Welcome to the June 2021 newsletter, bringing you an update on recent and upcoming activities.

Burjeel Medical City opens Thalassemia Center to help children with Thalassemia

VPS Healthcare's premium medical facility, Burjeel Medical City at Mohammed Bin Zayed City, Abu Dhabi, has opened a Thalassemia Center to offer exclusive treatment for children diagnosed with the illness.

The opening of a center offering exclusive and comprehensive treatment for thalassemia is a blessing for hundreds of patients in the UAE, who are presently dependent on fewer facilities that provide the treatment.

A genetically inherited blood disorder, thalassemia is a condition where the body produces hemoglobin in abnormal quantity. Hemoglobin is a protein in red blood cells that carries oxygen. Any abnormality in hemoglobin production affects the red blood cells and causes anemia.

There are two types of thalassemia – major and minor. A person diagnosed with Thalassemia major requires regular treatment. While those suffering from thalassemia minor do not require treatment, they can transmit the disease to the next generation.

According to available data, there are around 800 patients who require regular treatment for the condition in the UAE. However, as per the UAE Health Ministry data, 8.5 percent of the UAE's population are diagnosed with thalassemia minor condition.

Though efforts to reduce the prevalence of thalassemia major in the country have been successful, the carrier population remains high. The ignorance of the risks of the disease and how it transmits is also a challenge.

The thalassemia center at Burjeel Medical City will create awareness and offer comprehensive medical care to the patients. Speaking on the relevance of the thalassemia center at the hospital, Dr. Zainul Aabideen, Consultant Paediatrician, said: "Thalassemia major causes chronic, lifelong anemia diagnosed in early childhood and must be treated with frequent blood transfusions. The treatment should be administered by an extensively experienced team as there are chances for significant complications, including iron overload, and cardiovascular illness, liver disease, growth, and development. In some cases, it may lead to early death in children as if not treated optimally."

"The major cause of death in children with thalassemia major is due to iron overload. At Burjeel Medical City, we have a special scan called FerriScan, the most advanced scan approved by FDA and gold standard recommended by Thalassemia International Federation for iron-level assessment. We are arguably the only facility in the UAE to have this technology. This technology will help us to choose the correct dose of oral chelation for children with thalassemia major," added Dr.Zainul Aabideen.

The Thalassemia department at Burjeel Medical City comprises specialized doctors, a team of highly qualified nurses, and a psychologist. The center has an advanced laboratory with facilities for extended blood grouping and to conduct studies to explain the molecular basis of genetic blood diseases. The department will also be organizing educational programs regularly to create awareness about the disease to reduce the prevalence of the disease in the UAE.

The full article can be read at the VPS Healthcare website by visiting the following URL: https://www.vpshealth.com/news-details/burjeel-medical-city-opens-thalassemia-center-to-help-children-with-thalassemia.

HepaFat-AI
for automated measurement of liver fat

HepaFat-AI gains regulatory clearance from the US FDA, CE marking, and TGA approval.

Resonance Health is delighted to announce that HepaFat-AI is now available for routine clinical and clinical trial use after obtaining United States Food & Drug Administration (FDA) clearance, European CE marking, and Australian Therapeutic Goods Administration (TGA) approval within the last six months.

HepaFat-AI delivers multiparametric reporting in rapid time in one easy to read and comprehensive report. Patient time in scanner is minimal and contrast agents are not required, improving the patient experience.

The multi-metric output provided by HepaFat-AI enables clinicians to rapidly confirm if their patient has fatty liver. The treating physician can use this information to monitor patients undergoing weight loss management; to screen the livers of live donors for transplant suitability; monitor patients with suspected or diagnosed non-alcoholic fatty liver disease (NAFLD) or the more serious subtype, non-alcoholic steatohepatitis (NASH); drug induced fatty liver; and pancreatic insufficiency.

With HepaFat-AI, radiology throughput and reporting are improved due to decreased reporting times and production of multiparametric reports, allowing radiology to deliver high value, rapid reporting to clinicians.

HepaFat-AI can be deployed either in the cloud or on premises and can be integrated directly into radiology workflows.

HepaFat-AI reports the following:

NASH-CRN Steatosis Grading

- Provides a validated NASH-CRN histopathological steatosis grading. This steatosis grading has traditionally been undertaken by histopathologists and is now fully automated by HepaFat-AI without the need for biopsy.

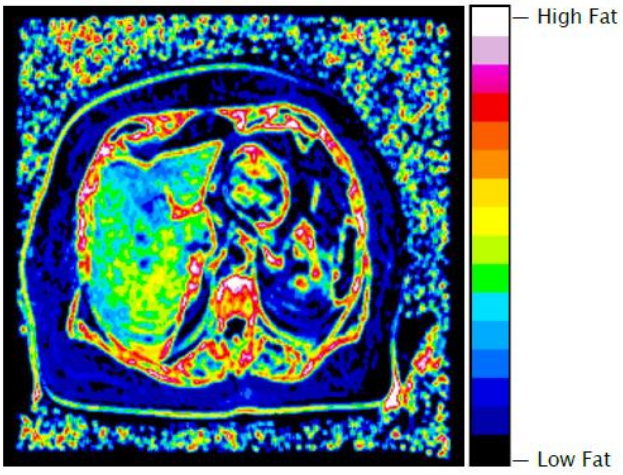
Proton Density Fat Fraction (PDFF)

- Provides the commonly reported liver MR fat metric from imaging and spectroscopy. PDFF has been widely shown to correlate with the degree of hepatic steatosis, with a cut-off of 5% being indicative of NALFD.

Volumetric Liver Fat Fraction (VLFF)

- Provides an MR liver fat metric that correlates with hepatocyte macro-vesicular fat volume; Enhanced signal to noise acquisition for improved performance.

Liver Fat Distribution Map (for illustrative purposes)



Anomaly Reporting

- In the event that high liver fat or high liver iron content is detected, or lung crest is present due to incorrect slice position, anomaly reports are generated.

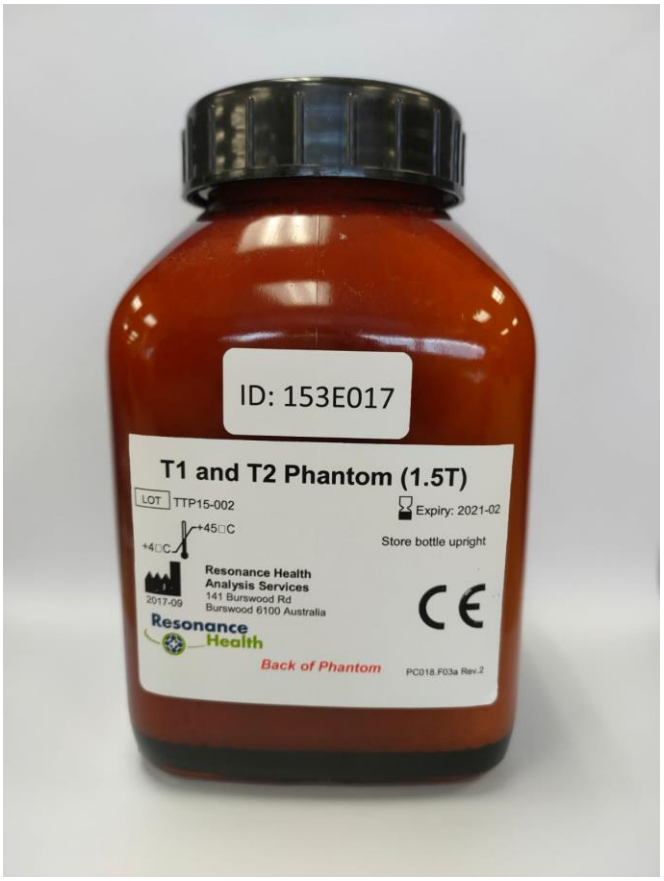
T1MES and a New Production of T1/T2 Cardiac Phantoms– Register your interest today

What is T1MES?

The T1 Mapping and ECV Standardization Program (T1MES) was developed to explore T1 mapping quality assurance (QA) on 1.5 and 3T magnets across numerous cardiovascular magnetic resonance (CMR) centres worldwide. This program started with the development and regulatory approval of the T1MES phantom.

The T1MES phantom was originally designed by a team of experts including cardiologists, physicists, engineers and national metrology institutes, led by Prof James C Moon (University College London) and Dr Peter Gatehouse (Imperial College London).

Resonance Health is the manufacturer of the T1MES phantom, and as part of this initial study, manufactured approximately 70 phantoms in 2015 for distribution to CMR centres worldwide engaged in the T1 Mapping and ECV Standardisation (T1MES) and cardiovascular magnetic resonance programme.



Why use a T1MES phantom?

The three key advantages of using a T1MES phantom include:

- Provide quality assurance to centres that T1 values are unchanged for any technical reason over long periods of application;
- Enable correction to be applied in case a sudden shift in technique is exposed by regular phantom scanning;
- Permit systematic inter-sequence and inter-manufacturer analyses, aiming ultimately towards corrections to a 'standard'.

Resonance Health is now preparing for production of the next batch of the T1MES Cardiac T1 Mapping and ECV phantoms. If you are interested in purchasing a T1MES phantom, please register your interest now.

To place an order or to register your interest, please contact Resonance Health directly at support@resonance health.com. One of the Resonance Health team members will contact you directly with further details.

For additional information on the T1MES program and the efforts involved to deliver T1 mapping to global clinical care, please read the full abstract published directly at the following website link: https://www.ncbi.nlm.nih.gov/pubmed/27660042.