

Message from the President

As I write this, it dawns on me that this will be my last newsletter as my term as President draws to a close. Two years has gone incredibly fast and we as a Secretariat have instituted a number of changes within the Society that I believe will strengthen the Society going forward; and have managed to do so without any increase in fees. I hope that you will continue to enjoy the benefits of ISOPP Society membership and will encourage your colleagues to join. I say this as our current election is ongoing; so please use your personalized link and vote today. As I'm sure many of you that have already voted noticed, the current slate of candidates is the bare bones minimum of people. While all of the candidates are excellent, and will serve you and the Society well for the next 2 years (4 years for President Elect) it is somewhat disconcerting that more members are reticent to step forward and give of their time to advance Oncology Pharmacy across the globe. It is key to remember that service to ISOPP is not an individual effort but that of the entire Secretariat, and ISOPP's committees. In that regard, I would be remiss in not acknowledging the tremendous amount of work put in by the Secretariat, Committee Chairs and Committee members these past 2 years.

In terms of key updates, we have filed our tax declaration in Germany and await news from the German courts on winding up our activities in Germany and transitioning to Canada. At the Canadian end, our articles of

incorporation are complete except for the official date of incorporation in Canada. I anticipate being able to update you further at our AGM at ISOPP XIV in Montreal next month. The program for the Symposium in Montreal is outstanding; the Scientific Planning committee has done a superlative job, and our Canadian hosts CAPhO will have a warm welcome and have put together an excellent social program. Hopefully the weather will warm up as well! While Europe has enjoyed one of it's mildest winters in many years, Australia one of it's hottest summers, we have had one of our coldest winters. Please check the forecast for Montreal before leaving home and pack accordingly! Whatever the weather, It promises to be one of the best symposia yet. I look forward to meeting as many of you as I can throughout the symposium and at the AGM. I wish to remind everyone that with our transition to annual meetings commencing in 2016, we will be announcing the host cities for both the 2016 and 2017 meeting at our closing ceremony, so there will be a session or plenary that is worth attending from start to finish.

This year also marks the 10th Anniversary of the Founding of the Hematology/Oncology Pharmacists Association in the United States as well as 10 years of German-Polish Oncology Pharmacy collaboration. On behalf of all ISOPP members, I wish to offer our warmest congratulations to our colleagues in the USA, Germany and Poland on achieving these milestones.



John T Wiernikowski, PharmD, FISOPP
ISOPP President.

NZW meeting, Hamburg, Germany:

Nearly 1000 participants attended, inclusive of 50 ESOP members from 28 countries. A good start in 2014 for Europe with the goal to mobilise as many participants as possible to attend ECOP 2 in Krakow, Poland in June 2014. Will you be there?

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The election will close on March 31, 2014 at midnight Greenwich Mean Time.

Message from Rowena Schwartz, President Elect

On behalf of the ISOPP Nominating Committee; it is my pleasure to introduce the slate of candidates for this year's ISOPP Election. There is one candidate for President Elect, one candidate for Treasurer and two candidates for the two open General Secretariat Members of the Secretariat.

There is a photo of each candidate, and a Letter of Intent that each candidate provided below.

I encourage you to read all of the candidate's letters and begin formulating your decision.

Rowena Schwartz (USA, Committee Chair)

Anantha Naik Nagappa



Two General Secretariat positions

Tiene Bauters



After receiving my Doctor of Pharmacy degree in 2002, I started working in the Pharmacy Department of the Ghent University Hospital. My practice expertise is since then focused on pediatric oncology and hematopoietic stem cell transplantation. My interest in oncology first started when I took an oncology pharmacotherapy module organized by the European Society of Oncology Pharmacy. I was intrigued with the complexities of chemotherapy and the significant impact that the oncology pharmacist can have on patient care. My professional development was further enhanced when, in 2008, I was able to attend my first ISOPP meeting in Anaheim. I was delighted to find an international organization dedicated to the promotion of oncology pharmacy practice and to the support of oncology pharmacists. From then on, I have attended every meeting as

active participant or as speaker and still serve as an active member of the Research Committee and as reviewer for the Journal of Oncology Pharmacy Practice.

I'm actively involved in the management of patients' pharmacotherapy and my current areas of interest are optimizing supportive care and expanding oncology services in the hospital and outpatient setting, reviewing oncology related policies and procedures and evaluating medication reimbursement. I serve as pharmacy representative of the clinical committee of the Joint Accreditation Committee of the International Society for Cellular Therapy and the European Society for Blood and Marrow Transplantation (JACIE).

During the years, I became more and more convinced of the formal and informal networking of ISOPP being one of the strengths of the organization. They have helped me a lot in my professional growth. I would like to contribute to the growth of ISOPP, basically focusing on young colleagues' recruitment and promoting them to find their way in oncology pharmacy and to help them sharing their knowledge throughout the organisation.

That's why I'm dedicated to apply for the position of general secretary within the General Committee of ISOPP, as I would like to contribute to the ongoing successful mission of this society.

I am very eager to serve as a board member of the prestigious international professional organization "International Society of Oncology Pharmacy Practice". This would give me an opportunity to develop the Oncology Pharmacy practice across the globe especially in countries like India, China where the poverty and ignorance are playing havoc in cancer morbidity and mortality. The concern for the patients' plight was very much throughout my career. I have been advocating and striving to put forth the patient concerns in the right perspectives. I have been arguing in various forums like ISPOR, IAP0 and Global alliance for Human resources regarding the patient centric care. I am also very much dedicated in uplifting the basic infrastructure of health provision like monitoring and diagnosing the various disease conditions like diabetes mellitus, hypertension and cancer. The objectives of two NGOs established under my leadership are able to motivate pharmacists to take up pharmaceutical care as one of the major intervention in healthcare. The Association of Community Pharmacists of India is promoting the pharmacist to assist patients in management of drugs, diseases and diet. The Association of Practicing Pharmacists and Clinical Pharmacologists of India is creating a platform for Indian clinical pharmacist and pharmacologists to practice their profession and upgrade the healthcare delivery quality.

Candidate for Treasurer

Johan Vandenbroucke



Having qualified as a pharmacist in 1979 and obtained a Pharm D in Hospital Pharmacy in 1981, I started working in the central pharmacy of the University Hospital Ghent in August 1979. The field of interest of these first years was mainly the parenteral nutrition and reconstitution of antibiotics for selected departments.

In 1986 I took a year off to work as the scientific manager for the B. Braun Company of Belgium. In that position I was responsible for the scientific advices and education of the sales people in the areas of parenteral nutrition and antiseptic solutions. Returned to the hospital in 1987 I became more and more involved in oncology including: reconstitution, formulation and stability of cytotoxics; safe-handling; the development of hospital guidelines in a multi disciplinary setting, the development of software for the aid in prescription, reconstitution and administration of cytotoxic drugs and the organisation of a CIVA unit. In the year 2000 I became Senior Pharmacist production for the production department of the pharmacy. The department set to work 6 pharmacists, 22 pharmacy technicians and produces 300.000 units among them 29.000 cytotoxic preparations.

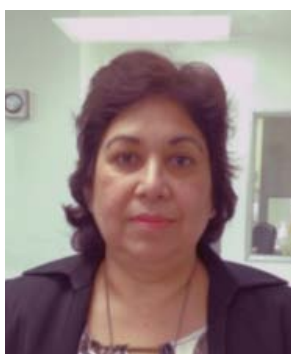
My first contact with ISOPP was at the meeting in Hamburg and I have attended every meeting since both as attendant and as speaker. I co-chaired the ISOPP standards committee

together with colleagues of Australia and the US since 2003 with as first priority the development of an ISOPP standard for safe handling which has been successfully published as a supplement of our JOPP journal in 2007. As I became more and more interested in the working of ISOPP, I decided to take part in the nomination first of secretariat member, later for president elect, both with success.

I served as the president from 2011 to 2012 and the last 2 years I was the treasurer of our society and my hope is that my contribution to the society helped the society forwards in his growth as a society and as the helping hand for the oncology pharmacists worldwide. I would like to help ISOPP organisation another 2 years as treasurer in the further development, growth and transit to new horizons.

Candidate for President Elect

Harbans Dhillion



I graduated as a pharmacist from the Victorian College of Pharmacy, Melbourne, Australia in 1979. From 1980 till now, I worked as a pharmacist in the Pharmacy Department of University Malaya Medical Centre, Kuala Lumpur, Malaysia. Presently, I am in charge of the Manufacturing Unit specializing in aseptic and cytotoxic reconstitution, including Total Parenteral Nutrition. I set up the first Sterile Complex at this hospital in 1998 to compound TPN and reconstitute drugs including cytotoxic drugs. It was the first of its kind in Malaysia. Since then, I have also conducted numerous national level Aseptic Dispensing Courses (targeting cytotoxic reconstitution) in attempts

of setting a respectable level in the standards to be practiced. The course that was meant to target Malaysian professionals now attracts participants from other Asian countries. Suffice to say, I have been in the field of oncology pharmacy for the last 16 years and still envision a great deal more to be done.

I have served as the president of PENSMA (The Parenteral and Enteral Nutrition Society of Malaysia) from 1998 till 2010. I was also the president of PENSA (The Parenteral and Enteral Nutrition Society of Asia) 2007 till 2009 and am currently the advisor to both these societies. I was Chairperson of Asia4Safe Handling Committee 2008-2010 and currently am a board member of this committee. During my term with these societies, I organized 2 international symposia, 4 national level symposia and numerous workshops in the field of parenteral nutrition and oncology. I have also travelled to Yogyakarta, Indonesia in 2013 to train local Indonesian pharmacists in oncology pharmacy and reconstitution.

My first exposure to ISOPP was in 1998, in Sydney and since then I have attended all ISOPP symposia. I was involved in organizing the symposia in Kuala Lumpur in 2006. I have served as a secretariat member of ISOPP from 2008- 2011 and as part of the Standards Committee of ISOPP.

With these leadership credentials I believe I will be able to lead the society as president elect and ultimately president, with my passion and enthusiasm. I share the same vision for ISOPP that is to make it a society known worldwide to enhance oncology pharmacy practice to improve cancer care to our patients and provide standards for practice in oncology pharmacy. I have always been very passionate about oncology pharmacy and ISOPP's mission, therefore, I would like to offer my services and experience to enhance the society's standings in the field of oncology and to make ISOPP's presence felt worldwide but more so in Asia, Africa and South America.

It will be an honor to serve once again in the secretariat of ISOPP.

Report from the SIOP conference, Hong Kong, September 2013

John T Wiernikowski,
PharmD, FISOPP
ISOPP President

I had the pleasure of attending the 45th annual conference of the Societe Internationale de Oncologie Pediatrique (SIOP) held in Hong Kong in September 2013. The conference got off to a bit of a stormy start thanks to super typhoon Usagi which was headed towards Hong Kong, just as delegates were making their way. The airport had to be closed for over 15 hours resulting in the cancellation or delay of over 400 flights into Hong Kong. In the end, despite some delays, over 1500 delegates from 82 countries were able to attend.

As always, the conference started off with a number of pre-conference meetings of specific SIOP committees. I am a member of the Pediatric Oncology in Developing Countries (PODC) committee and as ISOPP President, was honoured to be asked to be a member of a PODC working group on access to medicines in low and middle income countries. This committee has been quite productive and we have now published a number of position papers in Pediatric Blood and Cancer on topics such as the WHO Essential Medicines list, Health



Economic issues, Regulatory Issues/Obstacles, and a number of others are in preparation including advocacy and roles of NGO's. As part of the PODC, there was an additional meeting of our nursing colleagues and challenges they face in providing care in low and middle income countries. To my delight, they, and their Oncologist colleagues who were present at the meeting had great praise for the ISOPP Standards of practice. It turns out that our Standards document is a very useful tool for advocating for fundamental improvements in practice such as provision of basic PPE for those handling chemotherapy, which in many low income countries is predominantly nursing staff. The nurses in these

countries would love to have Oncology pharmacists to work with. The PODC also has a number of working groups on creating adapted treatment regimens and clinical trials (where there is infrastructure to support these) and again, our Standards audit tool is being adapted by some of these working groups (I work on the Neuroblastoma group) to direct treatment based on level of infrastructure within a health care region of facility.

There were a number of excellent plenary talks, one by Dr. Oleg Chestnov of the WHO on the importance of tackling non-communicable diseases such as cancer, now that we have made significant inroads in communicable diseases. Again, I was quite surprised and delighted that during the opening reception he recognized my name and ISOPP from our participation as a sponsor of the Cancer Control 2013 publication catalyzed by the INCTR. All I could think about was ...People (a Deputy Director in this case) within the WHO know about ISOPP....wow. Two further excellent plenaries were delivered by Dr. Chin Hon Pui of St Jude Children's research hospital on the state of the art of A.L.L. treatment, and another excellent plenary on the role of conservative surgery in pediatric oncology by Dr. J. Godzinski of Poland. I'm now looking forward to SIOP 2014 which will be just down the road in Toronto in October.



San Antonio Breast Cancer Symposium 2013

Sue Kirska

Director of Pharmacy
Peter MacCallum Cancer Centre.
Australia

The San Antonio Breast Cancer Symposium is an annual event organised by University of Texas Health Science Centre School of Medicine. The 2013 symposium was the 36th annual event, held at the Henry B Gonzalez Convention Centre in downtown San Antonio, a short walk from the famous Alamo (Texas's most popular tourist attraction) along the Riverwalk. These are really San Antonio's major attractions in the downtown area, although there are a number of other interesting historical sites to see, including the 5 Mission settlement ruins dating back to the 1700's when the Spanish missionaries brought Christianity to the Native American tribes of the region. San Antonio is in south Texas reasonably close (about a 3-4 hour drive) from the Mexico border and as such its cuisine and culture is heavily Latino influenced.

My dual aims in travelling to the US in December 2013 were to attend the SABCS and to visit my step-brother and his wife, who are both professors at University Texas, San Antonio. In the few days leading up to the symposium, my daughter and I stayed with my step-brother who made it his mission



to introduce us to all of the fine-dining experiences in San Antonio, and to help us to spend all of our hard-earned money at the various retail outlets that dot the outer San Antonio suburbs, including the most enormous Outlet centre I have ever been to in San Marco. There in one centre were every brand name store from Old Navy to Etro and everything in between. The cuisine ranged from excellent Mexican to one of the most amazing steak restaurants I have ever dined at.

The weather was apparently unseasonably cold in the days we were there. Temperatures ranged from below freezing (as low as 26oF) to a "balmy" 70oF, but with a warm coat and many layers, it was easy enough to walk around, particularly in along the Riverwalk both to the convention centre and in the evening to the myriad of eateries along the river.

The SABCS was held from the 10th to the 14th December. Day 1 is a pre-conference educational day. I attended 3 mini-symposia:

- Management of premalignant disease and breast cancer prevention
- Pathology and biology of early lesions
- Who should receive preventive therapy

- Breast SERMs and AIs – prevention of all types of breast cancer
- Individualised Adjuvant Therapy
- Adjuvant therapy in the elderly – making the right decision
- The impact of biological age
- Integration of the tumour, treatment and patient elements
- Metastatic Breast Cancer – an update on management and supportive care
- Update on management of ER positive metastatic breast cancer
- Update on the management of triple negative metastatic breast cancer
- Symptom management and quality of life in metastatic breast cancer

These sessions proved to be useful background to a number of the papers that were presented over subsequent days and served to remind symposium goers of the current state of play in a number of important areas of Breast Cancer treatment. Of particular interest to me were the discussions around how patient functional status and co-morbidities can and should influence the way their breast cancer is managed and how important it is to have a holistic approach when discussing treatment options.

The scientific sessions began in earnest on Day 2. The nice thing about this symposium is that there is essentially



a single stream of clinical papers, with some basic science concurrent sessions. This limits the need for attendees to be rushing from stream to stream to see papers of interest. For me, it was really nice just to be able to focus on the presentations as they came, instead of thinking about where the next selected concurrent session was being held, and whether I'd made the best session choices. Even so, there are far too many presentations offered at this symposium for me to describe in detail all of the work presented in this short report. However, following, I have selected just a few that I think will be of most relevance to our work in the coming months, and into the next few years.

S3-01 – First results of the International breast cancer intervention study-II (IBIS-II): A multi-centre prevention trial of anastrozole vs placebo in post-menopausal women at increased risk of developing breast cancer. This study is the newest in a series that have shown that the incidence of breast cancer can be reduced by treating women at high risk of developing breast cancer with either a SERM or an AI for 5 years. In this study, against placebo, the incident rate of all breast cancers in the treatment arm reduced from 5.6% (placebo) to 2.8% (anastrozole) (HR 0.47 (0.32-0.68), $p < 0.0001$) and the rate of ER positive invasive breast cancers reduced from 3.3% to 1.4% (HR= 0.42 (0.25-0.71) $p = 0.001$). While the study authors posited that anastrozole should become the drug of choice for preventing breast cancer in post-menopausal women at high risk of developing breast cancer, the audience and subsequent commentary has come to the conclusion that this certainly should be one of the options discussed for these high risk women. None of these drugs are (PBS) funded for this indication at present in Australia. However all of the AIs and

tamoxifen are now generic drugs, and the price for each has dropped markedly over the past 12 months or so, making them an affordable option for patients to consider as part of their strategy to avoid breast cancer.

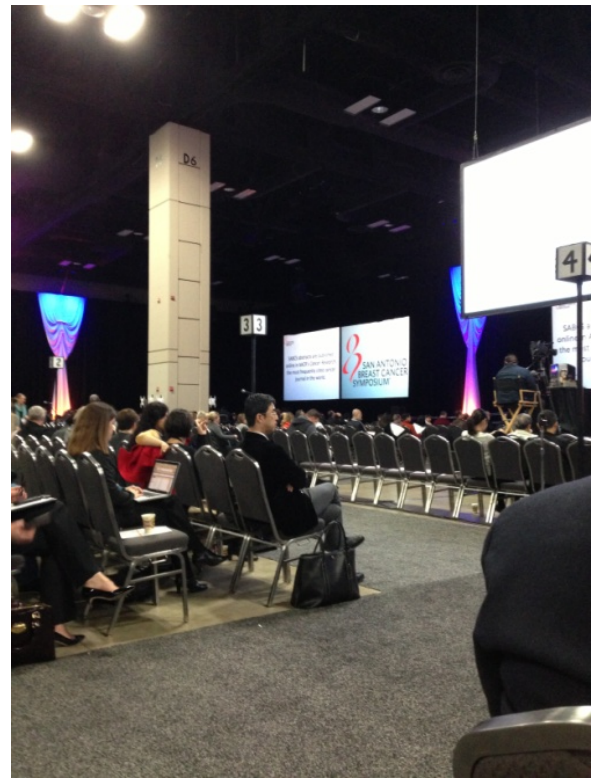
S4-07 – Effects of bisphosphonate treatment on recurrence and cause specific mortality in women with early breast cancer: a meta-analysis of individual patient data from randomised trials.

For a number of years now there has been debate about whether bisphosphonates have an effect on delaying recurrence of breast cancer – ie do they have an anti-tumour effect? Some studies have shown positive results, others not, with some even hinting at a detrimental effect. This group set out to analyse at individual patient data level as many of the studies into this subject that they could obtain data for. They were able to obtain data from 22 trials involving both clodronate and aminobisphosphonates (the majority being zoledronate) analysing almost 17,800 patient data sets. This represents 77% of all the reported trial data. The analysis involved a number of pre-planned subanalyses. The bottom line is that this meta-analysis has shown a 34% reduction in risk of bone recurrence ($p = 0.0001$) and a 17% reduction in risk of breast cancer death ($p = 0.004$) in post-menopausal women treated with a bisphosphonate. This effect was not seen in pre-menopausal women. The benefits seem to be similar for aminobisphosphonates and clodronate and don't seem to be dependent on schedule (ie the osteoporosis schedule appears to be just as effective as the more frequent bone-met treatment schedule for zoledronate). During the discussion, the presenter was asked

which bisphosphonate he would offer his patients, to which he responded that he would go with the evidence, that suggests it probably doesn't matter, but that the effect was not seen with weekly doses of drugs such as alendronate, that clinicians need to use either oral clodronate or one of the parenteral aminobisphosphonates such as zoledronate.

S1-05 – Tumour infiltrating lymphocytes (TILs) indicate trastuzumab benefit in early stage HER2 positive breast cancer.

I have selected this paper not only because the presenter, Sherene Loi, is from my institution but because this was one of 3 papers on similar topics that I believe will become important in the future of breast cancer treatment. There is increasing interest in how cancers interact with the immune system to avoid detection, and the effect of the levels of tumour infiltrating lymphocytes in the tumour microenvironment on the outcome of cancer treatment. This study aimed to demonstrate that trastuzumab has an effect on the tumour microenvironment. They were able to show that trastuzumab relieves tumour mediated immunosuppression, and that high levels of immune



negative regulators (such as CTLA-4 and PD-1) are associated with a higher benefit from trastuzumab. They have gone on to demonstrate in a HER2-driven mouse breast cancer model that the combination of T-cell checkpoint inhibitors with trastuzumab is synergistic. These early results are likely to be informative in the near future as these anti-PD-1 and checkpoint inhibitors come into clinical practice, potentially paving the way for significant advances for patients who progress despite optimal anti-HER-2 drug treatment.

Finally, another interesting feature of this symposium was the case discussion session. With little detail in the program about these sessions, I went along expecting the traditional moderated case-discussion by a panel of experts. As I moved into the room I was intrigued to see a line of conference delegates at each of the audience placed microphone stands. As the session started, the moderator introduced himself and the panel of experts (comprised of the usual MTD clinicians – a surgeon, a medical oncologist, a radiation oncologist and a pathologist, with a consumer included on the panel as well) and then invited the person at the first microphone to succinctly present their case for the



panel to give expert opinion on. So it seems that these sessions were specifically for delegates to bring along their challenging cases to have a panel of experts give advice on what they would do with each patient briefly presented. These sessions were packed, and clearly a highly popular means by which clinicians attending can seek some assistance with their patients. I have had the wonderful opportunity to attend a number of large cancer and pharmacy conferences over the past few years. This very focussed

symposium dedicated to presenting current trends and future directions in breast cancer treatment was one of the most enjoyable of recent years. I highly recommend it to cancer pharmacists looking for some focussed continuing education.

I would like to acknowledge the sponsorship provided by Roche who supported my airfares and accommodation to attend this conference, and Peter Mac and the staff at the Pharmacy for allowing me the leave to attend.

Congratulations for our international travel grant winners

- Tamret Assefa, Addis Ababa University, Addis Ababa, Ethiopia
- Nadia Ayoub, Aga Khan University, Karachi, Pakistan
- Aasma Hayid
- Rhonda Kalyn, BC Cancer Agency, Kelowna, Canada
- Bogumila Julia Sobkowiak, Medical University of Lublin, Lublin, Poland

And our Australasian Travel Grant winners:

Diana Booth, Kimberley-Ann Kerr, Jude Lees, Janelle Penno, Michael Powell and Vicki Wilmott.

See you in Montreal!

ISOPP ANNUAL GENERAL MEETING April 3, 2014

1. President's Report
2. Treasurer's Report
3. Committee Reports:
 - a. Membership and Finance
 - b. Education
 - c. Publications
 - d. Research
 - e. Standards
4. New Business
 - a. Introduction of New Secretariat Members
5. Discussion
6. Close

To add an item of business to the above Agenda, please contact ISOPP Secretary Steve Stricker (sstricke@samford.edu).

Members' Corner

Siew-Woon Lim

Name of work-place: National University Hospital (NUH), Singapore. A university hospital and the National University Cancer Institute

My Highlights of 2013: I had two highlights in 2013: Firstly it would be to set up our new oncology pharmacy and update patient processes at the new NUH Medical Centre. Operations commenced smoothly with great team work amongst staff members. The

second, I was accredited and registered as an Oncology Pharmacy Specialist with the Singapore Pharmacy Council in August. It was a great honour to receive this title. I felt really indebted to the mentors (both locally and in the US) I have learnt with over the years

My challenges for 2014: My two main challenges for the year would be to successfully seek ASHP accreditation for our Pharmacy Post-graduate Year 1 (PGY1) residency (the first in Singapore) and to be creative in justifying new clinical oncology pharmacist positions.



My story to share: Back in the late 2000's, I had received a scholarship to pursue a one year oncology pharmacy practice training in the US. It was not easy seeking a cancer centre that would be keen to accept such a proposal. But I was really blessed to have received a reply that went something like this "I'm intrigued by this opportunity" from Dr Moe Schwartz (She was then the Director of Oncology Pharmacy at The Johns Hopkins in Baltimore, Maryland). And the rest was history. Despite the various challenges e.g. paperwork posed, we managed to overcome them. I commenced my training at the Hopkins in July 2010. It would certainly be a very memorable part of my life. The clinical teachings, the friendships that were forged and the experience of living on my own (for the first time!) were priceless.



ISOPP XIV XIV INTERNATIONAL SYMPOSIUM ON
ONCOLOGY PHARMACY PRACTICE
April 2-5, 2014 • Montréal • Canada
Fairmont The Queen Elizabeth

www.isoppXIV.org

Steve Stricker, PharmD, MS, BCOP
Assistant Professor of Pharmacy
Practice, Samford University
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Birmingham, AL, USA

The 55th Annual American Society of Hematology (ASH) Annual Meeting and Exposition was held December 7 – 10 in New Orleans, LA. This year's program included a diverse mix of long-term extension data from many classic clinical trials as well as novel therapies and scientific breakthroughs in both malignant and benign hematology. A few of these highlights from this year's Best of ASH session are reviewed here.

Abstract 5 - The Role of TP53 Mutations On The Evolution of Therapy-Related AML

Terrence Neal Wong from Washington University of St. Louis, MO discussed findings from one of the most fascinating scientific sessions of this year's ASH meeting. Clinicians have been aware of the potential risk of treatment-induced secondary malignancies, especially AML (t-AML) for decades. Many of these cases have been associated with mutations in TP53. These mutations have long been believed to be directly induced by the application of chemotherapy. However, in a recent review of 7 patients who had available blood or bone marrow from the time period prior to the development of t-AML, Wong's study identified a new paradigm for secondary malignancies. They noted that TP53 mutations accumulated as a direct result of aging were selected for in the presence of cytotoxic therapy may be directly responsible for the high incidence of TP53 mutations in t-AML and the poor chemosensitivity and subsequent prognosis in this patient population.

Abstract 151 - Ibrutinib in Patients with Relapsed or Refractory Waldenstrom's Macroglobulinemia

Ibrutinib is an inhibitor of Bruton's Tyrosine Kinase (BTK) previously approved in the United States for the management of patients with mantle cell lymphoma and chronic lymphocytic leukemia (CLL). Waldenstrom's Macroglobulinemia (WM) is a rare disorder characterized by excess production of IgM monoclonal protein in the setting of certain lymphoproliferative disorders and plasma cell dyscrasias. To date, no drugs have been approved for WM and no standard therapy has been defined. In this clinical trial, patients with symptomatic WM who had failed at least one prior therapy were treated with ibrutinib 420 mg daily for two years or until disease progression. The results demonstrating minor response or better occurred in 81% of patients, major response rate of 57.1% and a time to response of 4 weeks. Ibrutinib was well-tolerated as 14.3% of patients experienced a grade 2 thrombocytopenia, grade 2 neutropenia was reported in 19.1% of patients and other minor toxicities in less than 2% of patients. This trial demonstrated that ibrutinib is a promising therapy for patients with rare disease with few clear therapeutic options.

Late Breaking Abstract 6 – Idelalisib and Rituximab for Previously Treated CLL

Idelalisib is a novel oral PI3K inhibitor which inhibits proliferation and induces apoptosis in CLL cells. The current study evaluated the role of idelalisib in combination with rituximab (I+R) in patients with relapsed or refractory CLL who were not candidates for cytotoxic chemotherapy. Progression-free survival (PFS) was not reached in those patients receiving I+R while the arm receiving placebo + rituximab had a PFS of 5.5 months ($p<0.0001$). These results included patients with poor prognostic mutations in TP53 or del(17p). I+R also demonstrated statistical significance in the improvement of overall response rates

($p<0.0001$) and overall survivorship ($p=0.018$). The authors concluded that the favorable toxicity profile of this combination and outstanding efficacy makes the combination of I+R an interesting option in the management of patients with advanced CLL.

Abstract 775 – Effects of GMI 1070 on Pain Intensity and Opioid Utilization in Sickle Cell Disease

Painful veno-occlusive crisis (VOC) is a common observation in patients with sickle cell disease. GMI 1070, a pan-selectin inhibitor was evaluated in a phase 2 trial of sickle cell patients aged 12 – 60 years old. Patients received an intravenous loading dose followed by dose escalation defined by study protocol. Pain intensity was assessed using a visual analogue scale to determine the impact on the primary endpoint: time to resolution of VOC. GMI 1070 resulted in a significant reduction in patient's IV and oral opioid requirement and breakthrough pain medication cumulatively throughout the VOC episode ($p=0.006$).

This data represents a very small percentage of the data presented at this year's ASH meeting, the preeminent conference highlighting advances in benign and malignant hematology. In addition to breaking scientific advances, the program features a variety of educational programming to update clinicians on the management of disease states seen every day in clinical practice. We look forward to the 56th ASH meeting will be held December 6-9 at San Francisco's Moscone Center!



Steve Stricker

Report from the Belgian Oncology Pharmacy Practitioners (BOPP) Symposium 2014

Tiene Bauters, Ghent University Hospital, Ghent, Belgium.



This year, the 7th annual Belgian Oncology Pharmacy Practitioners (BOPP) symposium took place at the Belgian coast in Blankenberge (January 31- February 1). The themes of this year's symposium were "Supportive care", "New therapeutic agents" and "Risk analysis in hospitals".

The first session started with the nurses perspective on supportive care in oncology, presented by a oncology nurse specialist (E. Decoene) from the Ghent University Hospital. The focus of her talk was psychosocial and survivorship care and evolutions in symptom management in oncology. An example of a multidisciplinary consult was based on the experience in Ghent for metastatic renal carcinoma where nurses, a clinical pharmacist and physicians work together in order to optimize the pharmacotherapy in a complementary way.

This session was followed by a talk of a psycho-oncologist, discussing the

different concepts on the diagnosis of cancer (the bad news, the rights of the patients, stress during consultation, reactions of the patients, coping strategies, and psychological aspects) by David Ogez, from the Centre du Cancer et d' Hématologie, UCL Bruxelles. He also discussed the different concepts on communication (strategy facilitators), psychological follow-up) and sources of concern after cancer treatment (physical and emotional).

The dieticians' point of view, as member of a multidisciplinary oncology team and their different roles were presented by Aurélie Cartiaux (Clinique Saint luc, Bouge, Namen). Dieticians are involved in ambulatory consultation rounds, training of personnel and involvement and hospital rounds and meetings on nutritional care.

Cutaneous side effects of targeted therapy were discussed by Dr. S. Segaert (University Hospital Leuven): cutaneous side-effects in

patients on long-term treatment with epidermal growth factor receptor inhibitors including acneiform eruption, xerosis, nail changes, hair changes, hyperpigmentation, mucosal changes and necrotizing fasciitis, were discussed in depth. Supportive treatments making the difference include sun protection, lukewarm water and emollients on hands and limbs. For acneiform eruption, metronidazole cream +/- vitamin K (for mild and moderate forms) is advised, while for severe forms, saline compresses 15 minutes bid, metronidazole cream up to 5 times daily, minocycline 200 mg qd (when necessary in combination with cetirizine and cefuroxim for *S. aureus* superinfection) can be used. Treatment for xerosis, eczema and fissures include emollients, the use of weak topical corticosteroids, propyleneglycol 50% in water for 30 minutes under occlusion qd, salicylic acid 10% ointment qd. were discussed. Paronychia are treated with antiseptic soaks bid, pastes containing potent

BOPP continued . .

steroid, antiseptic and antifungals bid. Skin toxicity of other mTOR inhibitors (temsirolimus, everolimus, ridaforolimus), imatinib skin toxicity and oedema, vitiligo were presented.

An overview on new therapeutics was given by X. Gerard (CHU Liège):

- vandenatib (locally advanced or metastatic medullary thyroid cancer, TKI)
- afatinib (lung adenocarcinoma with EGFR mutations, irreversible TKI)
- vismodegib (basal cell carcinoma, inhibitor of SMO)
- bosutenib (CML Philadelphia chromosome-positive, 2nd generation bcr-abl inhibitors) and ponatinib (refractory Philadelphia chromosome-positive leukemia) 3th generation bcr-abl inhibitors (orphan drugs).
- regorafenib (GIST, multikinase inhibitor)
- trastuzumab-emtansine (T-DM1), HER2-positive advanced breast cancer
- dabrafenib: BRAF-mutated metastatic melanoma

In the late afternoon, concurrent sessions for French and Dutch speaking colleagues included clinical cases discussed in an interactive (quiz) way. They were presented by Birgit Tans and Tine Van Nieuwenhuyse (both from the University Hospital of Leuven),



Tiene Bauters (Left) and Birgit Tans



while pediatric cases in oncology and hematopoietic stem cell transplantation were highlighted by Tiene Bauters (Ghent University Hospital), Guy Van Schandevuyl (Hopital Universitaire des Enfants Reine Fabiola, Brussels) and Aline Wertz (Université Catholique de Louvain, Brussels).

The second day was started with an introduction on Multiple Myeloma (pathogenesis, epidemiology, symptoms, diagnosis, treatment of complications) presented by Dr. C. Schuermans (Wilrijk). Agents involved in the treatment of multiple myeloma include bortezomib, thalidomide, lenalidomide and their toxicity was described. New agents for treatment of multiple myeloma include carfilzomib, pomalidomide, elotuzumab, daratumumab, AKT-1 inhibition. The

main goal of therapy is long term disease control and longer overall survival. She concluded that multiple myeloma remains a rare disease but however, is the second most common hematological malignancy, that the disease is still largely incurable, but that promising drugs and therapies are coming and new combinations look promising.

The BOPP days were finished by a presentation on risk analysis in hospital pharmacy and a microbiological risk-analysis in daily practice.

Looking forward for the next BOPP symposium, a conference that I would recommend to any Belgian pharmacist who works in the area of cancer services!

The 14th issue of the Virtual Journal Club (VJC) is available on the ISOPP website by clicking on the VJC logo. The journal article is: "Predictive and prognostic biomarkers with therapeutic targets in breast, colorectal, and non-small cell lung cancers: a systemic review of current development, evidence, and recommendation". Use this article and the questions available on it to add to your continuing education requirements.

Regards
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If you are attending the HOPA Annual Conference in New Orleans, Louisiana taking place March 26th - 29th, please join us for our next ISOPP Meet N Greet event.

The event will be held on Saturday, March 29th from 07:30 to 08:15 in the Chequers room of the Hilton Hotel. Come and enjoy a light breakfast and meet other ISOPP members attending the Conference. Also bring along a colleague(s) and introduce them to ISOPP.

To make a submission to the ISOPP newsletter – contact the Editor – Jill Davis by email at Jill.davis5@bigpond.com