

PHILIPS

Computed Tomography

Spectral CT 7500



Lead with spectral speed

Never underestimate the life-changing power of a fast, confident diagnosis

The Philips Spectral CT 7500 provides advanced diagnostic capabilities through a single spectral scan, enabling accurate diagnoses and expediting treatment times.

One-stop solution

Expand patient care with a one-stop solution across radiology, cardiology, oncology, neurology and ED/trauma.

Simplify the care journey

Healthcare is becoming more complicated. Simplify the patient care journey with Spectral CT 7500. Leading with spectral speed helps provide meaningful value to you and your patients by reducing uncertainty and saving scans, time and costs.



Fast, confident diagnosis

Assessment of coronaries and myocardium in one exam in under **<15 min**¹

Up to **96%** certainty of cyst vs. lesion compared to 30% with conventional CT²

Up to **97%** diagnostic sensitivity compared to 55% with conventional CT³

Easy workflow

Always on spectral with no special protocols or separate reconstruction

2 seconds needed to complete a full spectral chest-abdomen-pelvis scan

Always available in **PACS** with Spectral Magic Glass

Meaningful value

50% or more reduction in IV contrast dose while maintaining or even improving image quality⁴

26% reduction in follow-up scans due to incomplete diagnosis⁵

\$135K annual savings by avoiding the need for unreimbursed confirmation scans⁵



Fast insights that can change the care pathway

Detector-based spectral allows the coronaries and myocardium to be assessed in a single exam. Spectral CCTA results can mean that patients may avoid an invasive and expensive procedure in the cath lab. Perform comprehensive cardiac evaluations quickly, including perfusion and delayed enhancement studies, all without increased radiation dose.

Improve assessment of in-stent stenosis



Enhances characterization of complex plaque and improves myocardial tissue evaluation helping to reduce cath lab interventions.¹

Expanded cardiac capabilities

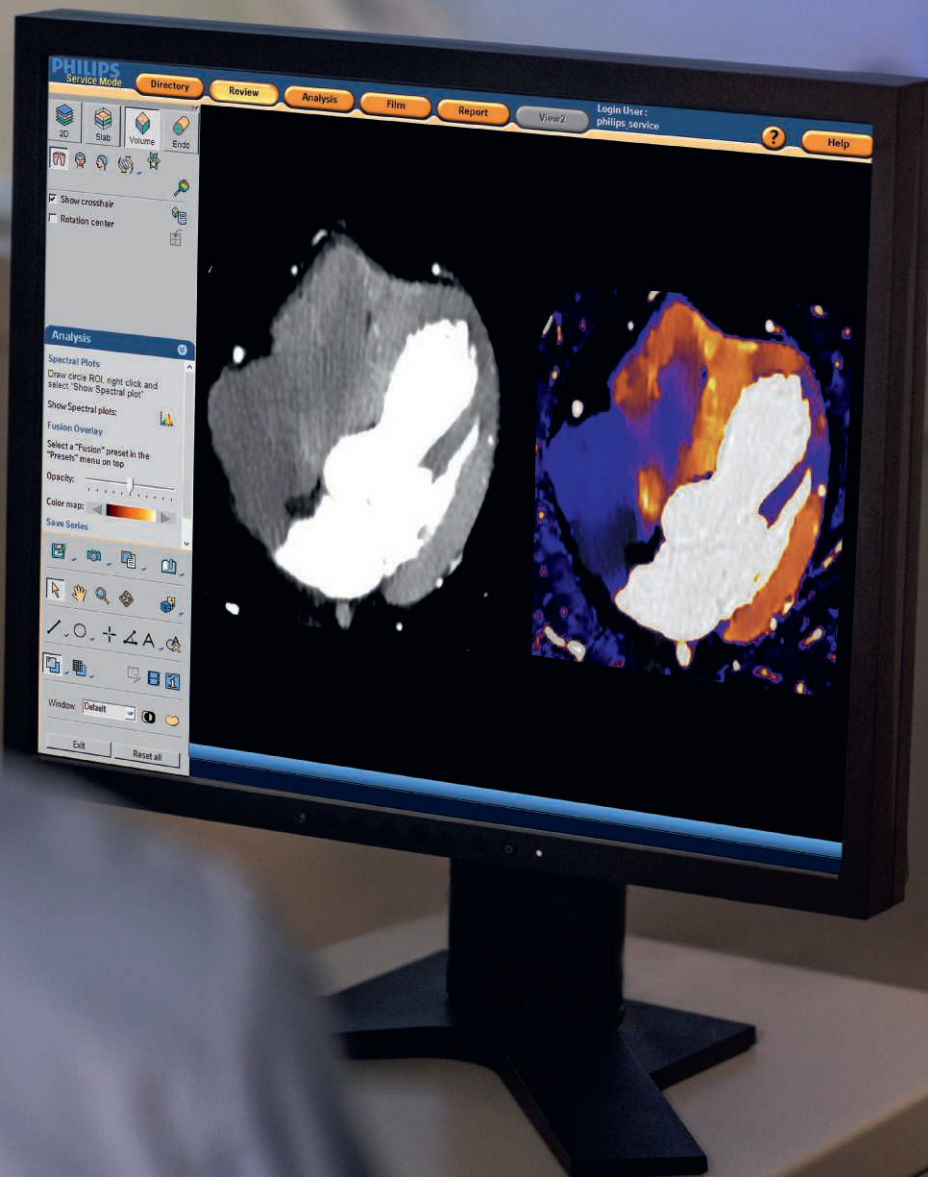
- Enhance visualization of stents, highly calcified vessels and the coronaries to assess coronary artery disease
- Aid characterization of complex plaque and improve myocardial tissue evaluation, traditionally done with MRI
- Manage wait lists for cardiac patients who would otherwise have been scanned by MRI
- Help stratify risk of severe disease in cardiac patients
- Reduce unnecessary cath lab interventions
- With Precise Cardiac, the artifact reduction resulted in an 11x gain in effective temporal resolution for Spectral CT 7500, which would result in an effective temporal resolution of 12.3 ms

"It's a game-changer and a one-stop solution for cardiology patients. You have all the right information available allowing you to provide fast confident diagnosis. You don't have to wait for cardiac MR. You are maybe saving the patient several weeks for the final decision. That's really important and convenient for the patients."



Dr. Eliseo Vañó Galván

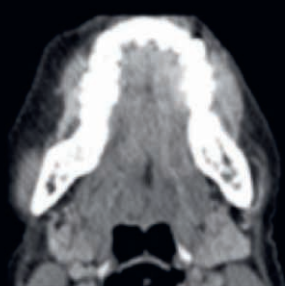
Medical Director of MR and CT Services at the Hospital Nuestra Señora del Rosario
Madrid, Spain



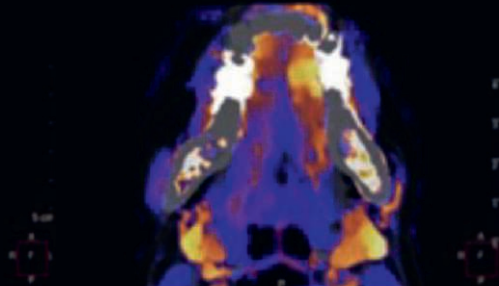
Diagnostic confidence with meaningful value

Detector-based spectral results can save the costs of repeat scans and contrast media, and potentially avoid scans from other modalities.

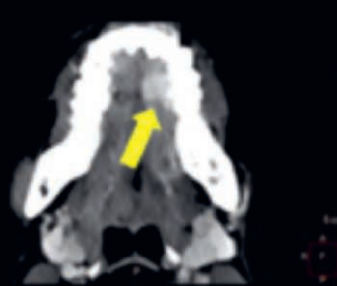
Support enhanced lesion detectability and tumor assessment in oncology



Conventional CT



Spectral VNC/Iodine density

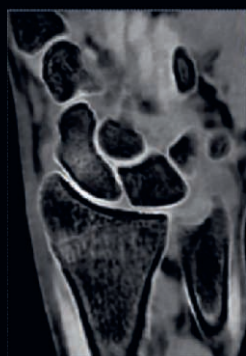


Spectral MonoE 40 keV

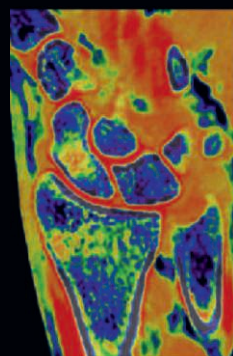
Earlier detection of bone edema, potentially decreasing the need for other imaging modalities



Conventional



Calcium suppression



VNC/Calcium suppression



Photorealistic volume rendering

Fast neuro assessments to speed time to treatment

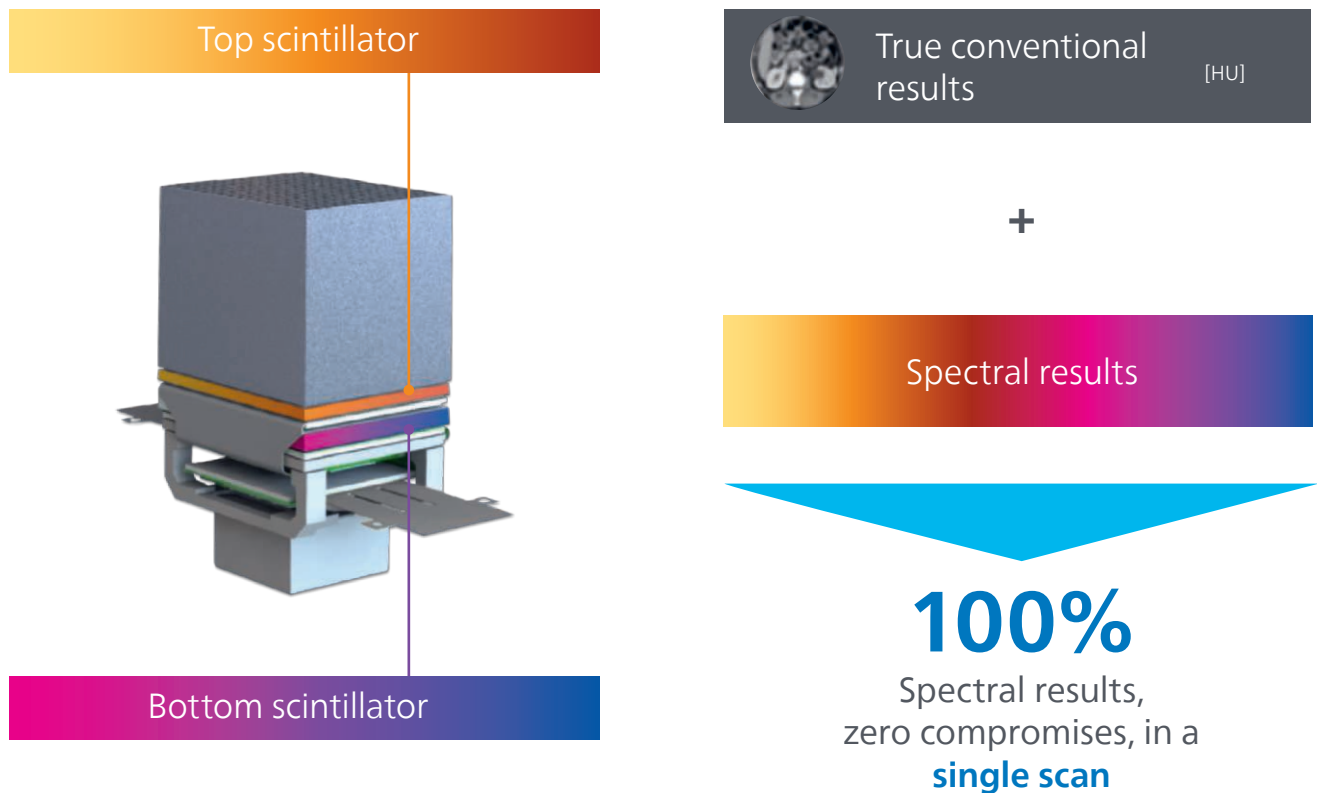
Fast neuro assessments, including grey and white matter differentiation and bleeding vs CA to shorten time to treatment. Fast time to conclusive diagnosis and start of treatment.

Treatment with minimal delay for ED/trauma patients

This one-stop solution for ED/trauma helps minimize delays in treatment, such as the ability to quickly assess PE, salvage sub-optimal studies and improve contrast resolution with low MonoE spectral results.²

The advantages of detector-based spectral

Have layers of rich spectral results – on demand, with no special protocols. Always on spectral delivers true conventional and spectral insights for every patient and every scan with easy workflow.



**One scan for both spectral
and conventional results**



No change in workflow
No special protocols

Seamless workflow for high image quality, low dose and spectral results

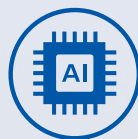
Scan in seconds as you normally would for conventional CT with immediate access to spectral CT results that can help eliminate the need for multiple CT scans or even additional scans from other modalities.

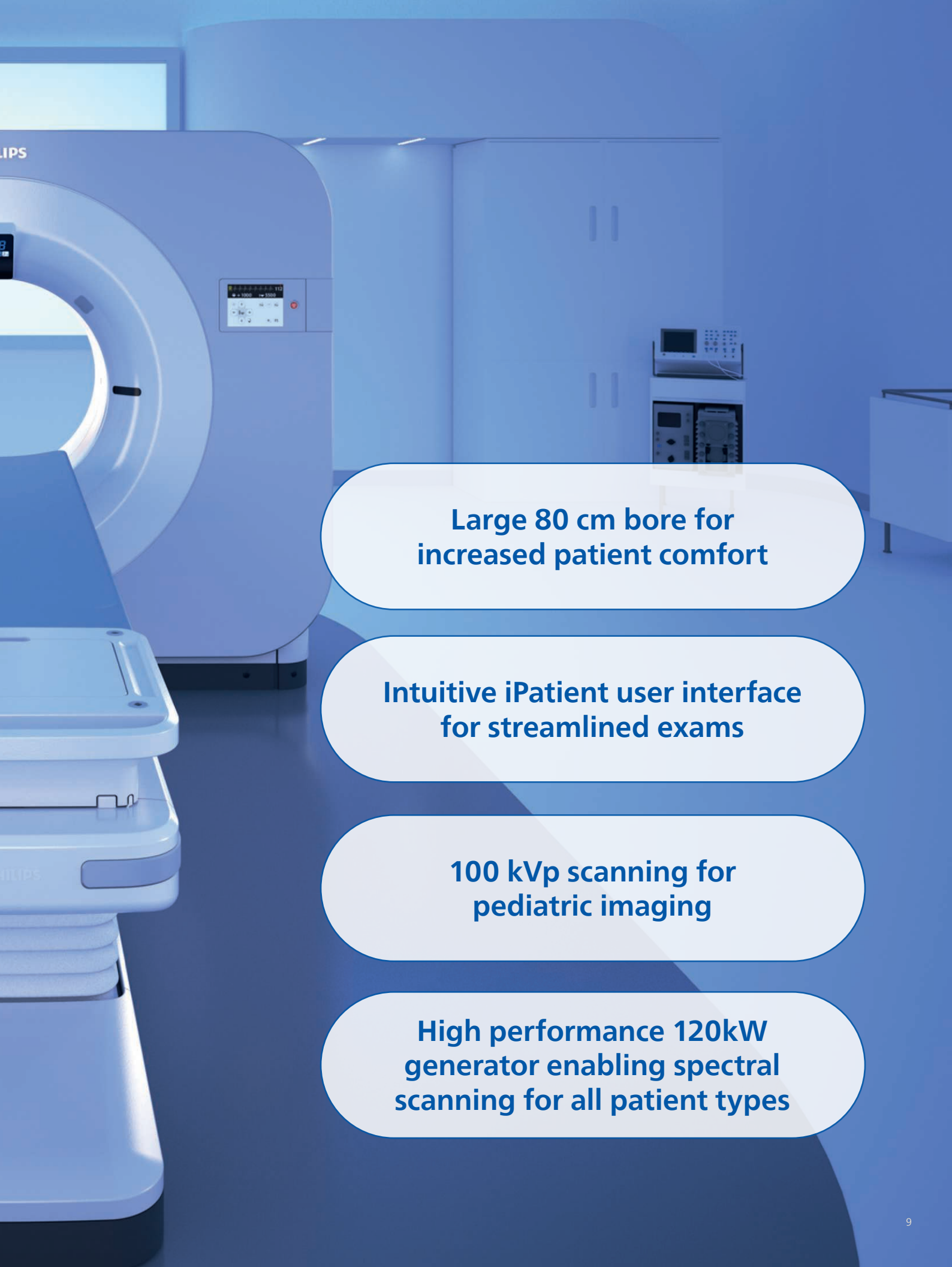
**Fast 0.27s rotation time
for fast scanning**

**High performance table
supporting up to 60cm/s speed
and up to 307kg patient weight**

**Detector-based spectral
technology is always on**

**Smart algorithms
and analytics**





**Large 80 cm bore for
increased patient comfort**

**Intuitive iPatient user interface
for streamlined exams**

**100 kVp scanning for
pediatric imaging**

**High performance 120kW
generator enabling spectral
scanning for all patient types**



PHILIPS

Proven by clinical collaborators around the world

675+ spectral systems shipped IQon Spectral CT & Spectral CT 7500

24M+ spectral exams completed to date

750+ published peer-reviewed clinical papers from collaborators





1. Comprehensive cardiac evaluations in under 15 minutes including coronary assessment, perfusion, and delayed enhancement studies, all without increased radiation dose. Customer story: A one-stop solution for cardiac patients using detector-based spectral CT. 4522 991 87231 * Sept 2024
2. Andersen MB, Ebbesen D, Thygesen J, Kruis M, Rasmussen F. Impact of spectral body imaging in patients suspected for occult cancer: a prospective study of 503 patients. Eur Radiol. 2020 Oct;30(10):5539-5550. doi: 10.1007/s00330-020-06878-7
3. Mellander, et al. (Skåne University Hospital, Lund, Sweden), Acta Radiology (2022) DOI: 10.1177/02841851221130612
4. Huang et al, 2020, Quant Imaging Med Surg, The optimal monoenergetic spectral image level of coronary computed tomography (CT) angiography on a dual-layer spectral detector CT with half-dose contrast media; Ren et al, 2021, Quant Imaging Med Surg, Feasibility of low-dose contrast media in run-off CT angiography on dual-layer spectral detector CT; Nagayama et al, 2018, European Radiology, Dual-Layer DECT for multiphasic hepatic CT with 50 percent iodine load: a matched-pair comparison with a 120 kVp protocol; Tsang et al, 2017, Quantifying potential reduction in contrast dose with Monoenergetic images synthesized from dual layer detector spectral CT; Van Hamersvelt, et al, Int'l Journal of CV Imaging, 2018 University Medical Center Utrecht. Contrast agent concentration optimization in CTA using low tube voltage and dual-energy CT in multiple vendors: a phantom study
5. Follow-up Recommendation Rates Associated With Spectral Detector Dual-Energy CT of the Abdomen and Pelvis: A Retrospective Comparison to Single-Energy CT. Atwi, Noah E. et al. J Am Coll Radiol. 2020;17:940-950