News LETTER

Newsletter - Vol 14, No 3, September 2012 • International Society of Oncology Pharmacy Practitioners

Message from the President

It's hard to believe that it's September already. For many of us, September is a month of transition. For those in the Northern Hemisphere, summer holidays are winding down, days are getting cooler, and soon many of us will enjoy the splendour of Fall colours. For our colleagues living south of the equator it heralds the arrival of Spring, and the anticipation of Summer. Globally, it's a busy time for pharmacy education, as those of us with teaching commitments either welcome back Pharmacy students or are in the final stages of the academic year and preparing students for examinations. It's also a busy time for Oncology Pharmacy education as a number of key educational events are taking place this and next month. Firstly, the European Conference of Oncology Pharmacy will be taking place in Budapest, Hungary Sept 27-29; followed in October by the British Oncology Pharmacy Association (BOPA) meeting in Harrogate, and finally the Canadian Association of Pharmacy in Oncology (CAPhO) meeting (NOPS) in Saskatoon, Canada Oct 26-28. On behalf of ISOPP, I wish all of these organizations; and those attending, successful meetings. I also mention these meetings because the Secretariat has discussed, and will be moving forward on having informal networking/meet & greet opportunities for ISOPP members attending these conferences. This will take the form of an opportunity to meet for drinks at the conference hotel or nearby bar; or meeting for lunch at a nearby restaurant. Watch your email, for details of these events. Details will also be posted on our Facebook page and I will be sending out updates via Twitter (isopppresident if you want to start following me on Twitter). If these are successful, we will aim to continue them at events such as ASH, San Antonio Breast Cancer Conference, HOPA, and ASCO. I look forward to reading about the meeting reports from these events in the next newsletter.

I have received some email feedback regarding our proposed move of our Constitution. The responses have been supportive of the move, but there has also been at least one request for more information on alternative [English speaking] 'homes' for our Constitution. The Secretariat will be working on this in the coming months, and I aim to have a Comparison Table for you by the end of this year. Our committees are moving forward on their charges. Many of you have seen and participated in the Virtual Journal Club on our website. The next paper is up and ready for you to review on the ISOPP website. I am also pleased to announce that Kim Stefaniuk from Toronto who is a member of the ISOPP Education committee has agreed to lead the Sub-Committee looking at developing an educational program for pharmacists (and nurses) working with cancer patients in developing countries.

Don't forget to log into our website regularly (www.isopp.org) and participate in the Members Discussion Forum; too many of us think about using it only when we have a question. However, consider that you might 'have an answer(!)' to someone's question on the Forum. The home page is also a repository of news and updates on Cancer related developments that are relevant to pharmacists from around the world. While you're there, please visit our sponsors, by clicking on their Logo.

Finally, I will take this opportunity to 'plant the seed' as it were for our upcoming election. We will be

CONTENTS

1. Message from the President
2. Introducing Chair of the Standards Committee
3. ISOPP Research Grant 2012
4. ASCO 2012 report
5. Oncology pharmacy in Fiji

having elections for the positions of Secretary, and 2 General Secretariat Members in the New Year. This is a great opportunity to get involved in ISOPP, and to share your expertise and enthusiasm in promoting Oncology Pharmacy throughout the World. The call for nominations will be coming soon, so please consider standing for election.

As always, I and the Secretariat want to hear from you with respect to what you like about ISOPP, but also about what we could be doing that we aren't currently, or what we are doing that could be done better to meet your needs. Feel free to email me (john.wiernikowski@gmail.com), FAX: +1-905-521-5008; or write to me: McMaster Children's Hospital, 3F Clinic, 1200 Main Street West, Hamilton, ON, L8N 3Z5, CANADA

John Wiernikowski

Introducing Chair of the Standards Committee

Jim Siderov

Jim Siderov has been appointed Chair of the Standards Committee. Jim commenced work in the area of oncology and haematology pharmacy practice in 1989 soon after completing his Bachelor of Pharmacy degree. In 1998 he successfully completed the inaugural US Board of Pharmaceutical Specialties Certification in Oncology Pharmacy (BCOP), and re-certified in 2006. In 2004 he was awarded Fellowship to the Society of Hospital Pharmacists of Australia (SHPA), and in 2005 completed his Masters in Clinical Pharmacy. Jim is currently the Senior Pharmacist for Cancer Services at the Olivia Newton-John Cancer & Wellness Centre located at Austin Health, Heidelberg, Australia.

Jim has been an active member of many professional organisations. He served on the SHPA Committee of Specialty Practice in Oncology and the Cancer Pharmacists Group of the Clinical Oncological Society of Australia, which he chaired for 2 years from 2010. Jim currently coordinates the Victorian Oncology Pharmacy Special Interest Group which meet on a regular basis to promote the education of local practitioners in cancer pharmacy practice.

Jim has published widely in peer-reviewed journals, and presented at local, national and international conferences. He has lectured to a number of undergraduate and postgraduate programs at both Melbourne and Monash Universities.

Jim's major interests are solid tumours, with a particular interest in colorectal cancer. He also has an interest in occupational health and safety issues in the handling of cytotoxic drugs.

Activities planned for the committee are the finalisation of the updated ISOPP safe handling standards, as well as commencing clinical standards of practice. Any ISOPP members interested in assisting the Standards Committee are welcome to contact Jim directly via email at jim.siderov@austin.org.au or the next time you are visiting Australia to come and say hello.

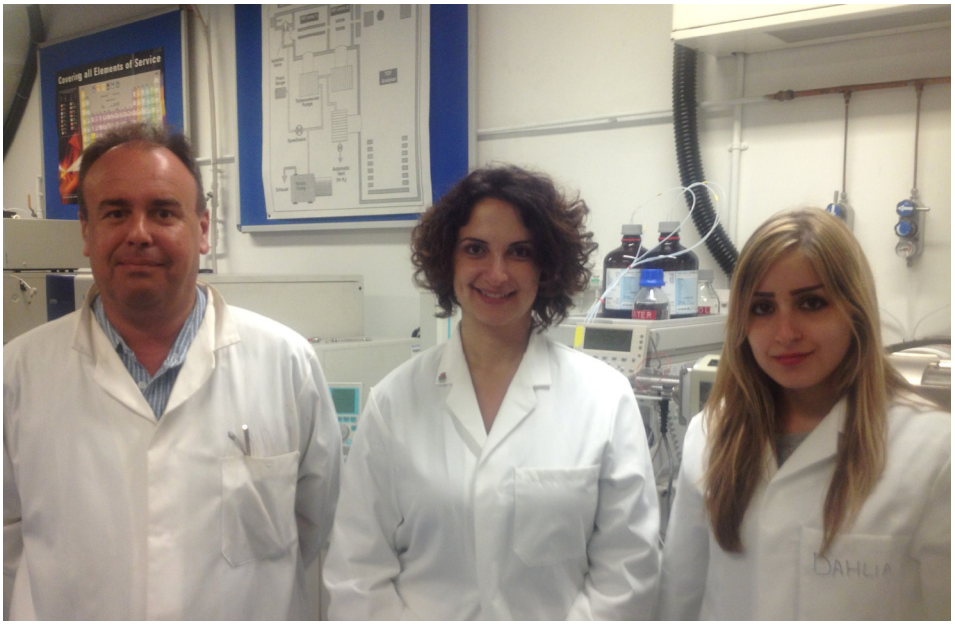
News - rules for worker protection

The 2011 Legislature of the State of Washington (USA) passed Engrossed Substitute Senate Bill (ESSB) 5594, requiring the Department of Labor & Industries (L&I) to set requirements to protect workers who handle chemotherapy and other hazardous drugs. The bill required L&I to adopt rules that are consistent with but do not exceed provisions in the National Institute for Occupational Safety and Health's (NIOSH) 2004 Alert on preventing occupational exposures to antineoplastic and other hazardous drugs in health care settings, as updated in 2010. The NIOSH list of hazardous drugs was first updated in September 2010 and more recently in June 2012. The 2012 update added 26 new drugs and removed 15 existing drugs – go to: http://www.cdc.gov/niosh/docs/2012-150/.

Thomas H. Connor, PhD
Research Biologist
Division of Applied Research and Technology
National Institute for Occupational Safety and Health
4676 Columbia Parkway MS C-23
Cincinnati, OH 45226

One of the two ISOPP Research Grants awarded in 2012: Stability of Ifosfamide in Ambulatory Elastomeric Pumps

By Dahlia Salman, Shereen Nabhani, Steven Barton



Multidisciplinary Team: (from the left) Stephen Barton, PhD in Analytical Chemistry, Shereen Nabhani-Gebara, PharmD, BCOP, Dahlia Salman, MSc – PhD student

The purpose of this study is to evaluate the stability of Ifosfamide and Mesna (IfosM) in Baxter's elastomeric infusion pumps over a 14-day period to allow patients to receive their full treatment at home and improve their quality of life. IfosM is an anticancer regimen that is indicated for the treatment of advanced stage sarcoma patients as a 14 day infusion via ambulatory pumps. [1] However, its stability at in-use conditions was only evaluated for 7 days. [2-3] To date, patients cannot have their full treatment at home as no published studies have evaluated the stability of both Ifosfamide and Mesna for the whole duration of the therapy. Analytical methods that have been published in literature did not investigate the different temperatures these elastomeric pumps will be exposed to as they will be exposed to a temperature higher than ambient since they will be worn by the patients and covered by their clothes. This higher temperature could cause degradation of the anticancer drug and cause undesirable materials to be leached from the elastomeric reservoir of the pumps to the solution. In our collaborative cancer centre, patients need to present to the cancer centre on days 1 and 8 to be provided each time with a pump that covers a 7 day dose. This translates into more disruption for patients and extra strain on the pharmacy services. If the combination is stable in solution under in-use conditions for 14 days or longer, it will save the patients an extra journey to the cancer centre, and it will reduce the demand on the cancer centre services. Furthermore, it can allow preparation for the weekend or for the whole home chemotherapy treatment cycle in advance and consequently facilitate the use of home therapy services and reduce the cost for cancer centres. In addition, reconstituting Ifosfamide with Mesna instead of water for injection is another concern to be investigated within this research as it will reduce the volume of the final solution which the patients will have to carry around in the pumps.

Elastomeric Pumps will be filled with the Ifosfamide (26mg/mL) and Mesna (20mg/mL) and stored at various temperatures under light and dark conditions. Samples will be withdrawn from all pumps on a daily basis for chemical and physical analysis. The chemical analysis will require developed and validated High Performance Liquid Chromatography (HPLC) and Liquid Chromatography-Mass Spectrometry (LC-MS) techniques to be used to analyse the eluted samples from the pump. Also, Nuclear Magnetic Resonance (NMR) technique will be used to identify the degradation products of both Ifosfamide and Mesna. The physical analysis will entail visual inspection of the IfosM solution stored in the pump, measuring the solution pH and determining any weight loss due to evaporation of the solution.

We would like to thank the ISOPP Research Committee for choosing this study to receive a research grant. The results of this study will assist pharmacists to streamline services and to offer patients a less disruptive regimen which can translate into better quality of life.

References

1. Skubitz KM, Hamdan H and Thompson RC, Ambulatory Continuous Infusion Ifosfamide With Oral Etoposide In Advanced Sarcomas, Cancer. 1993; 72:2963-2969
2. Radford JA, Margison JM, Swindell R, Lind MJ, Wilkinson PM, Thatcher N, The Stability of Ifosfamide In Aqueous Solution And Its Suitability For Continuous 7-Day Infusion By Ambulatory Pump. J Cancer Res Clin Oncol. 1991; 117 Suppl (IV): S154-S156.
3. Priston M. and Sewell G, Stability of three cytotoxic drug infusions in the Graseby 9000 ambulatory infusion pump, J Oncol Pharm Practice. 1998 4:143-149.

Dr Shereen Nabhani-Gebara
Senior Lecturer in Pharmacy Practice
School of Pharmacy and Chemistry
Kingston University-London

ISOPPXIV will be in Montreal Canada in 2014

ASCO 2012

The annual meeting of the American Society of Clinical Oncology (ASCO) took place from June 1-5, 2012 in Chicago, Illinois in the USA. This meeting, of over 25,000 attendees, provides an amazing amount of information. Much of it is on early product research that may or may not prove to be clinically useful in patient care. My focus for the meeting was on patient care topics and the goal was to take away information that can be integrated into current practice as well as to learn new trends and upcoming products. Take away pearls of knowledge or issues from this year's meeting for me were:

Duloxetine for chemotherapy-induced neuropathy (Abstract CRA 9013)– patients with taxane or platinum related peripheral neuropathies were given duloxetine or placebo 30 mg daily x 1 week, then 60 mg daily x 4 weeks, followed by a 1-week washout and then crossed over to the other arm, all in a blinded fashion. Patients receiving duloxetine first, as opposed to placebo, had a significantly decreased pain score vs placebo (p=0.004) with the most common side effect decrease in grade 2 fatigue. This is the first positive trial in managing this toxicity with prior negative trials of gabapentin and pregabolin despite common use of these agents. Prior research has been primarily extrapolation from diabetic neuropathy research.

Avoiding large food effects on oral cancer therapies: currently antineoplastic medications with a large food effect are taken in the fasting state to minimize the variations in pharmacokinetics (PK) that could be caused by different types of diets. This may be challenging for adherence, especially if taken multiple times daily, and result in an accidental overdose if taken with a meal. There may also be a financial incentive as lower doses could be given with food and thus cost less to the patient. You may start to see oncologists prescribing lower doses with food as this was suggested by a presenter. While the safety and efficacy of this practice are currently unproven there are PK trials underway, mainly with abiraterone, to see if adequate drug levels for different amounts of fat in the diet can be consistently achieved. There will also need to be useable patient information for description of these diets.

Crizotinib hepatotoxicity (Abstract 7598) – mild changes in transaminases (ALT and AST) are common with the use of crizotinib and typically occur in the first 2 months of treatment. Most of these are manageable with dose adjustments. If there is elevated total bilirubin concurrent with transaminases, this is a signal that additional work-up for drug-induced hepatic toxicity is indicated and may indicate compromised hepatic function as well. There have been two deaths attributed to crizotinib-induced hepatotoxicity at this time.

Olanzapine for breakthrough chemotherapy-induced nausea and vomiting (Abstract 9064): Olanzapine 10 mg daily for 3 days was compared with metoclopramide 10 mg 3 times daily for 3 days in chemotherapy-naïve patients with breakthrough nausea or vomiting in a double blind study. During the 72 hour study period patient receiving olanzapine had significantly less emesis and nausea than the metoclopramide arm (both p<0.01). There was little difference in side effects. The study could be criticized for the low dose of metoclopramide used, however this is one of the few studies looking at breakthrough nausea and emesis management.

Cannabinoids for nausea control (Abstract 9061): Dronabinol 5 mg 3 times daily x 5 days or placebo was added to palonosetron plus dexamethasone for moderate emetogenic risk chemotherapy in adults. The dronabinol group had significantly fewer days of nausea than placebo (p=0.027) 1.86 vs 3.1 days and no change in emesis efficacy. There was more dizziness, fatigue, and diarrhea in the dronabinol group. This suggests an opportunity to decrease nausea in appropriate patients.

Telmisartan for the prevention of epirubicin cardiotoxicity (Abstract 9006): Telmisartan 40 mg daily starting 1 week before epirubicin and continuing for 6 months after the final dose. The telmisartan patients showed decreased amounts of interleukin 6 and reactive oxygen species than the placebo group. Signs of cardiac strain were reduced during therapy and out to 18 months after. Long term follow-up is still needed and it is unknown if this is a class effect for the angiotensin receptor blockers and whether the same effect will be seen with other anthracyclines.

Vitamin D3 for aromitase inhibitor musculoskeletal effects (Abstract 9000): 30,000 units of vitamin D3 weekly vs placebo with letrozole showed no significant difference in incidence but did decrease severity of myalgias and arthralgias at 24 weeks from starting the letrozole. It was well tolerated with no hypercalcemic events. Longer term benefits unknown.

Useful negative studies

Parenteral hydration in the last days of life (Abstract 9025) – Parenteral hydration (1000 ml/day) within days to weeks of death did not improve symptoms associated with dehydration, QOL, or survival. This supports limiting long term hydration in this population as many palliative care practitioners recommend.

Conflicting studies

AcetylCarnitine – decreased chemotherapy induced neuropathy pain (Abstract 9017) but increased the incidence in of grade ¾ neuropathy in a prevention study (Abstract 9018) so currently would not suggest using it in either setting until a definitive study has been performed.

Continued on Page 5

Oncology Pharmacy in Fiji

Tomasi Marovia works at the Colonial War Memorial Hospital (CWMH) in Suva the capital city of Fiji.CWMH is the largest hospital in the country. Fiji is an island country in the South Pacific consisting of more than 300 islands with a population of about 800,000.Tom has worked as a pharmacist for more than 17 years and is specialising in oncology pharmacy. He attended the ISOPP XIII meeting in Melbourne and while in Melbourne had the opportunity to gain work experience at the Alfred Hospital. The oncology services available are a day oncology unit, a gynaecological oncology unit and a paediatric service. Radiotherapy is not available and patients are generally referred to India for this treatment. There is no formal oncology training for nurses or pharmacists. Until recently the doctors and nurses prepared the cytotoxic treatments either in an incubator or in the general ward area. The paediatric unit is 'twinned' with New Zealand's Christchurch Hospital Cancer Children's service and teleconferences regarding patient treatment are frequent. Tomasi himself, has had 8 weeks of aseptic and cytotoxic drug preparation at Hawkes Bay Hospital and Palmeston North Hospital (both in New Zealand). Laminar flow cabinets were first obtained by the hospital in 2009 and an aseptic and cytotoxic suite had very recently been completed and is awaiting commission. The day oncology unit has two chairs and two beds and treats four people a day. Resources are scarce – leur lock syringes are not available and drug shortages are common. With the knowlege that Tomasi has gained from attending ISOPP XIII and the Alfred Hospital and the network he has been able to set up because of his attendance, oncology pharmacy services in Fiji are set to improve.

Continued from Page 4

There are additional abstracts and many of the accompanying posters available via the virtual meeting on the ASCO web site at http://www.asco.org/ I hope you find this information useful for your practice.

Respectfully submitted, Joe Bubalo

2012 ISOPP Symposium

All of the presentations for this Conference are now online and the link is available from the home page of the website once you have logged in.

Please consider nominating to be on the Secretariat. Positions that will become vacant are the Secretary and two ordinary members. This is an opportunity to participate in the leadership of ISOPP.

Update from ISMP re the self assessment for oncology

To capture the most complete data set possible, the Institute for Safe Medication Practices (ISMP), ISMP Canada, and the International Society of Oncology Pharmacy Practitioners (ISOPP) are giving healthcare organizations more time to participate in the new international medication safety self assessment for oncology. Data submission has been extended to September 30, 2012.

Virtual Journal Club

The ISOPP Virtual Journal Club has recently released it's third set of questions based on a JOPP artilce. ISOPP members are encouraged to read these articles then answer questions via a Survey Monkey type format with correct answers embedded. After completing the questionnaire a certificate will be available for you to download, print, and add your name and date for your records. Just click on the Virtual Journal Club icon on the ISOPP website home page to start. Each article reviewed is equal to one hour of CME activity.

Thanks to the Education Committee and Felice Musicco, Chair Publications Committee

Follow us on Facebook

'Check out the photos taken at the ISOPP XIII meeting on our Facebook page and add in your own!'

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