

Welcome to our September 2016 newsletter, bringing you a snapshot of our recent and upcoming activities

Customer in Focus: University of Minnesota Masonic Children's Hospital, USA Iron Overload in Cancer Survivors

Iron overload has been identified as a complication in cancer survivors who have required multiple blood transfusions during their therapy. However, many cancer survivors at risk may not have access to optimum monitoring. Cancer survivors have a higher risk than the general population of developing conditions such as metabolic syndrome, diabetes, cardiovascular disease, or re-occurrence of cancer. Reducing iron toxicity, which may contribute to the onset of late effects in cancer survivors, is an important goal. Please [click here](#) for more information.

The FerriScan® clinical community is uniquely positioned to share best practice in this area and Resonance Health has been partnering with the team at the University of Minnesota Masonic Children's Hospital, USA to explore this further.



Clinical staff at the prestigious University of Minnesota Masonic Children's Hospital were among the early adopters of FerriScan in 2006 and have used the technology for the past 10 years for both studies and routine clinical practice. The group published a recent paper which highlighted the prevalence of iron in childhood (determined by FerriScan) in cancer survivors at their hospital. To read the paper please [click here...](#)

Dr Angela Smith, Assistant Professor, Division of Pediatric Blood and Marrow Transplantation at the University of Minnesota commented on the importance of monitoring and managing iron overload in cancer survivors:

"Cancer survivors with excess iron may be exposed to this iron for years ahead if untreated, so timely monitoring and reduction of iron burden is an important goal. In our recent data we found even at relatively low thresholds of serum ferritin, liver iron concentration can be elevated in these patients. Conversely, a high serum ferritin, which may be caused by inflammation or other factors, may not be reflective of high liver iron concentration."

FerriScan provides us with a standardized and reliable tool to screen cancer survivors and guide treatment where required. FerriScan is especially suitable for pediatrics as it is free-breathing and quick. It is also unaffected by the presence of fat in the liver, which can be an issue in cancer survivors as a result of their therapy. We recommend that all patients who have undergone hematopoietic stem cell transplantation (HSCT) or those who have received > 10 transfusions should be considered for assessment using FerriScan."

Resonance Health is partnering with its clinical network to encourage screening of cancer survivors at risk of iron overload using FerriScan. Clinicians are invited to take our 3 minute survey to help us learn more. As a thank you, eligible participants will receive a USD \$9.99 Amazon voucher and we will share the results of our poll in the next issue. To complete the survey please [click here...](#)

Conference Season is Here Again...

Our team has been busy gearing up for six upcoming conferences to facilitate knowledge sharing and face-to-face meetings with our valued stakeholders from across the clinical community. For more information on any of these events please [click here](#) or if you are attending any of these events and would like to meet the team please contact alisonl@resonancehealth.com.



44th Sickle Cell Convention - Sickle Cell Disease Association of America (SCDAA), Baltimore

27 September – 1 October 2016

As this newsletter goes to press, our US-based team have a booth at the SCDAA Convention, which combines an impressive combination of events to cover the complexity of sickle cell disease. [Read more...](#)

10th Anniversary Conference - Academy for Sickle Cell and Thalassaemia Conference (ASCAT), Guys and St Thomas, London

5 – 7 October 2016

This conference is established as a leading international event, targeted at experts and health care professionals in sickle cell disease and thalassaemia. Our UK-based team will have the opportunity to interact with leaders in the field and explain the role of FerriScan in improving health outcomes. [Read more...](#)

Blood Transfusion Forum and Education Event, London

14 October 2016

This important symposium brings together haematologists, transfusion practitioners, and laboratory managers, to share best practice in transfusion. Our UK-based team will be attending, as FerriScan is ideally suited to assist with monitoring and management of patients receiving multiple blood transfusions. [Read more...](#)

The Late Medical Effects of Cancer Treatments – Royal College of Physicians, London

11 November 2016

The focus of this conference is the medical late effects of cancer treatments in cancer survivors. Our UK-based team will be in attendance to discuss best practice and the role of FerriScan in this field. [Read more...](#)

American Association for the Study of Liver Diseases (AASLD) – The Liver Meeting, Boston

11 - 15 November 2016

The AASLD Liver Meeting has an expected attendance of 9500 hepatologists and hepatology health professionals from around the world. It will explore the advances in liver research, training, and patient care. Key members of our Research & Development Team will be present at the conference and will also be attending the associated Liver Forum to discuss latest research using HepaFat-Scan® and FerriScan. [Read more...](#)

American Society of Hematology (ASH) - 58th Annual Meeting & Exposition, San Diego

3 - 6 December 2016

The ASH Annual Meeting is the world's premier event in malignant and non-malignant haematology and will be attended by 20,000 haematology professionals. The meeting will provide an invaluable opportunity for our team to liaise with global experts in the field. [Read more...](#)

New FerriScan Video: A Clinician's Perspective

We are delighted to share a short interview with Dr Josu de la Fuente, a Consultant Paediatric Haematologist and Senior Lecturer at Imperial College London and Director of the Paediatric Blood and Marrow Transplant Programme. Dr de la Fuente is a key opinion leader and an expert in the fields of haematology and bone marrow transplantation. It is an honour to have the endorsement of such a respected clinician and to hear him explain the advantages of FerriScan from a clinician's perspective.



To view the video please [click here...](#)

Publication Snapshot

Resonance Health is happy to share with you some recent publications featuring our HepaFat-Scan and FerriScan technologies.

HepaFat-Scan Paper Published in International Peer-reviewed Journal

Resonance Health was delighted to see an important paper on HepaFat-Scan published in the international journal PloS One recently. The research paper presents evidence for the accuracy and repeatability of HepaFat-Scan for measuring the concentration of fat in the liver, also referred to as the Volumetric Liver Fat Fraction (VLFF). The clinical study on 59 patients with a variety of liver diseases introduced a highly specialised method, known as stereology, for measuring fat concentration in liver biopsy samples. HepaFat-Scan's accuracy was confirmed and it is the only technology to have been validated against a reference standard based on stereological analysis of liver biopsy samples.

To read the article [click here...](#)

Transfusional Iron Overload in Sickle Cell Disease

A new paper from the highly respected Dr Janet L Kwiatkowski and team at the Children's Hospital of Philadelphia shows new evidence of the impact of FerriScan on improving health outcomes for sickle cell patients receiving blood transfusions. The paper reports that the use of FerriScan impacted the management of transfusions in sickle cell patients resulting in a reduced body iron burden. There is an estimated 15,000 sickle cell disease patients receiving regular blood transfusion in the USA alone who could benefit from regular LIC measurements.

To read the abstract [click here...](#)

Large Multicenter US Clinical Trial Demonstrates the Role of FerriScan in Guiding Chelation

Resonance Health was proud to provide FerriScan measurements for the very high profile multicentre TWITCH study in the USA for sickle cell patients. The results of the study were published this year in the highly prestigious journal, The Lancet. FerriScan was used in the study to determine LIC in patients and to guide treatment decisions. The recently published paper suggests that hydroxycarbamide may be used in place of transfusion for some patients, but transfusion for a year is still recommended. Importantly the paper highlights that FerriScan LIC measurements can be used to determine the dose of deferasirox on newly chelated sickle cell disease patients.

To read the article [click here...](#)



R&D Update: Non-invasive Assessment of Bone Marrow Iron – Regulatory Submission

Resonance Health is excited to announce that we have commenced work on FDA (USA), CE-Mark (European), and TGA (Australian) regulatory submissions for our new non-invasive technology for assessing bone marrow iron using MRI. Regulatory approvals, anticipated possible by mid to late 2017, will enable us to offer the technology to the clinical community for routine clinical practice alongside FerriScan, Cardiac T2* and HepaFat-Scan.

Strong clinical interest in the Bone Marrow R2-MRI technology has been expressed by key opinion leaders in the field of bone marrow transplantation, who already use FerriScan to assess body iron stores prior to transplant.

Dr Josu de la Fuente, a Consultant Paediatric Haematologist and Senior Lecturer at Imperial College London and Director of the Paediatric Blood and Marrow Transplant Programme, commented:

“We are interested to determine if the amount of iron in the bone marrow may be an important marker of complications post bone marrow transplantation. A non-invasive standardised method for assessing bone marrow iron may provide important additional clinical information to assist in managing patients being considered for bone marrow transplant as severe complications such as graft versus host disease can, in some cases, become more severe and costly to manage than the original disease of the patient.”

For more information please [click here](#) and if you have interest in bone marrow iron assessment please email emmas@resonancehealth.com.

Team Member in Focus: Ryan Tan – Senior Technical Analyst

Ryan joined Resonance Health in 2009 and is amongst our long-standing team of experienced Senior Technical Analysts. Ryan is a key team member, being heavily involved in daily analysis and quality control processes. He also provides support on our Research & Development projects and played an important role in our initial Bone Marrow R2 analyses.



Originally from Singapore, Ryan completed his Mechanical Engineering degree before moving to Australia. Ryan commented on the 'Aussie charm' that prompted the move:

"I came to Australia in 2006 on solo tour, when the adventure bug hit, and found the people absolutely gorgeous and warm!" Australia has been Ryan's home ever since.

Ryan has always worked with cutting edge technologies and is proud of the difference his role at Resonance is making to people's lives:

"Resonance has great products and services that offer enormous value to patients who are suffering from various medical conditions. Non-invasive metrics of measurement are the future and Resonance Health both sets the gold standard and leads development in its field."

When not analysing digital medical images, and as part of his environmental and social interest, Ryan enjoys bee-keeping as a hobby.

Resonance Health's Hospital Specialist, Pat Corley, Receives SCDAAs Pioneer Award for Excellence!

Every year the Sickle Cell Disease Association of America (SCDAA) honours pioneers and champions who have made a significant impact in the Sickle Cell Disease community.



At this years, 44th Annual SCDA Convention, our team member Pat Corley (RN), is awarded the Pioneer Award for overwhelming dedication and commitment, and her contributions and work with individuals with sickle cell disease and the sickle cell community. The SCDA Pioneer Award will be officially presented at the Convention, during the Unity Soiree, the largest convention event with over 500 attendees present.

Pat openly shared her feelings about this honour:

"It's good to be respected, loved, and honoured on a local level but unbelievably amazing to know you have made a difference on a national level. I am always reminded - to those who much is given, much is expected."

We are proud to congratulate Pat on this outstanding recognition of her work.

Coming Next Issue...

- New & Recent Studies Update
- Poll Results: Cancer Survivors & Iron Overload
- Conference Round-up