

Welcome to our first newsletter for 2016. Feedback or enquires are always welcome at info@resonancehealth.com

Patient Focus: Supporting Sickle Cell Care Worldwide

Sickle Cell Disease (SCD) is an inherited blood disorder common in southern Europe, the Middle East and India, with a high prevalence in the African American population. Approximately 100,000 Americans are currently living with SCD.

Blood transfusions are a regular treatment for many patients in an attempt to reduce the impact of the disease. Unfortunately, a side effect of regular transfusion can be iron overload. Recent US Guidelines recommend quantitative measurement of Liver Iron Concentration (LIC) by Magnetic Resonance Imaging (MRI) as part of iron management in regularly transfused SCD patients. Choosing the most accurate measurement tool for this is vital — FerriScan, the globally recognised gold standard in LIC measurement is ideally placed for this.

There is a high prevalence of SCD in the southern states of the US and FerriScan has been established at many of the leading hospitals in the care of SCD in that region. One such hospital is Children's Healthcare of Atlanta (CHOA) in Georgia, ranked one of the best paediatric hospitals in the US. When FerriScan was introduced at CHOA in 2010 there were initially seven referring clinicians, increasing to more than 40 by 2015.

Dr Jeanne Boudreaux introduced the FerriScan service at CHOA when she first arrived there from Children's Hospital of Boston. Dr Boudreaux is a Pediatrician, Pediatric Specialist, Oncology Specialist, and Hematology Specialist treating thalassemia and SCD patients. She developed a case study using FerriScan as the gold standard for LIC measurement; clearly demonstrating that serum ferritin was a poor indicator of iron loading in thalassemia intermedia.

Please click here to read the case study...

Dr Jeanne Boudreaux said:

"The availability of noninvasive iron measurement is a game changer for the management of patients on chronic transfusion regimens. FerriScan provides more accurate data to aid providers in the decision about chelator drug choices and doses."

Alongside clinicians, patient societies play a vital role in educating their members and advocating access to the best diagnostics and treatment. Resonance Health looks forward to furthering our collaborations with clinicians and patient groups in the US as well as globally to showcase best practice in SCD Care.

Click here to find out more on the latest Standards of Care guidelines and how FerriScan is being used to improve outcomes in Sickle Cell Disease (please refer to the "FerriScan: Patient Management Guidelines" section)...



L to R: Resonance Health's Marketing Director - Melanie Baxter, Kye Gbangbola - Chair of the Sickle Cell Society: www.sicklecellsociety.org, and Dr Leena Karnik - Consultant Haematologist and lead for Paediatric Oncology shared care, Imperial College Healthcare, discussing patient care

Resonance Health News March 2016

Publication Spotlight

Resonance Health is proud to provide you with a quick snapshot of some relevant articles that have been recently published. Please click here for further articles...



Real-life Experience using FerriScan

The Italian Liver Iron Concentration Network (LICNET) group has published further data on their experience using FerriScan in the European Journal of Haematology, 2016.

The Italian network of haematologists and radiologists gathered data which underscore the importance of measuring LIC in children as young as two years; finding some children were already heavily iron loaded. FerriScan is especially suited to measuring iron accurately in young children as it does not require breath holds; an advantage over many alternative techniques. The authors comment that FerriScan is robust against inflammation and fibrosis and that it is approved by the FDA.

To view the abstract of the publication please click here...

Iron Overload in Childhood Cancer Survivors – a New Role for FerriScan?

A recent paper by researchers at the prestigious University of Minnesota in the *Journal of Paediatric Hematology Oncology*, 2016 featured the use of FerriScan in childhood survivors of cancer who had received multiple blood transfusions. Using FerriScan in patients with high serum ferritin (>1000ng/ml), the authors showed that all subjects had significantly elevated liver iron that ranged from 2.6 to 39.3 mg/g dry weight tissue. Owing to its role as an acute phase reactant, the authors go on to warn against relying on ferritin as a marker of total body iron. The results indicate that careful and accurate monitoring of iron overload could be an important factor in the ongoing management of these patients. FerriScan is the ideal tool to use for this accurate monitoring of body iron stores.

Resonance Health is keen to hear from interested clinicians wanting to explore how FerriScan could improve patient outcomes in this setting. Please contact juliew@resonancehealth.com to express your interest.

To view the abstract of the publication please click here...

New Hospital Specialist for the US – Pat Corley



Resonance Health is delighted to welcome former specialist nurse, Pat Corley to our US team. Pat has worked extensively in the Sickle Cell Disease setting, both as a Research Coordinator and Nurse Coordinator for over 30 years. Pat received the Elliot Vichinsky Award for Excellence in Sickle Cell Disease in 2010.

With significant teaching experience and direct involvement in National Institute of Health workshops, Pat is ideally positioned to provide FerriScan education across both clinical and patient communities. Pat will focus on increasing access to FerriScan at existing hospitals and growing our networks in the US to optimise accuracy in monitoring.



Resonance Health News March 2016

Meet the Experts – Conference Season Starts!

Resonance Health is attending and presenting at numerous conferences and events in the next quarter so please come and meet us if you are attending!

13-17 April: European Association for the Study of the Liver Annual Meeting (EASL) – Barcelona



Resonance Health's Chief Scientific Officer, Prof. St Pierre and Clinical Research Manager, Dr Sherif Boulos are attending the EASL conference in

Barcelona to meet with clients and potential collaborators for the HepaFat-Scan and FerriScan technologies. They are also contributing to the 4th Liver Forum held immediately before this meeting.

Please email sherifb@resonancehealth.com to arrange a meeting at either event.

Click here for further details...

15-18 April: 10th SCD Research and Educational Forum - Florida

Visit our stand to meet our newest US team member, Pat Corley and join Sheila Murphy, our US Consultant, to hear the latest updates on the role of FerriScan for iron monitoring in Sickle Cell Disease. Email sheilam@resonancehealth.com to arrange a meeting.

Click here for further details...

18-21 April: International Society of Haematology (ISH) World Congress - Glasgow

The ISH congress is hosted by the British Society of Haematology. Chief Scientific Officer Prof. Tim St Pierre and our Global Marketing Manager, Melanie Baxter will be attending this event to profile our FerriScan and HepaFat-Scan technologies.

Also, don't miss the speaking session on "Hyperferritinema Management" by Prof. John Porter from the University College of London, which will highlight the role of using MRI for iron and fat measurement in unexplained Hyperferritinemia cases to assist in clinical management. Email melanieb@resonancehealth.com to arrange a meeting.

Click here for further details...

21–23 April: 5th Symposium on Sickle Cell – Berlin – 'HÄMATOLOGIE HEUTE'

Attended by over 150 participants from Germany, Austria, Switzerland and Italy, Prof. Tim St Pierre will be a keynote speaker on iron monitoring using MRI on 21st April 17.45-18.30. Please email Tilo Stolzke, from our German office for more information or to arrange a meeting on tilos@resonancehealth.com.

Click here for further details...

23 April: Genetic Haemochromatosis, Patient UK National Conference - Manchester

Resonance Health will be represented by our Clinical Research Manager, Dr Sherif Boulos, who will be a keynote speaker on the role of FerriScan in Haemochromatosis. Resonance Health will also have a stand at the conference. Please email melanieb@resonancehealth.com to arrange a meeting.

Click here for further details...

29-30 April: International Workshop on NASH Biomarkers Workshop – Washington DC

The First International two-day Workshop on NASH Biomarkers is an exciting abstract-driven workshop, endorsed by the International Association for the Study of the Liver (IASL). Clinical Research Manager, Dr Sherif Boulos has been awarded a Poster Presentation; "Stereological analysis of Liver Biopsy histology sections as a reference standard for validating fat fraction measurements by MRI". Dr Boulos is available to meet with any attendees at this meeting to provide further information on our HepaFat-Scan services — please email sherifb@resonancehealth.com.

Click here for further details...



A full list of conferences and events can be found on our website by clicking here. Please email <u>juliew@resonancehealth.com</u> to find out more.

Resonance Health News March 2016

R&D Round-up

Resonance Health is commencing with further exciting new studies:

Cincinnati Children's Hospital Bariatric Study

This study, involving the monitoring of liver health and fat before and after bariatric surgery in 70 patients, is due to commence shortly. This four-year longitudinal study will use HepaFat-Scan to measure changes in liver fat following surgery.

Malaysian Diabetes Study

Diabetes is known to contribute to the progression of non-alcoholic fatty liver disease (NAFLD) from simple steatosis to the more serious condition, non-alcoholic steatohepatitis (NASH). In recognising the importance of diabetes in NAFLD, Resonance Health has teamed up with researchers from the University Malaya Medical Center to investigate the prevalence of fatty liver disease and its correlation with insulin resistance. Having just gained institutional approval, this study, using HepaFat-Scan, is expected to commence in April and take 12 months to recruit 100 NAFLD patients with and without diabetes.

Sherif Boulos, Clinical & Research Manager commented:

"We are excited about the diverse and valuable studies within our comprehensive R&D program. We seek to continually reinvest and develop our suite of offerings within the field of MRI diagnostics and are proud to be partnering with some very prestigious institutions in targeting new areas to answer key clinical questions."



Team Member in Focus: Dr Sherif Boulos, Clinical Research Manager



Sherif is tasked with identifying and coordinating clinical studies in which Resonance Health's products can add value. With a focus on HepaFat-Scan and our developing liver fibrosis technology, his work has already led to a number of new and important studies in the NAFLD / NASH and diabetes fields.

Prior to joining Resonance Health, he established a research laboratory investigating brain diseases while teaching undergraduates and supervising post-graduate students. Well before this time, in a career spanning both the academic and commercial worlds, he worked as a sales engineer, product specialist, and technical sales representative with a number of medical and laboratory supply companies.

Married with two teenage children, he enjoys Perth's abundant coastal lifestyle while occasionally finding time to play guitar.

Coming Next Issue...

- London Marathon Update
- Conference round up report
- Latest developments in R&D