[438] VOXELLENCE: AI-POWERED RADIOLOGY

Arnaldo Mayer, VP R&D, Voxellence

- **Investment Rational**
  Voxellence develops AI-based medical image enhancement technology for a dramatic reduction of radiation exposure (90%) and imaging acquisition time reduction (50%). Voxellence technology will enable more people to access life-saving imaging by reducing radiation-related risk, imaging cost and waiting time for an appointment. Imaging service providers that will adopt the technology will enjoy higher profitability (increased productivity) and increased offer (ultra-low dose scans).

- **Business Strategy**
  Voxellence image enhancement can be commercialized in a software-as-a-service mode with payment per-processed scan or via a license agreement. In both cases, implementation can be through a zero-footprint, cloud-based operation or local server, depending on the customer preferences and volumes.

- **Core Technology**
  Voxellence image enhancement is based on proprietary deep neural networks technology that performs powerful image enhancing while preserving local, fine details that are important for diagnostic. In contrast to existing enhancement technologies such as iterative reconstruction (for CT) or compressed sensing (for MRI) which affect the genuine appearance of the images, those enhanced by Voxellence algorithms remain very similar to normal dose images or standard duration acquisition, thus more trustable by the radiologist.

- **Product Profile/Pipeline**
  Voxellence image enhancement is 100% vendor-independent, featuring DICOM-in to DICOM-out processing pipeline. The operation is fully automated, with the input data directly fed by the imaging modality and the enhanced images transferred to the customer PACS. The technology has already been clinically validated for ultra-low dose lung cancer screening.

- **What's Next?**
  Development and validation of additional applications, regulatory clearances, financings, and further expansion of the IP portfolio.