



August 2013

Volume 7: Issue 2



Inside:

- 2 A word or two from the President
- 3 Optimising Symptom Management to improve QOL in Myeloma
- 8 Preparing a Poster for a Conference
- 10 Preparing a Resume
- 17 Paroxysmal Nocturnal Haemoglobinuria (PNH) – A Clinical Update
- 20 Clinical Trials Corner
- 27 Conference Calendar
- 29 How do I Evaluate and Retrieve Drug Information

Plus much more...!

Newsletter design and publishing:
Natalie D'Abrew

HAA 2013 Joint Annual Scientific Meeting of HSANZ/ANZBT & ASTH Gold Coast Convention & Exhibition Centre 20-23 October 2013

Early bird registration closes 16th September

HAA is fast approaching. Abstracts have closed and are currently being assessed by the review committee for inclusion in the free communication sessions. The full program (free communications pending) is available for review online via the conference website – why not check it out? Now is the time to sort out your registration and travel plans to attend – don't forget early bird registration closes 16th September. We look forward to welcoming you to 'The Sunshine State' for a productive, interactive, educational and fun conference.

Early Bird Registration closes 16th September.

<http://www.fcconventions.com.au/HAA2013/>

Program available for review

<http://www.fcconventions.com.au/HAA2013/programme.html>

Catherine Kirk

Local Organising Committee Nurse – HAA 2013.



A word or two from the President...

I've finally acclimatised to the Australian winter and find myself complaining of the cold! My mother would hear nothing of it as she tells me of the snow they had in the UK in May this year! A solution to the winter blues of course, is a trip north to the Gold Coast in October for HAA, or as Catherine tells me – the GC!

I've moved on from Twitter – although I encourage you all to follow us @CNRU1 to be kept up to date on a range of cancer and haematology news, issues and conversation. I'm now an App Addict!No – not just the 6 versions of Angry

Birds I have on my phone – I mean Apps as tools to keep me updated, to learn, to communicate, to track and store information amongst other applications.

This edition of our newsletter has a focus on professional development, education and learning – a key driver in any organisation or professional groups ability to provide best care to its patients. A range of exciting seminars, educational programs and online resources are available to haematology nurses and we encourage you to take part, get involved and embrace the opportunities available. Many organisations utilise Apps to communicate with their customers, members and as a quick, at the point of care mode of delivering information. You'll find many of the articles in this edition of the newsletter demonstrate or recommend Apps that you'll find useful for a range of specialist areas of interest.

Two articles of particular importance and relevance to this edition, are Cathie Barnett's' preparing a poster for conference, which speaks for itself, and preparing a resume. Having a professional resume or CV is important for all of us, not only for times of seeking employment but for inclusions in ethics applications, grant submissions or when seeking membership of professional groups. A well written and presented CV tells allot about an individual – both positive and negative! We look forward to seeing those new and improved CVs coming through in membership applications ahead.

As ever, I'd love to hear from any of you with ideas and contributions for newsletter editions ahead. Look forward to seeing many of you at HAA in October on the GC!

Tracy King

President HSA NZ NG

tracy.king@sswahs.nsw.gov.au

OPTIMISING SYMPTOM MANAGEMENT TO IMPROVE QUALITY OF LIFE (QOL) IN MYELOMA

On July 23th The Cancer Nursing Research Unit (CNRU) and HSA NZ NG had great pleasure in hosting a visit from Beth Faiman, a Multiple Myeloma Nurse Practitioner from the United States. Beth was visiting Sydney on her way to CNSA Congress where she also gave a series of lectures. In Sydney local haematology nurses were invited to hear Beth speak about new approaches and agents on trial in the USA and about the importance of optimising symptom management in improving patients' quality of life. This was an excellent opportunity for haematology nurses to attend a talk given by an expert international clinician and researcher in her field. The audience also had the opportunity to ask questions of Beth and some valuable discussion ensued. Beth is an active member of the International Myeloma Foundations Nurse Leadership Board (IMF NLB) who have authored a series of valuable guidelines and consensus papers around supportive care in myeloma. Nurses who attended the event particularly valued new information on treatment strategies such as the use of Duloxetine for managing painful peripheral neuropathy (Lavoie Smith 2013) and keenly anticipate the new NLB guidelines on managing myeloma patients undertaking transplants – due for publication later this year. Earlier in the day Beth received a tour of the RPA Institute of Haematology and had the opportunity to speak to local clinicians about how MM care was managed locally. Professor Kate White hosted the seminar and Tracy King, MM CNC RPA also presented a brief overview of MM in Australia 2013 including some great slides of a young 'Nurse Tracy' and her relatives as far back as the late 1800's! That would be her ancestors and not Tracy, she's not that old! CNRU and HSA NZ NG are grateful to Beth for taking the time to share her expertise and knowledge at this event.



CNRU | Cancer Nursing Research Unit



About Beth Faiman

Beth Faiman is an active author, presenter, and educator on the topic of multiple myeloma, plasma cell dyscrasias, general cancer diagnosis and treatment, as well as management of skeletal and other cancer complications. She is an appointed delegate on the International Myeloma Foundation Nurse Leadership Board and is currently Editor-in-Chief of The Oncology Nurse. She has authored several book chapters and many articles relating to diagnosis, treatment, and management of multiple myeloma.

Lavoie Smith, E. (2013). Effect of Duloxetine on Pain, Function, and Quality of Life Among Patients with Chemotherapy-Induced Painful Peripheral Neuropathy. A Randomised Clinical Trial. *Journal of American Medical Association*. 309(13):1359-

1367.

International Myeloma Foundation Nurse Leadership Board – Publications.

<http://myeloma.org/PortalPage.action?tabId=8&menuId=201&portalPageId=7>

Getting the Most Out of Attending a Large Conference

International Society of Thrombosis & Haemostasis (ISTH) 2013



XXIV CONGRESS
OF THE INTERNATIONAL SOCIETY
ON THROMBOSIS AND HAEMOSTASIS

Grainne Dunne

Apheresis / Haematology CNC,
Sydney Children's Hospital.

Grainne.dunne@sesiahs.health.nsw.gov.au

What is ISTH and why would I go?

ISTH is an international, not for profit, organization comprising of the world's greatest experts in the 'yin and yang' of haematology i.e. thrombosis and bleeding disorders. To find out more about this organisation, visit their website at www.isth.org/

Every second year this organisation holds a very large international congress where a range of medical professionals come together; nurses, physiotherapists, haematologists, surgeons, orthopaedics, intensivists, cardiologists and you will no doubt come across the occasional anaesthetist too. The first time I attended ISTH I found it very scientific based and rather overwhelming – a feeling shared by other nurses new to ISTH. Once I came to terms with the fact that any meeting attended by the world's top 7,500 experts was bound to be BIG – I embraced the challenge to learn!

How do I choose what to attend? Be selective

With a large conference the key is to appreciate you can't possibly take everything in. You aim to soak up what you can and avail of the great opportunity to network with new and existing colleagues. I took a more strategic approach, studied the program and targeted those sessions that best suited my needs. Although some sessions were challenging, and believe me jet lag is never your friend in these sessions, I always took away something from every session.

Most conferences will run several program streams and many sessions run concurrently with other sessions. There may be 6 or 7 sessions running at the same time. So to get the best out of each day's program, you do need to do a little homework first. Most conferences advertise their program online in advance. Where better to study the program than on a long haul flight travelling there!?! Scan through what looks appealing, read the abstracts on what has taken your attention. Mark sessions of interest remembering that you can also change your mind later but you now have an advantage by knowing the competing sessions. After that, all that's left is to hope the sessions you have chosen work out well for you. If you have colleagues at the conference it sometimes helps to check out what they're attending as you may have missed something - plus it can be good to share your thoughts afterwards on what you both took from the presentation.

Don't forget the poster sessions too – a great way to meet people.

As well as attending presentations, take some time to meander your way through the poster area. Use the opportunity to network with both national and international colleagues. Don't forget to wonder through the industry booths too so you can discover what's new, what's on the horizon, what you're not exposed to in Australia and of course who has the best coffee.... or perhaps even the best hot chocolate!!

You won't be able to attend everything so be selective. If you can come home with 3 - 4 good learning advancements, messages or ideas which can improve your practice and an overall view of what's ahead in your area, then you have achieved a successful conference.

Continued from page 4

What were my highlights to feedback from ISTH?

(i) Diagnosis and management of CSVT in neonates: Mahendranath Moharir (presenter)

CSVT (Cerebral Sinovenous Thrombosis) is a blood clot which occurs in veins near the brain. Sinovenous is the term given to the large veins which return blood to the heart.

- Radiological imaging is essential for diagnosis of a clot in neonates. It is still debatable whether laboratory testing lends much value towards diagnosing a clot. The message was certainly towards imaging for diagnosis.

Administration of anticoagulant therapy is now believed to be safe in newborns. If however you choose not to treat with anticoagulant, you must monitor very closely by imaging.

- The recovery time from a clot is normally between 6 weeks - 3 months.
- Veins in the brain are thin and have a low pressure blood flow hence why clot development in the brain is of a higher risk. Cerebral haemorrhage can occur as the clot grows and extends through the veins pathway. This causes a back pressure through the vein and haemorrhage from the pressure produced.

(ii) The risk of venous thrombosis in oral contraception users with a history of superficial thrombophlebitis: Rachel Roach (presenter)

According to existing data, there are no contraindications for contraception use in patients who have a history of 'superficial' thrombophlebitis.

Roach carried out a study on this population. It showed a significant clinical importance to assess women with histories of superficial clots as they found DVT's did occur in this category of women.

The study was a starting point. More work is of course needed to find out more.

(iii) Gene therapy: Amit Nathwani (presenter)

The ultimate goal of gene therapy in severe haemophilia is for a 1 off dose, or intravenous infusion, to be sufficient to increase natural factor production, for life. Current studies are active in Haemophilia B (FIX) as this gene is smaller than FVIII hence easier to work with. Production is minimal e.g. 2 - 8% FIX level increase at the moment. However this increase is enough to change a 'severe' haemophilia status to that of 'moderate' or 'mild' and thus no longer be dependent on regular factor infusions.

Haemophilia genes were cloned in the 1980's. A lot has evolved since then. Haemophilia B (FIX deficiency) has had the greatest success to date. In the UK, Dr Nathwani has injected close to 10 severe haemophilia B patients with the Adenovirus-Associated virus vector. This therapy has been successful in changing their bleeding status from severe haemophilia to mild or moderate haemophilia, reducing spontaneous bleeding significantly. Most of these patients no longer need regular prophylactic factor infusions but instead use on demand factor should they sustain an injury or prior to high impact sport. Gene therapy not only improves patient's quality of life but also reduces the high expenditure of such costly haemophilia factor infusions.

A single intravenous injection of the Adenovirus-Associated virus (AAV) vector is enough to work for years. Some patients were injected 10 years ago.

AAV is a vector or 'transport medium' used to get the DNA material into the cells of the liver. Infusing DNA alone into the patient's blood stream would rapidly break down so a vector is essential to protect the DNA while transporting it to the liver cells.

More recently, Dr. Nathwani has been able to improve his vector by pseudo-typing the vector with an aav8 capsid (on the outside shell of the vector) to reduce low pre-existing immunity to the aav8 in humans i.e. preventing it from damage.

- 4 new patients recruited in the past 12 months on improved vector.
- Steroids given if Liver Function Tests (LFT's) increase.
- Of the 4 new patients, 2 required steroids.
- High dose gene therapy patient's who could not produce any FIX, are all expressing > 5% FIX levels now.

Continued from page 5

Dr. Nathwani's team of scientists hope to open a FVIII (haemophilia A) gene therapy trial in 2 years time. They are currently working on a vector for FVIII.

When asked the question; how long before FIX gene therapy could be available to the general market, Nathwani's reply was "another 5 years perhaps"!

There is only one way for the locals to commute to the ISTH sessions each day in Amsterdam! Photo left depicts it - main entry of the conference centre!



By the time this newsletter reaches you the CNSA 16th Winter Congress will have been held at the Brisbane Convention and Exhibition Centre. With strong early-bird registrations, including many from nurses working in cancer care who have not previously been CNSA members, the Winter Congress continues to be one of the most important meetings of Australian cancer nurses. The congress included a pre-congress educational dinner

with a presentation by Beth Faiman, Adult Nurse Practitioner in the Multiple Myeloma Program at the Cleveland Clinic, a pre-congress workshop for experienced cancer nurses on Recent Advances in Cancer Care and a plenary session debate on the place of palliative care in haematology. Plans are already well under way for the 17th Winter Congress to be held at the Pullman Albert Park, Melbourne from 24-26 July 2014 and we hope to see some of you there.

In addition to our annual Winter Congress, the CNSA works to provide professional networking and education opportunities through our Regional Groups, our local CNSA chapters. Currently there are five active groups in Australia, in Adelaide, the Hunter region, Melbourne, Perth and Sydney with a Tasmania group on the horizon. Regional Groups provide cancer nurses with the opportunity to meet regularly throughout the year, with some groups offering members access to educational and travel grants. In May, the CNSA Melbourne Regional Group combined forces with the Victorian HSANZ Nurse Group to host an inaugural joint education meeting with the theme of 'Caring for the Aboriginal person with cancer'. With over 40 nurses attending, we look forward to more collaborative events like these in the future. More details about our Regional Groups and also about our three Special Interest Groups can be found on the About Us page on the CNSA web site (<http://www.cnsa.org.au/about-us/>).

Trevor Saunders

Victoria Representative
National Executive Committee
Cancer Nurses Society of Australia



HSANZ NG Junior Travel Award recipient NSW 2012 blazes the way in haematology nursing!

It just shows that early career mentorship and support can encourage clinical excellence. Congratulation to **Ellen Charalambous** – winner of the Bayer junior haematology nurse travel grant (NSW) for HAA 2012. Ellen's attendance at HAA last year has fuelled a passion in haematology nursing and this year she was rewarded for her efforts. Ellen was the winner in Royal Prince Alfred Hospitals International Nurses Day 'Celebrating Clinical Excellence' awards. Congratulations to Ellen for her great efforts in championing clinical excellence in Haematology nursing – no pressure Ellen but we look forward to great things in the future from you!

Tracy King
HSANZ NG President.



Transplant Telephone Discussion Forum

Every second month a telephone discussion forum is held to connect people who have had a bone marrow or stem cell transplant, wherever they live across Australia.

It can be hard for people who haven't had a bone marrow or stem cell transplant to understand what it is like. And if they live in a regional area, they might not meet other people in the same situation very often. Regional and remote patients may also have a minimised support network and the telephone forum allows people to ring in and meet others going through something similar and really learn from each other.

In the telephone discussion forum patients can share experiences, tips and become part of a support network in the comfort of their own home. Each discussion is facilitated by a trained Leukaemia Foundation health profession, at times in association with an allied health representative or a haematologist.

Patients can call anywhere in their journey of their transplant, patients may be assessed as suitable to join on a case by case basis. The call is free if the patient lives in the country or the cost of a local call if they live in the city.

Details on how to find out more about the forum can be directed to:

Simone Waterman

Mob: 0432750829 swaterman@leukaemia.org.au



**Leukaemia
Foundation**
VISION TO CURE
MISSION TO CARE



Preparing a Poster for a conference...

Cathy Barnett PhD Senior Research Officer, CNRU, Sydney Nursing School

Poster presentations are a way of communicating your research, ideas and innovations at conferences when it is not possible to give an oral presentation of your work. Presenting a poster is different from presenting work orally or as a published paper. Posters are put up for the duration of a conference and have designated sessions for presentation. Presenting posters can provide an excellent networking opportunity, as well as being an occasion for receiving feedback on your research.

Poster Layout,

- Important to review the conference poster guidelines as these can be quite specific and will impact on your content. E.g. is it portrait or landscape layout?
- Microsoft PowerPoint templates can be used for designing poster presentations; you can alter the dimensions to fit the required format.
- Good rule of thumb: **'Less is more'**
 - (i) Leave white spaces so the reader has visual pauses; this makes it visually pleasing and the white spaces can guide the readers eye.
 - (ii) Convey message clearly, organising content from left to right and possibly using arrows to assist readers through the logical flow of the presentation.
 - (iii) Don't go overboard with visual images e.g. photos, graphs, and illustrations.
 - (iv) Only use 1 or 2 font types (minimum 20-point for text and much larger for the title (36-point) and headings – somewhere between 22-36 point), avoid capitalisation, and only use bold/underline for emphasis.
 - (v) Use colour sparingly (2-3 colours at most; green and blue are more calming).
 - (vi) The title is the first and possibly only, thing people will see, so it must be compelling. The title should not be long (up to 10 words) but should reflect the nature of your study. It should not contain excessive jargon or try to be 'gimmicky'. The title might be posed as a question, outline the nature of your study, or suggest a new finding/give an idea as to your conclusion.

Poster Content

- Ensure that the poster content follows the format of the **Abstract** you submitted to the conference organisers.
- You must explain:
 - **Introduction** - the scientific problem (i.e. the question you are asking), significance of the research (why is this important?) and how your research addresses the problem?
 - A brief **Method** - the experiments that were performed
 - **Results** – these can be often usefully presented in a table or figure
 - **Discussion/conclusions**, including possible limitations and how to take the research field forward
 - Include **key references**
- Include author and institutional details below the title (in smaller font size than the title).
- Include your email contact details.
- Proof read the poster, and ask colleagues to check it for logic and mistakes.
- Acknowledge any funding sources.

Preparing a Resume

Cathy Barnett PhD Senior Research Officer, CNRU, Sydney Nursing School

A *résumé* or curriculum vitae (CV) is an important document to have because it is used for almost every formal career application such as *employment, grants/funding, scholarships, fellowships and awards*. Once you have written one, it is a simple matter to maintain and modify or update changes occur in your professional life. The main difference between the two is that a *résumé* is a short document (around 1-3 pages) summarising your education, skills and experience whereas a *CV* is a long document (used for academic and research positions) which details teaching and research experience, as well as fully cited publications, conference presentations, awards, fellowships, professional memberships, present (and past, where applicable) positions held. A *résumé* is the most widely used document and the basic professional career document you would have and is what is discussed here. People reviewing many applications and *résumés* prefer short (1-2 pages), concise and well-presented *résumés* and may discard/discount an application if the *résumé* is too long, out-dated or not relevant. There are many different websites with ideas about how to write a *résumé* or CV, some of which are shown at the end of this article. Many also provide examples and templates.

Writing the *résumé*

Most *résumés* have a fairly standard format. Do not include information or headings that are not relevant, although any gaps in your work or practice history should be briefly noted with the time period and reason (e.g. home duties, study, travel, maternity). In terms of the style of the *résumé*, ensure that you keep headings and layout consistent. Use easy to read fonts such as Times New Roman, Calibri or Arial and maintain the font size at 10-12 points, with slightly larger fonts for headings. Use bullet points to organise material and make it easier to read when you are listing information, such as skills or accomplishments. Make sure to do a spell-check!

Writing your *résumé* should only take a few hours. Then give it to someone else to have a look at, to help check for any errors or phrasing; or put it aside for a few days and look at it with fresh eyes your-self. You don't want to describe yourself as "meticulous, with strong attention to detail", only to find that you have spelling errors or have put in a date or job position incorrectly!! Double-check that the information you have put in is accurate, as many reviewers will do background or Google checks to verify your information.

Online submissions

Many applications today are done online and can have a number of parts to them. Your *résumé*, as one part, will then be submitted online as a document attachment, which is another good reason to have it prepared and maintained on your computer (ready to go!). You may also be asked to answer separately a series of selection criteria which can be a time-consuming task, so, once again, having the *résumé* pre-prepared can save you a lot of time when you are under pressure to complete a job, scholarship or funding application. Sometimes, other information may be asked in an online application, such as maiden name (or other aliases), passport and driver's licence information, permission to do background criminal checks etc. These pieces of information do not generally need to be in the *résumé*.

Useful websites

- NSW Health – useful because many nurses work for NSW Health.
https://nswhealth.erecruit.com.au/applications/Default/interview/Documents/nswhealth_application_guide.pdf
- University of Sydney – useful for early career and *résumé* for employment.
http://sydney.edu.au/careers/career_advice/downloads/resume_writing.pdf

- Uni of Qld – advice on CV’s for early career researchers. <http://www.uq.edu.au/grad-school/academic-CV>
- Pace University has a good website for nurse researchers. <http://www.pace.edu/sites/pace.edu.career-services/files/PDF/NursingGuideforWritingCV.pdf>
- More about resumes, but for nurses, so is useful. <http://www.careers.gut.edu.au/student/resource/ResumeNUR.pdf>
- (Crown Copyright September 2006, “Example of a general practice nurse curriculum vitae”) http://www.rcn.org.uk/_data/assets/pdf_file/0009/176319/Tool2.5-GPNCVExample.pdf
- Australian Health Practitioner Regulation Agency website and advice for CV’s. <http://www.ahpra.gov.au/Registration/Registration-Process/Standard-Format-for-Curriculum-Vitae.aspx>

What to include?

- **Contact information:** name, address (home and institution), phone, email. (DOB, marital status, whether you have children, disabilities are not relevant).
- **Professional Profile:** BRIEF (2-3 sentences) statement about who you are professionally & your career aims.
- **Key strengths and attributes:** these might be done as bullet points and list positive things about your skills and abilities that you can bring to any role eg. team player but can work autonomously, energetic and enthusiastic individual, can work with people from diverse backgrounds, good communicator, strong attention to detail, values fairness and ethics, resourceful and motivated, ability to problem-solve and thrive on challenges etc. You should also include a statement here about your competency with technological skills (if you work with computers) and major programs of relevance, such as Word, Excel, PowerPoint, or database management.
- **Education and Qualifications:** full title of qualification, institution and year.
- **Professional Experience/ Employment history:** Include employer, your position & dates of employment.
- **Honours, Prizes and Awards*:** title of award and year. Generally only include quite major/significant ones and those with some relevance to your profession.
- **Languages, other skills & extracurricular activities*:** only where they can enhance your resumé.
- **Referees:** It is not necessary to list referees in your resume but a statement at the bottom of the final page, such as ‘Referees available on request’ lets people know that you can provide them. Select referees who can speak to your current employment, relevant skills for the job or award you are applying for. Provide name, contact details and institution/organisation position for each of your referees. Notify your referees in advance of any applications you make.

***Don’t include headings if they are not relevant.**

Myelodysplastic Syndromes and the nursing management of patients receiving Azacitadine.

Debbie Carr, Nursing Unit Manager,

Haematology Day Unit, Calvary Mater Hospital, Newcastle. E: Debbie.Carr@calvarymater.gov.au

What are Myelodysplastic Syndromes?

Myelodysplastic Syndromes (MDS's) are a heterogeneous group of disorders that are characterised by inadequate and dysmorphic haematopoiesis.¹ The goals of treatment for patients with MDS are guided by their International Prognostic Scoring System score (IPSS) and other measures of disease risk such as co-morbidities, transfusion dependence and level of lactate dehydrogenase (LDH).

- For patients with low and intermediate-1 scores therapy is aimed at improving haematopoiesis and alleviating symptoms through the use of supportive measures such as blood transfusions, granulocyte colony stimulating factor and erythropoietin. Erythropoietin is only available for patients in Australia on the Patient Pharmaceutical Benefits (PBS) scheme if they have chronic renal failure.
- For patients with higher risk disease, intermediate-2 and higher IPSS scores, the additional goal, along with supportive care is to prolong the patient's survival by modifying the course of the disease.

Until recently the only way to do this was with allogeneic stem cell transplantation however the age of the majority of MDS patients meant that this is not always a viable option.

What is Azacitadine?

In 2010 Azacitadine was made available in Australia on the Patient Pharmaceutical Benefits (PBS) scheme under section 100 for the treatment of patients with MDS classified as intermediate-2 or higher according to their IPSS score, patients with Chronic Myeloid Leukaemia and patients with Acute Myeloid Leukaemia with 20% - 30% blasts and multi-lineage dysplasia.²

Azacitidine is a member of a new class of drugs known as DNA "demethylating" agents. Methylation of DNA is a major mechanism that regulates gene expression in cells. When there is an increase in DNA methylation this can result in the blockage of the activity of "suppressor genes" that regulate cell division and growth. When suppressor genes are blocked, cell division becomes unregulated, allowing or promoting cancer.

Azacitidine's anticancer effects are believed to be twofold. One of these is by demethylation or interfering with the methylation of DNA. By this process of demethylation, normal function to the tumor suppressor genes is restored, thus restoring control over cell growth. Azacitidine also belongs to the category of chemotherapy called antimetabolites. Antimetabolites are very similar to normal substances within the cell. When the cells incorporate these substances into the cellular metabolism, they interact with a number of targets within the cell to produce a direct cytotoxic effect that causes death of rapidly dividing cancer cells.

What is the nurses' role in managing patients on Azacitadine?

In 2012 the Cancer Oncology Nurses Journal published a paper titled "*Counselling and adverse events management for patients with MDS undergoing Azacitadine therapy. A practice standard for Canadian nurses*". This article offers comprehensive guideline for developing a model of care for patients receiving Azacitadine. It focuses on two main areas of care, patient counselling and management of adverse events.

Standard 1 focuses on Patient counselling and involves ensuring that every patient has been given informed consent, appropriate levels of education and has reasonable expectations of their disease management.

It is particularly important to explain the mechanism of action of Azacitadine specifically that it must be given as repeated

cycles for as long as it continues to be of benefit or there is disease progression. Experience has shown that some patients will expect that once the treatment has worked they will be able to stop receiving the drug. If patients do not see improvement within the first few cycles they may think that the treatment is not working and may not understand the reason for continuing. It is clearly detailed that cytopenias may get worse during the first few cycles and that it may take up to 6 cycles before an improvement in their blood counts are noticed. Patients need to understand that Azacitadine is not a cure for MDS but provides a more stable disease.

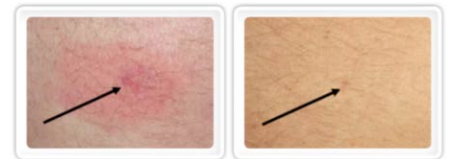
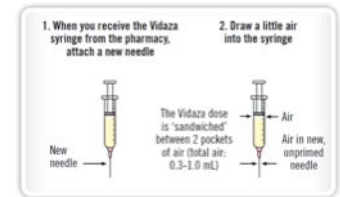
Standard 2 focuses on the management of adverse events particularly skin site reactions. As Azacitadine is given in repeated cycles over a long period of time it is important to reduce the risk and impact of adverse events so that the patient is willing to continue with their treatment. Injection site reactions are one of the most significant adverse events associated with the administration of Azacitadine.



Injection site reactions can be very uncomfortable and distressing for the patient.

They may take the form of erythema, red or purplish colour lumpy pain at the injection site or bruising. Generally these reactions are transient and do not require specific therapy. One of the key methods for reducing the risk and severity of injection site reactions is the use of proper injection technique.

- Choose an appropriate injection site. Avoid lean areas or easily irritated areas such as the belt line, around elastic waist bands, inner thighs and the seat belt line. Never inject into tender, bruised, red or hardened areas.
- Prior to administration ensure that the drug is in a homogenous state. This can be done by vigorously rolling the syringe between the palms until a uniform cloudy suspension is achieved.
- A 25 gauge needle is then attached to the syringe. You should not prime the needle. A small pocket of air should be placed in the syringe to form an "air sandwich". This ensures that the full volume of drug is administered and that the entire drug is pushed out of the needle deep in the fatty tissue and does not leak out to the surface of the skin. The drug is then injected into the subcutaneous tissue of the upper arm, thigh or abdomen. The site of injection should be varied. It is a good idea to encourage your patient to map their injection sites and choose where to put their next dose.
- Cover the site with sterile gauze or cotton wool. For patients with low platelet counts get the patients to apply gentle pressure for 10 – 15 minutes to help minimise bleeding. Do not apply hot or cold packs immediately after injection as this may affect absorption. Injection site reactions should be managed according to their symptoms and severity. These techniques are drawn mainly from anecdotal evidence and clinical experience. They include the use of an antihistamine prior to the injection, the application of a corticosteroid cream and the use of analgesia for pain relief.
- There has been a small case series that has shown the efficacy of evening primrose oil to reduce the itch and discomfort.³
- The use of low dose doxycycline during the treatment period has also been shown to work. Even though bacteria do not appear to be involved in the skin inflammation caused by Azacitadine doxycycline has an anti-inflammatory effect over and above its bacterial properties. The dose that we have found effective is 50mg daily in the morning taken on an empty stomach at least one hour prior to or 2 hours after food.



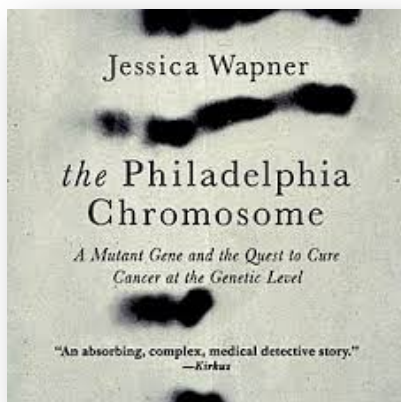
Nurses are uniquely positioned to play an important role in the management of patients with Myelodysplastic Syndrome. Due to the approval of Azacitadine in Australia for the treatment of high risk MDS, patients now have the option of a treatment that gives them a more stable disease. The management of this treatment and its potential side effects is imperative to ensuring good patient outcomes.

1. Garry Gillard and Cynthia E Dunbar, Blood – Principles and Practice of Haematology Second Edition 2003

2. www.medicareaustralia.gov.au/provider/pbs/drugs1/azacitidine.jsp

3. Vidaza Product Information, 25 October 2011.

4. Murray C, Wereley A, Nixon S, Hua-Yung C, von Riedemann S, Kurtin S: Canadian Nurses Working Group on Azacitadine in MDS. Counselling and adverse event management for patients with Myelodysplastic syndromes undergoing Azacitadine therapy: a practice standard for Canadian nurses. 2012 *Can Oncol Nurs J*. 2012 Autumn;22(4):222-34.



A great read: 'the Philadelphia Chromosome' by Jessica Wapner

Almost daily, headlines announce newly discovered links between cancers and their genetic causes. *The Philadelphia Chromosome* relates the back-story—never before told at book length—behind many of those headlines. This epic journey unfolds over fifty years, encompassing the first glimpse of a genetic mutation, dubbed the Philadelphia chromosome, in 1959; its role in causing chronic myeloid leukemia (CML); and the development of Gleevec, a groundbreaking drug that made this once-fatal cancer treatable with a single daily pill.

Science journalist Jessica Wapner brings this story vividly to life—reconstructing the crucial breakthroughs, explaining the science behind them, and giving due to the dozens of researchers, doctors, and patients whose curiosity and determination restored the promise of a future to the more than 50,000 people worldwide who are diagnosed with CML each year. Chief among them is researcher and oncologist Dr. Brian Druker, whose dedication to his patients fueled his quest to do everything within his power to save them.

A turning point in our long and difficult history with cancer, *The Philadelphia Chromosome* is an inspiring story of what is possible when people, working alone and in concert, are driven to make sense of the unknown and improve the lives of others. <http://jessicawapner.com/the-philadelphia-chromosome/>



The Australian Journal of Cancer Nursing – A Haem Theme!

Volume 14 Number 1 June 2013. Available to all CNSA members or subscribers.

This edition of the AJCN includes 4 comprehensive articles around a 'Haem Theme' Moira Stephens, Past President HSANZ NG and Editor of the AJCN writes in her editorial *"this edition of our journal has a haematological theme but our four papers report findings and engage in discussion that resonates with all cancer nurses. The threads that link the four papers are those of living with cancer and haematological malignancies and ho best to support individuals doing this"*.

- Beverleigh Quested – 'Patient blood management and care for chemotherapy and haematopoietic stem cell transplant patients'
- Yvonne Panek-Hudson – Survivorship care – time for innovation?
- Nicole Loft – Second primary cancers: A focus on Australian survivors of haematological cancers.
- Patricia Morris – Understanding the experience of a cancer diagnosis and illness – A patient perspective of the biographical disruption of multiple myeloma.

The AJCN is not available online but you can subscribe to the Journal or why not consider becoming a member of CNSA and you'll automatically receive the journal as part of your membership fee?

Tracy King, HSANZ NG President / Editor



The Royal
Melbourne Hospital

*Advanced Staff Only

Bone Marrow and Haematopoietic Stem Cell Transplants

CPD - 16 hours

8.00 am - 5.00 pm

Charles LaTrobe Theatre
The Royal Melbourne Hospital
Grattan St
Parkville, VIC, 3052

Tue 12 & Wed 13 November 2013

About the Course

The Bone Marrow Transplant short course was developed to meet the learning needs of nurses caring for patients undergoing bone marrow or peripheral stem cell transplantation.

In preparation of the program, we ask that you be familiar with the transplant process. To assist you with this please familiarise yourself with the pre readings attached to this flyer on the RMH Nursing Education Website

Topics include

- Overview of Haemopoiesis and Immunosuppression
- The history of Bone Marrow Transplantation
- Tissue Typing and the Bone Marrow Donor Registry
- Clinical Indications and selection of BMT
- Infection in BMT
- Management of BMT recipients including: Fertility Issues, Complication Management, Oral Management, Total Body Irradiation, Psychosocial Issues, Nutrition, Graft versus Host Disease (GVHD)
- Long term issues
- Apheresis

Program Structure

The program consists of two full day training sessions.

Program Eligibility

The program is open to Registered Nurses, Enrolled Nurses, Medical Staff and Allied Health Staff.

Program Enrolment

The program is limited to 80 participants.

Amenities

For full day courses, lunch and refreshments provided. (Please let course coordinator know of special dietary requirements by 25 October 2013).

To Register

Please download the registration from from the following link:

<http://www.rmh.mh.org.au/nursing-education-short-courses/w1/i1031959/>

Registrations close: **Friday, 25 October, 2013**

**Registration is from 8am - 8.30am
(Tues 12th November)**

Program Duration

Course fees

External Applicants:	\$300.00
Melbourne Health Employees:	\$140.00

For more information about the clinical content of this course, contact:

Chelsea Victor

Clinical Nurse Educator
Ph: 03 9342 7000 pager: 7343
Email: chelsea.victor@mh.org.au

For registration and payment queries, contact:

Short Course Administration

Ph: 03 9342 4981
Fax: 03 9342 4970
Email: shortcourse@mh.org.au

BONE MARROW TRANSPLANT 2013

The Royal Melbourne Hospital is part of Melbourne Health. ABN 73 802 706 972

Monitoring central line associated blood stream infections (CLABSIs) on an inpatient haematology ward.

Peter Haywood A/NUM

Ward 5 North Royal Melbourne Hospital

Managing central lines is an important part of a haematology nurse's role. It's something we've always thought that we do really well. We shake our heads in disgust at the patient's story of the agency nurse that flushed the line without swabbing. We roll our eyes at the quivering ED grad nurse on the phone asking how to take blood cultures from a patient with a Port - "Err ... no, I think it's not a Port, it's actually a Hickman and ... I'm pretty sure, that's like 25,000 units of heparin you're talking about, umm ... maybe I should just come down and do it?" Sound familiar?

But are we as good as we think we are? We've been monitoring CLABSI on our combined haematology / oncology ward for about 18 months now and have been quite humbled by the results. It's become commonplace, to the point of being mandatory, for ICU departments to monitor CLABSI rates. Significant improvements have been made over the last 15-20 years in the USA in the prevention of CLABSI, with consequent cost savings and reductions in patient morbidity¹. We hope for similar improvements as we make improvement to our line management.

One of the challenges in haematology has been in finding a suitable definition for what is an infected central line. In a neutropenic patient, how would you know if a bacteraemia is from a line or from translocation of gut bacteria? Many different definitions have been proposed, with the most popular being that of the National Healthcare Safety Network (NHSN). A recent update makes specific exceptions for gut bacteria in neutropenic patients, or patients with gut graft-vs-host disease².

The process of calculating a CLABSI rate isn't an excessive burden. One nurse is allocated one shift per month off the ward to go through blood culture data that is provided by our infection prevention department. The process also allows us to calculate a blood culture contamination rate; an important nursing skill, and something else we've always felt we do quite well (it turns out that we do!).

It's far more difficult to improve practice, and efforts so far have included:

- A 'scrub the hub' education campaign to improve disinfection of central line caps.
- Changing to larger to alcohol swabs that also contain 2% chlorhexidine.
- Broader education around line set ups, correct dressing technique and documentation.
- Changing the type / brand of caps we use on lines.
- Institution of a multidisciplinary committee to look at medical as well as nursing management of central lines – including the insertion procedures.
- A stronger, more aggressive ward based hand hygiene monitoring and improvement project.
- Examination of medication administration system – with possibility of removing all 'open' systems such as burettes and airway needles.

Interested in carrying out a similar practice improvement project on central lines in your clinical area?

We would love to share our experience with other wards who are, or are considering monitoring CLABSI or blood culture contamination, or even to discuss the best way to manage of central lines.

Contact Peter Haywood: peter.haywood@mh.org.au

1. O'Grady et al. Guidelines for the Prevention of Intravascular Catheter-related Infections. Clin Infect Dis. 2011 May 1; 52(9): e162–e193

2. National Healthcare Safety Network. April 2013 CDC/NHSN Protocol Corrections, Clarification, and Additions. Accessed from

Paroxysmal Nocturnal Haemoglobinuria (PNH) – A Clinical Update

Michael Brown, PNH CNC
Royal Melbourne Hospital

PNH is an acquired clonal disease of the blood affecting between 150 and 200 Australians. It is a progressive and chronically disabling illness, which significantly impacts quality of life and is associated with an increased mortality rate. While the disease can present at any age, it most often affects patients in the prime of their lives with the typical age at diagnosis in the early 30s. It can occur in isolation (as classical PNH) or in the presence of a bone marrow dysfunction disorder, such as Aplastic Anemia (AA) and / or Myelodysplastic syndrome. Patients with a history of (or active) AA and MDS, have been reported to be at higher risk for developing PNH.

The defect in PNH is the result of a somatic mutation of the PIG A gene which prevents all GPI anchored proteins from attaching to the cell surface. The proteins CD59 and CD55 are responsible in forming a protective shield over the blood cell to guard against complement mediated attack. The lack of these proteins on the PNH red blood cell means it is vulnerable to destruction during periods of complement activation.

Signs and Symptoms

Chronic haemolysis, due to the PNH red blood cell (RBC) destruction, is central to the morbidities and mortality associated with PNH. This can be associated with a wide spectrum of presenting signs and symptoms including:

- Anaemia
- Thrombosis
- Fatigue (disproportionate to the underlying anaemia)
- Haemoglobinuria
- Elevated LDH
- Pain (eg, abdominal)
- Erectile dysfunction in males
- Dysphagia
- Dyspnoea
- Renal insufficiency
- Pulmonary hypertension

Patients suffer from a poor quality of life associated with these symptoms and are at risk for life-threatening complications. 35% of PNH patients die within 5 years of diagnosis. Thrombosis is the leading cause of death in PNH. Historically, failure to recognize the consequences of chronic haemolysis has contributed to the challenge of diagnosing and managing the disease. It has been recognized that intermittent acute haemolysis (paroxysms) leads to exacerbations of distinct PNH symptoms such as haemoglobinuria. However, many of the signs and symptoms, including fatigue, smooth muscle dystonias (e.g, dyspnoea, dysphagia, pain and erectile dysfunction), and thrombosis, do occur without haemolytic exacerbations. In fact only approximately 25% of PNH patients present with haemoglobinuria.

Diagnosis

Diagnosis of PNH is generally confirmed by laboratory assessment. Important laboratory assessments are:

- **Lactate dehydrogenase** (LDH) levels. LDH, long considered a useful clinical marker of intravascular haemolysis, is frequently elevated in patients with PNH
- **FLAER** (fluorescent aerolysin)/ **Flow Cytometry**: a measure of the PNH clone of GPI-deficient white and red blood cells.
- Other laboratory measures that assist in the diagnosis of PNH or help to monitor disease burden, include **Haemoglobin**, **reticulocyte count**, and **haptoglobin**.

Treatment / Management

Red blood cells transfusions have historically been the main supportive therapy available to these patients. Transfusions have been primarily aimed at replacing RBC loss as a result of ongoing active haemolysis. However, transfusions alone only transiently treat the anemia. They do not address the underlying haemolysis that leads to other signs, symptoms, and risks

in PNH patients. In fact many PNH patients require minimal or no RBC transfusions support, but may still demonstrate significant chronic haemolysis and suffer symptoms and risks associated with it, such as life-debilitating fatigue, dysphagia, pain, kidney disease and thrombosis. Corticosteroid and androgen therapy has also been used in an attempt to help control acute haemolytic exacerbations, but no controlled data exists to suggest that the potential benefit outweighs the established risks of such therapies.

Patients with acute thrombosis are often treated with thrombolytic therapy and placed on long-term anticoagulants to help prevent further blood clots. However, the risk for haemorrhagic effects associated with long-term anticoagulant therapy also needs to be considered. Furthermore, evidence shows that some PNH patients will continue to develop blood clots despite therapeutic anticoagulation.

Bone marrow transplantation: remains the only cure for PNH, but is associated with high treatment related morbidity and mortality rates. In the current era of effective antibody therapy (as mentioned below) allograft is now recommended only for patients who remain refractory to therapy or have PNH in association with another bone marrow dysfunction disorder (AA/ MDS) in which that the other disorder requires treatment with transplant.

Soliris® (eculizumab) is indicated for the treatment of patients with PNH. Eculizumab is a monoclonal antibody which specifically blocks the action of complement in the terminal phase. Effectively protecting the PNH red cell from complement mediated attack. It has been shown to reduce chronic haemolysis, improve anemia (as defined by stabilization of haemoglobin and the reduction or elimination of the need for transfusions), decrease disabling fatigue, experience fewer thrombotic events and improve overall quality of life. Recent studies have shown that the eculizumab treated patient now has a life expectancy equal to that of their age matched population. Eculizumab is a life long therapy administered intravenously every 2 weeks (once on maintenance schedule). Patients on eculizumab therapy are at a higher risk of acquiring serious meningococcal infections. As such they require a meningococcal vaccination prior to commencing therapy and should also be taking prophylactic antibiotics. In Australia, access to eculizumab is strictly controlled and is only available through an individual application to the Life Saving Drugs Program (LSDP).

Despite being on effective therapy PNH patients will, from time to time, continue to have exacerbations of their PNH related symptoms, which require intervention. This frequently can be seen during periods when the patient's immune system is up-regulated. i.e. during times of minor infections or post surgical procedures. In caring for this patient group it is important to be acutely aware of this potential and observe for the early stages of these symptoms developing.

Interested in PNH – keen get more involved?

We are looking at establishing and Australia wide PNH nursing support network within the haematology nursing community. If you would like to become involved with this group, or would like to be informed about some upcoming educational opportunities, please contact Michael Brown (Royal Melbourne Hospital).

I look forward to hearing from you soon.

Email: michael.brown@mh.org.au. Ph: (03) 9342 7954/ 0426 973 807



Cancer Institute NSW Update

Haematology Reference Groups – opportunities to get involved.

The haematology reference group was held in May and discussed CLL treatment protocols which are currently under construction. The next haematology reference committee meeting will be held later this year and will review lymphoma protocols. If you are interested in being involved in a reference committee meeting please contact Patricia Ryan: patricia.ryan@cancerinstitute.org.au

New and updated protocols available now – why not check them out online?

- The clinical procedure for administration of intrathecal drugs - recent update
- The patient information for chemotherapy via an intraventricular reservoir – recent update
- NEW - Checklist for educating the patient prior to radiation therapy

If anyone has any feedback, is interested in participating in any of the reference committees or would like to contribute to any of the content, please don't hesitate to contact us at contactus@eviq.org.au or via the contacts page at www.eviq.org.au



Keeping 'APP' to-date on apps!

New fact sheet app

Have you ever seen the series of fact sheets from the Australian Red Cross Blood Service aimed at people with non-medical backgrounds? Needed help to explain what's in a bag of blood? Or what plasma gets used for?

The answers are at hand with the new iTransfuse fact sheet app for iPads and iPhones. The fact sheets provide basic information about blood, blood components, transfusion and related concepts. The [fact sheet app is available for download](#) at the iTunes store. The android version is on its way soon.



PDF versions are also regularly added to the Blood Service website for health professionals www.transfusion.com.au under the 'Fact sheets' tab in 'News, Library and Events'.





iTransfuse Online Learning: RhD Immunoglobulin clinical modules

The Australian Red Cross Blood Service has developed RhD Immunoglobulin Clinical Modules, which support the safe and appropriate administration of RhD immunoglobulin by health professionals.

This new eLearning package on iTransfuse Online Learning is a collaboration between the National Medical Education Unit at the Blood Service and the Scottish National Blood Transfusion Service.

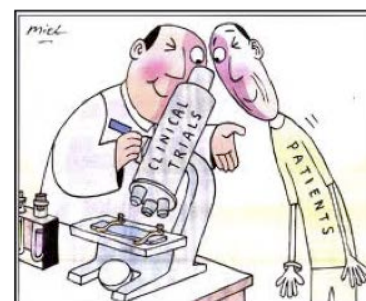
The eLearning package consists of six modules, which each have an assessment to follow. All modules need to be completed for certificates to be received. This is a great way for nurses and midwives to extend their knowledge of this area. Topics include haemolytic disease of the newborn and routine care of RhD negative pregnant women.

Clinical Trials Corner

...packed full of news and innovation!

Bec Meti

CNC, Haematology Research Unit
RPA Sydney



The temperatures outside are dropping, winter is definitely coming so it's time to work together to stay warm which is my rather poor segue into the theme of this trials corner COLLABORATION. In previous editions we have highlighted the many benefits that a commitment to research can provide, for example patients access to cutting edge treatment, funding to support units and better outcomes for patients. In addition to this, research promotes collaboration and learning opportunities. This edition I would like to highlight some fantastic work by researchers in NSW.

CLINTRIAL REFER – WORLD-FIRST APP TO TRACK STUDIES IN NSW

Clinical trial teams at Concord Hospital (Sydney Local Health District) and St George Hospital (South Eastern Sydney Local Health District) led by Admir and Roslyn developed a world-first smart phone application, which connects patients and doctors to clinical trials.





With ClinTrial Refer, users simply search through fields including tumour/disease and hospital location to access suitable trials and potentially gain life-changing treatments. The Director of the Clinical Research Unit and senior staff specialist at the haematology department of Concord Hospital, Associate Professor Judith Trotman, said this was an exciting milestone which would increase patient access to treatment options and help doctors screen and refer patients with blood-related diseases to suitable clinical trials. *“The digital age has pushed us to think of new and better ways to reach doctors, researchers and our patients. This app is one answer. We can now make many more doctors and patients aware of suitable trials to help treat blood diseases, and importantly improve patients’ quality of life,” Associate Professor Trotman.* The App is available now and free to download I encourage you all to do so and promote the App to your clinicians and patients.

ALLG CELEBRATES ITS 40 YEARS OF SERVICE

Another example of successful collaboration is the Australian Leukaemia & Lymphoma Group. This year represents 40 years of service, a fantastic achievement. The origins of the ALLG date back to 1973 when Dr Fred Gunz, then director of the Kanematsu Institute at Sydney Hospital, convened a meeting of nine haematologists in Canberra to discuss the formation of a study group to perform clinical trials in leukaemia and lymphoma.

By 1975 the group was joined by haematologists from Perth and Auckland and called the Australian & New Zealand Lymphoma Group (ANZLG). The Australasian Leukaemia Study Group was formed. The two groups then merged and in 1999 a unified clinical trials group, the ALLG was formed with Prof Ken Bradstock as the chairman.

Delaine Smith is the CEO of the ALLG and provides this update on the ALLG: In 2013 The ALLG membership of approximately 305 clinicians is made up of almost all of the Haematologists treating Leukaemia and Lymphoma across Australia and New Zealand. With head office in Melbourne, there is a team of 8 staff. Some funding for infrastructure is awarded from Cancer Australia. We are committed to multisite research, and have over 80 hospitals across Australia and New Zealand participating in a range of clinical trials. ALLG trials cover the entire spectrum of blood cancer: Non Hodgkin Lymphoma, Hodgkin Lymphoma, Chronic Lymphocytic Leukaemia, Acute Leukaemia’s, Myelodysplasia, Chronic Myeloid Leukaemia, Myeloma etc... via a range of studies. The ALLG has an active Laboratory Sciences Committee which oversees to ensure all trials include sample collections for correlative research projects. There are currently 19 trials open to accrual. With new studies in CML and AML expected to open in the coming months.

The ALLG has undergone significant evolution since its inception in 1999 and has been instrumental in advancing blood cancer research in Australia and New Zealand. Today, the ALLG has a well-established international reputation and collaborative international trials are a feature of the ALLG trials portfolio.



SPOTLIGHT ON A TRIAL

This month we are highlighting a trial for follicular lymphoma called the DAWN study formally known as **Protocol PCI-32765FLR2002**. A Phase 2 Open-label, Multicenter, Single-arm Study of PCI-32765 (Ibrutinib) in Subjects with Refractory Follicular Lymphoma.

This trial allows access to the drug Ibrutinib which is a first-in-class oral therapy that is a selective, irreversible inhibitor of Bruton’s tyrosine kinase (BTK), a critical signaling kinase in the B-cell receptor pathway for tumor cell survival and proliferation. Ibrutinib is being developed as a treatment for various B-cell malignancies.

Inclusion Criteria;

- Grade 1, 2, or 3a FL at initial diagnosis, without transformation
- Prior therapy including all of following:
 - 2 prior lines
 - 1 prior rituximab-containing combination chemotherapy
 - Last line includes anti-CD20 monoclonal antibody-containing chemotherapy regimen
- Progression during or within 12 months of last regimen
 - 1 measurable site of disease
- ECOG 0 or 1
- Haematology
 - ANC \geq 750/mm³ independent of growth factors
 - Plt \geq 75,000/mm³ independent of transfusion or $>$ 50,000/mm³ if bone marrow involved
 - Hb \geq 8 g/dL independent of transfusion

Dosage and Administration

560mg daily (4 tablets) - continuous dosing on a 21 day cycle

The lead Principal Investigator is A/Prof Judith Trotman at Concord Hospital NSW. If you would like more information contact CRGH Haematology CRU: CRGHHaem.CRU@sswahs.nsw.gov.au

HOT OFF THE PRESS!

Rituximab Purging and / or Maintenance in Patients Undergoing Autologous Transplantation for Relapsed Follicular Lymphoma: A Prospective Randomized Trial

From the Lymphoma Working Party of the European Group for Blood and Marrow Transplantation
Ruth Pettengell, Norbert Schmitz, Christian Gisselbrecht, et al. J Clin Oncol 31. © 2013 by American Society of Clinical Oncology

Many sites across Australia participated in the international LYM1 clinical trial sponsored by the collaborative EBMT group. The publication of this clinical trial has recently been published. The objective of the trial was to assess the efficacy and safety of Rituximab as in vivo purging before transplantation and as maintenance treatment immediately after high dose chemotherapy and ASCT in patients with relapsed Follicular Lymphoma. This was done by enrolling patients with relapsed FL who had achieved either a Complete or very good partial response to salvage chemotherapy be randomised to receive either rituximab purging (375mg/m² weekly for 4 weeks) or observation before HDC-ASCT and to maintenance rituximab (375mg/m² every 2 months for four infusions) or observation. Overall Survival was not improved by either rituximab purging or maintenance.

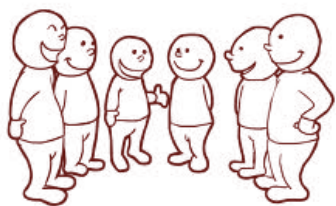
Conclusion: Rituximab maintenance after HDC-ASCT is safe and significantly prolongs PFS but not OS in patients undergoing transplantation for relapsed FL. Pretransplantation rituximab in vivo purging, even in rituximab-naive patients, failed to improve PFS or OS.

For the full article see the Journal of Clinical Oncology.



**PROFESSIONAL EDUCATION PROGRAM 2013
ADVANCED HAEMATOLOGY NURSING SYMPOSIUM
ISSUES, INNOVATIONS AND INTERVENTIONS
Friday September 13th**

0830 - 0835	Welcome & Introduction
0835 - 0915	Haematopathology: Laboratory perspectives Dr. David Westerman, Haematologist & Consultant Physician
0915 - 1000	What's all the fuss about a piece of tissue? Dr. Stephen Lade, Consultant Anatomical Pathologist
1000 - 1045	Exploring treatment options & decision making around management of lymphoma Dr. Michael Dickinson, Consultant Haematologist
1045 - 1100	Morning tea
1100 - 1145	Sepsis Kills !!! So what can we do about it? A/Prof Karin Thursky, Infectious Diseases Physician
1145 - 1230	Palliative care for haematology patients – More than end of life care. Mr. Michael Collins, Nurse Practitioner
1230 - 1330	Lunch
1330 - 1415	Improving your skills at critiquing a research paper? Dr. Anna Ugalde Research Coordinator/Senior Research Fellow Centre of Palliative Care St. Vincent's Hospital/University Melbourne
1415 - 1500	The Role of exercise in haematological malignancies Dr Catherine Granger Physiotherapist Leader of Physiotherapy Research, Royal Melbourne Hospital
1500 - 1515	Afternoon tea
1515 - 1615	After the treatment is over... A case study approach exploring survivorship issues following treatment Ms Priscilla Gates, Advanced Practice Nurse, Australian Cancer Survivorship Centre, PMCC



The Talking Corner

Toni Lindsay and Nicole Ferrar

Clinical Psychologists @ Sydney Cancer Centre/RPA

toni.lindsay@sswahs.nsw.gov.au

nicole.ferrar@sswahs.nsw.gov.au

Hi There,

Thanks for the invite Tracy King, to come and have a regular “psychological stuff” column in the HSANZ NG newsletter! We are very excited to be a part of the crew, and hopefully can add some interesting tidbits into the mix! We are both Clinical Psychologists who work in the Psycho-Oncology Service at RPA (Sydney) and provide psychological support to patients and their families with a diagnosis of cancer or haematological malignancies. As part of our role, we also work closely with staff to help support them in managing the emotionally challenging situations that come up as part of working with this group, including when our patients die or deteriorate. When thinking about how we can add the most into the newsletter, we started thinking about the common issues that come up in our practice, and the things that we most often get asked about. We want you to direct us about what might aid you in caring for your patients! We have banged our heads together and thought that we can do a bit of a Q+A format (sans Tony Jones) where you guys can send in questions to the editor, and we can answer them in the next edition! Some inspiration to help you kick off...

Q: My patient who is the same age as me has “friend requested” me on FaceBook. What should I do?

A: Ah, social media. This was a problem that didn’t exist even 10 years ago, where sometimes you might have a moment of running into a patient in the supermarket, which may have been a little awkward, but relatively harmless. Social media has changed many of our interactions, including a grey area of what is acceptable behaviour with patients! Our advice generally is to not engage with any patients in a social manner. There are lots of reasons for this, and most of which are around managing your professional persona to allow you to deliver the best care for your patient. FaceBook and other social media blur boundaries of social interaction anyway, and adding your patients into the mix is sure to be a bad idea (even when they have finished treatment). And, from the patients perspective for right now the hospital etc is very important, but in 3 months when they are trying to get “back to normal” having their nurses social events come up in their newsfeeds is probably not going to help them. Also, it is worth checking the policies of your workplace/institution, of which many now have rules and guidelines about this, and the penalties for breaking them are usually quite significant. If you need something to say to patients who have asked, its easiest to just let them know that the hospital/workplace has a policy of not allowing patients and staff to have this contact. Most people will accept this, and it won’t be a problem.

Q: I am a haematology nurse working on a busy ward. Often our patients go to ICU and then deteriorate which leaves us feeling disconnected with the family and the patient who have been on the ward for so long. What are some ways that we can manage this?

A: It’s always a really difficult situation for staff when their patients go to another ward, particularly if they die there. I think in haematology this is even more pronounced as there is such a strong bond and relationship that happens on these wards, particularly with the patients who have been around for a really long time. When a patient becomes unwell and goes to ICU, there is a tricky balance with making sure that the patient and their family are being supported, whilst not overwhelming them. Let the family guide what is helpful and appropriate. For instance, give their relative a call and check in to see if they would like staff from the ward to visit, or if there are things that you can do to help them. If the family says that they are coping ok, and feel safe and supported in the new ward, then it’s usually not necessary to go and spend time with them. Remember each time that the patient and family retells the story or updates people, it takes energy, which is often a precious resource for them. For other families, they may happily welcome familiar faces from the ward to visit. Be guided by the family, and remember if you aren’t feeling ok, or feeling particularly emotional about the situation, its ok to speak with someone like us, or the EAP service at the hospital. We work in a difficult environment, and we have to deal with significant grief and loss in our everyday, so it’s ok that sometimes those days might feel harder than others.

Resources/Ideas/Upcoming events/Stuff to read etc...

As I am sure that you are all aware, HAA is coming up in Oct on the Gold Coast. Even if you are not presenting, conferences like this are always an interesting space to learn and meet a whole bunch of people who are doing the same jobs, similar interests etc! It's also a good way to meet people for possible collaborations and projects, if you are so inclined!

For a different tack, there is also the Australian Palliative care Conference that occurs every 2 years happening in Canberra for those who work with people at end of life. I personally quite like Pall Care conferences, as it's a good way to get a slightly different perspective on a familiar tale. <http://www.dconferences.com.au/apcc2013/>

And, for those who are so inclined, I have attached a link to a nice article looking at Acceptance and Commitment Therapy (ACT) which talks you through the process of being mindful, engaging in therapy and other things like that, which we have included as people often are a little mystified about what the "Psychologists" do. It also has some nice little sections about learning some mindfulness meditation.

http://www.actmindfully.com.au/upimages/Dr_Russ_Harris_-_A_Non-technical_Overview_of_ACT.pdf

We will add as a disclaimer however, that this article is simply an explanation of what happens in therapy, and doesn't provide any skills or training in being able to deliver such ☺

The Psychs!

(#great advice)

The National Cancer Nursing Education Project

The **EdCaN Cancer Nursing Program (Entry to Speciality)** has been uploaded to the [EdCaN website](#). Access this FREE resource now for inclusion in professional development programs and activities for nurses new to cancer care:

http://www.cancerlearning.gov.au/edcan_resources/

The EdCaN and PSGC project team can be contacted via edcanpsgc@gut.edu.au for any questions or comments on the learning resources. Project resources such as factsheets, USBs, bookmarks and flyers are available for dissemination at CPD events or workshops and can be posted upon request.



Kylie Ash

Project coordinator

EdCaN & PSGC Projects

e: k.ash@gut.edu.au | p +617 3138 6128 | f +617 3138 6030 | m 0411109469 | <http://www.cancerlearning.gov.au>



Sexuality is a fundamental supportive care need for people affected by cancer. Do you feel comfortable talking about sexuality with your patients?

The PSGC resource is a great place to start.

- Explore your understanding of sexuality and what it may mean for your patient.
- Learn about evidence based strategies to discuss sexuality.
- Develop skills to assess and manage psychosexual effects of gynaecological cancers.

Explore video case studies



Maria's story
Cervical cancer
28 year old Maria has never had a pap test...



Anna's story
Cervical cancer
48 year old, born in a non English speaking country...



Jane's story
Endometrial cancer
58 yo, caucasian post menopausal woman living with a husband...

The PSGC team is proud to have been associated with the plenary session focussing on sexuality at the recent CNSA Winter Congress in Brisbane (July 2013). *"Sex in the Afternoon"* was a Q & A panel session.

Expert panel members included:

Dr Margaret Redelman - Medical Sex and Relationship Therapist in Private Practice, Sydney

Ms Kim Hobbs - Social Worker, Westmead Hospital

Ms Janine Porter-Steele - Manager of the Wesley Hospital Kim Walters Choices Program in Brisbane.

For more information why not contact the PSGC team to receive the SEXUALITY FACTSHEET which was provided to Congress delegates attending the session.



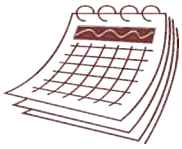
Haematology Education Day for Nurses

- When:** 27th September 2013
- What:** Haematology Education Day for Nurses – aiming for those in haematology less than 2 years
- Speakers:** Prof White, Dr's Rice & Weatherburn, CNC's Sandra Geddes, Rebecca Meti, Tracy King, CNS Hannah Kaehler.
- Topics:** Haemopoiesis, Leukaemia, Lymphoma, MDS, Myeloma, Symptom management, building career pathways

For more information or to register your place please contact Jasmine Mazis

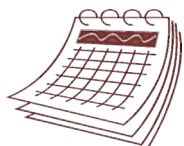
Ph: 02 9515 527

jasmin.mazis@sswahs.nsw.gov.au






Conference Calendar

Date	Conference	Details
September		
20-21 Sept, 2013	NCCN 8th Annual Congress: Hematologic Malignancies	New York Marriott Marquis, New York, NY
		<p>Intended Audience: Hematologists, oncologists, nurses, pharmacists, and other health care professionals who manage patients with hematologic malignancies.</p>
		<p>For more information ⇨ http://www.nccn.org/</p> <p><i>Deadline for early bird Registration:</i> Friday, August 16, 2013</p>
October		
20-23 Oct, 2013	HAA 2013 Annual Scientific Meeting <i>Combined scientific meeting of the Haematology Society of Australia and New Zealand, Australian and New Zealand Society of Blood Transfusion, and the Australian Society of Thrombosis and Haemostasis.</i>	Gold Coast Convention & Exhibition Centre, Broadbeach, Queensland
	 	<p>For more information ⇨ www.hsanz.org.au</p> <p><i>Registration brochure available:</i> April 2013</p> <p><i>Due date for Abstracts:</i> 1 July 2013</p> <p><i>Early bird Registration:</i> Mid Sept 2013</p>
November		
12-14 Nov, 2013	COSA's 40th Annual Scientific Meeting 2013 <i>Cancer Care Coming of Age, highlighting geriatric oncology and gastro-intestinal cancers</i>	Adelaide Convention Centre, Adelaide. For more information ⇨ http://www.cosa2013.org/
		<p><i>Registrations & Abstract submissions are open.</i></p> <p><i>Symposium abstract submissions:</i> 10 July 2013</p> <p><i>Abstract submission Deadline:</i> 14 August 2013</p> <p><i>Early bird Registrations close:</i> 6 September 2013</p>



Conference Calendar

Date	Conference	Details
November		
12-15 Nov, 2013	ALLG Scientific meeting – Sydney 	Novotel, Brighton Beach, Sydney For more information ⇨ http://www.allg.org.au/
25 th – 27 th Nov, 2013	2013 National Indigenous Health Conference 	Pullman Cairns International Hotel Cairns QLD, Australia Registration closes 22 nd November 2013 http://www.indigenoushealth.net/
December		
7-10 Dec, 2013	2013 ASH 55th Annual Meeting and Exposition 	Ernest N. Morial Convention Center, New Orleans, LA. For more information ⇨ http://www.hematology.org/ <i>Members-only registration opens:</i> 24 July, 2013 <i>Abstract submission deadline:</i> 8 August, 2013
1 st – 4 th Dec 2013	24th Regional Congress of the ISBT (international society of blood transfusion)	Kuala Lumpur Convention Centre Kuala Lumpur, Malaysia Early bird registration closes 6 th October 2013 http://www.isbtweb.org/malaysia/w elcome

How Do I Evaluate and Retrieve Drug Information?

Aisling Kelly

eviQ Quality Manager Cancer Institute NSW

aisling.kelly@cancerinstitute.org.au

Evaluating and retrieving drug information have become essential skills for both nurses and pharmacists as their roles expand. Gone are the days of dusting off bulky reference books, as both the internet and mobile application “apps “ are increasingly used when answering questions about drug information; answers that need to be provided accurately and in a timely manner.

It is not just clinicians retrieving information; patients are more involved with their health care than ever before with the Internet providing them the means to get information independent of their health practitioner. Although we don’t always have the answers to every question, we need to know how to approach a question and where to locate reliable, credible information.

Assessing Quality of Drug Information Resources

While many web sites are useful for obtaining information, not all sites are reputable. When assessing if information on a site is trustworthy, check the author’s credentials, the quality of the references, how frequently information is updated, and how the site is financially supported.

Another way that you can be confident information on a health website is reliable, is if they display a symbol, known as the Health on the Net (HON) code. The Health on the Net Foundation has developed a list of principles that improve the quality and reliability of health information. Health websites voluntarily submit their information to the foundation; if the information is approved the site can then display the HON Code Icon, demonstrating itself as a reputable website.

Clinical Information Repositories

Clinical information repositories such as the Clinical Information Access Portal (CIAP) in NSW and the Clinicians Health Channel in Victoria will be familiar to most health professionals. Most public health facilities have direct access through the hospital network without the need for individual passwords.

These websites host many clinical evidence resources, including drug information resources, clinical guidelines, selected full text articles; bibliographic research databases e.g. MEDLINE[®] and the Cochrane Library. They are a valuable resource that support clinical practice, research and education, and are freely available at the point of care. Specific user guides, general education sessions, workshops and online training are provided by each website vendor to help users navigate their sites rapidly and effectively. If you do access these sites, it is worthwhile locating the learning activities they offer, as ‘you don’t know what you don’t know’!

Specific drug information resources that can be accessed via these repositories include:

- Australian Medicine’s Handbook
- Australian Injectable Drug’s Handbook
- Therapeutic Guidelines (eTG Complete)
- MIMS Online and Drug Alert
- Micromedex[®]
- American Hospital Formulary Service - AHFS[®] Drug Information- (STAT!Ref platform)
- Natural Standard (alternative and complementary medicine information)

Some of these can also be accessed directly without the need to go through a clinical repository, however subscription may be required.

Other Drug Information Internet Based Resources

Below are some reputable drug information resources. The image next to the title indicates if a mobile application iPhone application "app" is available:

UpToDate (www.uptodate.com)

UpToDate® is an evidence-based, physician-authored clinical decision support resource. Over 5,000 physician authors, editors and peer reviewers utilise a rigorous editorial process to synthesise the most recent medical information into trusted, evidence-based recommendations. UpToDate partners with Lexicomp to provide individual drug monographs and on drug interactions information. A subscription is required to access this site.



Lexi-Comp® Online (<http://www.lexi.com/>)

This integrated search platform has multiple databases including Lexi-COMPLETE, Lexi-Drugs and Lexi- Interact. It includes a number of helpful tools, including those for identifying drugs, reviewing drug interactions and assessing drug compatibility. Also available are patient education leaflets, a latest news section, and lists of drug recalls and shortages (although US drugs). Their AHFS Essentials app has been derived from the AHFS Drug Information.



Epocrates® Online (<https://online.epocrates.com>)

This free, web-based database contains current, concise summaries of drug prescribing and safety information for thousands of U.S. brand and generic drugs. Epocrates Online includes a drug to drug interaction checker, disease modules with evidence-based content from the BMJ Group and more. Applications for handheld devices are available free or via subscription depending on the level of app chosen.



Medscape (www.medscape.com)

This free internet resource provides health care professional-specific information. Information is categorised by medical specialty, including one for pharmacists. Medscape provides numerous items of evidence-based information, including free access to some journals and many useful review articles. Also provides online education courses.

Evidence based medicine and guidelines

- eviQ www.eviq.org.au
- National Comprehensive Cancer Network (NCCN) : www.nccn.org
- American Society of Clinical Oncology (ASCO) : www.asco.org
- BMJ Best Practice: www.bestpractice.bmj.com
- UpToDate: www.uptodate.com
- inPractice® Clinical Care Options - Oncology www.clinicaloptions.com
- Practice Update www.practiceupdate.com



Familiarity with online resources may expedite the information gathering and decision-making process. Additionally, the growth explosion recently of mobile phone applications over the last few years, suggest that their use within clinical practice is likely to increase in the future.

Keeping up to date with the latest medical information can sometimes seem like an impossible task with the increasing number of articles written and the varied means and ways to access these.

Other than accessing the sites, such as those listed above, subscribing to medical journal alerts, and where available downloading their apps are ways to keep you informed in a timely manner.



Editor's note: For those of you who like the 'bulky' hands on text to compliment online resources, as a nurse practitioner candidate I cannot recommend a better text than:

- *Pharmacology for Health Professionals* by B. Byrant & K. Knights. 3rd Edition. Elsevier Australia.

It is a very resourceful text, with detailed pharmacological concepts presented in a language that is easy to grasp and understand. Given it is written for the Australian and New Zealand audience, most hospital (and university) libraries do keep a copy.

Some excellent texts do exist online including:

- *Goodman and Gilman's The Pharmacological Basis of Therapeutics* edited by L. Brunton, B. Chabner, B. Knollman et al. 12th Edition. McGraw Hill Professional
- *Pharmacotherapy: A Pathophysiologic Approach* edited by DiPiro, Talbert, Yee et al. 8th Edition. McGraw Hill Education.

Both texts contain very detailed and comprehensive information on all aspects of drugs, and would be a good primary reference resource for all things pharmacology related. These texts are available online through most university websites and some hospital libraries. For anyone interested both are available in very large hardback form!

Julija Sipavicius

BMT CNC, (NP Candidate)
Royal Melbourne Hospital VIC.



Regional Round up!

HSANZ NG – regional groups are made up of nurses willing to contribute their time and energy to improve the care of those with a haematological condition within Australia and New Zealand. They do that by hosting educational meetings that not only give us all an opportunity to learn, but also to network with other like-minded nurses. These groups and meetings are only possible with the generous support of pharma but also, by the contributions, drive, and *engagement of us all*. If you have the time to contribute on a local committee, or offer some ideas for meeting topics, speakers, perhaps even present

your work yourself; then we would all love to hear from you. Please take the time to get involved with your local group in some way.

North Island, New Zealand

Catherine Wood

The lower North Island has had three education sessions so far this year with another three planned for the rest of the year. So far presentations in Wellington include an excellent update on Multiple Myeloma and a worthwhile session about patients' transition from intensive treatment back to "normal" life. Palmerston North has had a presentation about allogeneic stem cell transplant.

There continues to be an enthusiastic response to these meetings with an average of around 20 attendees coming along each evening. They are popular so you need to be in quick if you want to attend! The education evenings wouldn't be possible without sponsorship. So far this year we have had generous sponsorship from Janssen, Roche and the Wellington division of the Cancer Society of NZ. Sponsorship for the remaining meetings of the year is kindly coming from Gilead, Bayer HealthCare and Janssen. Tentative dates and topics for the remaining meetings for 2013 are as follows:

Date	Location	Topic
21 st August	Palmerston North	Haemophilia
30 th October	Wellington	Sexuality and fertility issues in haematology patients
27 th November	Palmerston North	AML

If anybody would like further information about any of these meetings or would like to attend then please feel free to get in touch with me. I can be emailed at Catherine.Wood@ccdhb.org.nz

South Island, New Zealand

Jane Worsfold

Jane Worsfold Nurse Manager from Christchurch hospital BMT Unit is the new representative for South Island NZ. She has been working on building collaborations with existing cancer and haematology groups and programs. They are able to utilise videoconference to broadcast to other centres. Recently they have hosted a successful transplant educational meeting for nurses, medical and allied health staff and a tele-conference with participants from Southland & the West coast of the South Island. Nurses in South Island NZ are encouraged to get in contact with Jane directly as she works towards raising the profile of haematology nursing in her region and hosting educational events. Jane can be emailed at: Jane.worsfold@cdhb.health.nz

Tasmania

Gillian Sheldon-Collins

Monthly work placed based journal club in collaboration with CNSA will run through 2013 and include haematology related papers. 4th September educational day planned with a range of speakers and subjects.

Victoria

Yvonne Panek-Hudson

The Victorian HSA NZ nurses group have held 2 successful meetings this year with more to come. We were thrilled to co-host our first Victorian collaborative meeting with CNSA. The presentation was “care of the aboriginal person with cancer”. The educational session was thought provoking and described issues faced by the patient and carers. In addition to our metropolitan education we hosted an evening for nurses from Geelong and surrounding districts that focussed on management of multiple myeloma. This included an overview of diagnostic and prognostic factors, novel therapies, application of transplants and management of symptoms. In August we are off to Traralgon to host an educational evening focussing on autologous and allogeneic transplants. Our next metropolitan evening is discussing “Blood Transfusion issues including Blood Matters”. We are fortunate to have Linley Bielby and Lisa Stevenson from the Red Cross to present. We will shortly be announcing HSA conference grant opportunities for junior and rural haematology nurses in Victoria. There will be an application process with criteria that will be circulated to our local members. Thanks to everyone for their ongoing commitment to the group. Please don't hesitate to contact me if you have any queries about your local group or national membership. Hope to see you on the GOLD COAST. For any information or queries regarding the Victorian group please don't hesitate to contact me on: yvonne.panek-hudson@petermac.org

Western Australia

April meeting hosted with a BMT focus. August meeting planned ahead with a Myeloma focus. Planned session in Geraldton with GPs and allied health.

South Australia/Northern Territory

Events planned in Darwin (rural paediatric 1 day event with an AYA focus) and Adelaide (apheresis and transfusion in collaboration with HOCA). In partnership with the Adelaide blood club a weekend event is planned and will be in collaboration with nurses.

New South Wales/ ACT

Tracy King

NSW has held 3 successful meetings so far this year with the new format of more work less dinner – working well! It's been wonderful to have a different haematology unit showcase their service each meeting with improved networking occurring as a result. Meetings ahead include a collaborative event with CNSA in Sydney on 7th November where Prof Kate White is our main speaker and we hope to have 2 advanced practice nurse present topical cases. We are hosting a haematology study day for those nurse's new to the speciality (<2yrs experience) in collaboration with RPA on 27th September. November 21st and 22nd we are hosting a series of events in collaboration with Orange Base Oncology Unit – more on that in the next newsletter. We are delighted to say that we have been in a position to offer 5 separate grants to support nurses attending HAA this year. 3 kindly supported by Bayer and offered to junior (<2yrs in Haematology) nurses and 2 kindly supported by Amgen open to associate nurse members. Grants were awarded on merit based on an application process. We look forward to hearing more from the grant winners in future editions of the newsletter.

Tracy.king@sswahs.nsw.gov.au

HSANZ NG Committee Contacts

President

Newsletter Editor & NSW / ACT representative

Tracy King

Myeloma CNC / Clinical Research Fellow
 Institute of Haematology
 Cancer Nursing Research Unit / Sydney Nursing School
 C/O 7 West 1, Royal Prince Alfred Hospital,
 Sydney NSW 2050
 T: 02 9515 7310
 E: tracy.king@sswahs.nsw.gov.au

Vice President

Jenelle Peppin

Clinical Haematology & BMT Research Nurse
 Royal Melbourne Hospital, Grattan St
 Parkville
 VIC 3050
 T: 03 9342 4646
 E: Jenelle.Peppin@mh.org.au

Secretary

Julija Sipavicius

BMT Coordinator
 Royal Melbourne Hospital, Grattan St
 Parkville
 VIC 3050
 T: 03 9342 7965
 E: Julija.Sipavicius@mh.org.au

Treasurer

SA / NT representative

Allan Hayward

Program Manager, Youth Cancer Service SA/NT
 C/O Cancer Centre
 Royal Adelaide Hospital
 T: 08 8222 2804
 E: allan.hayward@health.sa.gov.au

ANZSBT representative

Bev Qusted

Transfusion Nurse Educator
 Transfusion Medicine Service
 ARCBS Adelaide
 T: 08 84221372
 E: BQusted@arcbs.redcross.org.au

VIC representative

Yvonne Panek-Hudson

Allograft Nurse Practitioner
 Peter MacCallum Cancer Centre, Melbourne
 VIC 3002
 T: 03 9656 1111 and page by name
 E: Yvonne.Panek-Hudson@petermac.org

TAS representative

Gillian Sheldon-Collins

BMT Coordinator
 Royal Hobart Hospital, Tasmania
 T: 03 6222 8078
 E: Gillian.sheldoncollins@dhhs.tas.gov.au

QLD / HAA 2013 representative

Catherine Kirk

Transplant Coordinator
 Haematology and Oncology Clinics of Australia (HOCA)
 Level 1, Wesley Medical Centre
 40 Chasely Street, Auchenflower
 QLD 4066
 T: 07 3737 4648
 E: ckirk@hoca.com.au

WA / HAA 2014 representative

Cassi Lawrence

Cancer Nurse Coordinator Haematology
 WA Cancer and Palliative Care Network
 PO Box 8172
 Perth Business Centre WA 6849
 T: 0408 811 849
 E: cassi.lawrence@health.wa.gov.au

NZ North Island representative

Catherine Wood

Clinical Nurse Specialist - BMT
 Wellington Hospital
 T: +64 4 806 2091
 E: catherine.wood@ccdhb.org.nz

NZ South Island representative

Jane Worsfold

BMTU
 Christchurch Hospital
 Private Bag 4710
 CHRISTCHURCH 8140
 New Zealand
 E: Jane.Worsfold@cdhb.health.nz