

News LETTER



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Message from Acting President

I am looking forward to our upcoming meeting in Anaheim in just a few short months. Although I have not started to count how many 'sleeps' away the meeting is, I do know this will be the last newsletter before a number of us from around the world congregate in Anaheim. This has been another busy focused three months. Thank you to each of you who has submitted an abstract, registered for the upcoming meeting, provided your input on constitution changes, nominated someone for an award consideration, and voted for our new Secretariat. We are still planning many other activities to engage our membership such as a safety survey, input for our strategic direction, and a call for new Chairs/members of our committees. A vibrant society needs and encourages membership input and sharing.

Sharing is a strong value that ISOPP members demonstrate and this newsletter brings one such concrete example. Thank you Jean for sharing your excellent work

Invitation to view and submit to a new open access cancer journal. www.ecancermedicalscience.com, the open access cancer journal founded by Professor Gordon McVie, in partnership with the European CanCER Organisation and the European Institute of Oncology. ecancermedicalscience.com is completely open access and thus, free to publish research, free to read, free to comment. All visitors welcome!

in Stabilis with the ISOPP membership. If any other members have works they are willing to share and feel the membership would benefit please don't hesitate to let us know.

Included in this newsletter is our invitation to the membership to attend our General Assembly during the Symposium. There are a number of decisions we will need our members to vote on to keep the society strong and moving forward. The General Assembly is your opportunity to influence the focus of ISOPP and will also be our chance to congratulate award recipients. I do hope that as many members as possible will attend.

As we enter the last few months before our meeting I encourage each and everyone to think about how our valuable time together will be the most productive and energizing. As we only meet every 2 years it makes this a special time and I look forward to seeing many of you there.



Editorial

The ISOPP Newsletter celebrates its tenth anniversary in 2008. As I prepared this edition I reflected on the global impact of ISOPP. I think this is clearly shown in the contents of this newsletter. Educational reports on oncology meetings, both adult and paediatric, from contributors from 3 different continents. Updates on oncology pharmacy practice from two countries on opposite sides of the world and the sharing of work freely between members. Through membership of ISOPP individual oncology pharmacists are truly able to join an international community with a common goal to improve the care of the cancer patient while at the same time promote a safe working environment. I thank all the contributors to the newsletter and all the members who work behind the scenes to make ISOPP the vibrant society that it is. If you would like to share your experiences with other ISOPP members please contact me at jillian.davis@austin.org.au.
Editor: Jill Davis

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San Antonio Breast Cancer Symposium



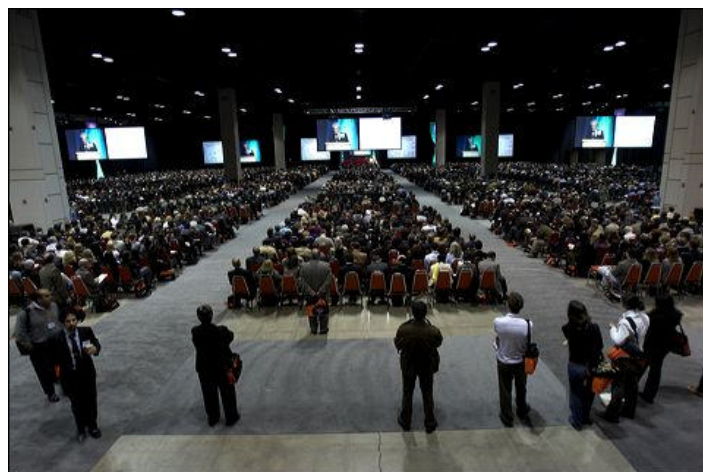
Dan Mellor,
Peter MacCallum Cancer
Centre, Australia

The annual San Antonio Breast Cancer Symposium took place from 13-16th December 2007. Over 8000 delegates from over 60 countries converged on this small town in the Lone Star state for the 30th anniversary of this meeting.

From the humble beginnings of a few people back in the 1970s this meeting has grown into a world class event, attracting abstracts and posters from those at the pinnacle of breast cancer research.

The Henry B Gonzales Convention Centre gets transformed into a mini-city for the duration of the conference. There is the main auditorium - large enough to seat over 5000 people, the exhibition - with offerings from the large pharmaceuticals, biotech companies, genetic testing companies, surgical equipment specialists, medical literature companies, and many associated support groups and patient advocacy services. There is the dining room with cuisine of exceptional range and quality for catering on such a large scale, there are other satellite symposia, and the main proceedings are also relayed out into the main area of the convention centre with live audiovisual streams in two other locations - there is literally something for everyone involved in the treatment of breast cancer patients.

The content of the meeting



did not disappoint. There was something for everyone here too - the latest research in translational areas, epigenetics, chemotherapy, radiotherapy, diagnostic imaging and surgery.

The following is a selection of research presented at the meeting:

- An observational study reported that the median survival after detection of brain metastasis in HER2 positive women is about 13.9 months. Brain metastases were found to occur in about 30% of women and also occur relatively early (after a median of 12.1 months following the metastatic diagnosis) (RegistHER Study).
- The long term findings of a large, multicentre study showed that breast cancer survival is significantly improved with docetaxel plus cyclophosphamide when compared with doxorubicin plus cyclophosphamide. The study also found the side effects in the docetaxel arm to be significantly less severe
- A meta-analysis showed that there is no overall survival benefit gained with high-dose chemotherapy and autologous

HSTC for women with early breast cancer and multiple positive nodes

- Denosumab was shown to be useful in treating aromatase inhibitor-induced bone loss. Denosumab was also shown to have different modes of action than current therapeutic options.

- Anastrozole offers long-term efficacy over tamoxifen, and the benefits of treatment are maintained long after therapy is completed (updated data from ATAC trial)

- The largest trial to date shows that the tamoxifen benefit in adjuvant therapy appears to extend beyond 5 years. The analysis suggests that the current advice to cease therapy at 5 years is wrong. (ATLAS Study)

- Healthy diet may not reduce breast cancer recurrence or mortality (WHEL Study)

- Continuing treatment with trastuzumab improved PFS in women who's advanced HER2-positive breast cancer progressed after initial treatment with the drug (GBG 26/BIG 3-05 Study)

I have just picked a selection of highlights from the four days because there is far too much to report in this article - take a look at the conference proceedings for more details. I would recommend this conference to anyone with an interest in breast cancer who is lucky enough to get the opportunity to attend. This was my third year at the SABCS and I am looking forward to the next trip to Texas already. The southern hospitality takes some beating!



Oncology Pharmacy in Hong Kong

By Keith SO, BPharm(Hons),
MRPharmS, DipClinPharm
Pharmacy Aseptic Dispensing
Unit
Queen Elizabeth Hospital,
Hong Kong SAR

For the last ten years, like most parts of the world, cancer morbidity rate in Hong Kong is rising. From 1998 to 2001, Hospital Authority data showed that there was a steady 5% rise in cancer morbidity rate per 1000 population.

Since 1991, malignant neoplasm had even risen to the top of the leading causes of death, according to the Census and Statistics Department. As a result, the demand for cancer treatment is rising and most of them go to public hospitals since about 88% of the total beds belonged to public hospitals. Pharmacy aseptic dispensing units in these public hospitals are struggling hard to cope with such increases.

In our Queen Elizabeth Hospital, we are currently facing the challenge of providing services for the whole hospital with limited resources. Historically nurses were assigned by doctors to reconstitute cytotoxic drugs. Until several years ago, nurses began to realize the danger of reconstituting cytotoxic drug in an unprotected environment via risk assessment by occupational and safety consultant employed by the Hospital Authority. Consequently we are being pressed to take up the reconstituting duties but with little additional resources as a result of the prevailing economic downturn at that time.

After volunteering myself to be the dedicated pharmacist in charge of the aseptic dispensing unit, I began to re-engineer our work processes in order to improve quality, and reduce risk. All major processes listed below from prescribing to waste disposal were revised, standardized, and streamlined: (a) All chemotherapy protocols were reviewed and pre-



Keith So (front) with all his staff

printed on NCR (no carbon required) prescription; (b) The reconstitution procedures ; (c) The packaging and labelling of finished infusion bag; (d) The administration of cytotoxic drugs; (e) The proper disposal of cytotoxic wastes.

Two new work systems were also initiated to improve efficiency: (a) Develop automation in total parenteral nutrition productions with bar code verification; and (b) Develop the first dose-banding scheme in Hong Kong. The successful implementation of the above had helped to increase our production capacities significantly and increase our services to the hospital. Currently my unit has one four-glove isolator in an ISO 5 clean room, 3 laminar flow hoods in an ISO 5 clean room, handling about 3000 items (including cytotoxic drugs and other sterile preparations) per month. Being the chairman of the hospital cytotoxic safety subcommittee, I am trying hard to bid for resources from higher management to provide 100% pharmacy cytotoxic reconstitution service, upgrade our clean room and equipment, clinical trial, ward clinical pharmacy services, and ultimately better staff protection and cancer patient care.

Manpower level varied among hospitals and did not commensurate with workload. In our cytotoxic unit, there are 2 pharmacists and 5 dispensers, therefore most of my time was dedicated to screening prescription, checking and releasing finished products. Regular clinical pharmacy activities such as ward round or direct bed side patient counselling were not performed at the moment.

However, I do strive to provide ad hoc teaching and training to ward nurses on safe handling, safe administration, spill management, and extravasations monitoring of cytotoxic drugs.

Although it is disappointing that specialist oncology pharmacist training is basically absent in Hong Kong, I do appreciate training organized by other countries such as Singapore, conferences such as ISOPP meetings, and the ISOPP web site in helping to update and open my eyes to the wonderful practice of oncology pharmacy around the world. Finally I would like to thank Jillian Davis for inviting me to share what I am doing in Hong Kong and I hope I can see you all in the ISOPP XI.



A change in therapy standards and an “old” German cytotoxic drug with very exciting new data

The 49th annual meeting of the American Society of Hematology in Atlanta focussed on new therapeutic options in haematology and in the treatment of leukaemia and lymphoma.

New therapeutic option for patients with chronic immune thrombocytopenic purpura (ITP)

In a randomized, placebo-controlled phase III study, investigators evaluated the efficacy and safety of AMG 531 in previously splenectomized patients with chronic immune thrombocytopenic purpura (ITP) and baseline platelet counts $< 30.000/\mu\text{L}$. Chronic ITP is an autoimmune disorder in which patients produce antiplatelet autoantibodies that destroy their blood platelets and, in some cases, damage their megakaryocytes (the cells that produce platelets in the bone marrow) causing defective platelet production. These result in a low blood platelet count that may cause bruising or excessive bleeding. Splenectomy is sometimes undertaken in patients with chronic ITP, as platelets targeted for destruction will often meet their fate in

the spleen. AMG 531 is a novel “peptibody” that acts by stimulating platelet production at the thrombopoietin receptor. In this study, subcutaneous AMG 531 or placebo was administered weekly for 24 weeks. The results indicated that AMG 531 was well tolerated and effectively increases and sustained platelet counts in patients.

Oral, direct Factor Xa inhibitor rivaroxaban for extended prevention of blood clotting after a total hip replacement

Thromboprophylaxis is recommended for at least 10 days and for up to four to five weeks after total hip replacement in order to avoid the formation of a thromboembolism. Rivaroxaban is an oral, direct Factor Xa inhibitor in advanced clinical development for the prevention and treatment of thromboembolic disorders. RECORD 1 was a phase III study with 4.541 patients to compare the efficacy and safety of rivaroxaban with subcutaneous enoxaparin in patients undergoing a total hip arthroplasty.

Results: Rivaroxaban significantly reduced the incidence of any deep vein thrombosis and non-fatal pulmonary embolism compared with enoxaparin. The incidence of major and non-major bleeding events was similar in both groups.

Bendamustin (TREANDA®, Ribomustin®) triples PFS in CLL

Bendamustin (B) is a purine analog/alkylator hybrid agent with a particular mechanism of action that provides effective treatment for a number of hematologic and non-hematologic malignancies. In a phase III study presented during the ASH meeting efficacy and safety of B was compared with chlorambucil (CLB) in treatment-naïve patients with CLL. After a median follow up of 18.5 months ORR was significantly higher with B than with CLB (68% vs. 39%; $p < 0,0001$), with CR of 30% vs. 2%, resp. Median PFS was 21.7 months with BEN and 9.3 months with CLB ($p < 0,0001$). Toxicity was manageable and did not impair QoL when compared with CLB.

Bendamustin demonstrates substantial efficacy in patients with relapsed indolent Non-Hodgkin’s Lymphoma (NHL)

According to the National Cancer Institute, an estimated 30.000 people in the United States will be diagnosed in 2007 with indolent NHL. In a pivotal study of 100 patients with indolent NHL, whose disease progressed during or following treatment with rituximab, or a rituximab-containing regimen, as assessed by an independent radiological committee, were treated with B. 75 patients had a response. The median duration of response was 9.2 months. “The high response rate in this study suggest that bendamustine could offer substantial periods of remission to patients with indolent NHL whose cancer is progressing after treatment with rituximab”, said B. Kahl, who presented this study.

In addition to this pivotal Phase III data, an abstract of an interim analysis by M. Rummel and colleagues reports that the combination of bendamustine plus rituximab appears to be non-inferior to the standard CHOP-R while showing a better tolerability profile.

SOUTH AFRICAN SOCIETY OF ONCOLOGY PHARMACISTS (SASOP)



Pennington near the conference centre

On the 3rd March 2001 oncology pharmacists from different regions of South Africa got together under the kind sponsorship of Aventis Oncology and at this meeting the South African Society of Oncology Pharmacists (SASOP) was formed. Mission and goals were formulated, office bearers & regional representatives were elected.

Unfortunately the progress that the society has made over the past few years has not been very satisfactory, as minimal goals have been reached.

SASOP has an association with the South African Society of Medical Oncology which allows our members to attend their bi annual conference. Some



Dr.S.D. Moodley shared his knowledge

progress has been made e.g. the South African Pharmacy Council has accepted the registration of Oncology Pharmacies in private oncology centres which was previously not allowed.

Formulation of a part-time oncology pharmacy course with the Wits School of Pharmacy has not yet been successful. Newsletters on oncology topics have been reaching pharmacists but at irregular intervals

On the 17 - 18 November 2007 an Oncology Pharmacist weekend was sponsored by Sanofi-Aventis in Pennington Kwa Zulu Natal.

Some 25 pharmacists from both private and state institutions attended and a varied programme was presented. This

two-day meeting included presentations on:

- Healthcare and funding environment
- Oncology outcomes, their meaning and interpretation
- The importance of quality and predictability of oncology drugs
- New Molecules &



Michael Conidaris addresses the meeting

Targeted Therapies

- The Chemo Pharmacy-from start to finish

- Breast cancer update

In addition an election of new office bearers and acceptance of the Constitution took place. It is hoped that the South African Society of Oncology Pharmacy will now grow from strength to strength, the goals will be met, and regular meetings will be held in South Africa

Michael Conidaris, Chair Person
Email mconidaris@yebo.co.za

Paediatric Oncology Group of Ontario (POGO) annual symposium: Childhood Cancer in the Age of Genomics

John Wiernikowski, BScPhm, PharmD
McMaster Children's Hospital,
Canada

Once again, POGO had its annual 2 day symposium in Toronto in November, 2007 with this year's theme being: Childhood Cancer in the Age of Genomics. The symposium brought together a broad range of Paediatric Oncology health care practitioners from Canada, the United States, Latin America, and even a pharmacist from Malaysia (Rizal Husaini, from Kuala Lumpur who was spending a month with me honing up his clinical skills in Paediatric Haematology/Oncology).

Participants heard from a broad range of disciplines in Medical (clinical and basic scientists), Nursing, Social/Behavioural Sciences as well as parents and childhood cancer survivors on a varied range of topics relating to cancer and genomics such as genetic determinants of early and late toxicity of therapies, targeted therapies emerging from the application of genomics, as well as Adolescent issues and familial breast cancer, How parents make difficult treatment decisions (in the context of genomic information); Genes, Environment and cancer, and How to set up a cancer genetics counselling program.

Some key points of information highlighted at the meeting: 1) The introduction of chromosome 1p and 11qLOH as new parameters in the Children's Oncology Group (COG) risk stratification schema for children with Neuroblastoma. Work at the Hospital for Sick Children identifying unique Neuroblastoma stem cells that will form mouse xenograft tumours with the injection of less than 10 cells. Work on the p53 pathway in these cells isolated from patients at time of relapse (vs. diagnosis) indicate that this pathway to cell apoptosis becomes inactive, but p73 (a p53 homologue) is active and will

Paediatric Oncology Group of Ontario (POGO) annual symposium: continued

activate apoptotic pathways. Efforts are underway to identify new agents (COX 2 Inhibitors are good p73 activators) that will activate this pathway. 2) Ethical dilemmas remain in the utilization of genetic tests; case in point of a child whose parents are divorced, but may have Li Fraumeni syndrome. If the child is tested and positive, what responsibility does the Oncologist have to tell the biological mother (and her kindred) about her risk? What if biological mother objects to sharing the information with her relatives? 3) Thought provoking information from Dr. Logan Spector of the University of Minnesota on epi-genetics, or gene-environment interactions that affect health. Interesting data was presented on DNAt2 (topoisomerase II inhibition) and infant leukemia, or DNAt2 associated (classically Etoposide) AML. As it happens, there are a lot of environmental DNAt2 inhibitors, such as quinolone antibiotics, natural laxatives, as well as dietary DNAt2 inhibitors such as Genistein (abundant in Soy products such as Tofu), Quercetin (onions), Catechins (tea and wine), caffeine, and Ellagic acid (almost every type of "berry"). A new COG study will be examining these exposures in relation to childhood leukemias. As always, one of the highlights of our annual symposium is to hear how a particular issue, affected a parent or child with cancer. This year we heard from 2 sets of parents and two sisters affected by Von Hippel Lindau syndrome; and the personal struggles they faced making the decision to test or not test their unaffected child, and in the case of the sisters, how it felt to be the one who did and didn't know their mutation status. As always, our patients are our best teachers.....

This year's symposium will be in November again, theme TBA, if you're interested, visit www.pogo.ca for more information on this year's symposium.

Stabilis online !



The free database STABILIS on stability and compatibility of injectable drugs is now available online at the address www.infostab.com.

This database has been compiled in an international language based on pictograms (definitions in 24 languages are provided for all the pictograms). It was first created in 2001 and available as a CDROM since the third edition in 2006. Currently, the database contains a series of 374 Monographs

The following information is given for each drug:

- trade names in different countries
- stability in simple solution
- stability in admixtures
- factors affecting stability
- incompatibilities
- routes of administration
- relevant references.

It contains also many summary lists like:

- list of drugs incompatible with various solvents (sodium chloride 0.9%, dextrose 5% ...)
- list of drugs stable in various containers (PVC, EVA ...)
- list of drug that can provoke leaching of plasticizers

Important new functions have been added into the online version like:

- a pdf file which can be created for each monograph
- a search function for incompatibilities
- a general search function
- link to abstracts or articles of the bibliographic references
- immediate translation of the pictograms by the mouse
- new summary lists

Jean Vigneron
Président of INFOTAB Association
Heillecourt - FRANCE
infostab@wanadoo.fr

[Editor- there is a link to this website though the Education Center of the ISOPP website - www.isopp.org]

