

HyperSight Imaging Solution Bibliography*

JOURNAL ARTICLES

Kim E, Park YK, Zhao T, et al. Image quality characterization of an ultra-high-speed kilovoltage cone-beam computed tomography imaging system on an o-ring linear accelerator. Journal of Applied Clinical Medical Physics;n/a:e14337. Washington University in St. Louis. (<u>Link</u>)

Haertter A, Salerno M, Koger B, et al. ACR benchmark testing of a novel high-speed ring-gantry linac kV-CBCT system. J Appl Clin Med Phys 2024:e14299. University of Pennsylvania. (Link)

Bogowicz M, Lustermans D, Taasti VT, et al. Evaluation of a cone-beam computed tomography system calibrated for accurate radiotherapy dose calculation. Phys Imaging Radiat Oncol 2024;29:100566. MAASTRO. (Link)

Robar JL, Cherpak A, MacDonald RL, et al. Novel technology allowing cone beam computed tomography in 6 seconds: A patient study of comparative image quality. Pract Radiat Oncol 2023. Nova Scotia Health. (<u>Link</u>)

ESTRO 2023

Zhao T, Price A, Laugeman E, et al. Characterization of a novel high-performance cone beam computed tomography imaging system. European Society for Radiotherapy and Oncology. Vienna, Austria. 2023. Washington University in St. Louis. (Link)

Zhao T, Price A, Knutson N, et al. Accuracy of electron density in a novel high-performance CBCT imaging system. European Society for Radiotherapy and Oncology. Vienna, Austria. 2023. Washington University in St. Louis. (Link)

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Fonseca G, Lustermans D, Bogowicz M, et al. An evaluation of a novel CBCT system: Image quality, extended FOV and metal artefact reduction. European Society for Radiotherapy and Oncology. Vienna, Austria. 2023. MAASTRO. (<u>Link</u>)

Fallone C, MacDonald L, Cherpak A, et al. Evaluation of Ethos HyperSight imaging performance compared to standard CBCT and FBCT. European Society for Radiotherapy and Oncology. Vienna, Austria. 2023. Nova Scotia Health. (Link)

Cherpak A, Fallone C, MacDonald L, et al. Treatment plan dose calculation using the novel HyperSight CBCT. European Society for Radiotherapy and Oncology. Vienna, Austria. 2023. Nova Scotia Health. (<u>Link</u>)

Bogowicz M, Taasti V, Fonseca G, et al. Accuracy of dose calculation using a novel high-performance cone-beam CT imager. European Society for Radiotherapy and Oncology. Vienna, Austria. 2023. MAASTRO. (<u>Link</u>)

AAPM 2023

Zhao X, Azmy H, Laugeman E, et al. Imaging dose in Varian HyperSight™ CBCT imaging system. AAPM. Houston, TX. 2023. Washington University in St. Louis. (<u>Link</u>)

Zhao H, Nelson GS, Huang J, Y., et al. KV CBCT image quality evaluation of Varian Halcyon HyperSight. AAPM. Houston, TX. 2023. University of Utah. (Link)

^{*} This bibliography is a comprehensive selection of articles but is not necessarily an exhaustive list of literature pertaining to HyperSight Imaging Solution

Lustermans D, Fonceca G, Taasti V, et al. Metal artifact correction and extended field-of-view evaluation for a novel fast CBCT system. AAPM. Houston, TX. 2023. MAASTRO. (Link)

Lustermans D, Elmpt W, Taasti V, et al. An evaluation of a new rapid CBCT system with anthropomorphic dynamic phantoms. AAPM. Houston, TX. 2023.MAASTRO. (Link)

Li T, Haertter A, Salerno M, et al. Technical evaluation of a new high-performance ring-gantry mounted kVCBCT imaging system for treatment planning (CBCTp). AAPM. Houston, TX. 2023. University of Pennsylvania. (Link)

Li T, Dong L, Haertter A, et al. First clinical experience with a new high-performance kilovoltage cone-beam CT system with accurate HU reconstruction. AAPM. Houston, TX. 2023. University of Pennsylvania. (<u>Link</u>)

Lee HHC, Pak F, Hao Y, et al. Dual-energy calibration for electron density and proton stopping power ratio in a high-performance CBCT imaging system. AAPM. Houston, TX. 2023. Washington University in St. Louis. (<u>Link</u>)

Laugeman E, Azmy H, Zhao X, et al. Imaging quality of a high-performance cone-beam computed tomography imaging system. AAPM. Houston, TX. 2023. Washington University in St. Louis. (Link)

ASTRO 2023

Zhao T, Hilliard J, Lindsey A, et al. Accuracy of electron density and planning dosimetry in a novel high-quality CBCT imaging system. ASTRO. San Diego, CA. 2023. Washington University in St. Louis. (<u>Link</u>)

Zhao T, Beckert R, Hilliard J, et al. An in silico study of a one-day one-machine workflow for definitive radiotherapy cases on a novel simulation and treatment platform. ASTRO. San Diego, CA. 2023. Washington University in St. Louis. (Link)

Dong Z, Hao Y, Laugeman E, et al. Performance of adaptive deep learning models for dose predictions on high-quality cone-beam computed tomography images. ASTRO. San Diego, CA. 2023. Washington University in St. Louis. (<u>Link</u>)

Koger B, Teo K, Salerno M, et al. Accuracy of electron density mapping of a novel kVCBCT system designed for planning. ASTRO. San Diego, CA. 2023. Department of Radiation Oncology, University of Pennsylvania. (<u>Link</u>)

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MacDonald RLL, Fallone C, Chytyk-Praznik K, et al. The feasibility of adaptive CT simulation-free radiation therapy. ASTRO. San Diego, CA. 2023. Nova Scotia Health. (Link)

Intended Use Summary

Varian Medical Systems' linear accelerators are intended to provide stereotactic radiosurgery and precision radiotherapy for lesions, tumors, and conditions anywhere in the body where radiation treatment is indicated.

Radiation treatments may cause side effects that can vary depending on the part of the body being treated. The most frequent ones are typically temporary and may include, but are not limited to, irritation to the respiratory, digestive, urinary or reproductive systems, fatigue, nausea, skin irritation, and hair loss. In some patients, they can be severe. Treatment sessions may vary in complexity and time. Radiation treatment is not appropriate for all cancers.

Varian Medical Systems as a medical device manufacturer cannot and does not recommend specific treatment approaches. Specifications subject to change without notice. Not all features or products are available in all markets.



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