

**SURGICAL ONCOLOGY**

**SO01  
NEOADJUVANT: RECTAL CANCER**

**B. A. ROBINSON**

*Christchurch Hospital, Canterbury, New Zealand*

Neoadjuvant therapy is given before surgery to improve resectability, local control and/or survival. Post-operative radiation therapy for locally advanced rectal cancer has been long accepted, and since 1990 adding fluorouracil (5FU) chemotherapy became the NIH standard. However, trials then showed that pre-operative radiotherapy followed by surgery improved local control over surgery alone, but had a less consistent effect on overall survival. The German trial (Sauer, NEJM, 2004, 351:1731) showed a 5 year local relapse rate of 6% for pre-operative chemo-radiotherapy and 13% for post-operative chemo-radiotherapy for T3 or T4 or node-positive rectal cancer treated by TME. The EORTC 22921 trial (37% had TME) showed a similar reduction in local recurrence whether 5FU/leucovorin chemotherapy was given with pre-operative radiotherapy, after pre-operative radiotherapy plus surgery, or both (Bosset, NEJM, 2006, 355:1114). Trials show increased rates of complete pathological remission, increased acute toxicity, but no consistent effects on sphincter preservation rates or overall survival when chemotherapy is combined with pre-operative radiation.

Many questions remain. The TROG/AGITG trial compares pre-operative radiotherapy as a short course (5 Gy X 5#) or long course with chemotherapy (50.4 Gy plus 5 FU infusion), with accrual just completed. Ongoing phase III trials explore capecitabine, adding other drugs to 5 FU, and post-operative adjuvant chemotherapy.

Neo-adjuvant pre-operative radiation with concurrent chemotherapy, unless contra-indicated by comorbidity, has become widely accepted for T3 or T4 or node-positive rectal cancer based on MRI staging. Individual patient care is best planned by a multidisciplinary team.

**SO02  
SYNOPTIC REPORTING OF BREAST IMAGING:  
AN OPPORTUNITY TO IMPROVE BREAST CANCER CARE**

**B. MANN, H. ZORBAS, H. GOODWIN AND C. NEHILL**

*Royal Womens and Melbourne Hospital, Victoria, Australia*

A scoping study of breast imaging reporting in July 2006 by the National Breast Cancer Centre (NBCC) revealed that synoptic reporting has not been widely implemented in Australia. The 2002 NBCC publication Breast imaging: a guide for practice recommended the use of a breast imaging synoptic report.

A synoptic report contains a summary of essential information in a checklist format with standard language, descriptions and classification system (i). Synoptic reporting may improve the content and completeness of reports, reduce the risk of misinterpretation of findings, improve communication between referring clinicians and radiologists and facilitate the transfer of information to databases for quality improvement activities and audit (i).

A breast imaging synoptic report helps clinicians and patients by assisting in tracking individual lesions, ensuring the inclusion of mammographic and ultrasound characteristics of lesions, offering one classification per lesion and a combined imaging diagnosis.

As a result of the scoping study, the breast imaging synoptic report has been revised by a multidisciplinary working group to ensure acceptability and applicability to radiologists, referring clinicians and end users. A number of strategies have been identified to assist the implementation of the revised NBCC breast imaging synoptic report and standard classification system.

Surgeons as referrers and end users, play an integral role in advocating and promoting the use of synoptic reporting in breast imaging.

(i) National Breast Cancer Centre. Breast imaging: a guide for practice. Camperdown, NSW: National Breast Cancer Centre, 2002.

**SO03  
CRITICAL ANALYSIS OF TREATMENT FAILURE FOLLOWING  
COMPLETE CYTOREDUCTIVE SURGERY AND PERIOPERATIVE  
INTRAPERITONEAL CHEMOTHERAPY FOR PERITONEAL  
DISSEMINATION FROM APPENDICEAL MUCINOUS NEOPLASMS**

**T. D. YAN, L. BIJELIC AND P. H. SUGARBAKER**

*St. George Hospital, New South Wales, Australia*

**Purpose** The objective of this data analysis was to study treatment failure after complete cytoreductive surgery (CRS) and perioperative intraperitoneal chemotherapy (PIC) for peritoneal dissemination from appendiceal mucinous neoplasms.

**Methodology** Prior to June 2006, 402 patients with peritoneal dissemination from appendiceal mucinous neoplasms underwent complete cytoreduction and PIC at the Washington Cancer Institute. Patient characteristics, pathologic features and treatment-related data were obtained from a prospective database. Survival analyses were performed using Kaplan-Meier method and Cox Regression model.

**Results** After a median follow-up of 66 months, the 5- and 10-year overall survival rates for the entire 402 patients were 90% and 85%, respectively. The 5- and 10-year progression-free survival rates were 70% and 67%, respectively. Disease progression was the only independent risk factor for a reduced overall survival. One hundred and eleven patients (28%) developed progressive disease. Of these, 98 patients underwent second-time and 26 patients third-time CRS and PIC. Complete cytoreduction after repeat surgery was the only independent prognostic factor for an improved survival. The most common sites of treatment failure were on the small bowel and in the pelvis.

**Conclusions** The present study reported the patterns of treatment failure after complete cytoreduction and demonstrated that a disease-free state is important for long-term survival in peritoneal dissemination from appendiceal mucinous neoplasms. Repeat complete cytoreduction should be pursued when possible and is associated with an improved overall survival in patients with recurrent disease.

**SO04  
CYTOREDUCTIVE SURGERY AND PERIOPERATIVE  
INTRAPERITONEAL CHEMOTHERAPY FOR PERITONEAL  
CARCINOMATOSIS FOR COLORECTAL CARCINOMA**

**S. SATHASIVAM, T. YAN, F. CHU AND D. MORRIS**

*Department of Surgery, St George Hospital, New South Wales, Australia*

Cytoreductive surgery (CRS) combined with perioperative intraperitoneal chemotherapy (PIC) has been reported as a treatment option for patients with peritoneal carcinomatosis from colorectal carcinoma.

This prospective study was to report survival outcomes and evaluate the significant prognostic factors for overall survival in 30 patients who underwent CRS and PIC.

No patients were lost to follow-up. Univariate analysis was performed to evaluate the significant prognostic factors for overall survival, defined from the time of surgery. Survival analysis was performed by using the Kaplan-Meier method and compared using the log rank test.

The median survival was 29 months (range 2–39 months). No patients died in the post-operative period. The 1- and 2-year survival rates were 72% and 64%, respectively.

Six clinicopathologic factors and one treatment-related factor for overall survival were analysed by univariate analysis. Clinicopathological factors included gender, age, timing of the surgery, histological grading, liver metastases and Peritoneal Cancer Index (PCI). Treatment-related factors included operative duration, length of hospital stay, completeness of cytoreduction and peri-operative morbidity. Three factors were significant for overall survival: non-mucinous colorectal adenocarcinoma (versus mucinous,  $p=0.047$ ),  $PCI < 13$  (versus  $> 13$ ,  $p=0.016$ ), and complete cytoreduction (versus incomplete,  $p=0.030$ ).

Non-mucinous colorectal adenocarcinoma and  $PCI < 13$  were associated with an improved survival in the 30 patients who underwent cytoreductive surgery and perioperative intraperitoneal chemotherapy for colorectal peritoneal carcinomatosis.

**SO05**  
**THE NATURE OF NEARBY LYMPHATICS DICTATES WHETHER A VASCULAR ENDOTHELIAL GROWTH FACTOR-D (VEGF-D) INDUCES TUMOR LYMPHATICS AND METASTASIS**

R. SHAYAN, T. KARNESIS, M. G. ACHEN, G. B. MANN, S. A. STACKER AND G. I. TAYLOR

*Ludwig Institute for Cancer Research, Victoria, Australia*

**Purpose** Tumors secreting VEGF-D or VEGF-C proteins exhibit increased lymphatic vessel density and lymph node spread (1), however tumor depth and anatomical location also influence metastasis in some tumors. It is unclear whether tumor lymphatics mirror one of the normal lymphatic subtypes or if they form an independent phenotype, and how this may vary in different anatomical locations. We aimed to study lymphatics induced in a VEGF-D+ tumor model (1), xenografted in different locations, to better understand the vessels that facilitate tumor spread.

**Methods** We analysed lymphatics formed in mouse skin wounds and tissue from VEGF-D+ or VEGF-D- tumors in the ear or flank, using immunohistochemical lymphatic marker LYVE-1 and confocal imaging of fluorescently-labelled antibodies.

**Results** VEGF-D+ tumors that were adherent to skin induced abnormal lymphatic structures that promoted lymph node metastasis (89%) and exhibited morphologically abnormal lymphatics; whereas size-matched tumors that were adherent to the underlying body wall (similar VEGF-D levels) metastasised minimally (19%,  $p < 0.001$ ) and contained no morphologically abnormal lymphatics. Analysis of ear wounds and tumors suggested that lymphatics sprout mainly from the 'pre-collector' lymphatic subtype within skin.

**Conclusion** Lymphangiogenic growth factors are important but tumor location also plays a role in metastasis. A distinct tumor lymphatic subtype may also offer new diagnostic or therapeutic molecular targets.

- Stacker, S.A. et al., 2002. Lymphangiogenesis and cancer metastasis. *Nat Rev Cancer* 2:573-583.

**SO06**  
**EXTRATHORACIC SOLITARY FIBROUS TUMOURS: OUTCOME OF 33 CASES**

I. M. CRANSHAW, K. THWAY, C. FISHER, W. HARGREAVES, A. J. HAYES AND J. M. THOMAS

*Royal Marsden Hospital, Middlesex, United Kingdom*

**Purpose** Extrathoracic solitary fibrous tumours (SFT) have traditionally been regarded as less aggressive than their intrathoracic counterparts. However there has been some evidence that a subset of more aggressively malignant tumours exist. We examined our experience with these rare tumours in an effort to clarify their clinicopathological behaviour and relate this to their histopathological findings.

**Methodology** All patients with a histopathological diagnosis of SFT who presented to the Royal Marsden Hospital between 1998 and 2006 were reviewed. Clinicopathological data were recorded for all cases and comparisons made using Fishers exact test and calculating Odds ratios (OR).

**Results** There were 33 cases included in the study. 18 (55%) cases had malignant features on histological examination and these cases were associated with significantly increased rates of local recurrence (OR 16.21  $p$  0.021), metastatic disease (OR 8.91  $p$  0.046) and death (OR 38.29  $p$  < 0.01). Tumours within the abdominal cavity or retroperitoneum were associated with a higher rate of local recurrence compared to those in the limbs (OR 21.67  $p$  < 0.01). One case with benign histopathology developed metastatic disease at 102 months of follow-up.

**Conclusion** In our experience extrathoracic SFT have a higher rate of malignant behaviour than that classically described. Those tumours with atypical or malignant features on histological examination should be closely monitored and followed up in the same manner as other high grade soft tissue tumours. Even histologically benign tumours occasionally behave in a malignant fashion.

**SO07**  
**LAPAROSCOPIC VERSUS OPEN TOTAL MESORECTAL EXCISION: A CASE-CONTROL STUDY**

S. O. BREUKINK, J. P. E. N. PIERIE, A. J. GROND, C. HOFF, T. WIGGERS AND W. J. H. J. MEIJERINK

*University Medical Center Groningen, Groningen, Netherlands*

**Purpose** Because definitive long-term results are not yet available, the oncological safety of laparoscopic surgery for treatment of rectal cancer remains unproven. The aim of this prospective non-randomized study was to assess the feasibility and short-term outcome of laparoscopic total mesorectal excision (LTME) after 25-30 Gy preoperative radiotherapy and to compare the results with a matched-control group of open TME (OTME).

**Methodology** A series of 41 patients with primary rectal cancer underwent LTME for rectal cancer and were matched with a historical control group of 41 patients who underwent OTME. Both groups received preoperative short-term radiotherapy.

**Results** There was no mortality in the LTME group and 2% mortality in the OTME group. The overall postoperative morbidity was 37% in the LTME group and 51% in the OTME group, including an anastomotic leakage of 9 and 14% in the LTME and OTME groups respectively. A positive circumferential margin was found in 7% of patients in the LTME group and in 12% of the patients in the OTME group.

**Conclusion** This study shows that LTME is technically feasible and can be performed safely. We show at least a similar surgical completeness using a laparoscopic technique.

**SO08**  
**MANAGEMENT OF COMPLEX LARGE VOLUME GROIN TUMOURS WITH RECTUS ABDOMINUS MYOCUTANEOUS FLAPS - A CASE SERIES**

I. M. CRANSHAW, P. FISCHER, J. STAINIO AND J. M. THOMAS

*Royal Marsden Hospital, Middlesex, United Kingdom*

**Purpose** Resection of large volume soft tissue tumours and metastatic disease in the groin commonly involves extensive resection of abdominal wall and overlying skin to achieve adequately wide surgical margins. There are many reconstructive techniques available often requiring specialised plastic surgical input. We have routinely used vertical rectus abdominus myocutaneous flaps (VRAM) to reconstruct these defects and our impression was that these simple flaps provided good cover with few complications.

**Methodology** A search of our operative database between 1999 and 2005 to identify large volume groin tumours which had been immediately reconstructed with a VRAM. We recorded information on patient demographics, tumour characteristics, reconstruction type, postoperative complications, follow-up and survival data.

**Results** 18 patients fulfilled our criteria and were included in the study. Tumour pathology was sarcoma 11 (61%), melanoma 4 (22%) and squamous cell carcinoma 3 (17%). Only 6 cases were potentially curative resections for primary tumours with, 5 palliative procedures for recurrent sarcoma and 7 for metastatic. Patients with palliative resections did poorly with an average survival of 17 months (range 6-36 months) but complications were uncommon with partial flap necrosis requiring split skin grafting in one case only. Curative resections had no local recurrences and one death from disease at 44 months.

**Conclusion** VRAM reconstruction following resection of large volume groin tumours was very successful in our series providing excellent cover in the groin with few complications. The technique is useful in achieving robust surgical palliation and appears equally effective for potentially curative cases.

**SO09**  
**PERCUTANEOUS RADIOFREQUENCY ABLATION OF LUNG TUMOURS: RESULTS IN FIRST 100 CONSECUTIVE PATIENTS**

J. C. ZHU, T. D. YAN, K. NG, J. KING, D. GLENN AND D. L. MORRIS

*Department of Surgery, St. George Hospital, UNSW, New South Wales, Australia*

**Purpose** The study reported our experience with first 100 consecutive patients who underwent radiofrequency ablation (RFA) of their unresectable malignant lung tumours.

**Methodology** From Nov 2000 to Dec 2006, the clinical and treatment-related information regarding the 100 consecutive patients (58 males, mean age of 65 years) with 240 lung tumours treated by RFA were collected prospectively and reviewed retrospectively. RFA was performed under CT guidance with local anaesthetics and conscious sedation. The patients were followed up with chest CT at regular intervals.

**Results** Five patients had primary lung carcinoma while the remaining patients had pulmonary metastases from extra-thoracic malignancies, with colorectal cancer being the most common primary site (70%). The mean number of pulmonary lesions ablated was 2.4 per patient; the mean size of lesion was 2.2 cm in diameter. Nineteen patients had repeat RFA for recurrent or residual pulmonary disease. There was no post-procedural mortality and the overall morbidity rate was 42%. The most common complication was pneumothorax, which occurred in of 31% of procedures (n = 39/127) with only 20 (16%) requiring chest tube placement. After a median follow-up of 24 months (range 1 to 70 months), 72% of RFA treated lesions did not progress. The overall median disease-free interval was 13 months, with 1-, 3- and 5-year disease-free survival of 55%, 22% and 7% respectively. The overall median survival was 34 months with 1-, 3- and 5-year-survival of 85%, 49% and 33% respectively.

**Conclusion** Percutaneous RFA is an emerging therapy with promising results when surgical resection of pulmonary malignancy cannot be performed.

#### SO10P

##### A RETROSPECTIVE ANALYSIS OF WOUND INFECTION AFTER PERCUTANEOUS ENDOSCOPIC GASTROSTOMY (PEG) IN CANCER PATIENTS

T. LAM, J. B. SPILLANE, D. B. Y. SYME, R. WOOD AND T. T. MCPHAIL

*Peter MacCallum Cancer Centre, Victoria, Australia*

**Purpose** To determine infectious complications following PEG insertion with attention to the effect of chemotherapy, radiotherapy and timing of PEG insertion.

**Methodology** A review of medical records of patients who underwent PEG insertion at a single institution between 1st July 2003 and 30th June 2005 was performed. PEG infection rate, antibiotic use, and concurrent chemotherapy and/or radiotherapy were recorded. Overall infection rate was calculated and a Quality Control Chart determined no evidence of an infectious outbreak.

**Results** 96 PEG procedures were performed. 92.8% of patients had head and neck cancers, 90.6% had squamous cell carcinoma, 64.6% had distant disease. 71 of 96 patients were male, mean age 61.2 yrs, mean BMI 22.1 kg/m<sup>2</sup>. Median length of stay was 8 days for infected patients and 5 days for non-infected patients; median follow-up 21 days and 19 days respectively. 56 patients had prior chemo-radiotherapy, 17 radiotherapy alone, 4 chemotherapy alone and 19 had no prior treatment. 14.6% patients had an infection. 21.4% of infected patients did not receive prophylactic antibiotics. Type of cancer, stage of cancer, and co-morbidities were not predictive of infection. Chemotherapy and/or radiotherapy treatment before, during or after PEG insertion was not statistically significant for PEG infection.

**Conclusion** An infection rate of 14.6% was found, which falls within the range outlined by other authors. Our study investigated a patient group with tumours, the majority of whom had chemo-radiotherapy around the time of PEG insertion. There was no statistical difference in infection rate due to timing of PEG insertion and no difference with the use of chemo-radiotherapy.

#### SO11P

##### A SYSTEMATIC REVIEW ON THE EFFICACY OF REPEAT HEPATECTOMY FOR RECURRENT LIVER METASTASES FROM COLORECTAL CARCINOMA

J. SIM, T. D. YAN, D. BLACK AND D. L. MORRIS

*St. George Hospital, New South Wales, Australia*

**Purpose** The objectives of this systematic review were to critically appraise the quantity and quality of current clinical evidence and demonstrate the efficacy of repeat hepatectomy for CRLM.

**Methodology** Electronic searches for relevant studies published in peer-reviewed journals on repeat hepatectomy for recurrent CRLM prior to September 2006 were performed on six databases. All articles identified were assessed with application of selection criteria. The quality of each included

study was assessed. Clinical effectiveness was synthesized through a narrative review with full tabulation of results.

**Results** Seventeen studies with more than 20 patients were included for quality appraisal and data extraction. These 17 studies consisted of two multi-institutional, one bi-institutional and 14 single-center observational studies. The overall perioperative morbidity rate ranged from 7–30% and mortality rate varied from 0–5%. The overall median survival since initial hepatectomy was 26 to 73 months. The overall median survival since the repeat hepatectomy ranged from 23 to 56 months, with 3- and 5-year survival of 24–68% and 21–49%, respectively. The median disease-free survival ranged from 9 to 52 months, with 3- and 5-year disease-free survival of 16–68% and 16–48%, respectively. After repeat hepatectomy the rates of recurrence in the liver and at an extra-hepatic site were 15–67% and 27–64%, respectively.

**Conclusions** The current literature suggests that repeat hepatectomy is associated with a prolonged survival for recurrent CRLM. Although all studies were observational case series, repeat hepatectomy is justified in selected patients, as there is a lack of evidence for alternative treatment.

#### SO12P

##### COMBINED CYTOREDUCTIVE SURGERY AND PERIOPERATIVE INTRAPERITONEAL CHEMOTHERAPY IN THE TREATMENT OF PERITONEAL MESOTHELIOMA

J. SIM, T. D. YAN AND D. L. MORRIS

*St. George Hospital, New South Wales, Australia*

**Purpose** Australia has the highest incidence of mesothelioma worldwide. Compared with traditional treatments using systemic chemotherapy, the combined cytoreductive surgery (CRS) with perioperative intraperitoneal chemotherapy (PIC) has shown improved survival.

**Methodology** Fifteen consecutive patients with peritoneal mesothelioma underwent CRS and PIC at the St. George Hospital, Sydney. Clinical and treatment-related data were prospectively collected and reported. The morbidity and mortality rates and overall median survival were evaluated to assess the safety and efficacy of CRS and PIC in the treatment of peritoneal mesothelioma.

**Results** There were 10 male and 5 female patients. The median age was 55 years old (range 35–72). The median follow-up was 12 months (range 6–50). Thirteen patients were surveyed regarding asbestos exposure, in which 7 reported a definite asbestos exposure, 3 reported working in high risk occupations and 3 reported minimal exposure risk. The mean operating duration was 9.6 hours. Rate of re-operation was 7% and mean hospital stay was 23 days. The morbidity and mortality rates were 36% and 7% respectively, with an overall median survival of 86 months (range 1–86). The 1-, 2- and 3-year survivals were 80%, 69% and 55% respectively.

**Conclusion** CRS combined with PIC is a treatment option for peritoneal mesothelioma that confers improved survival, when compared with historical controls using systemic chemotherapy.

#### SO13P

##### CYTOREDUCTIVE SURGERY COMBINED WITH PERIOPERATIVE INTRAPERITONEAL CHEMOTHERAPY FOR DIFFUSE MALIGNANT PERITONEAL MESOTHELIOMA – ANALYSIS OF 100 CONSECUTIVE PATIENTS FROM A PROSPECTIVE DATABASE

T. D. YAN, J. SIM AND P. H. SUGARBAKER

*St. George Hospital, New South Wales, Australia*

**Purpose** Diffuse malignant peritoneal mesothelioma (DMPM) is a rare and invariably fatal neoplasm. Some studies have shown that cytoreductive surgery (CRS) combined with perioperative intraperitoneal chemotherapy (PIC) achieved an improved survival, as compared to historical controls. However, prognostic factors for survival have not been well defined.

**Methodology** One hundred patients with DMPM underwent CRS and PIC at the Washington Center Institute. The inclusion criteria for surgery consisted of histological diagnosis of DMPM, age < 80 years, good performance status, and signed informed consent. All data were collected prospectively. Eight clinical and eight treatment-related prognostic factors were analyzed for survival.

**Results** The overall median survival was 52 months (range 1 to 148 months), with 1-, 3-, 5- and 7-year survival of 78%, 55%, 46% and 39%, respectively. Univariate analysis showed that gender (p < 0.001), peritoneal

cancer index ( $p = 0.009$ ), lymph node status ( $p < 0.001$ ), distant metastasis ( $p = 0.026$ ), histological type ( $p < 0.001$ ), intraoperative blood loss ( $p = 0.035$ ), completeness of cytoreduction ( $p < 0.001$ ), intraperitoneal chemotherapy regimen ( $p = 0.041$ ), and redo cytoreductive surgery ( $p = 0.022$ ) were significant for survival. Multivariate analysis demonstrated that female gender, absence of lymph node involvement, epithelial/multicystic type, and adequate cytoreduction were independently associated with an improved survival.

**Conclusions** CRS and PIC showed an improved survival for DMPM, as compared to historical controls. Long-term survival was associated with female gender, absence of lymph node involvement, epithelial or multicystic type and adequate cytoreduction.

#### SO14P

##### PERIOPERATIVE OUTCOMES OF CYTOREDUCTIVE SURGERY AND PERIOPERATIVE INTRAPERITONEAL CHEMOTHERAPY FOR NON-APPENDICEAL PERITONEAL CARCINOMATOSIS FROM A PROSPECTIVE DATABASE

T. D. YAN AND P. H. SUGARBAKER

*St. George Hospital, New South Wales, Australia*

**Purpose** Cytoreductive surgery and perioperative intraperitoneal chemotherapy has expanded its application in the management of peritoneal carcinomatosis from gastrointestinal and ovarian malignancies. An accurate assessment of perioperative outcomes is crucial for integration of this combined procedure into clinical practice.

**Methodology** A prospective study of 80 patients undergoing the combined treatment for non-appendiceal peritoneal carcinomatosis was conducted. Forty-seven adverse events by 8 organ-systems were rated from Grade I to IV with increasing severity. Grade I morbidity was self-limiting; Grade II required medical treatments; Grade III required an invasive intervention; and Grade IV required returning to the operating room or intensive care management.

**Results** One patient (1.3%) died postoperatively. Postoperative adverse events affected genitourinary system (38%), haematological system (31%), gastrointestinal system (25%), infection (20%), intravenous catheters status (15%), pulmonary system (14%), cardiovascular system (11%), and neurological system (4%). Thirty-six patients (45%) experienced 49 Grade III adverse events. Six patients (8%) experienced 8 Grade IV adverse events. More than 4 peritonectomy procedures ( $p = 0.010$ ), and length of hospital stay of more than 21 days ( $p = 0.007$ ) were strongly associated with Grade III and/or Grade IV morbidity.

**Conclusions** The morbidity and mortality rates after the combined treatment for non-appendiceal peritoneal carcinomatosis were within the acceptable range of surgical treatments for other gastrointestinal cancers. A standardized prospective database is required for an accurate assessment of perioperative outcomes.

#### SO15P

##### PERCUTANEOUS RADIOFREQUENCY ABLATION OF LUNG TUMOURS: PROGNOSTIC RISK FACTORS FOR LOCAL PROGRESSION

K. NG, T. D. YAN, J. C. ZHU, J. KING, D. GLENN AND D. L. MORRIS

*Department of Surgery, St. George Hospital, New South Wales, Australia*

**Purpose** The purpose of this series was to evaluate the prognostic features for local progression in non-surgical candidates after undergoing percutaneous RFA of lung tumours.

**Methodology** From Nov 2000, a total of 233 lung neoplasms (9 primary) in 95 patients (56 males, mean age of 66 years) with a minimum follow-up of 6 months were included in this study. The primary end point was local progression free interval defined from the time of RFA intervention. Local progression was defined as tumour recurrence of previously RFA treated site/s. Univariate and multivariate analysis were performed to identify significant prognostic parameters for post-ablative tumour recurrence.

**Results** The mean number of tumours ablated per patient was 2.5 while the mean diameter of tumours was 2.2 cm. After a median follow up period of 24 months (range: 6–54 months), 32% of ablated tumours recurred. The overall median local progression free interval was 20 months (range 3–54 months) with 1, 2 and 3 year local progression free survival of 82%, 74% and 68% respectively. Univariate analysis of lesion characteristics identified size ( $p = 0.0002$ ), hilar location ( $p = 0.0141$ ), proximity to bronchus ( $p = 0.009$ ) and vessel ( $p = 0.001$ ), number of ablations required per lesion ( $p = 0.0052$ ) and post-ablation and tumour volume ratio ( $p = 0.0002$ ) as statistically significant prognostic factors for tumour recurrence. Multivariate analysis identified size of lung tumours  $>3$  cm ( $p = 0.07$ ) as an independent risk factor for local progression.

**Conclusion** Percutaneous lung RFA may play a useful role as a local therapy in non-surgical candidates with pulmonary neoplasms. However, the efficacy of local control may be restricted to lesions smaller than 3 cm.

#### SO16P

##### MULTIDISCIPLINARY CANCER CARE IN AUSTRALIA: AN AUDIT OF CURRENT UPTAKE

H. WILCOXON, A. EVANS, H. GOODWIN, J. O'BRIEN, H. ZORBAS AND K. LUXFORD

*National Breast Cancer Centre, New South Wales, Australia*

Multidisciplinary care (MDC) has been shown to improve care and outcomes for cancer patients and is incorporated into national and state/territory clinical practice guidelines, frameworks and plans across Australia. The National Breast Cancer Centre Principles of Multidisciplinary Care provide a flexible framework for the implementation of MDC. However, while there has been a considerable focus on MDC in breast cancer there is anecdotal evidence that the wider uptake of MDC is limited.

The NBCC has undertaken a national audit of MDC activity across five tumour streams: breast, gynaecological, lung, colorectal and prostate cancers. The aim of the audit was to provide a snapshot of MDC activity in Australia across a range of health service delivery settings, to identify areas or gaps where implementation strategies could be targeted to increase MDC uptake. The audit was timed to precede the introduction of a Medicare Benefit Schedule item to support specialists attending MDC meetings.

A random sample of 420 hospitals, stratified by state/territory, hospital type (public/private) and geographic area (metropolitan/regional) were invited to nominate hospital staff to participate in a telephone survey about MDC activity for each of the five tumour streams. The survey investigated both practical and qualitative aspects of MDC practice based on the Principles of Multidisciplinary Care. Within two states the survey was administered through collaboration with state-based health departments.

The national data was analysed by tumour stream, hospital type and geographical area. Key results and outcomes relevant to surgeons will be presented.