



Clinical Application:

Musculoskeletal (MSK)

More than **125 million adults** report a musculoskeletal (MSK) condition in the United States each year — over half the population of those 18 years or older.¹

Despite this prevalence, clinicians recognize that each patient is unique. Treating and preventing **MSK conditions and injuries** takes integrated, intelligent tools that enable informed decision-making and innovative procedures.

Collaborative Imaging from Canon Medical Systems delivers a complete imaging solution to help clinicians increase diagnostic confidence and improve patient-centric care across every step of the MSK continuum.

Collaborative Imaging ensures health care providers are one step ahead. Thanks to its ability to seamlessly integrate imaging applications, clinicians have access to the holistic patient information they need to make informed decisions when treating MSK conditions.



¹ Source: United States Bone and Joint Initiative (USBJI). The Burden of Musculoskeletal Diseases in the United States: Prevalence, Societal and Economic Costs, Third Edition, 2015. <http://www.boneandjointburden.org/docs/The%20Burden%20of%20Musculoskeletal%20Diseases%20in%20the%20United%20States%20%28BMUS%29%203rd%20Edition%20%28Dated%2012.31.16%29.pdf>. Accessed Nov. 1, 2018. %28Dated%2012.31.16%29.pdf. Accessed Nov. 1, 2018.

SCAN

Collaborative Imaging provides high quality images to advance visualization and elevate evaluation.

- With **SUREVOI** and **KneeLine+** — available on Vantage Galan 3T and Vantage Orian MR systems — clinicians can automatically detect volume of interest and centering at isocenter to achieve over 95% accuracy in determination and placement of standard knee views.
- **FSE DIXON technology** reduces MR scan time by up to half with simultaneous acquisition of four contrasts in a single scan.
- **Ultrashort TE pulse sequences** extends the range of imaging to tissues traditionally difficult-to-capture in MR.
- Thanks to the ultra-high frequency Matrix Technology of the **Aplio i800** and its **24MHz transducer**, clinicians can visualize superficial structures and dynamic muscle movements with great detail in real time.
- **Super Microvascular Imaging** enables clinicians to catch more detail and clearly visualize inflammatory responses associated with low-flow vessels for more confident diagnoses.
- **Aquilion Precision CT** delivers ultra-high resolution scanning and reconstruction of bone trabeculae detail while the **Aquilion ONE / GENESIS Edition** with 4D imaging makes it possible to perform 4D kinematic joint studies.



DIAGNOSE & TREAT

Canon Medical Systems delivers comprehensive solutions for fast, confident diagnosis and effective MSK treatment plans.

Our diagnostic and treatment features and applications include:

- **Quantitative Cartilage Mapping** provides insight into early cartilage degeneration to assist in assessing and anticipating potential MSK conditions. This technology is ideal for sports medicine.
- **4D orthopedic analysis** allows joint movement to be fully assessed in real time while angle measurements can be made to plan a course of treatment.



ANALYZE

Canon Medical delivers intelligent analytics to help facilities improve clinical, operational and financial outcomes — and deliver optimal patient-centric care.

With analytics powered by Vitrea Intelligence and CodeX, practices can strive to achieve:

- **Improved** operational outcomes via prescriptive analytics.
- **Reduced** clinical risks.
- **Better** dose efficiency and safety with dose management and reporting across the organization — per equipment and operator.
- **Enhanced** clinical workflows and operations thanks to Patient Cohort Analysis.
- **Standardization** of acquisition protocols across equipment, models and locations.

Experience enhanced clinical operations, thanks to intelligent analytics with Collaborative Imaging.



SHARE

Our suite of integrated applications securely enables intelligent information sharing so clinicians can:

- **Refresh** relevant clinical information from disparate sources and deliver it to the point of care with Vitrea Connection.
- **Integrate** images into the clinical workflows across devices and networks with Vitrea View Enterprise Viewer.
- **Manage and reduce** risk by addressing system vulnerabilities with Canon Medical's Cybersecurity capabilities.

Because of our partnerships with leading enterprise imaging companies, all data — regardless of vendor or system — is seamlessly integrated, optimized and shared across all networks.

Experience intelligent content orchestration across your network — so you can focus on what matters most, the patient — thanks to Collaborative Imaging.

