

**Rapid Response Radiotherapy Program (RRRP)
and Bone Metastases Site Group (BMSG)**

Annual Report

January–December 2008

**Dr. Edward Chow
Chair**

Rapid Response Radiotherapy Program and Bone Metastases Site Group

Executive Summary

1. Clinics

- a) RRRP clinics: We are meeting the goals of the RRPP to provide timely palliative radiotherapy to patients with advanced cancer. The number of patients seen annually in the five weekly half-day clinics has reached a plateau of 500-600, eighty percent of which are new to OCC.
- b) We successfully developed the role of an advanced practice radiation therapist with the support of the Ministry of Health (MOH).

2. Education

- a) Newsletter - Our quarterly newsletter HOT SPOT has been in production for 10 years from 1999-2008 and continues to be informative and educational.
- b) We continue to offer electives to palliative health care professionals to visit our Centre and learn about our programs.

3. Research

- a) We were successful in obtaining grant support to continue our research projects.
- b) Research students from University of Waterloo's co-op program have been extremely productive and have won numerous awards.

4. Our Quality Assurance rounds resulted in several published case reports.

5. We have been awarded the Quality Award from the Cancer Quality Council of Ontario, Cancer Care Ontario and the Canadian Cancer Society.

6. We have produced the bone metastases teaching book for our patients and the families. We have requests from centres from Canada, US and abroad for copies to distribute to their patients.

7. We have developed with the EORTC a bone metastases specific quality of life module (BM 22) which has been published in European Journal of Cancer. BM 22 can be used in clinical trials now.

This report summarizes our very successful year and the academic activities of the RRRP/BMC.

**Odette Cancer Centre
Rapid Response Radiotherapy Program (RRRP)
December 2008**

The membership of the RRRP currently includes:

Radiation Oncologists

Edward Chow (Chair)
Toni Barnes
Cyril Danjoux
Arjun Sahgal
May Tsao

Radiation Therapists

Gunita Mitera
Emily Sinclair

Nurses

Grace Chan
Michelle Daley-Martin
Ernest Dixon
Michelle Ross

Pharmacist

Carlo DeAngelis

Clinical Trials

Soruba Vijayaratnam

**Odette Cancer Centre
Bone Metastases Site Group
December 2008**

The membership of the BMC currently includes:

Radiation Oncologists

Edward Chow (Chair)
Toni Barnes
Cyril Danjoux
Arjun Sahgal
May Tsao

Orthopedic Surgeons

Joel Finkelstein
Michael Ford
Albert Yee

Radiologists

Monique Christakis
Elizabeth David
Andrea Donovan
Linda Probyn
Robyn Pugash
Joel Rubenstein

Medical Oncologist

Urban Emmenegger

Palliative Care Physician

Anita Chakraborty

Radiation Therapists

Gunita Mitera
Emily Sinclair

Nurses

Macey Farhadian
Sima Farhangi-Manesh

Pharmacist

Carlo DeAngelis

Clinical Trials

Soruba Vijayaratham

EDUCATION

The RRRP organizes monthly Palliative Rounds, publishes a quarterly newsletter "HOT SPOT" and provides educational electives for students and health care professionals interested in palliative radiotherapy.

CME Monthly Rounds

The rounds are organized by Dr. E. Barnes and held on the last Tuesday of the Month from 12 - 1 p.m. in the R.D.T. Jenkin Auditorium. They are accredited for MOCERT credits.

The subjects discussed during 2008 were:

2008	Title	Presenter
January 29	Opioids and Addiction: An Approach to Risk Management	Dr. Lawrence Librach
February 26	Conservative Management of Fistulas	Ms. Debbie Miller
March 25	Care Where There is No Cure	Dr. Alexandra Easson
April 29	Liver Metastases	Dr. Laura Dawson
May 27	Difficult Cases in Palliative Care: A Discussion	Dr. Jeff Myers
June 24	Outpatient Palliative Care Who Suffers & Who Benefits?	Dr. Camilla Zimmerman
September 30	Latest in RRRP research	Ms. Emily Sinclair and Gunita Mitera
October 28	Akathisia in Cancer	Dr. Kim Miller

**Rounds cancelled: July 29, August 26, November 25, and December 30*

Hot Spot Newsletter

In response to a satisfaction survey from our referring physicians who wanted better communication, we initiated a quarterly newsletter in 1999 called "HOT SPOT".

HOT SPOT is the educational newsletter of the RRRP at OCC. It is published quarterly and distributed to oncologists, palliative care specialists, family doctors and professional health care workers in palliative medicine. Our readership has expanded to over 2,000 per issue and we continue to expand our circulation to new readers. Survey results from our readers rated the educational value of HOT SPOT as high and suggested that we add other topics of interest. We increased the content of our newsletter from four to six pages with additional sections and contributors. The newsletter has regular articles on the following topics:

- ETHICS
- RESEARCH
- PSYCHOSOCIAL
- PHARMACOLOGICAL
- EDUCATIONAL ACTIVITIES
- EDUCATIONAL INSERT

The Editorial Board of Hot Spot

Editor	Dr. E. Chow
Associate Editor	Dr. C. Danjoux
Consultant	Dr. S. Wong
Advisers	Dr. E. Barnes, Dr. R. Goldman, Dr. A. Husain, Dr. L. Librach, Ms. G. Mitera, Dr. A. Sahgal, Ms. E. Sinclair, Dr. E. Szumacher, Dr. M. Tsao
Editorial & Financial Manager	Ms. S. Lue

The publication of the newsletter is made possible by the financial support of pharmaceutical & radiotherapy equipment companies.

The newsletter is also available electronically on the OCC web site:
http://www.sunnybrook.ca/content/?page=Focus_Occ_Care_RRRP_Home

[\[Appendix D provides the content of previous issues and inserts of HOT SPOT from 1999-2008.\]](#)

Educational Electives

As part of our undergraduate teaching, students from the co-op program at the University of Waterloo have their electives working with the RRRP-BMC. This co-operative educational elective has been extremely successful. Several of our students have won numerous awards.

Awards

Sarah Campos (2008), Second year undergraduate student.

- ❖ 2008 RRRP/BMC Student of the Year Scholarship, Odette Cancer Centre, Toronto, Ontario, December 2008.

Shaelyn Culleton (2008), Second year undergraduate student.

- ❖ 2008 Best Scientific Oral Presentation Award, 18th Annual Ontario Provincial Conference on Palliative and End-of-Life Care, Toronto, Ontario, April 2008.
- ❖ 2008 Co-op Student of the Year (Honorable Mention) for Faculty of Science, University of Waterloo, Waterloo, Ontario, 2008.

Candi Flynn (2007 - 2008), Graduate student.

- ❖ 2008 – 2009 Schulich Graduate Scholarship, The University of Western Ontario, London, Ontario, 2008.

Philiz Goh (2006 - 2008), Graduate student.

- ❖ 2008 Hal Rogers Endowment Award, Toronto, Ontario, 2008.
- ❖ 2008 Seymour Schulich Award in Nursing, Toronto, Ontario, 2008.
- ❖ 2008 National Education & Research Award, Canadian Nursing Student's Association.
- ❖ 2008 Donner Wheeler Nursing Career Scholarship, Registered Nurses' Foundation of Ontario

Amanda Hird (2006 – 2008), Third year undergraduate student.

- ❖ 2008 Travel Grant Award, Cancer and Bone Society, Edinburgh, Scotland, July 2008.
- ❖ 2008 Best Scientific Oral Presentation Award, 18th Annual Ontario Provincial Conference on Palliative and End-of-Life Care, Toronto, Ontario, April 2008.
- ❖ 2008 Michael and Karyn Goldstein Best Cancer Research Student Travelling Scholarship Award, Odette Cancer Centre, Toronto, Ontario, December 2008.
- ❖ 2008 RRRP/BMC Student of the Year Scholarship, Odette Cancer Centre, Toronto, Ontario, December 2008.
- ❖ 2008 Co-op Student of the Year for Faculty of Applied Health Sciences, University of Waterloo, Waterloo, Ontario, 2008.
- ❖ 2008 Canadian Association for Co-operative Education Co-op Student of the Year - Honorable mention
- ❖ 2008 Education at Work Ontario Co-op Student of the Year

Kathy Li (2004 - 2006), Graduate student.

- ❖ 2007 – 2008 Ontario Graduate Scholarship, Ontario, 2008.

Nadia Salvo (2008), Third year undergraduate student.

- ❖ 2008 Marion J. Todd Memorial Award, Faculty of Applied Health Sciences, University of Waterloo, November 2007, Waterloo, Ontario.

Sukirtha Tharmalingam (2006), Graduate student.

- ❖ 2007 – 2008 Ontario Graduate Scholarship, Ontario, 2008.

Jennifer Wong (2007 - 2008), Third year undergraduate student.

- ❖ 2008 RRRP/BMC Student of the Year Scholarship, Odette Cancer Centre, Toronto, Ontario, December 2008.

[Appendix E – Undergraduate Teaching–Co-op Program]

Health Care Professionals Electives

The RRRP provides an orientation for other health care professionals to experience the activities of the RRRP clinics. Dr. Belal Ahmad from London, Ontario and Dr. Palmira Foro Arnalot from Barcelona, Spain spent a couple of days with us as they plan to start a similar project in their Centre. They found the experience valuable and recommend it for others planning to start a similar program.

RESEARCH

The RRRP-BMC team objective is to provide palliative radiotherapy in an academic environment. We participate in local, national and international clinical trials, have regular research rounds and have been successful in securing grants to fund our research projects.

Clinical Trials

We participate in several clinical trials. The research students have been an essential resource in helping us to enroll, follow-up, analyze and publish our studies. Without the dedication of our research students, it would have been difficult to successfully complete our research studies.

[\[Appendix F - A list of ongoing research studies in the RRRP and BMC\]](#)

CPROG (Canadian Palliative Radiation Oncology Group)

Our collaboration with Princess Margaret Hospital (PMH) and the Hamilton Regional Cancer Centre Palliative Radiation Oncology Group, led to the formation of the Palliative Radiotherapy Oncology Group Ontario (PROG-O) in 2000. Since then PROG-O has expanded to include Cancer Centres from the Maritimes, Manitoba, Calgary and British Columbia. Currently, this group meets monthly through videoconference. This has improved communication between the staff involved in the palliative radiotherapy program in those Centres and offered the opportunity for collaboration in research. At the last CARO meeting, more Cancer Centres expressed enthusiasm in participating in PROG-O rounds.

PROG-O offers a national forum for monthly research discussion in palliative radiotherapy. Over the past years the coordinators for the PROG-O rounds have been Drs. J. Wu, A. Bezjak, R. Wong and T. Barnes. The rounds are scheduled for the first Tuesday of every month.

To represent the change in participation from Ontario to Cancer Centres across Canada we renamed the group as Canadian Palliative Radiation Oncology Group (CPROG)

Videoconference Rounds (CPROG)

The subjects discussed during 2008 were:

2008	Title	Presenter(s)
January 8	Role of Specialized Clinic in Repeated Access to Palliative Radiotherapy for Bone Metastases	Dr. Jackson Wu, TBCC Calgary
February 5	The Ottawa Palliative Radiotherapy Program: Improving Access and Care across the Champlain LHIN	Ms. Lynn Kachuik, Ottawa Hospital
March 4	Palliative Whole Brain Radiotherapy for Patients with Brain Metastases – A Decade of Research	Dr. Andrea Bezjak, PMH
May 6	Evaluation of a Virtual Consultation Process for Patients with Spinal Cord Compression Factors Indicating Referral for Spinal Surgery and Efficacy of the Virtual Consultation Process	Dr. Dr. David Fitzpatrick, PMH
June 3	Pain Flare Following Palliative Radiotherapy for Bone Metastases – Occurrence, Prevention and Etiology	Ms. Amanda Hird and Dr. Carlo DeAngelis, OCC
September 2	What Should RO Residents Learn About Symptom Control During Residency Training	Dr. Jackson Wu, TBCC Calgary
October 7	CBCT Enable 1 Step Sim and Treat for Bone Metastases: Ready for Prime Time?	Dr. Rebecca Wong, PMH
November 4	Multidisciplinary Team Contributions within a Rapid Access Palliative Radiotherapy Program	Ms. Edith Pituskin, Cross Cancer Institute

**Rounds cancelled: April 1, July 3, August 7, and December 2*

RRRP and BMC Monthly Meetings

The subjects discussed during 2008 were:

2008	Title	Chair
January 15	RRRP Quality Assurance Round	Dr. May Tsao
February 19	Changing patterns in spinal metastatic disease: Quantifying tumour progression, treatment effects, and their implications on stability (Presented by Dr. Cari Whyne)	Dr. Edward Chow
February 26	Heterotopic Ossification (Presented by Drs. Hans Kreder, Mary Bell, May Tsao)	Dr. May Tsao
April 15	Business Meeting	Dr. Edward Chow
May 20	RRRP Quality Assurance Round	Dr. May Tsao
June 17	Imaging of Musculoskeletal Metastases (Presented by Dr. Joel Rubenstein)	Dr. Toni Barnes
July 22	Radiofrequency ablation of bone metastases - new treatment or forgotten modality? (Presented by Dr. Michael Gofeld)	Dr. Jeff Myers
August 12	Balloon Kyphoplasty in Oncology: The Indications and Procedure (Presented by Dr. Roger Smith)	Ms. Emily Sinclair

August 19	PalCare Software Demonstration... Completing the Circle of Care (Presented by Ms. Dawn Van Dam)	Ms. Gunita Mitera
September 16	Annual General Meeting	Dr. Edward Chow
October 7	How to Improve Pain Management Index (PMI) (Presented by Drs. Lawrence Librach, Dr. Jeff Myers, Carlo DeAngelis, Ms. Gunita Mitera and Mr. Nadil Zeiadin)	Ms. Gunita Mitera
November 4	Intra-nasal Fentanyl for Control of Breakthrough Pain in Patients with Bone Metastases Referred for Palliative Radiotherapy (Presented by Dr. Carlo DeAngelis and Ms. Amanda Hird)	Ms. Gunita Mitera
November 18	PDT – Translational advances towards the treatment of vertebral metastases (Presented by Dr. Albert Yee)	Dr. May Tsao
December 2	Acute Radiation-Induced Skin Reactions: A Literature Review and Future Research Initiatives (Presented by Dr. Carlo DeAngelis and Ms. Nadia Salvo)	Ms. Gunita Mitera
December 16	PET Motion Study (Presented by Ms. Kathy Mah)	Dr. May Tsao

** Rounds cancelled: March 18 and October 21*

Grants

A biomechanical assessment of kyphoplasty and IBC in a human cadaveric burst fracture model. Kyphon \$24,000 (2006 - 2008). Whyne C, Ford M, Yee A, Finkelstein J.

A novel delivery system for BMP-2 to enhance ACL graft integration. Physician's Services Incorporated \$80,000 (2007 - 2008). Richards RR, Robertson C, Yee AJ.

A phase II study of Early Integration of Zoledronic Acid with Radiotherapy to Bone in the Treatment of Painful Bone Metastases in Prostate Cancer. Novartis Pharmaceuticals Canada Inc. \$60,000 (2007 – present). Chow E, Ko Y, Emmenegger U, Danjoux C, Barnes E, Barbera L, Tsao M, Sinclair E, Lemon S, Vieth R.

A Phase II Study of Maintenance Therapy with Temsirolimus in Androgen-Independent Prostate Cancer After First-Line Chemotherapy with Docetaxel. Wyeth Pharmaceuticals Canada Inc. \$315,000 (2007 – 2009). Ko Y, Emmenegger U, Berry S, Kerbel R.

Biomechanical Implications of a Novel Cancer Treatment in the Spine for the Teachers' Science and Technology Outreach Program (TSTOP). Ministry of Research and Innovation (MRI) Ontario \$9,270 (2008 - 2009). Whyne C.

Biomechanical Implications of metastatic disease in the spine: Evaluation of stability and tumor burden in a pre-clinical model - funding extension. Canadian Institutes of Health Research \$40,096 (2007 - 2008). Whyne C, Yee AJ, Finkelstein J.

Bone stability and tumor burden in the metastatic spine: implications of variable disease patterns. Canadian Institute of Health Research \$379,862 (2008 - 2012). Whyne C, Yee AJ, Finkelstein JA.

Centre for Research in Image-Guided Therapeutics. Canada Foundation for Innovation, Research Hospital Fund Large Scale Institutional Endeavours \$14,337,919 (2008 - 2011). Hynynen, K., multiple Collaborators including Whyne C.

Development of a Canadian-led international bone metastases module to accompany European Organization for Research and Treatment of Cancer Quality of Life Group core questionnaire (the EORTC QLQ-C30) for future clinical trials in patients with bone metastases. National Cancer Institute of Canada \$271,483 (2005-2008). Chow E, Clemons M, Wu J Beznak A, Brundage M, Yee A, Bottomley A, Velikova G, and Hoskin P.

Metastatic breast cancer genome anatomy. Canadian Breast Cancer Research Alliance, Special Competition in New Approaches to Metastatic Disease in Breast Cancer Research \$750,000 (2005 - 2010). Seth A, Aubin J, Kahn H, Lyons-Weiler J, Yee AJ, Narod S.

Modeling thin bone structures of the human skeleton. Natural Sciences and Engineering Research Council (NSERC) \$165,000 (2006 - 2011). Whyne, C.

New Radiofrequency Device for Soft Tissue and Bone Malignant Tumor Ablation. Ontario Centres of Excellence Grant \$550,000 (2008 - 2009). Yee AJ, Whyne C, Akens M.

Novel elastin-based polypeptides for tissue engineering strategies in orthopaedic surgery. Advanced Regenerative Tissue Engineering Centre (ARTEC) / Ontario Ministry of Health Matched Funds \$110,400 (2008 - 2009). Yee AJ, Woodhouse K, Whyne C.

Pedicle Screw Insertion Simulator Study. St. Michael's Hospital Trauma/Neurosurgery Program Internal Multi-Disciplinary Small Grant Program \$2,000 (2008 - 2009). Ginsberg H, Whyne C, Massicotte E, Martin A.

Recombinant elastin-like peptide based materials for use in osteochondral defects; evaluation in a rabbit knee model. Elastin Specialties Inc. \$29,633 (2007 - 2008). Yee AJ, Woodhouse K, Moss I.

Recombinant elastin-like polypeptide based materials for use in artificial spinal discs. Emerging Materials Network Collaborative Grant, Ontario Centres of Excellence \$211,400 (2006 - 2008). Woodhouse K, Whyne C, Yee A.

Spinous Process Less Invasive Extendable Fusion - A less invasive extendable device for posterior spinal fusion. Ministry of Research and Innovation (MRI) Ontario \$10,000 (2008). Ginsberg H, Whyne CM, Singh D.

The impact of photodynamic therapy for the biomechanical stability of the metastatic spine: characterization independent and combined treatment effects with bisphosphonates and radiation therapy. Ontario Institute for Cancer Research \$530,361 (2008 - 2011). Whyne C, Yee AJ, Wilson BC, Burch S, Bisland S.

Publications

Bradley N, Husted J, Sey M, Sinclair E, Li K, Husain A, Danjoux C, Barnes C, Barnes E, Tsao M, Barbera L, Harris K, Chiu H, Doyle M, Chow E. Did the pattern of practice in the prescription of palliative radiotherapy for the treatment of uncomplicated bone metastases change between 1999 and 2005 at the Rapid Response Radiotherapy Program? *Clinical Oncology* 20: 327-336, 2008.

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Costa L, Badia X, Chow E, Lipton A, Wardley A. Impact of skeletal complications on patients' quality of life, mobility and functional independence. *Supportive Care in Cancer* 16: 879-889, 2008.

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Fairchild A, Goh P, Sinclair E, Barnes E, Ghosh S, Danjoux C, Barbera L, Tsao M, Chow E. Has the pattern of practice in the prescription of radiotherapy for the palliation of thoracic symptoms changed between 1999 and 2006 at the Rapid Response Radiotherapy Program? *International Journal of Radiation Oncology, Biology and Physics* 70 (3): 693-700, 2008.

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Flynn C, Ko Y, Yee A, Cardoso M, Bell C, Aviv R, Chow E. Clinical benefit of re-irradiation: a case report. *Journal of Palliative Medicine* 11 (1): 112-116, 2008.

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Flynn CJ, Yip D, Ko Yoo-Joung, Yee AJ, Cardoso M, Bell C, Aviv R, Chow E. Clinical Benefit of Reirradiation: A Case Report. *Journal of Palliative Medicine* 11 (1): 112-116, 2008.

Francia G, Emmenegger U, Lee CR, Shaked Y, Folkins C, Mossoba M, Medin JA, Man S and Kerbel RS. Long term progression and therapeutic response of visceral metastatic disease non-invasively monitored in mouse urine using human choriogonadotropin secreting tumor cell lines. *Molecular Cancer Therapeutics* 7 (10): 3452-9, 2008.

Hadi S, Fan G, Kirou-Mauro A, Hird A, Filipczak L, Chow E. Symptom clusters in cancer patients with metastatic bone pain. *Journal of Palliative Medicine* 11(4): 591-600, 2008.

Hadi S, Zhang L, Hird A, de Sa E, Chow E. Validation of symptom clusters in patients with metastatic bone pain. *Current Oncology* 15 (5): 10-18, 2008.

Hird A, Chow E, Ehrlich L, Probyn L, Sinclair E, Yip D, Ko Y. Rapid improvement in pain and functional level in a patient with metastatic renal cell carcinoma (mRCC): a case report and review of the literature. *Journal of Palliative Medicine* 11 (8): 1156-61, 2008.

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Hird A, Wilson J, Symons S, Sinclair E, Davis M, Chow E. Radiation recall dermatitis: Case report and review of the literature. *Current Oncology* 15 (1): 53-62, 2008.

Kased N, Huang K, Nakamura JL, Sahgal A, Larson DA, McDermott MW, Sneed PK. Gamma knife radiosurgery for brainstem metastases: The UCSF experience. *Journal of Neuro-Oncology* 86 (2): 195-205, 2008.

Khoury A, Kreder H, Skrinkas M, Hardisty M, Tile M, Whyne CM. Lateral compression fracture of the pelvis represents a heterogeneous group of complex 3D patterns of displacement. *Injury* 39 (8): 893-902, 2008.

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O'Reilly M, Whyne CM. Comparison of CT based parametric and patient specific finite element models of the healthy and metastatic spine using a mesh-morphing algorithm. *Spine* 33: 1876-1881, 2008.

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Sahgal A, Chou D, Ames C, Ma L, Huang K, Xu W, Chin C, Weinberg V, Chuang C, Weinstein P, Larson D. Stereotactic body radiotherapy is effective salvage therapy for patients with prior radiation of spinal metastases. *International Journal of Radiation Oncology Biology Physics* (published online December 16, 2008).

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Yee AJ, Adjei NA, Do J, Ford M, Finkelstein JA. Do Patient expectations of spinal surgery relate to functional outcome? *Clinical Orthopaedics and Related Research* 466 (5): 1154-1161, 2008.

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de Almeida J, Morris A, Whyne C, James A. Testing biomechanical strength of in vitro CSF leak repairs. *Journal of Otolaryngology*.

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Mitera G, Swaminath A, Wong S, Goh P, Robson S, Sinclair E, Danjoux C, Chow E. Radiotherapy for oncological emergencies on weekends: Examining reasons for treatment and patterns of practice at a Canadian Cancer Centre. *Current Oncology*.

Mitera G, Zeiadin N, Sahgal A, Finkelstein J, Chow E, Loblaw A. Quality of life measures used in radiation therapy trials for patients with metastatic spinal cord compression (MSCC): A literature review. *Journal of Pain Management*.

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- ❖ Draanen J, Hird A, DeAngelis C, Loblaw A, Wong R, Wu J, Chow E. Pain flare following radiotherapy for painful bone metastases: A joint effort of three cancer centres to determine the incidence. *Cancer Treatment Review* 34: Suppl 82-83, 2008.
- ❖ Hird A, Chow E. Determining relevant quality of life issues for bone metastases patients: Differences in perspectives. *Cancer Treatment Review* 34: Suppl 81, 2008.
- ❖ Hird A, Chow E. Development of the European organization for research and treatment of cancer bone metastases module (BMM) (EORTC QLQ-BM22). *Cancer Treatment Review* 34: Suppl 54-55, 2008.
- ❖ Sinclair E, Ford M, Holden L, Chow E. Minimally invasive treatment of tumour related vertebral compression fractures and other metastatic bone lesions. *Cancer Treatment Review* 34: Suppl 85-86, 2008.

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- ❖ Chow E, James J, Barsevick A, Hartsell W, Scarantino C, Ivker R, Roach M, Suh J, Petersen I, Bruner D. Functional interference clusters in cancer patients with bone metastases: An analysis of RTOG 9714. *International Journal of Radiation Oncology Biology Physics* 72: Suppl 1: 141, 2008.
- ❖ Chow E. ASTRO Nursing Symposium: Survival prediction.
- ❖ Fairchild A, Barnes T, Ghosh S, Ben-Josef E, Roos D, Hartsell W, Holt T, Wu J, Janjan N, Chow E. International patterns of practice in palliative radiotherapy for painful bone metastases: Evidence-based practice? *International Journal of Radiation Oncology Biology Physics* 72: Suppl 1: 491, 2008.
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- ❖ Sahgal A, Gibbs I, Ryu S, Ma L, Gerszten P, Soltys S, Weinberg V, Fowler J, Chang E, Larson D. Preliminary guidelines for avoidance of radiation induced myelopathy following spine stereotactic body radiosurgery (SBRS).
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- ❖ Gordon L, Olsen M, Schemitsch E, Whyne CM. An automated method for neck-shaft angle determination in hip resurfacing arthroplasty.
- ❖ Hardisty M, Akens M, Yee A, Whyne CM. Tracking metastatic breast cancer in the rodent spine: A comparison of micro-CT, histology and bioluminescent imaging.
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- ❖ Moss IL, Gordon L, Woodhouse K, Whyne CM, Yee AJ. Nucleus pulposus tissue repair in intervertebral disc degeneration: biochemical and mechanical evaluation of a novel human disc cell-hyaluronan/elastin polypeptide scaffold composite. *Transactions of the Orthopaedic Research Society*: 1495, 2008.
- ❖ O'Reilly M, Whyne CM. Development of a morphing algorithm for the comparison of CT based parametric and patient specific finite element models of the healthy and metastatic spine.
- ❖ Rush R, Ginsberg H, Jenkinson R, Whyne CM. Training outside the OR: A simulator for sacro-iliac screw insertion.

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- ❖ Chow E, Sahgal A. CARO Workshop: Spinous stereotactic body radiotherapy (SBRT): how, when, and the risks, and current concepts in the molecular aspects of radiation induced myelopathy.
- ❖ Follwell M, Vasquez L, Yucel Y, Somani S, Heydarian M, Ma L, Sanghera P, Michaels H, Payne D, Millar B-A, Altamore F, Simpson ER, McGowan H, Laperriere N, Sahgal A. Neovascular glaucoma following stereotactic radiotherapy for choroidal melanoma.
- ❖ Sahgal A, Gibbs I, Ryu S, Ma L, Gerszten P, Chang U-K, Soltys S, Weinberg V, Fowler J, Chang E, Chao S, Wong CS, Larson D. Preliminary guidelines for avoidance of radiation induced myelopathy following spine stereotactic body radiosurgery (SBRS).

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Akens M, Hardisty M, Wilson BC, Burch S, Whyne CM, Bisland S, Yee AJM. Assessment of the Therapeutic Window of Photodynamic Therapy Treatment (PDT) of Breast Cancer Metastases in the Spine. (Poster) Bone and Mineral Group Research Day, University of Toronto, Toronto, Ontario, April 2008.

Chow E. Doc, how long do I have to live? 18th Annual Ontario Provincial Conference on Palliative and End-of-Life Care, Toronto, Ontario, April 2008.

Chow E. Quality of life and pain flare in bone metastases. Grand Round. Royal Victoria Hospital, Barrie, Ontario, March 2008.

Chow E. Sunnybrook - clinical research. Bonus 3. Breast cancer and bone disease new updates, Toronto, Ontario, March 2008.

Chow E. Symptom cluster research in patients with bone metastases receiving palliative radiotherapy. Province-Wide Sleep Rounds, Toronto, Ontario, December 2008.

Chow E. Symptom clusters: concepts, measurement and opportunities for research. RTOG scientific Meeting, San Diego, California, January 2008.

Crookshank M, Skrinkas T, Schemitsch E, Whyne CM. Intraoperative cone-beam CT-based measurement of malangulation and periaxial malrotation in femoral shaft fractures. (Poster) Gallie Day, Department of Surgery, University of Toronto, Toronto, Ontario, May 2008.

Du William W, Yang BB, Yang BL, Deng Z, Lee D, Yee AJ. Versican G3 domain promotes the growth of mammary tumor cells via upregulated EGFR/ERK pathway. (Poster) Canadian Orthopaedic Research Society, Combined Canadian Orthopaedic Assoc. / American Orthopaedic Assoc. Annual Meeting - 42nd CORS, Quebec City, Quebec, June 2008.

Du William W, Yang BB, Yang BL, Deng Z, Lee D, Yee AJ. Versican G3 domain promotes the growth of mammary tumor cells via upregulated EGFR/ERK pathway. (Poster) Canadian Connective Tissue Conference (CCTC), 14th Annual Meeting, Montreal, Quebec, June 2008.

Emmenegger U, Francia G, Kouri A, Man S, Kerbel RS. Analysis of acquired resistance to metronomic cyclophosphamide therapy. 1st Annual Scientific Meeting of the Ontario Institute for Cancer Research, Alliston, Ontario, February 2008.

Emmenegger U. Antiangiogenic therapies for advanced prostate cancer: how to starve to death the fittest. Molecular and Cellular Biology Research Divisional Seminar Series, Sunnybrook Research Institute, Toronto, Ontario, October 2008.

Emmenegger U. Antiangiogenic therapies for advanced prostate cancer: Promises and pitfalls', Canadian experiences and opportunities workshop - A roadmap for translation

of discovery to the clinic. Canadian Prostate Cancer Research Initiative, Vancouver, British Columbia, January 2008.

Emmenegger U. Antiangiogenic tumor therapies. Academic Half-Day of the Medical Oncology Training Program, University of Toronto, Toronto, Ontario, February 2008.

Emmenegger U. Anti-vascular tumor therapy of targeted and 'accidental' anti-vascular agents'. Oncology Grand Rounds – Odette Cancer Centre, Toronto, Ontario, September, 2008.

Emmenegger U. Castration refractory prostate cancer: A case based introduction for medical oncology residents. Annual Orientation Week for the Medical Oncology Training Program, Toronto, Ontario, July 2008.

Emmenegger U. Introduction to chemotherapy. Summer Student Lecture Series – Odette Cancer Centre, Toronto, Ontario, June 2008.

Emmenegger U. Prostate cancer bone metastasis: Sunnybrook (pre)clinical experience – medical oncology perspective. Bone Disease and the Oncologist New Updates (Bonus) 3 Meeting, Toronto, Ontario, March 2008.

Emmenegger U. The molecular biology & geography of anti-vascular tumor therapies. 1st Molecular Oncology and Basic Sciences Weekend, CancerLink Ontario Inc. and OncologyEducation.ca, Niagara-on-the-Lake, Ontario, July 2008.

Hojjat SP, Hardisty M, Whyne CM. Micro CT based semi-automated segmentation of the rat spine for quantitative analysis of metastatic disease. (Poster) Gallie Day, Department of Surgery, University of Toronto, Toronto, Ontario, May 2008.

Hojjat SP, Hardisty M, Whyne CM. Micro CT based semi-automated segmentation of the rat spine for quantitative analysis of metastatic disease. (Poster) SpineFest, Department of Surgery and the Divisions of Neurosurgery and Orthopaedic Surgery, University of Toronto, Toronto, Ontario, April 2008.

Hojjat SP, Hardisty M, Whyne CM. Micro CT based semi-automated segmentation of the rat spine for quantitative analysis of metastatic disease. (Poster) Bone and Mineral Group Research Day, University of Toronto, Toronto, Ontario, April 2008.

Lichtblau BS, Akens MK, Whyne C, Yee AJ. Comparing the tumour-inhibiting effects of zoledronic acid on MHMX human unclassified sarcoma cells and MT-1 human breast carcinoma cells. (Poster) Sunnybrook Research Institute, Summer Student Poster Competition, Toronto, Ontario, August, 2008.

Lotan R, Ford M, Yee AJ, Finkelstein J. Unilateral pedicle screw fixation with transforaminal lumbar interbody fusion: Does less mean more? (Poster) North American Spine Society, 23rd Annual Meeting, Toronto, Ontario, October, 2008.

Maloul A, Hardisty M, Whyne CM. Accurate quantification of image blurring on thin bone thickness and material properties by micro-CT. (Poster) Gallie Day, Department of Surgery, University of Toronto, Toronto, Ontario, May 2008.

Maloul A, Hardisty M, Whyne CM. Accurate quantification of image blurring on thin bone thickness and material properties by Micro-CT. (Poster) Bone and Mineral Group

Research Day, University of Toronto, Toronto, Ontario, April 2008.

Moss I, Gordon L, Woodhouse K, Whyne C, Yee A. Biomechanical and biochemical evaluation of a novel hyaluronan/elastin-like polypeptide composite scaffold for nucleus pulposus tissue engineering. Gallie Day, Department of Surgery, University of Toronto, Toronto, Ontario, May 2008.

Razmjou H, Kreder H, Yee AJ, Finkelstein JA. Relationship between satisfaction and expectation fulfillment one year following total knee arthroplasty surgery. (Poster) Canadian Orthopaedic Association, Combined Canadian Orthopaedic Assoc. / American Orthopaedic Assoc. Annual Meeting - 42nd CORS, Quebec City, Quebec, June 2008.

Sahgal A, Ames C, Chou D, Ma L, Chuang C, Lamborn K, Chin C, Huang K, Weinstein P, Larson D. Stereotactic body radiotherapy (SBRT) for spinous metastases: Preliminary experience at the University of California, San Francisco. *Canadian Journal of Neuroscience* 35 (3): 387, 2008.

Sahgal A, Gibbs I, Ryu S, Ma L, Gerszten P, Chang U-K, Soltys S, Weinberg V, Fowler J, Chang E, Chao S, Wong CS, Larson D. Preliminary guidelines for avoidance of radiation induced myelopathy following spine stereotactic body radiosurgery (SBRS). *Radiotherapy and Oncology*. 88 (1): S24, 2008.

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Sahgal A. New Technologies for radiosurgery for brain tumour. Brain Tumour Foundation of Canada: London Brain Tumor Information Day, London, Ontario, October 2008.

Sahgal A. New technologies for radiosurgery For brain tumors. Brain Tumor Foundation of Canada: Brain Tumor Information Day Conference, Halifax, Nova Scotia, September 2008.

Sahgal A. Overview of spine stereotactic body radiotherapy. Yale Medical School Visiting Professor, Yale Medical School, Connecticut, USA, October 2008.

Sahgal A. Radiation myelopathy following hyperbaric oxygen. Toronto Hyperbaric Medicine Symposium, University of Toronto, Toronto, Ontario, October 2008.

Sahgal A. Radiosurgery of the spine and radiation tolerance of the spinal cord. 2008 E. Harry Botterell Lectureship in Neurosurgery. The Toronto Western Hospital, University of Toronto, Toronto, November 2008.

Sahgal A. Spinal Radiosurgery-update and proposal for a new clinical trial. University of Toronto City-wide neuro-oncology rounds, Toronto, Ontario, November 2008.

Sahgal A. Spine radiosurgery. Baylor University Visiting Professorship. Baylor Medical College, Houston, Texas, USA, July 2008.

Sahgal A. Spine stereotactic body radiotherapy. Visiting Professor, University of Saskatchewan, Regina Cancer Centre, Regina, Saskatchewan, December 2008.

Sahgal A. Stereotactic radiosurgery for brain metastases. Oncology Grand Rounds. Odette Cancer Centre, University of Toronto, Toronto, Ontario, April 2008.

Sahgal A. Technologies for spine mets: Does more pain mean more dose? 14th Annual Conference: The Science and Art of Pain and Symptom Management, University of Toronto, Toronto, Ontario, November 2008.

Shaked Y, Henke E, Roodhart J, Mancuso P, Langenberg M, Colleoni M, Daenen L, Man S, Xu P, Emmenegger U, Tang T, Zhu Z, Witte L, Bertolini F, Voest E, Benezra R, Kerbel RS. Chemotherapy-induced surge in endothelial progenitor cells: implications for antiangiogenic drugs as chemosensitizing agents. The 10th International Symposium on Anti-Angiogenic Agents, San Diego, California, February 2008.

Singh D, Ginsberg H, Whyne C. A novel approach to posterior spinal fusion providing a less invasive alternative to current techniques. (Poster) SpineFest, Department of Surgery and the Divisions of Neurosurgery and Orthopaedic Surgery, University of Toronto, Toronto, Ontario, April 2008.

Singh D, Ginsberg H, Whyne CM. Automated segmentation of the posterior vertebral arch to allow quantification of key morphological features. (Poster) Canadian Student Conference of Biomedical Engineering, Toronto, Ontario, March 2008.

Singh D, Ginsberg H, Whyne CM. Automated segmentation of the posterior vertebral arch to allow quantification of key morphological features. (Poster) SpineFest, Department of Surgery and the Divisions of Neurosurgery and Orthopaedic Surgery, University of Toronto, Toronto, Ontario, April 2008.

Singh D, Ginsberg H, Whyne CM. Automated segmentation of the posterior vertebral arch to allow quantification of key morphological features. (Poster) Gallie Day, Department of Surgery, University of Toronto, Toronto, Ontario, May 2008.

Whyne C. Image based quantification and minimally invasive local treatments for spinal metastases. Bonus Symposium, MaRS, Toronto, Ontario, March 2008.

Whyne C. Medical Imaging and Computer Aided Interventions: Musculoskeletal Applications. Canadian Student Conference on Biomedical Computing, Toronto, Ontario, March 2008.

Rapid Response Radiotherapy Palliative Clinics

http://www.sunnybrook.ca/content/?page=Focus_Occ_Care_RRRP_Home

Staff: Dr. E. Chow (Rad Onc), Dr. C. Danjoux (Rad Onc), Dr. M. Tsao (Rad Onc), Dr. T. Barnes (Rad Onc), Dr. A. Sahgal (Rad Onc), E. Sinclair (RTT), G. Mitera (RTT).

Objective:

Provide expedited access for symptom relief from incurable cancers in patients with limited life expectancies.

Eligible Patients:

- ❖ Symptomatic cancer (any disease site) where palliative radiotherapy may be indicated.
- ❖ Patients with life expectancies of <6 months.
- ❖ A “most responsible physician” available to provide follow-up and ongoing oncological care upon completion of the RRRP consultations.

Ineligible Patients:

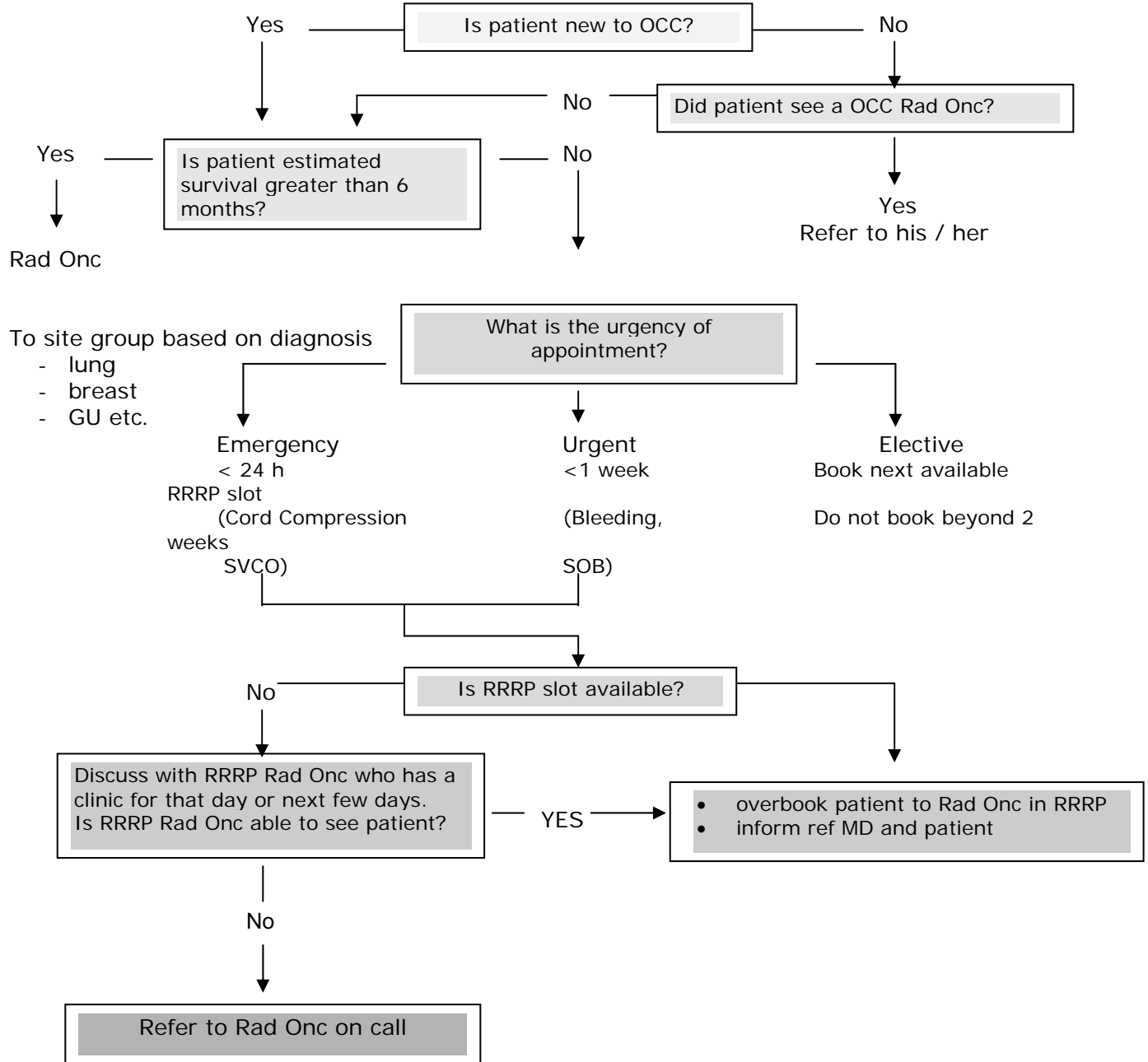
1. Candidates for potentially curative treatments.
2. Patients requiring further investigations before radiotherapy opinion can be rendered.
3. Patients who are currently actively being followed by a radiation oncologist at OCC (unless otherwise specifically arranged).
4. Patients whose disease status is better served by a radiation oncologist who could provide longitudinal follow-up.
5. Off-service in-patients who require transfer of care to radiation oncology for ongoing oncological care.

Monday	Dr. T. Barnes	Sim 1
Tuesday	Dr. M. Tsao	Sim 1
Wednesday	Dr. C. Danjoux	Sim 1
Thursday	Dr. E. Chow	Sim 1
Friday	Dr. M. Tsao	Sim 1

To make a referral:

1. Contact the new patient booking office and request a referral to the RRRP clinic.
2. Contact the RRRP nurse.
3. Contact one of the RRRP physicians directly.

Decision Tree for Patients Referred to RRRP / BMC (January 2001)



** RRRP Policy circulated as addendum to Minutes of Radiation Oncology staff meeting of March 2nd 2000.

Jan 1999: Initiated Bone Metastases Clinic (BMC)

A bi-weekly Bone Metastasis Clinic (BMC) was initiated at the OCC on January 8, 1999. The clinic is staffed by Orthopaedic Surgical Oncologists: Drs. J. Finkelstein, M. Ford and A. Yee; Radiation Oncologists: Drs. E. Chow, C. Danjoux, M. Tsao, T. Barnes.

The BMC is held on the 2nd and 4th Friday morning of each month in clinic C at the OCC.

The goals of the BMC are to:

- ❖ Provide an elective orthopaedic consultation service for patients with bone metastasis referred by OCC oncologists; provide elective radiation oncology consultations to patients with bone metastasis referred by SWHSC physicians.
- ❖ Provide elective orthopaedic and radiation oncology consultations to patients with bone metastasis referred by community physicians.
- ❖ Provide follow-up to oncology patients after orthopaedic interventions.

Bone Metastases Clinic – 2nd and 4th Friday (Clinic C)

To make a referral:

1. Contact the new patient booking office and request referral to the Bone Metastases Clinic.
2. Contact the RRRP nurse.
3. Contact one of the RRRP physicians directly.

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1999-2008

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	Prospective assessment of symptom palliation for patients attending a rapid response radiotherapy program	Drs. Edward Chow, Cyril Danjoux, Rebecca Wong
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	Interview with Russell Goldman, MD, CCFP, palliative care physician with the Temmy Latner Centre for Palliative Care, Mount Sinai Hospital	
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Insert February 2001	-Hormones in Breast Cancer, Metastatic Breast Cancer (Supported by Astra-Zeneca Canada Inc.)	Dr. Maureen Trudeau
	-Chemotherapy in Metastatic Breast Cancer Treatment, Treatment of Systemic Recurrence with Chemotherapy (Supported by Aventis)	Dr. Maureen Trudeau
	-Herceptin (Supported by Hoffman LaRoche)	Dr. Maureen Trudeau
Vol 3, Issue 2 May 2001	From the guest editor's desk	Dr. Charles Hayter
	Addressing spiritual needs	Dr. Sharon Grant
	When the shrink gets cancer and gets spiritually transformed	Dr. Mary Vachon
	Historical Vignette: The history of hospices	Dr. Charles Hayter
	Ethics: Caring for patients with different faiths	Dr. Scott Berry
	Research Corner - Patient expectations	Dr. Rebecca Wong
	Notice regarding treatment delays...	
Insert May 2001	A guide to spiritual care of the caregiver, A guide to spiritual assessment of cancer patients. (Supported by AstraZeneca Canada Inc. and Purdue Pharma)	Dr. Michele Chaban
Vol 3, Issue 3 August 2001	From the editor's desk	Dr. Cyril Danjoux
	Comfort and stress among cancer caregivers	Dr. Eva Grunfeld
	On suffering in terminal illness	Dr. Mary Vachon
	Historical Vignette: The history of morphine	Dr. Charles Hayter
	Research Corner	Dr. Rebecca Wong
Insert August 2001	Palliation in lung cancer (Supported by AstraZeneca Inc. and Purdue Pharma)	Drs. Andrea Bezjak, Dr. Catherine Heath, Ms. Jane Lea
Vol 3, Issue 4 November 2001	From the guest editor's desk	Dr. Andrew Loblaw, Ms. Lori Holden
	Survey shows 40% of RRRP patients arrive with missing info: A plea for help	Dr. Charles Hayter, Ms. Ruth Connolly
	Finding meaning in life in the face of advancing cancer	Dr. Mary Vachon
	Historical Vignette: The 50 th anniversary of cobalt treatment	Dr. Charles Hayter
	Tough decisions about funding for new palliative therapies: How do we decide?	Dr. Scott Berry
	Research Corner	Dr. Rebecca Wong
Insert November 2001	Malignant Spinal Cord Compression (Partially supported by Purdue Pharma)	Dr. Andrew Loblaw, Ms. Lori Holden
Vol 4, Issue 1 February 2002	From the editor's desk	Dr. Ewa Szumacher, Ms. Joan Pope

	Advance notice of the ninth annual conference on the science and art of pain and symptom management	
	Denial and minimization in advanced cancer	Dr. Mary Vachon
	Global health ethics and palliative care	Dr. Scott Berry
	Historical Vignette: The story of Essiac	Dr. Charles Hayter
	Research Corner	Dr. Rebecca Wong
Insert February 2002	Oral health care in the patient with cancer	Dr. Trey Petty
	Mouth care for radiation patients (Supported by Biotene Canada, Division of Bolton Dental Mfg. Inc.)	Dr. Alex Hammond
Vol 4, Issue 2 May 2002	From the associate editor's desk	Dr. Edward Chow
	New chiefs at TSRCC and University of Toronto	Dr. Edward Chow, Dr. Cyril Danjoux
	Depression in advanced cancer	Dr. Mary Vachon
	Historical Vignette: Blood and medicine	Dr. Charles Hayter
	Hope for a good death	Dr. Monica Branigan
	Research Corner	Dr. Rebecca Wong
Insert May 2002	Anemia in hematology and medical/radiation oncology (Supported by Ortho Biotech)	Dr. Gerard Morton, Dr. Rena Buckstein
Vol 4, Issue 3 August 2002	From the associate editor's desk	Ms. Lou Andersson, Dr. Cyril Danjoux
	TSRCC pharmacy services	Ms. Kim Stefaniuk
	The transformation from tragedy into grace in terminal illness – part one	Dr. Mary Vachon
	Historical Vignette: Plants, poisons and potions: Drug treatments for cancer	Dr. Charles Hayter
	TSRCC pharmacy assists Third World countries	Ms. Kim Stefaniuk
	Informed decision-making in palliative care	Dr. Scott Berry
	Research Corner	Dr. May Tsao, Dr. Rebecca Wong
Insert August 2002	Accessing medication (Supported by Amgen Canada and Abbott Laboratories)	Ms. Kim Stefaniuk
Vol 4, Issue 4 November 2002	From the associate editor's desk	Dr. Edward Chow
	Palliative care is not euthanasia	Dr. Monica Branigan
	The transformation from tragedy into grace in terminal illness – part two	Dr. Mary Vachon
	Palliative care at the University of Texas M.D. Anderson Cancer Center	Dr. Toni Barnes
	Historical Vignette: Charles Huggins: The Canadian who discovered hormone therapy for prostate cancer	Dr. Charles Hayter
	Research Corner	Dr. Rebecca Wong
	Award of Excellence	Dr. Cyril Danjoux
Insert November 2002	Expanded role of hormone therapy as neoadjuvant or adjuvant therapy in prostate cancer patients undergoing definitive treatment. (Supported by Aventis)	Dr. Richard Choo
Vol 5, Issue 1 February 2003	From the editor's desk	Drs. Cyril Danjoux, Edward Chow
	Congratulations on fifth year	Dr. Carol Sawka
	Congratulations on fifth year	Dr. Peeter Poldre
	Suffering, healing and the wounded healer	Dr. Mary Vachon
	More fifth year congratulations	Dr. Shun Wong
	Advance care planning – update and practical tips	Dr. Scott Berry
	Historical Vignette – A century of radiation therapy in Canada	Dr. Charles Hayter
	Research Corner	Dr. Rebecca Wong

Insert February 2003	Pain in cancer: The CARE approach	Dr. Larry Librach
Vol 5, Issue 2 May 2003	From the guest editor's desk	Dr. Charles Hayter, Ms. Lou Andersson
	The role of the social worker in palliative oncology	Ms. Magdalene Winterhoff
	Reflections on anxiety in confronting advanced cancer	Dr. Mary Vachon
	Historical Vignette – Spring fever	Dr. Charles Hayter
	Research Corner	Dr. Rebecca Wong
Insert May 2003	Advances and challenges in the management of febrile neutropenia. (Supported by Amgen Canada Inc.)	Dr. Elizabeth J. Phillips
Vol 5, Issue 3 August 2003	From the guest editor's desk	Dr. Toni Barnes
	Lymphoma in the elderly	Dr. Tom Kouroukis
	Demoralization in persons with advanced cancer	Dr. Mary Vachon
	Ethical issues in dealing with demands for "futile" treatment	Dr. Scott Berry
	Historical Vignette – The history of oxygen therapy	Dr. Charles Hayter
	Research Corner	Dr. Rebecca Wong
Insert August 2003	Advances for end-of-life respiratory care (Supported by Vital Aire)	Dr. Chin K. Chung
Vol 5, Issue 4 November 2003	From the guest editor's desk	Dr. Cyril Danjoux
	Referral of patients to the rapid response radiotherapy clinic	
	Boredom in terminal illness	Dr. Mary Vachon
	Hot Spot Survey 2003	
	"No CPR" – Talking it over	Dr. Scott Berry
	Historical Vignette – The Radium Institute of Toronto	Dr. Charles Hayter
	Research Corner	Dr. Andrea Bezjak
Insert November 2003	Androgen ablation for metastatic prostate cancer (Supported by Aventis)	Dr. Richard Choo
Vol 6, Issue 1 February 2004	From the guest editor's desk	Dr. May Tsao
	Brain metastases: The magnitude of the problem and the struggle to improve outcomes	Dr. May Tsao
	Dignity-conserving care in palliative care	Dr. Mary Vachon
	When capacity fluctuates, what happens to consent?	Ms. Karen Faith
	Historical Vignette: The Montreal Neurological Institute	Dr. Charles Hayter
	Research Corner	Dr. Alina Sturdza, Dr. Andrea Bezjak
Insert February 2004	Palliation in patients with metastatic cancer to the brain Management of brain metastases (Supported by Aventis)	Dr. May Tsao
Vol 6, Issue 2 May 2004	From the guest editor's desk	Dr. Charles Hayter
	Bisphosphonates in cancer	Dr. Rebecca Wong
	Anger in the person with advanced disease	Dr. Mary Vachon
	Ethics and SARS: Collateral damage and relationships in health care	Ms. Karen Faith
	Historical Vignette: Dr. Herbert Bruce: Ontario cancer visionary	Dr. Charles Hayter
	Research Corner	Dr. Jackson Wu, Dr. Edward Chow
Insert May 2004	Use of bisphosphonates in men with hormone refractory prostate cancer Use of bisphosphonates in women with breast cancer	Dr. Scott Berry Dr. Mark Clemons
Vol 6, Issue 3	From the guest editor's desk	Dr. Cyril Danjoux

August 2004	Supportive Care in Cancer Symposium	Dr. Cyril Danjoux
	Forgiveness in palliative care	Dr. Mary Vachon
	Making decisions for others	Ms. Karen Faith
	Survey shows 40% of RRRP patients arrive with missing info: A plea for help	Dr. Charles Hayter, Ruth Connolly
	Research Corner	Dr. Laura Dawson
Insert August 2004	Rapid Response Radiotherapy Program (RRRP) Review 1996-2003 RRRP Referral Form	Dr. C. Danjoux
Vol 6, Issue4 November 2004	From the guest editor's desk	Dr. Edward Chow
	The effect of SARS on access to palliative radiotherapy in the RRRP	Dr. Justin Lee, L. Holden, K. Fung, C. Danjoux, E. Chow, C. Gillies
	Reflections on the life and death of Mary Peacock	Dr. Mary Vachon
	Quality end-of-life care: Role of economics and the moral climate	Ms. Karen Faith
	Historical Vignette: The Canadian Society for the History of Medicine	Dr. Charles Hayter
	Research Corner	Dr. Jackson Wu, Dr. Edward Chow
Insert November 2004	Cannabinoids in medical practice	Dr. Vincent Maida
Vol 7, Issue1 February 2005	From the guest editor's desk	Dr. Toni Barnes
	Treatment of bone metastases with palliative radiotherapy: Patients' treatment preferences	Dr. Ewa Szumacher
	Parenting teens during a cancer experience	Dr. Mary Vachon
	Hospital CPR policy: Solution, prevention or band-aid?	Ms. Karen Faith
	Historical Vignette: Alfred Hardisty: Ontario's pioneer in cancer statistics	Dr. Charles Hayter
	Research Corner	Dr. Rebecca Wong
Insert February 2005	Methadone for cancer pain: An analgesic with a difference	Dr. Larry Librach
Vol 7, Issue2 May 2005	From the guest editor's desk	Dr. Edward Chow
	The do-not-resuscitate (DNR) order – incidence of documentation in patient charts of patients referred for palliative radiotherapy	Ms. Lou Andersson, Ms. Nicole Bradley
	Caught in the middle – mid-life adults with cancer	Dr. Mary Vachon
	Does culture influence patients' and families' DNR decision-making?	Ms. L. Andersson, S. Mary Williams, N. Bradley
	Lessons from my dad	Ms. Karen Faith
	Temmy Latner Centre Update on Palliative Care – Palliative care and children	Mr. Stephen Jenkinson
	PROG Rounds	Dr. Tanya Berrang
	Farewell to Dr. Charles Hayter	Dr. Cyril Danjoux
Insert #1 May 2005	Latest advances in antiemetics for radiation therapy and chemotherapy (Supported by an educational grant from Solvay)	Dr. David Warr
Insert #2 May 2005	Novel therapeutics for management for multiple myeloma (Supported by an educational grant from Ortho Biotech)	Dr. Keith Stewart
Vol 7, Issue3 August 2005	From the guest editor's desk	Dr. Cyril Danjoux
	A survey to assess cancer patients' awareness and interest in hypnosis for pain and distressing procedures – A synopsis	Mrs. Lori Holden, Dr. Charles Hayter
	Are we making any progress? Reflections on stressors in the Ontario oncology system over the past 30 years	Dr. Mary Vachon
	Organizational ethics in the eye of the storm: Woodside Hospice and Terri	Ms. Karen Faith

	Schiavo	
	Temmy Latner Centre Update on Palliative Care – End-of-life care distance education: An innovative approach to helping physicians to care for palliative patients	Dr. Anita Singh, Ms. Deborah Adams
	TSRCC investigates advanced practice radiation therapy roles!	Ms. S. Robson, R. Barker, L. Holden
Insert August 2005	A more minimally invasive approach to the treatment of metastatic spine lesions. (Supported by an educational grant from Kyphon)	Dr. Michael Ford
Vol 7, Issue 4 November 2005	From the guest editor's desk	Dr. May Tsao
	What keeps us going in our work?	Dr. Mary Vachon
	Research ethics and the importance of determining risk	Ms. Karen Faith
	Temmy Latner Centre Update on Palliative Care – Is terminal sedation ethical?	Dr. Victor Cellarius
	Research Corner – Results of three important randomized studies and their clinical implications.	Dr. Jackson Wu
Insert November 2005	Management of hormone refractory prostate cancer / Prostate bone metastases multidisciplinary clinic. (Supported by an educational grant from Novartis)	Dr. Yoo-Joung Ko
Vol 8, Issue 1 February 2006	From the guest editor's desk	Dr. Edward Chow
	Greetings from Cancer Care Ontario	Dr. Linda Rabeneck, Dr. Deb Dudgeon
	Hope in advanced disease	Dr. Mary Vachon
	Temmy Latner Centre Update on Palliative Care – Palliative care grand rounds	Ms. Deborah Adams
	Private clinics providing palliative IV therapies – What are the ethical issues?	Dr. Scott Berry
	Helping children and caregivers in fighting cancer – Truth telling in paediatric palliative care.	Dr. Christine Newman
	Research Corner	Dr. Toni Barnes
Insert February 2006	Venous thromboembolism in cancer patients (Supported by an educational grant from Pfizer Canada)	Dr. Agnes Y.Y. Lee
Vol 8, Issue 2 May 2006	From the guest editor's desk	Dr. Cyril Danjoux
	Truth-telling at the end of life	Dr. Monica Branigan
	What students think: Undergraduate students in palliative health care setting	Ms. Hannah H. Chiu
	Temmy Latner Centre Update on Palliative Care – The educating future physicians for palliative and end-of-life care project (EFPPEC): Developing competencies in medical undergraduates and postgraduates	Dr. Larry Librach
	Help no wanted?	Dr. Margaret Fitch
	If symptom clusters exist, how are they relevant to patient care?	Dr. Amna Husain
	Forgoing nutrition and hydration in children at the end of life: Is it ever justified?	Dr. Adam Rapoport
Insert May 2006	Radioimmunotherapies (Supported by an educational grant from GlaxoSmithKline)	Dr. Rena Buckstein
Vol 8, Issue 3 August 2006	From the guest editor's desk	Ms. Emily Sinclair
	Hope, denial and ethics of care	Ms. Karen Faith
	The role of a child life specialist at the MBWC-CGPC	Ms. Ceilidh Eaton Russell
	Quality indicators of end-of-life care in Ontario cancer patients	Dr. Lisa Barbera
	Palliative care consult team: Moving forward	Dr. Jeff Myers
	16 th Annual provincial conference on palliative and end-of-life care	Ms. Emily Sinclair

	Patients' and health care professionals' perspectives on the most important quality of life issues in bone metastases	Ms. S.Tharmalingam and Ms. Kristin Harris
	Interprofessionalism: A culture of caring	Dr. Michele Chaban
Insert August 2006	Video/teleconference as a tool to facilitate research and development in palliative radiotherapy – the Canadian model	Kathryn Burrows, Rebecca Wong, Andrea Bezjak, Jackson Wu, Graeme Duncan, Rajiv Samant, Jim Wright, Frances Wong, and Cyril Danjoux
Vol 8, Issue 4 November 2006	From the guest editor's desk	Dr. Toni Barnes
	Ethics and preparing for pandemic influenza	Ms. Karen Faith
	Research Column – Symptom control abstracts presented at the annual Canadian Association of Radiation Oncologist (CARO) meeting	Dr. Toni Barnes
	Demanding to live	Mr. Stephen Jenkinson
	Temmy Latner Centre Update on Palliative Care –Tariro (hope)	Dr. Sandy Buchman
	Communicating with children about dying	Ms. Jennifer B. Pond, Ms. Ceilidh E. Russell
	Exploring occupational therapy's role – Working with palliative clients and their families	Ms. Amy Tymchuk
Insert November 2006	New developments in the treatment of advanced renal cell carcinoma (RCC) (Supported by an educational grant from Pfizer)	Dr. Yoo-Joung Ko
Vol 9, Issue 1 February 2007	From the guest editor's desk	Dr. Lisa Barbera
	The alchemy of healing: Are we wired for compassion?	Dr. Mary Vachon
	Provincial Palliative Care Integration Project (PPCIP): Enhancing the quality of palliative care services	Dr. Deborah Dudgeon and Raquel Shaw Moxam
	Issues in the measurement and management of dyspnea in home palliative care patients: Who might benefit from oxygen therapy and how should they qualify?	Ms. Erica Moran and Dr. Amna Husain
	Redirecting hope	Dr. Christopher Church
	Capacity and consent: Separating fact from fiction	Mr. Blair Henry
	Temmy Latner Centre Update on Palliative Care – Computerization in palliative care	Dr. Albert Kirshen
Insert Nov 2006	Advances in iron chelation for myelodysplastic syndromes (Supported by an educational grant from Novartis)	Dr. Rena Buckstein
Vol 9, Issue 2 May 2007	From the associate editor's desk	Dr. Cyril Danjoux
	...on the truth of the matter!?!	Mr. Blair Henry
	Living after cancer: Challenges in being a survivor	Dr. Margaret Fitch
	Improving communication during the palliative care of children with brain tumours – learning from experience	Ms. Ceilidh Eaton Russell
	Symptom clusters in cancer patients with bone metastases	Ms. Stephanie Hadi, Grace Fan, Linda Filipczak
	New imaging studies in locally advanced breast cancer	Drs. Gregory Czarnota, Rebecca Dent, Jacqueline Spayne, Maureen Trudeau, Kathleen Pitchard, Martin Yaffe,

		Don Plewes, and Peter Burns
	The Rapid Access Palliative Radiotherapy Program: New kid in town	Dr. Alysa Fairchild
Insert May 2007	Emerging role of chemotherapy in early prostate cancer (Supported by an educational grant from Sanofi-Aventis)	Dr. Rena Buckstein
Vol 9, Issue 3 August 2007	From the editor's desk	Dr. Edward Chow
	Error in health care	Dr. Philip Hebert
	Edmond and Gloria Odette make landmark investment at Sunnybrook to help fight cancer	Ms. Natalie Chung-Sayers
	Suffering, taboos and interventions	Dr. Michele Chaban
	New initiatives in advance care planning in Canada	Dr. Larry Librach
	Review of the Rapid Response Radiotherapy Program (RRRP) at the Odette Cancer Centre (OCC)	Dr. Toni Barnes
Insert August 2007	New options for the treatment of moderate pain (Supported by an educational grant from Purdue Pharma)	Dr. Sol Stern
Vol 9, Issue 4 November 2007	From the guest editor's desk	Dr. May Tsao
	What hope can mask: Talking to children about life-threatening illness and death	Ms. Lysa Toye
	The role of experience and meaning in clinical ethics	Ms. Karen Faith
	The role of the therapeutic clown in the care of children with progressive life-limiting conditions	Ms. Camilla Gryski
	Provincial integration project moving forward at Odette Cancer Centre	Ms. Martha Wyatt
	Update: New options for the treatment of moderate pain	Dr. Sol Stern
	New research in palliative care	Ms. Shannon Ellis, Ms. Linda Wood, Dr. Lorraine Wood
	Health care professionals' perception of what defines "meaningful palliative care" in a palliative care unit	Ms. Julie Napolskikh, Drs. Jeff Myers, Debbie Selby
Insert #1 November 2007	Update in the management of colorectal cancer (Supported by an educational grant from Sanofi-Aventis)	Dr. Yoo-Joung Ko
Insert #2 November 2007	The evolving role of cannabinoids in supportive oncology (Supported by and educational grant from Bayer Inc.	Dr. Vincent Maida
Vol 10, Issue 1 February 2008	From the guest editor's desk	Dr. Toni Barnes
	Talking to dying patients	Dr. Scott Berry
	Being ready for pediatric palliative care – a person reflection	Dr. Christine Newman
	Involvement of family physicians in the care of patients seen in the Rapid Response Radiotherapy Program	Dr. Toni Barnes
	Resilience in palliative care	Dr. Mary Vachon
	The WHO analgesic ladder and new concepts in our understanding of cancer pain – building on the legacy	Dr. Carlo DeAngelis
	Development of the Bone Metastases Module to accompany the EORTC core questionnaire to assess quality of life in patients with bone metastases in future clinical trials	Ms. Amanda Hird
Insert February 2008	Management of invasive fungal infections (IFIs) in immunocompromised patients (Supported by an educational grant from Astellas Pharma Canada, Inc.)	Dr. Jeffrey H. Lipton
Vol 10, Issue 2 May 2008	From the guest editor's desk	Dr. Cyril Danjoux
	Resilience in professional caregivers	Dr. Mary Vachon
	Are some GIM patients missing a palliative medicine consult when they	Drs. Leah Steinberg,

	might benefit from it?	Anita Chakraborty, Niren Shetty
	Advanced directives or advanced troubles?	Mr. Blair Henry
	Advance care planning in pediatric palliative care: Dr we really know what they are asking?	Ms. Maria Rugg
	Improving cancer pain control: Helping patients to gain the most benefit from their medication	Dr. Carlo DeAngelis
Insert May 2008	Sorafenib in the treatment of advanced hepatocellular cancer (Supported by an educational grant from Bayer)	Ms. Anne Horgan, Dr. Jennifer Knox
Vol 10, Issue 3 August 2008	From the guest editor's desk	Dr. Edward Chow
	Only talk about positive things!	Dr. Monica Branigan
	Decision-making in a family dyad in the context of advanced cancer	Ms. Susanna Edwards
	Screening for emotional distress: The sixth vital sign	Dr. Margaret Fitch
	Opioid Dose Equivalency: Part 1 – General Overview	Dr. Carlo DeAngelis
Insert #1 August 2008	Secondary prophylaxis of venous thromboembolism (VTE) in cancer patients (Supported by an educational grant from Pfizer)	Dr. Richard Jay
Insert #2 August 2008	Prostate bone metastases clinic (PBMC): A multidisciplinary approach (Supported by an educational grant from Novartis)	Dr. Urban Emmenegger
Vol 10, Issue 4 November 2008	From the guest editor's desk	Dr. May Tsao
	Spine stereotactic body radiotherapy	Dr. Arjun Sahgal
	Stereotactic body radiation therapy for lung tumours	Dr. Patrick Cheung
	Disclosure and palliative chemotherapy	Dr. Philip Hebert
	Determining outcomes for patients with metastatic epidural spinal cord compression (MESCC): A quality of life and cost-effectiveness study	Dr. Arjun Sahgal, Ms. Aimee Gallant, Drs. Michael Fehlings, Edward Chow, Joel Finkelstein
	Bringing about change	Dr. Michele Chaban
Insert November 2008	Smoking cessation and reduction in patients with cancers (Supported by an educational grant from Pfizer)	Dr. Peter Selby

Undergraduate Teaching – Co-op Program

Programme	Student	Period
Fourth year student University of Waterloo ❖ Length of stay in hospice care	Julie Napolskikh	2006 - 2008
Third year student McMaster University ❖ Patient/Proxy correlation of ESAS	Andrea Kirou-Mauro	2006 - 2008
Fourth year student York University ❖ Patterns of practice at RRRP	Eric de Sa	2006 - 2008
Second year student University of Waterloo ❖ Dexamethasone pain flare project	Amanda Hird*	2007 - 2008
Third year student University of Waterloo ❖ Testicular cancer module development	Candi Flynn*	2007 - 2008
First year student Queen's University ❖ Quality of life in brain metastases	Jennifer Wong*	2007 - 2008
First year student McMaster University ❖ Case report	Alice Fitch	2008
Fourth year student University of Waterloo ❖ Quality of life issues in lung cancer	Nadia Salvo*	2008
Second year student University of Waterloo ❖ ESAS symptoms	Shaelyn Culleton*	2008
Second year student University of Waterloo ❖ Palliative radiotherapy in elderly patients	Sarah Campos*	2008

* Award Recipients

Ongoing Research Studies in the Rapid Response Radiotherapy Program and the Bone Metastases Clinic

Study Titles

- ❖ Examining Urinary Markers for Dexamethasone Metabolism, Inflammatory Cytokines and Bone Marker Turnover Following the Decadron Prophylaxis of Pain Flare
- ❖ Assessing quality of life in cancer patients receiving palliative radiotherapy for symptomatic lung cancer or lung metastases using the European Organization for Research and Treatment of Cancer Lung Cancer Module (EORTC QLQ-LC13)
- ❖ SC-20 A Phase III International Randomized Trial of Single Versus Multiple Fractions for Re-irradiation of painful bone metastases (NCIC Clinical Trials Group)
- ❖ SC-20U Effect of Re-Irradiation for bone pain on Urinary Markers of Osteoclast Activity --A companion study to SC 20
- ❖ International Cross-Cultural Field Validation of an EORTC Questionnaire Module for Patients with Bone Metastases (EORTC QLQ-BM22)
- ❖ Examining Urinary Markers of Pain Flare in Patients Undergoing External Beam Radiotherapy in the Treatment of Bone Metastases
- ❖ International Validation of the European Organization for Research and Treatment of Cancer Brain Module (EORTC-QLQ-BN20) for Assessing Quality of Life in Patients with Brain Metastases
- ❖ Assessing Quality of Life in Patients with Bone Metastases Using the European Organization for Research and Treatment of Cancer Bone Metastases Module (EORTC QLQ-BM22)
- ❖ Prospective Analysis of Antiemetic Medication Prescribed for Radiation Induced Emesis for Patients seen in the Rapid Response Radiotherapy Program (RRRP)
- ❖ Assessing Quality of Life in Patients with Brain Metastases Using the European Organization for Research and Treatment of Cancer Brain Module (EORTC QLQ-BN20)
- ❖ A Prospective cohort study of androgen independent prostate cancer patients receiving zoledronic acid
- ❖ A Phase II Study of Early Integration of Zoledronic Acid with Radiotherapy to Bone in the Treatment of Painful Bone Metastases in Prostate, Breast and Lung Cancer
- ❖ Correlating Radiotherapy Response with Tumour Related Factors in Cancer Patients with Bone Metastases to the Spine
- ❖ Developing a user-generated approach to health outcome measurement for older patients with cancer: pilot testing and validation of a questionnaire

