

2.2 Upper Gastrointestinal Cancer

2.2.1 Oesophageal and Oesophago-gastric Junction

Summary Points

- Based on NCRI figures, approximately 35% of surgical resections for oesophageal cancer in Ireland are undertaken at SJH.
- Multidisciplinary model well established, in particular for clinical trials of multimodality therapy and related molecular and scientific research.
- 50% of patients with localised disease are enrolled in cancer clinical trials.
- All oesophageal tumours biobanked for DNA and RNA research.
- High volume centre for all complex surgeries, including 2- and 3-stage resections, transhiatal oesophagectomy, and minimally invasive approaches.
- TCD Departments of Surgery and Medicine have a long-established major focus on oesophageal disease, including oesophageal cancer and Barrett's oesophagus, with grant income currently of over 2 million euro through the HRB and Cancer Research Ireland.
- Between 10 and 20 publications per annum on pre-malignant and malignant oesophageal disease.
- Rapid access oesophageal clinic. All patients referred are seen within one week.
- Integrated perioperative care pathway defined and implemented
- The standards and performance indicators for oesophageal cancer are well inside

internationally-accepted benchmarks in high volume centres: an in-hospital post-operative mortality of 3.5%, 1% in the last 100 cases (5-10% are international figures); a 3-year survival rate of 40%; integrated care pathways operational; and patients linked to the cancer clinical trials programme.

- Programme strengths include cognate tertiary services in thoracic and head and neck cancer surgery, vascular and endovascular surgery, interventional radiology, critical care and medical gastroenterology.
- Best outcome survival data reported from Ireland for localised oesophageal cancer, consistent with benchmark data from centres in Europe and North America.
- Defined linkage with St.Lukes's Hospital (SLH), where Professor Reynolds has a sessional commitment.

Structure of Upper Gastrointestinal Cancer Service

The following is the composition of the MDT.

- **Specialist Surgeons:** Professor John Reynolds, Mr Narayamasamy Ravi. A specialist oesophageal surgical position (8 clinical; 3 academic) is approved.
- **Medical Oncologist:** Dr Ken O' Byrne
- **Radiation Oncologist:** Professor Donal Hollywood
- **Medical Gastroenterologist:** Dr Napoleon Keeling, Professor Dermot Kelleher, Dr Suzanne Norris, Dr Nasar Mahmood, Dr Susan Mc Kiernan, Dr Dermot O'Toole

- **Specialist Pathologist:** Dr Cian Muldoon
- **Specialist Radiologist:** Dr Graham Wilson, Dr Jim Meaney, Dr Mary Keogan, Dr Patrick Freyne, Dr Mark Ryan, Dr Niall Mc Eniff.
- **Specialist Nurse:** Ms Jennifer Moore
- **Data-Manager:** Ms Sarah Young
- **Senior Audit Officer:** Ms Suzanne Rowley
- **(Regional) Integrated Care Pathways Officer:** Ms Eileen Nolan
- **Physiology Senior Lecturer:** Dr Patrick Byrne
- **Scientific Senior Lecturer:** Dr Graham Pidgeon
- **Post-doctorate Scientists:** Dr Stephen Maher, Dr Mohammed Abdel-Laetif.

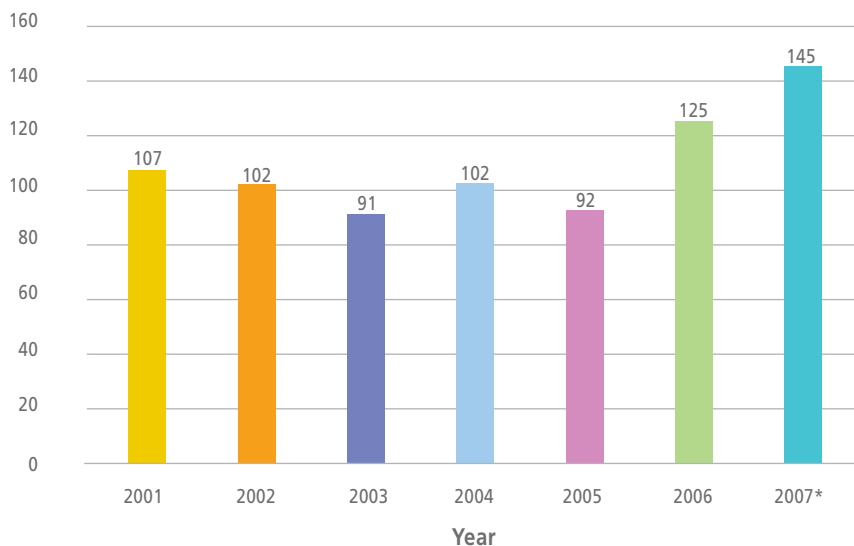
Multidisciplinary Conference: A weekly meeting is held at 7.30 am on Thursday mornings in the Telesynergy Conference Centre in the Academic Department of Clinical and Medical Oncology. All oesophageal cancer cases are discussed by the team and a management plan agreed and formally documented. This conference links through Telesynergy with surgical and oncology colleagues in the Midlands Hospitals.

A Rapid-Access Oesophageal Clinic providing rapid access for all new referrals, and follow-up for all patients who have been managed with oesophageal cancer takes place on Thursday morning from 09.00 to 13.00hrs.

Oesophageal Cancers Cancer Trends

This report looks at 619 oesophageal cancers patients diagnosed and treated in SJH from 2001-2006. To show the upward trend in newly diagnosed patients, numbers for 2007 are included but all other audit analysis is 2001-2006 only.

Figure 2.8 Oesophageal and Junctional Cancers 2001–2007



* Please note that data for 2007 are estimated based on actual data for the first six months of 2007

Referral Information by Health Board Area

Table 2.8

Referral* Pattern	Occurrences	Percent
ERHA	237	38
SEHB	99	16
MWHB	74	12
WHB	52	8
MHB	50	8
NEHB	48	8
NWHB	47	8
SHB	8	1
UK	2	<1
Other	1	<1

* Please note referrals to the end of 2006 were analysed by the old health boards

75% of patient referrals are from outside Dublin.

Table 2.9(a) Clinical Staging

Clinical Stage	Occurrences	Percent
Stage 0/High grade dysplasia	20	3
Stage 1	19	3
Stage 2	245	40
Stage 3	150	24
Stage 4	151	24
Unable to assess	33	5

64% of all oesophageal cancer patients were Stage 3 or less when they were clinically staged. 58% who had treatment in SJH for oesophageal cancer underwent treatment with a curative intent.

Table 2.9(b) Pathological Staging (n=253)

Pathological Stage	Occurrences	Percent
Stage 0/HGD	16	6
Stage 1	35	14
Stage 2	72	29
Stage 3	90	36
Stage 4	21	8
Unable to assess	19	8

Treatment Options

The MDT conference aims to discuss oesophageal cancer patients in the presence of the members of the MDT, the purpose of this is to co-ordinate the sequence of treatment modalities. 81% of patients were discussed at the conference in 2006.

Table 2.10 Treatment Options for Oesophageal and Junctional Cancer

Treatment Options	Occurrences*	Percent
Stenting	158	26
Endoscopic Dilatation	152	25
SURGERY only	151	24
MULTI-MODAL (neo-adjuvant Chemoradiation & Surgery)	116	19
Palliative Radiotherapy	109	18
Palliative Chemotherapy	101	16
Palliative Care	96	16
Radical Radiotherapy/ Chemotherapy (Herskovic)	59	10
Psychiatric Consult	47	8
Adjuvant Chemotherapy/ Radiotherapy	14	2
No Treatment	8	1
Laser Treatment (Argon)	8	1
Other (please specify)	5	1
Radical Chemotherapy	3	1
Radical Radiotherapy	3	1
Unknown	2	0

* Treatments are not mutually exclusive

Types of Surgery

Table 2.11 Types of Surgery

Type of Surgery	Occurrences*	Percent
2 Stage Oesophagectomy	156	52.2
3 Stage Oesophagectomy	61	20.2
Total Gastrectomy	33	13
Other	16	6.3
Distal Oesophagectomy	11	4.3
Pharyngolaryngo-oesophagectomy (PLO)	9	3.6
Transhiatal Oesophagectomy	7	2.8
Thoracoabdominal Oesophagectomy	1	0.4

* Some patients have more than one type of surgery

Lead Times [Figures are for 2005/2006 patients]

The lead times that were recorded for oesophageal cancer patients, which are used as clinical indicators of quality of service offered, are:

- 95% of patients were seen within two weeks of referral
- 97% of patients were diagnosed within one month of initial referral (95% within 2 weeks).
- 75% of patients started their treatment within one month of referral

Survival

Figure 2.9 Overall Oesophageal Cancer Survival 2001-2006

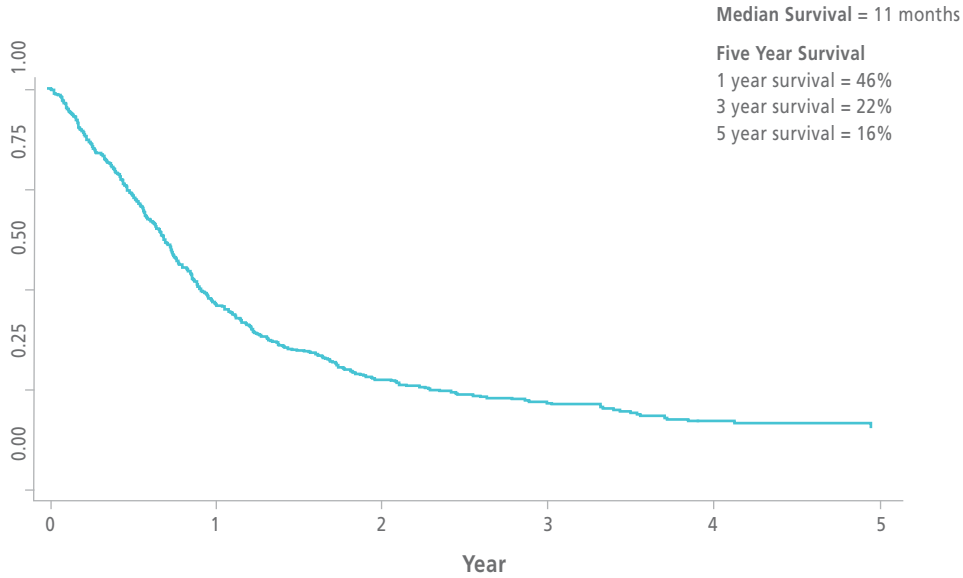
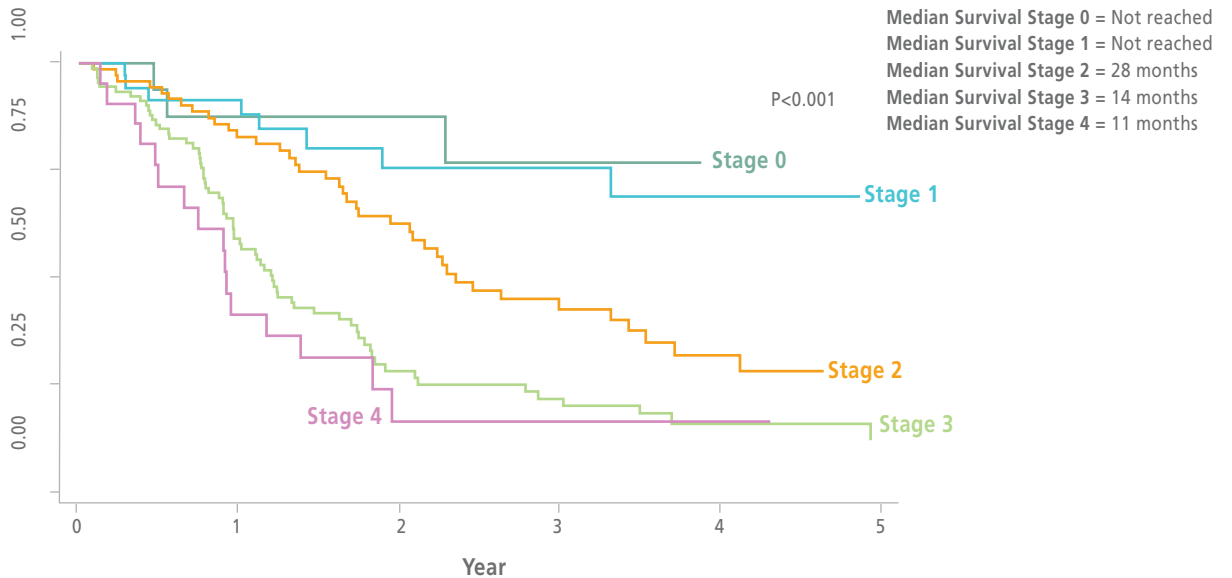
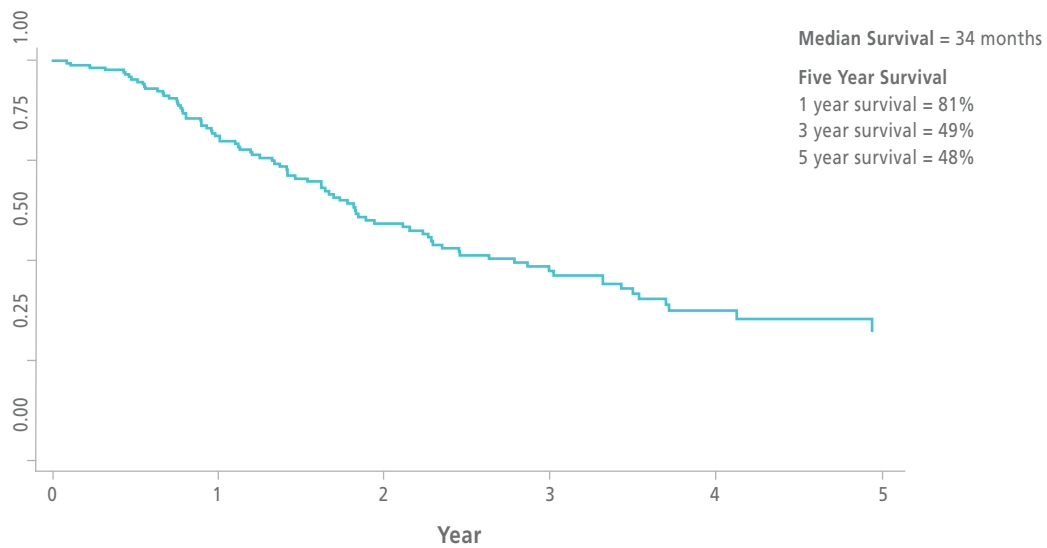


Figure 2.10 Overall Oesophageal Cancer survival by Pathological Stage



The overall 3-year survival in patients treated with multimodality therapy is 40%. In patients achieving a complete or near complete pathological complete response, the 5-year survival is 50 per cent.

Figure 2.11 Overall survival of Oesophageal Curative Surgical Resections 2001-2006



Surgical Performance Indicators

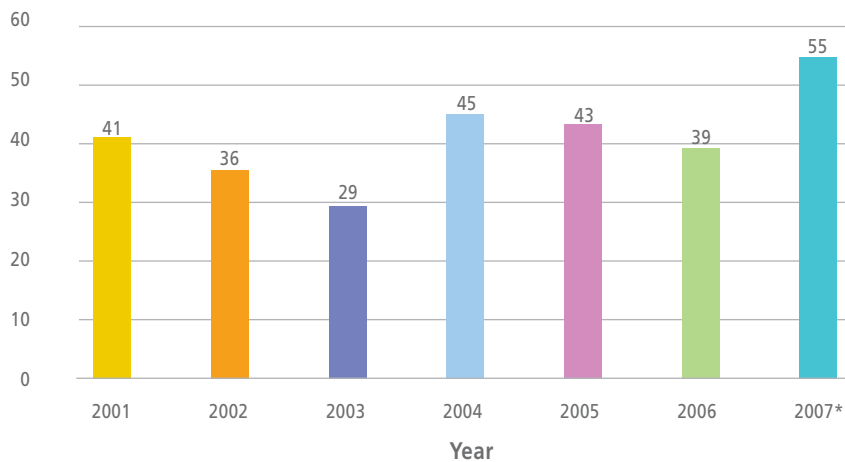
- During this period 267 patients had a radical oesophagectomy. The overall in-hospital postoperative mortality was 3.5%. There has been one in-hospital postoperative mortality (1%) in the last 100 cases.
- The anastomotic leak rate is 3%.

2.2.2 Gastric Cancer (excluding junctional)

Gastric Cancer Trends

The following report looks at 233 new gastric cancer patients diagnosed and treated in SJH from 2001-2006. Activity for 2007 is included in table 2.12, but in all other analysis 2001-2006 data is included.

Figure 2.12 Gastric Cancer 2001–2007



* Please note that data for 2007 are estimated based on actual data for the first six months of 2007

Tumour Site & Morphology

Table 2.12

Tumour Site	Occurrences*	Percent
Stomach (NOS)	76	33
Fundus Stomach	37	16
Antrum Stomach	31	13
Pylorus Stomach	27	12
Lesser Curve of stomach	20	9
Body of Stomach	14	6
Proximal Stomach	14	6
Distal Stomach	8	3
Greater Curve of Stomach	7	3

* Please note three patients had more than one primary site

Table 2.13

Tumour Morphology	Occurrences*	Percent
Adenocarcinoma	177	76
Lymphoma	20	9
GIST	14	6
Undifferentiated/Not specified	12	5
Intramucosal carcinoma/HGD	5	2
Neuroendocrine	3	1
Other	3	1

* Please note that some tumour sites have more than one histology

Clinical Staging

Table 2.14

Clinical Stage	Occurrences	Percent
Stage 0/HGD	6	3
Stage 1	21	9
Stage 2	30	13
Stage 3	59	25
Stage 4	65	28
Unable to assess	52	22

Treatment Options

Table 2.15

Treatment Options for Gastric Cancer	Occurrences*	Percent
Surgery	83	36
Palliative Care/Best Supportive Care	82	35
Palliative Chemotherapy	61	26
Adjuvant Chemotherapy/Radiotherapy	12	5
Palliative Resection	11	5
Endoscopic Dilatation +/- stent insertion	11	5
Psychiatric Consult	11	5
Radical Chemotherapy	9	4
No Treatment	7	3
Other (not specified)	7	3
Adjuvant Chemotherapy	6	3
Palliative Radiotherapy	4	3
Unknown	4	2

* Treatments are not mutually exclusive

Pathological Staging (n=87)

Table 2.16

Pathological Stage	Occurrences	Percent
Stage 0/HGD	5	6
Stage 1	16	18
Stage 2	13	15
Stage 3	26	30
Stage 4	14	16
Unable to assess	13	15

Lead Times [Figures are for 2005/2006 patients]

The lead times that were recorded for gastric cancer patients, which are used as clinical indicators of quality of service offered, are:

- 95% of patients were seen within one month of referral (85% within 2 weeks).
- 98% of patients were diagnosed within one month of initial referral.
- 77% of patients started their treatment within one month of diagnosis.

Survival

Figure 2.13 Overall Gastric Cancer survival 2001-2006

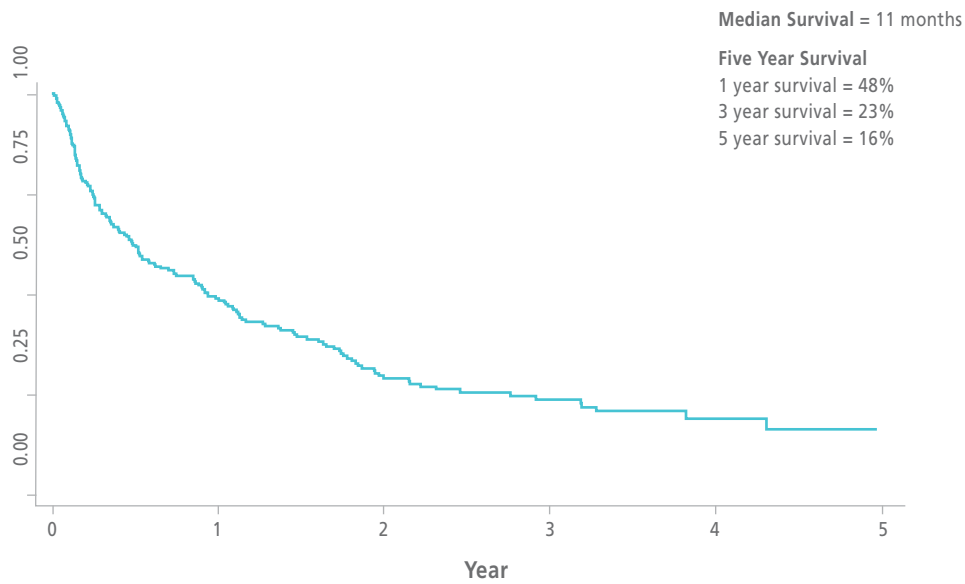


Figure 2.14 Overall Gastric Cancer survival of patients with Curative Intent

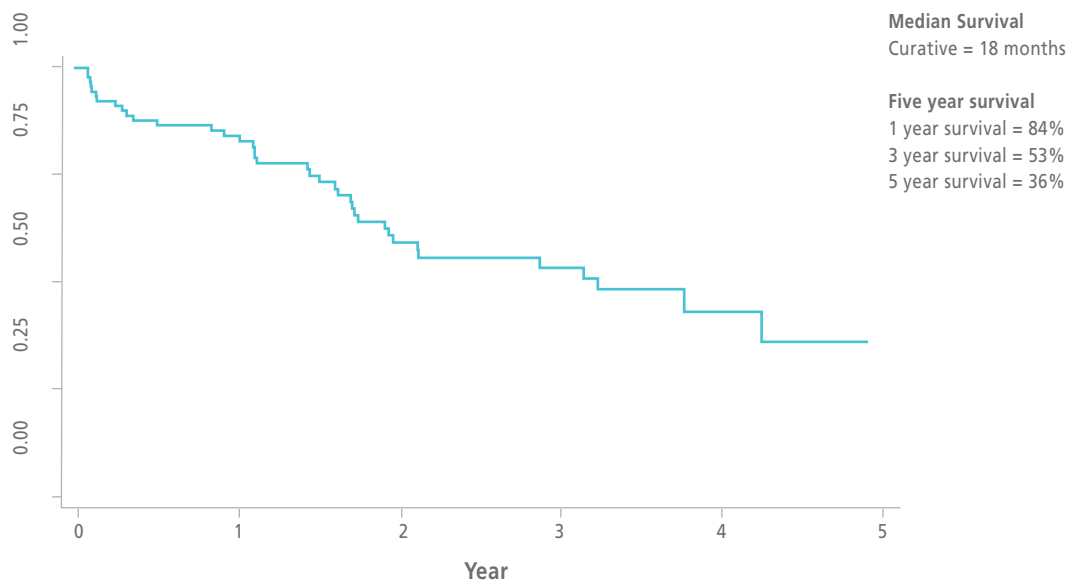


Figure 2.15 Overall Gastric Cancer survival by Pathological Stage

