**Geriatric Oncology- Brazil -2014-2015**

**Theodora Karnakis**

**Activities**

1**- State of São Paulo:**

The state of São Paulo is the region of the country where they focus more on local activities oncogeriatria. There are at least four major centers that initiated activity programs and research in elderly cancer patients.

The centers concerned are:

1. Sao Paulo Cancer Institute, University of Sao Paulo Medical School, Sao Paulo, Brazil \*\*
2. University of São Paulo-Medical School of Ribeirão Preto
3. Albert Einstein Hospital, São Paulo , Brazil \*
4. Faculty of Medicine of ABC: Coordinated by oncologist Dr. Auro del Giglio, activities in geriatric oncology began in 2010.
5. Hospital AC. Camargo : The Clinical Body is formed by over 400 specialists in oncology with interdisciplinary actuation. The activities in Geriatric Oncology began in 2012.

**\*Activities of Geriatric Division at the Cancer Institute of São Paulo (ICESP)-Brazil**

Team:

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Opened in May 2008, the Cancer Institute of São Paulo (ICESP) Octavio Frias de Oliveira is part of Clinics Hospital, linked through University of Sao Paulo.

ICESP is the largest hospital specialized in the treatment of cancer Latin America and one of the hugest vertical hospital in the world. Approximately 6000 patients diagnosed with cancer are treated in the hospital monthly.

Since October 2011, two geriatricians were included in the ICESP’s staff in order to meet the demand of these patients. Various types of assistance were directed to the geriatric population and specific protocols were directed to them:

Evaluation of surgical risk octogenarians

Track of morbidity of elderly in chemotherapy

Monitoring inpatient with surgical or clinical complications

Geriatric assessment to aid therapeutic oncologic decision and success of treatment.

**The main program of Geriatric Oncology:**

**A-Outpatient care:** Elderly patients who meet criteria for referral (1) - are evaluated by the staff geriatrician.

The consultation consists of clinical evaluation and implementation of AGA in order to provide aid to therapeutic decision duct cancer, optimization of clinical comorbidities.

On average 14 consultations are performed / week, average 52 consultations / month

**B-Surgical Risk assessment for all elderly over 80 years:** average of 40 pre-op assessment per month.

**C- Evaluation** and co-management of 60+ inpatients as requested by the oncologist/haematologist/surgeons

1. **Criteria for referral to a geriatrician:**

1-Age less than 80 years; OR

2 - Age between 60 and 80 years and more of the following:

1. Neuropsychiatric / neurodegenerative diseases
2. Loss of two or more basic activities of daily living
3. 2 or more falls in the past 12 months or 1 fall with serious consequences - fracture / disability / institutionalization
4. Three or more diseases with chronic complications besides neoplasia

NOTE: Patients who meet criteria for palliative care, which are not in specific cancer treatment strategy should be directed to the appropriate staff.

**D- Research**

Three protocols are under investigation :

1- Surgical patients

2- Chemotherapy patient

3- Epidemiological in oncogeriatric.

**E- Education:**

Every two months we have 4 residents geriatric rotation with our team

They are unique to activities in geriatric oncology, where besides the delivery of assistance to the elderly with cancer, seminars and discussions on the topic of geriatric oncology are prepared.

**Research**

**1- Studies in Geriatric Oncology at Cancer Institute of São Paulo 2012-2014**

1. Surgical risk and postoperative complications in the elderly aged 80 years or more in cancer surgery
2. Predictors of prescription of chemotherapy in elderly patients with colorectal cancer undergoing cancer Hospital
3. Use longitudinal of geriatric assessment in Brazilian elderly cancer patients : A pilot study in patients with breast cancer

**2- Studies in Geriatric Oncology 2014-2015**

Orientator of the following studies at the cancer institute of são Paulo and in the University of São Paulo

2.1- The importance of CGA in predicting functional decline and survivor in elderly patients with cancer

2.2- Associated factors to decisions in cancer treatment in Elderly patients over 90 years old.

2.3-Predicting postoperative complications in over 80 –year –old elderly people submited to oncologic surgery

2.4- Oncologic surgery in over 80 –year –old elderly people: Predictors of functional decline and mortality in 12 months

**3-THESIS DEFENSE-2015**

**Presentation in February 2015 at Medical University of São Paulo-Brazil**

The longitudinal use of geriatric assessment in an oncology center in Brazil : a pilot study in patients with breast cancer [thesis]. São Paulo: “ Faculdade de Medicina, Universidade de São Paulo“; 2015.

**4- Publications in Geriatric Oncology 2012-2013**

4.1PONTES, LUCIOLA DE BARROS ; TODARO, JULIANA ; **KARNAKIS, THEODORA**; KALIKS, RAFAEL ALIOSHA ; DEL GIGLIO, AURO . Treatment of a Frail Older Patient with Diffuse Large B-Cell Lymphoma on Maintenance Dialysis: Attenuated Immunochemotherapy and Adapted Care Plan. Case Reports in Oncology, v. 6, p. 197-203, 2013.

**4.2.**KALIKS, RAFAEL ALIOSHA ; PONTES, LUCÍOLA DE BARROS ;; **KARNAKIS, THEODORA** ; . Treatment of breast cancer patients from a public healthcare system in a private center: costs of care for a pilot public-private partnership in oncology. Einstein (São Paulo), v. 11, p. 216-223, 2013.

**3.**

4.3.PONTES, LUCIOLA DE BARROS ; LOUREIRO, LUIZ VICTOR MAIA ; KOCH, LUDMILA O. ; **KARNAKIS, THEODORA** ; GUENDELMANN, RAFAEL ALIOSHA KALIKS ; WELTMAN, EDUARDO ; MALHEIROS, SUZANA MARIA FLEURY . Patterns of care and outcomes in elderly patients with glioblastoma in Sao Paulo, Brazil: A retrospective study. J GERIATR ONCOL, v. 4, p. 388-393, 2013.

**4.**

4.4.PONTES, LUCIOLA DE BARROS ; GIGLIO, A. ; **Karnakis,T.** ; TODARO, JULIANA . idosos com Câncer: como escolher a melhor estratégia de tratamento. Einstein. Educação Continuada em Saúde, v. 11, p. 35, 2013.

**4.5.**PONTES, L.B. ; ANTUNES, Y.P.P.V. ; BUGANO, D.D.G. ; **KARNAKIS, T.** ; DEL GIGLIO, A. ; KALIKS, R.A. . Prevalence of renal insufficiency in elderly cancer patients in a tertiary cancer center in Sao Paulo-Brazil. J GERIATR ONCOL, v. 4, p. S66, 2013.

**4.6.**PONTES, L.B. ; ANTUNES, Y.P.P.V. ; BUGANO, D.D.G. ; **KARNAKIS, T.** ; DEL GIGLIO, A. ; KALIKS, R.A. . Clinical features and overall survival among elderly cancer patients in a tertiary cancer center in Sao Paulo- Brazil. J GERIATR ONCOL, v. 4, p. S66-S67, 2013.

**4.7.**SARAIVA, M.D. ; **KARNAKIS, T.** ; GIL-JUNIOR, L.A. ; OLIVEIRA, J.C. ; SUEMOTO, C.K. ; JACOB-FILHO, W. . Surgical risk and postoperative complications in the elderly aged 80years or more in cancer surgery. J GERIATR ONCOL, v. 4, p. S65, 2013.

**4.8.**WILDIERS, H. ; HEEREN, P. ; ARTZ, A. ; AUDISIO, R. ; BERNABEI, R. ; BRAIN, E. ; DALE, W. ; EXTERMANN, M. ; FLAMAING, J. ; GAMBASSI, G. ; JANSSEN-HEIJNEN, M. ; **KARNAKIS, T.** ; KENIS, C. ; LEGER, C. ; MILISEN, K. ; MOHILE, S. ; NORTIER, H. ; PUTS, M. ; REPETTO, L. ; TOPINKOVA, E. ; VAN LEEUWEN, B. ; HURRIA, A. . Geriatric assessment in older cancer patients: International Society of Geriatric Oncology (SIOG) recommendations. J GERIATR ONCOL, v. 4, p. S73-S74, 2013.

**4.9.**PONTES, LUCIOLA DE BARROS ; **KARNAKIS, THEODORA** ; MALHEIROS, SUZANA MARIA FLEURY ; WELTMAN, EDUARDO ; BRANDT, REYNALDO ANDRÉ ; GUENDELMANN, RAFAEL ALIOSHA KALIKS . Glioblastoma: approach to treat elderly patients. Einstein (São Paulo), v. 10, p. 512-518, 2012.

**Citações:**[2](http://www.scopus.com/scopus/inward/citedby.url?partnerID=bb5nvXTn&rel=R6.0.0&doi=10.1590/s1679-45082012000400021&md5=f3d68d9154e7dfd7fa759238a036ffdd)

**4.10.** PONTES, L.B. ; TODARO, J. ; **KARNAKIS', T.** ; BOLLMAN, P.W. ; BFC, SANTOS ; KALIKS, R.A. ; DEL GIGLIO, A. . Treatment of a frail and elderly patient with diffuse large B-cell lymphoma on maintenance dialysis: Attenuated immunochemotherapy and adapted care. J GERIATR ONCOL, v. 3, p. S63, 2012.

**4.11.KARNAKIS, T.** . Oncogeriatria: uma revisão da avaliação geriátrica amplas nos pacientes com câncer. RBM. Revista Brasileira de Medicina (Rio de Janeiro), v. 68, p. 8-12, 2011.

**4.12.**LERA, A. T. ; CUBERO, D. I. G. ; **KARNAKIS, T.** ; GIGLIO, A. . Aplicação do instrumento termômetro de estresse em pacientes idosos com câncer: estudo piloto\*. Revista da Sociedade Brasileira de Clínica Médica, v. 9, p. 112-116, 2011.

**5-Publications in Geriatric Oncology 2014-2015**

Publication in Brazilian indexed Journal:

1-Survivor and clinical characteristics in elderly cancer patients in a oncologic center

Two articles was submitted and we are waiting answer of the journal

1. The longitudinal use of geriatric assessment in an oncology center in Brazil : a pilot study in patients with breast cancer [thesis]
2. Surgical risk and postoperative complications in the elderly aged 80 years or more in cancer surgery

Achievements and Regional Events

1. **With the support of SIOG we are collaborating to the project SIOG LATAM 2016. Until now we have been awaiting the sponsors’ answer (pharmaceutical industry)**

**2-Conferences in Geriatric Oncology- Brazil- São Paulo 2014-2015**

1. XIX-Brazilian Congress of Oncology SBOC-2015:
2. IX Paulist Congress of Geriatric and Gerontology (GERP) 2015: Screenning Cancer in elderly patients
3. VI Interdisciplinary journey of Geriatrics and gerontology
4. II International Symposium in Quality of life in Cancer hospital of Barretos: The use of CGA in elderly people

**3- Conferences in Geriatric Oncology - Brazil- São Paulo 2012-2013**

**A**- XVIII Brazilian Congress of Geriatrics and Gerontology. How to care Cancer in the elderly 2013.

B-Symposium of Clinical Oncology: Cancer in elderly. Geriatric Oncology Patient A new sub-speciality? 2013.

C- V Interdisciplinary journey of Geriatrics and gerontology; Evaluation therapy in elderly patients with cancer

D-XVIII Brazilian Congress of Geriatrics and Gerontology. Considerations for Tracking Cancer in the elderly 2012

F-Oncology Congress of Cancer Institute of São Paulo (ICESP): Evaluation of elderly women with breast cancer

**Other services of Geriatric Oncology in Brazil**

**\*Activities of Geriatric Oncology at University of São Paulo- Ribeirão Preto**

Symposio of Clinical Oncology: Cancer in Elderly

**\*Activities of Geriatric Oncology at Albert Einstein Hospital-Brazil**

**Team:**

Rafael Kaliks- medical oncologist

Nelson Hamerschlak- hematologist

Luciola de barros Pontes - medical oncologist

Polliana Mara Rodrigues de Souza- geriatrician

Morgani Rodrigues- hematologist

Program of Geriatric Oncology:

A-Outpatient care: Elderly patients who meet criteria for referral (1) - are evaluated jointly by the geriatrician and medical oncologist/hematologist.

The consultation consists of clinical evaluation and implementation of AGA in order to aid the therapeutic decision regarding cancer treatment.

B- Geriatric evaluation in hospitalized elderly patients as requested by the oncologist/hematologist

(1) Criteria for referral to a geriatrician:

1-Age more than 80 years; OR

2 - Age between 60 and 80 years and more of the following:

A-Diseases neuropsychiatric / neurodegenerative

B-Loss of two or more basic activities of daily living of the following: getting up, eating, bathing, using the toilet, have continence, dressing without assistance

C-History of 2 or more falls in the past 12 months or 1 fall with serious consequences - fracture / disability / institutionalization

D-Three or more diseases with chronic complications besides cancer

NOTE: Patients who have criteria for palliative care, which are not in active cancer treatment should be directed to the Palliative care.

D- Research

Two research protocols are accruing patients :

2- Hematologic malignancy cancer patients: prospective serial evaluation pre, during and post treatment

3-Hematologic marrow transplantation

E- Teaching:

Monthly meeting with the interdisciplinary team, residents in medical oncology and geriatrics; discussion on specific updates in geriatric oncology

Monthly meeting with the interdisciplinary team, geriatric residents oncologists to discuss clinical cases of elderly patients

Lectures for residents in medical oncology

Training of nursing staff

**2- State of Rio Grande do SUL**

The oncologist Manuela Zereu (SIOG MEMBER) promotes activities with federal university of Rio Grande do Sul to the development and performance in the area of geriatric oncology .

Dr.

**3- State of Rio de Janeiro:**

There are epidemiological studies developed by researchers at the Institute of Cancer (INCA).