SS2-1 Challenges of Digital Pathology Image Storage

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= Abstract =

As the adoption of digital pathology in clinical practice and AI research continues to grow, the storage of digital pathology images presents significant challenges. The volume and complexity of the data are increasing rapidly, necessitating scalable storage solutions that can accommodate this growth. Whole slide images (WSI) are large, complex files that require high resolution for accurate analysis. Securely storing and accessing these files necessitates high-capacity and high-performance storage systems, as well as sufficient bandwidth and cost considerations. Ensuring the quality of digital pathology images is critical for accurate diagnosis. As such, file formats and image compression techniques that preserve the original resolution must be employed. At the same time, it must comply with the relevant standards and regulations to ensure the patient data privacy and security. Digital pathology image storage is a challenging but essential aspect of digital pathology that needs to be addressed with appropriate strategies and solutions. In this talk, challenges associated with storing digital pathology images will be discussed. A simple survey result from digital pathology users in South Korea for image storage will be included.