleem Iqbal</td>
</tr>
<tr>
<td></td>
<td>Monika Burek</td>
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Neuroendocrine Tumour (NET) Service

The Christie has been a designated Centre of Excellence for the management of patients with NETs since 2011 (by the European Neuroendocrine Tumour Society, ENETS). All new NET patients are discussed/assessed through the specialist NET MDT (at The Christie) serving the Greater Manchester population of 3.2 million.
Patients undergoing surgery do so at sites depending on specialist expertise (e.g. HPB surgical centres for pancreatic tumours; The Christie for intestinal tumours; cardiothoracic centre at University Hospital of South Manchester for cardiac valve replacement, etc.).

Where SACT is indicated, all new patients are seen through a specialist NET Clinic, an Endocrinology Clinic or Dr Mansoor’s Upper GI clinic.

For patients with an inheritable predisposition, a referral is made to the Clinical Genetics teams at either Central Manchester Foundation Trust or Salford Hospitals NHS Trust.

The Christie is the centre for delivery of SACT for HPB and NET patients.

The Christie is the centre for delivery of radiotherapy (including external beam radiotherapy or liver radio-embolisation for HPB patients; and additionally radionuclide therapy for NET patients).

All patients are considered for available clinical trials (detailed below).

All patients are invited to participate in the Manchester Cancer Research Centre (MCRC) Biobank (from Feb 2013).

The HPB/NET service provides second opinions at the request of patients, GPs or secondary/tertiary care.

In addition, due to the complex nature of neuroendocrine tumours and the peer review requirements (by ENETS) there is a comprehensive NET team reflecting the multidisciplinarity of the assessment and treatment strategy of these patients as detailed in the table:

**Personnel – additional to those already listed under HPB oncology**

<table>
<thead>
<tr>
<th>Consultants (Endocrinology)</th>
<th>Prof Peter Trainer</th>
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<tr>
<td></td>
<td>Dr Claire Higham</td>
</tr>
<tr>
<td>Consultants (Oncology)</td>
<td>Dr Was Mansoor</td>
</tr>
<tr>
<td>Consultants (Gastroenterology)</td>
<td>Dr Mark Kelly</td>
</tr>
<tr>
<td>Consultants (Surgery)</td>
<td>Mr Derek O'Reilly (HPB)</td>
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<tr>
<td></td>
<td>Mr Paul Fulford (GI)</td>
</tr>
</tbody>
</table>
Consultants (Radiology)

- D Prakash Manoharan (also Nuclear Medicine)
- Dr Bent Taylor
- Dr Damian Mullan
- Dr Jeremy Lawrance

Consultants (Pathology)

- Dr Bipasha Chakrabarty
- Dr Daisuke Nonaka

Consultants (Nuclear Medicine)

- Dr Amarjot Chander
- Dr Thomas Westwood

Nursing

- Margaret Roberts

Activity

<table>
<thead>
<tr>
<th>Primary Tumour Site</th>
<th>N</th>
</tr>
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<tbody>
<tr>
<td>Pancreas</td>
<td>181</td>
</tr>
<tr>
<td>Cholangio-carcinoma</td>
<td>83</td>
</tr>
<tr>
<td>Hepatocellular Carcinoma</td>
<td>59</td>
</tr>
<tr>
<td>Gallbladder Cancer</td>
<td>25</td>
</tr>
<tr>
<td>Ampulla</td>
<td>17</td>
</tr>
<tr>
<td>Others</td>
<td>12</td>
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</table>

Neuroendocrine 122

Total 499

Treatment Intent  

<table>
<thead>
<tr>
<th></th>
<th>HPB</th>
<th>NET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjuvant</td>
<td>46</td>
<td>13</td>
</tr>
<tr>
<td>Cannot be determined</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Curative</td>
<td>17</td>
<td>36</td>
</tr>
<tr>
<td>Neoadjuvant</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Palliative</td>
<td>293</td>
<td>61</td>
</tr>
</tbody>
</table>

Total 377 122

Service Development 2013/14

The Christie was designated as a Centre of Excellence for the treatment of patients with NETs in 2011 (one of 11 such centres across Europe); this was renewed following a planned 3-year audit in March 2014.

There is a merger implementation plan underway to merge the two HPB surgical centres (Manchester Royal Infirmary and North Manchester General Hospital) to a single surgical centre at Central Manchester Foundation Trust; expected merger date Oct 2014. While this will consolidate the surgical
expertise, little impact is anticipated with respect to patients referred to HPB oncology who will continue to have access to treatment and clinical trials.

The first meeting of the HPB Pathway Board (Chaired by Mr Derek O'Reilly) is scheduled for Monday 14th April 2014; Prof Valle has been appointed to the Board (as the Research Lead).

Following investment by the University of Manchester, there will be two new posts appointed to the team; a Clinical Senior Lecturer / Honorary Consultant in Medical Oncology (interview date 01/04/2014) and a project manager. These appointments will enable the HPB/NET team to consolidate, sustain and develop further clinical research activities.

During 2013-2014 the HPB team has undertaken a “Joint-working” project with the Palliative Care team (under a QUIPP initiative) aimed at streamlining the process of patient referral to end-of-life care (including improvement of documentation of end-of-life discussions, communication with GPs regarding Gold Standards Framework register and liaison with community palliative care teams). This successful initiative is included in the audit programme.
Peer Reviewed Publications 2013/14

**Summary statement:** the team have published 18 peer-reviewed papers during 2013-14. In addition, the cisplatin/gemcitabine combination in advanced biliary tract cancer (Valle NEJM 2010) has been adopted into the following guidelines over 2013-14: British Society of Gastroenterology (BSG), European Association for the Study of the Liver (EASL), International Liver Cancer Association (ILCA) and National Comprehensive Cancer Network (NCCN, USA).

1. **Phase II Trial of Cetuximab and Conformal Radiotherapy Only in Locally Advanced Pancreatic Cancer with Concurrent Tissue Sampling Feasibility Study.**


   Transl Oncol. 2014 Feb 1;7(1):55-64. eCollection 2014 Feb.

2. **Determination of the optimal echocardiographic scoring system to quantify carcinoid heart disease.**

   Dobson R, Cuthbertson DJ, Jones J, Valle JW, Keevil B, Chadwick C, Poston GP, Burgess MI.


3. **A comparison of diagnostic imaging modalities for colorectal liver metastases.**

   Bonanni L, De'liguori Carino N, Deshpande R, Ammori BJ, Sherlock DJ, Valle JW, Tam E, O'Reilly DA.

4. **Capecitabine and streptozocin ± cisplatin in advanced gastroenteropancreatic neuroendocrine tumours.**


5. **Optimal duration and timing of adjuvant chemotherapy after definitive surgery for ductal adenocarcinoma of the pancreas: ongoing lessons from the ESPAC-3 study.**


6. **Cisplatin and gemcitabine for advanced biliary tract cancer: a meta-analysis of two randomised trials.**

   Valle JW, Furuse J, Jitlal M, Beare S, Mizuno N, Wasan H, Bridgewater J, Okusaka T.


7. **Pancreatic cancer hENT1 expression and survival from gemcitabine in patients from the ESPAC-3 trial.**


Annels NE, Shaw VE, Gabitass RF, Billingham L, Corrie P, Eatock M, Valle J, Smith D, Wadsley J, Cunningham D, Pandha H, Neoptolemos JP, Middleton G.


10. The association of a panel of biomarkers with the presence and severity of carcinoid heart disease: a cross-sectional study.


11. Outcome of second-line chemotherapy for biliary tract cancer.


Hubner RA, Worsnop F, Cunningham D, Chau I.

Cheer K, Trainer PJ.

14. The harmonisation of growth hormone measurements: taking the next steps.
Wieringa GE, Sturgeon CM, Trainer PJ.

15. Control of growth hormone and IGF1 in patients with acromegaly in the UK: responses to medical treatment with somatostatin analogues and dopamine agonists.

16. The use of mass spectrometry to improve the diagnosis and the management of the HPA axis.
Monaghan PJ, Keevil BG, Trainer PJ.
17. Thymoma and thymic carcinoma in the target therapies era.

Lamarca A, Moreno V, Feliu J.


Mumby C, Davis JR, Trouillas J, Higham CE.


Presentations (in reverse date order):

31.03.2014 Pancreatic Cancer Study Day; Manchester
“The Future for Pancreatic Cancer”

25.03.2014 Regional Pancreatic Cancer meeting; Manchester
“Updates from ASCO-GI 2014” and Chair / Facilitator

12.03.2014 GBI-HPBA (GB/Ireland HPB Association) Annual Meeting; Leamington Spa
“Down-staging chemotherapy for Hepatobiliary Malignancies”

14.02.2014 Beaujon Conference - Paris, France
“Pancreatic Cancer – the state of play in 2014”
07.02.2014 5th European Symposium on Liver Directed Cancer Therapy; Rome, Italy
“Using 90Y-Microspheres - Multidisciplinary Discussion”

29.11.2013 Pancreatic Society of Great Britain and Ireland; Liverpool
“Novel agents for pancreatic neuroendocrine tumours”

25.11.2013 UKI NETS National Conference; London
“Chemotherapy is first-line treatment for pancreatic metastatic NETs”

“The past year in NETs: 2013”

07.09.2013 Indo-UK Oncology Summit, Chennai, India
“Establishing a coordinated research programme: lessons from biliary tract cancer”

30.08.2013 1st Manchester International Medical Student Cancer Conference; Manchester, UK: Speaker at opening plenary session
“The Archaeology of Cancer”

04.07.2013 World Congress in GI Cancer; Barcelona, Spain
Meet the Expert Concurrent Session: “Cholangiocarcinoma and gallbladder cancer”
03.07.2013 World Congress in GI Cancer; Barcelona, Spain

“Should patients with resected bile duct cancer receive and adjuvant treatment?”

10.05.2013 Friday Oncology Seminar Series; Manchester

“Same Drugs – Different Diseases”

15.04.2013 NIHR Clinical Research Facility Showcase Event; Manchester

“Translating Research into Clinical Practice…the Next Steps”

13.04.2013 Rad Society / 51 Club Meeting; Manchester

“From small acorns…..” [Advanced Biliary Tract Cancer]

Grants awarded:

- PanORAMA: Pancreatic Cancer Predisposition, Obesity-Related Deposition Assessment using MR ImAging (Pancreatic Cancer-UK)
- SIEGE: scheduling nab-paclitaxel with gemcitabine, randomised phase II 1st-line pancreas (Colgene)
- Development of blood-borne biomarkers for improving treatment selection for pancreatic cancer patients (Pancreatic Cancer UK)
- ABC-06: phase III, of active symptom control (ASC) alone vs. ASC with oxaliplatin/5-FU chemo (2nd-line) (Cancer Research-UK)
- Somatostatin receptors and Ki-67 in HCCs (Novartis)
- European Society of Medical Oncology Translational Fellowship (ESMO)
Clinical Audit

The HPB/NET team have an active audit programme; the following are registered audits (registration number) in 2013-14:

- Outcome of pathology review and discrepancies in reporting of gastrointestinal endocrine tumours (11/768)
- Hepatobiliary Cancer Nurse Specialist at the Christie – Your Views (12/937)
- End of Life Care Ongoing Audit - Upper GI (Qtr1 2013)
- UKINETS National Audit of the Use of Sunitinib and Everolimus for Patients with Pancreatic Neuroendocrine Tumours (pNETs) (12/949)
- Audit of decision making, documentation and communication following discussion at the neuroendocrine multidisciplinary meeting (CA12/921)
- Surgical follow up for patients with neuroendocrine tumours - is there scope for a nurse led service? (PE13/1141)
- The Neuroendocrine (NET) service - your views (13/1147)
- End of Life Care Ongoing Audit – HPB (April - Sept 2013)

In addition:

- 30-day mortality audit: the team meet on a monthly basis (first Monday of the month) to discuss 30-day mortality cases.
**Educational Activity**

Medical students are attached to the HPB/NET team for clinical experience; in addition medical student project options were supervised.

Specialty Registrars (SpRs) on the Medical Oncology rotation are attached to the HPB/NET team for 3-months. Educational opportunities include participation in the HPB and NET specialist MDTs, out-patient clinics (including research clinics), journal club, research meetings, and opportunities for involvement in audits, presentations and publications. Prof Valle is a member of the Medical Oncology SpR Specialist Training subcommittee.

A Translational Fellow (Dr Lamarca) was appointed following award of the Fellowship by ESMO. A number of projects are underway which will lead to peer-reviewed presentations and publications. It is anticipated that this will be the first of a number of such appointments over the next few years.

A major focus is on post-graduate education (see list of presentations, above) which include presentations at international meetings. During 2013-14 this has included:

- World Congress GI Cancer (Barcelona)
- Indo-UK Oncology Summit
- European Symposium on Liver Directed Cancer Therapy
- Beaujon Conference