HYPERSIGHT™
A REVOLUTION IN RESOLUTION
The leader in radiation oncology and the leader in oncology imaging are working to **connect the power of imaging**—inside and outside of the treatment room.

Varian, a Siemens Healthineers company, has taken an important step to bring you high-quality images when you need them most.

Think larger images, better contrast, and speed. Our re-engineered CBCT imaging takes you beyond what's possible with conventional linac-based systems, all designed to enhance existing workflows and enable new ones.
An epic advancement in image quality, precision, and speed—right inside your treatment room.

The ability to better see challenging, difficult-to-view anatomical regions is paramount when making important decisions during the course of treatment. With HyperSight™ imaging solution, you now have highly accurate imaging capabilities right inside the treatment room.

Using faster acquisition (only six seconds) to reduce motion artifacts, a larger Field of View (FOV) to cover patient anatomy, advanced reconstruction algorithms to increase image quality, and novel proprietary technology, HyperSight provides a remarkably sharp and crisp image.
Image Quality

Going beyond IGRT.

HyperSight improves image quality in terms of spatial and contrast resolution. This is designed to improve the ability to more precisely target tumor volumes and increase sparing of healthy tissue.

HyperSight comes with a metal artifact reduction algorithm improving image quality for patients with hip prostheses and metal or dental implants.

“You can see the fat plane between the esophagus wall and the tumor, enabling you to carefully align to the edge of the tumor-esophagus interface. This also then allows the possibility of CBCT online adaptive. Typically, this is more challenging on conventional CBCT, but the quality of image with HyperSight is pretty unique.”

—Lauren Henke, MD, MSCI
Washington University
Precision
Images you can plan on.

HyperSight offers the Hounsfield Unit (HU) accuracy expected from conventional CT-simulators, allowing calculation of dose distribution directly on the CBCT image. The image reconstruction algorithm and the increased FOV delivers improved visualization of the entire patient volume and surrounding organs at risk (OARs)—aimed at generating more precise treatment plans.

HyperSight provides a new and unique guided workflow that enables you to generate CBCT images for initial treatment planning—including topogram, interactive isocenter placement, patient marking, and treatment position verification.

Dose calculation and HU comparison CT (red) vs. HyperSight CBCT (blue). Doses calculated with Acuros® XB photon dose algorithm.
Speed
A single breath hold is all you need.

HyperSight acquires images for all anatomical sites in six seconds. This significant reduction in CBCT acquisition time reduces motion-related artifacts due to patient movement. Shorter image acquisition time may minimize patient discomfort and anxiety due to less time on the couch.
HyperSight will deploy across the Varian portfolio.

HyperSight technology will be deployed on certain Varian linacs starting with the Halcyon® system and Ethos™ therapy, followed by the TrueBeam® and Edge® systems. HyperSight will be offered as an option on new systems and as purchasable upgrades for eligible existing machines and configurations.
Integrate the power of HyperSight on Halcyon and Ethos

This table summarizes the capabilities of HyperSight implemented on Halcyon and Ethos:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Ethos</th>
<th>Halcyon</th>
</tr>
</thead>
<tbody>
<tr>
<td>XL CBCT imager (86 cm x 43 cm)</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>New kV collimator</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Larger capacity x-ray tube</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Larger scan diameter (53.8 cm)</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Gantry speed*</td>
<td>6 RPM</td>
<td>6 RPM</td>
</tr>
<tr>
<td>6 sec CBCT acquisition</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Metal artifact reduction (software)</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Extended FOV reconstruction (software)</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Topogram view</td>
<td>—</td>
<td>✔</td>
</tr>
<tr>
<td>Patient marking</td>
<td>—</td>
<td>✔</td>
</tr>
<tr>
<td>Dedicated imaging modes</td>
<td>—</td>
<td>✔</td>
</tr>
</tbody>
</table>

*Depends on configuration
Put the power of HyperSight to work in your clinic.

Larger images. Better contrast. Faster CBCT imaging. With HyperSight, you can gain efficiencies, add new workflows, and expand the capabilities of your in-room imaging solution.

Begin your transformation today—with the epic advancement in image quality, precision, and speed that is HyperSight.

Experience HyperSight now at varian.com/hypersight.
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 and are subject to change.

2023 Varian Medical Systems, Inc. All rights reserved. Varian and Varian Medical Systems are registered trademarks and Halcyon and RapidArc are trademarks of Varian Medical Systems, Inc. The names of other companies and products mentioned herein are used for identification purposes only and may be trademarks or registered trademarks of their respective owners.