

Pharma Imaging Network for Therapeutics and Diagnostics (PINTAD)

MEETING SUMMARY

MEETING SUBJECT:	PINTAD 2014 Telecon
DATE / TIME:	30MAY14 / 11:00 AM EST
PREPARED BY:	Barbara Chandler, Annette Schmid
LOCATION:	Teleconference

DISCUSSION POINTS:

1	<p>From our QIBA efforts series:</p> <p>Dr. Anthony Samir (MGH): QIBA US activities</p> <p>Clinical Director of MGH/MIT Center for Ultrasound Research & Translation</p> <ol style="list-style-type: none">1) Information about QIBA and its aims2) Ultrasound biomarker – focus on sheer wave speed velocity (SWS) in liver tissue3) Activities to bring the biomarker into format <p>The premise is to reduce variability in radiology to extract objective, quantitative data from scans. Quantitation reduces variability. A more quantitative approach can be used in clinical trials.</p> <p>The QIBA mission is to improve value and practicality of quantitative biomarkers by reducing variability across devices, patients and time. Ultrasound is the ideal modality but it suffers from variability.</p> <p>The QIBA effort started in 2007. Ultrasound was selected as a biomarker.</p> <p>Dr. Samir discussed tissue SWS and elastography (measuring the mechanical characteristics of tissue, eg, stress/strain) as it relates to chronic liver disease. Diseased tissue is different in physical properties than healthy tissue. Progressive cirrhosis correlates to liver stiffness.</p> <p>Steps in estimation of elastic modulus in SW sonoelastography:</p> <ul style="list-style-type: none">• The harder the tissue the faster the sheer wave propagates• Track sheer wave speed• Advanced technique combining real time imaging with true quantitation <p>QIBA US activities:</p> <ul style="list-style-type: none">• Technical and clinical subcommittees looking at sources of variability originating within the equipment chain• Focus on variability within clinical data acquisition and interpretation• Phantom construction• Simulations• Clinical guidelines• UPICT protocol (image acquisition)• QIDW (quantitative imaging data warehouse) <p>Questions:</p> <ul style="list-style-type: none">• How commonly is SWS technique used?<ul style="list-style-type: none">○ Dr. Samir's opinion stated with confidence is that US elastography will be widely used. Liver disease is common and found everywhere.
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	<ul style="list-style-type: none">○ Cost is low.○ Pathology is thought to be the gold standard but is very variable.○ Liver fibrosis is a heterogeneous disease but can affect different parts of the liver differently. From imaging you can obtain multiple measurements in the liver (~10 measurements in 5 minutes) versus the sampling problems from biopsy.▪ Is elastography reimbursable?<ul style="list-style-type: none">○ It will require new, additional equipment, comparable to a general radiology system.○ The transducer is the same.
2	<p>The following point on the agenda was not discussed on 30MAY14 due to lack of time but will be discussed at the next meeting:</p> <p>Reader Variability/ Secondary Reads- a thing of the past?</p> <p>Future QIBA presentations at PINTAD may include PET and volumetrics.</p>
3	<p>Next meeting Friday, 27JUN14 11:00 am ET</p>