



A COMPLETE ROBOTIC RADIOSURGERY SYSTEM

The Accuray CyberKnife® System allows clinicians to provide patients with more accurate treatments and an improved quality of life:

Synchrony® Respiratory Tracking System—

Continuously synchronizes beam delivery to the motion of the tumor, allowing clinicians to significantly reduce margins while eliminating the need for gating or breath-holding techniques.

Xsight® Lung Tracking System—Tracks the movement of the lung tumors directly, without fiducials, with accuracy, reliability and self-adjusting repeatability.

Xsight Spine Tracking System—Eliminates the need for surgical implantation of fiducials by using the bony anatomy of the spine to automatically locate and track tumors with sub-millimeter accuracy.

Iris™ Variable Aperture Collimator—

Using tungsten leaves to rapidly manipulate beam geometry, the Iris Collimator enables treatments of unrivaled conformality and unparalleled preservation of healthy tissue.

Xchange™ Robotic Collimator Changer—

Automatically exchanges collimator sizes, allowing for highly conformal treatments to be delivered more efficiently.

RoboCouch® Patient Positioning System—

Robotically aligns patients accurately with six degrees of freedom, reducing patient setup times and enabling faster treatments.

Linear Accelerator—

Light weight 6MV X-band linear accelerator with an output of 800 MU/min, accurately delivers highly collimated beams of radiation providing superior conformality when treating patients.

MultiPlan® Treatment Planning System—

This intuitive workflow-based workstation designed for radiosurgery, enables the creation of plans that have excellent conformality and coverage with steep dose gradients.

Sequential Optimization—

With our user-defined, sequentially prioritized planning objectives, treatment plans are custom tailored to the unique clinical characteristics of each patient.

4D Treatment Optimization and Planning System—

Takes into account not only the movement of the target but also the movement and deformation of the surrounding tissue.

Monte Carlo Dose Calculation—

Often considered the gold standard dose calculation, the CyberKnife System's Monte Carlo Dose Calculation produces results in minutes compared to what typically requires hours or days with other systems.

CYBERKNIFE® SYSTEM HIGHLIGHTS

• Continual image guidance

Without the need for staff intervention or treatment interruption, the CyberKnife's revolutionary image guidance technology continuously works in concert with the treatment delivery system to automatically track, detect and correct—managing even the slightest target movements throughout the entire treatment.

• Flexible robotic maneuverability

Driven by continual imaging and intelligent motion corrections, the CyberKnife's robotic manipulator automatically positions the linear accelerator to an unprecedented range of positions—allowing for access to virtually any tumor from any direction.

• Dynamic motion targeting

With constant updates of target position throughout the respiratory cycle, the CyberKnife System delivers beams synchronized in real-time to targets that move with respiration while adapting to changes in breathing patterns—delivering highly conformal radiation with considerably smaller margins and unprecedented accuracy.

• Unrivaled dose conformality

Unconstrained by clockwise/counter-clockwise gantry rotations, the robotic mobility of the CyberKnife System delivers diverse non-coplanar and non-isocentric treatments to precisely sculpt radiosurgical doses to the unique contours of the target.

ACCURAY INCORPORATED

Our Business Begins with Patients™

Accuray's philosophy, *Our Business Begins with Patients™*, drives the company's commitment to advancing the field of robotic radiosurgery through innovation, while also establishing its products as the standard of care.

Accuray's success is measured by the success of its customers in delivering the most advanced care to their patients. Medical institutions worldwide have expanded their clinical programs using Accuray's CyberKnife® Robotic Radiosurgery System by treating patients that may have been considered untreatable, while building a more comprehensive oncology practice.

To this end, Accuray has developed collaborative partnerships with clinicians, researchers and patients. These partnerships help educate clinicians and patients on the benefits of robotic radiosurgery, enabling Accuray to refine and upgrade its technology based on user and patient feedback. This feedback allows Accuray to develop innovative programs that improve clinician's success while differentiating Accuray from traditional medical device companies.

The result, the CyberKnife Robotic Radiosurgery System, a pain-free treatment alternative for patients that eliminates invasive surgery and results in a significantly improved quality of life for cancer patients the world over.



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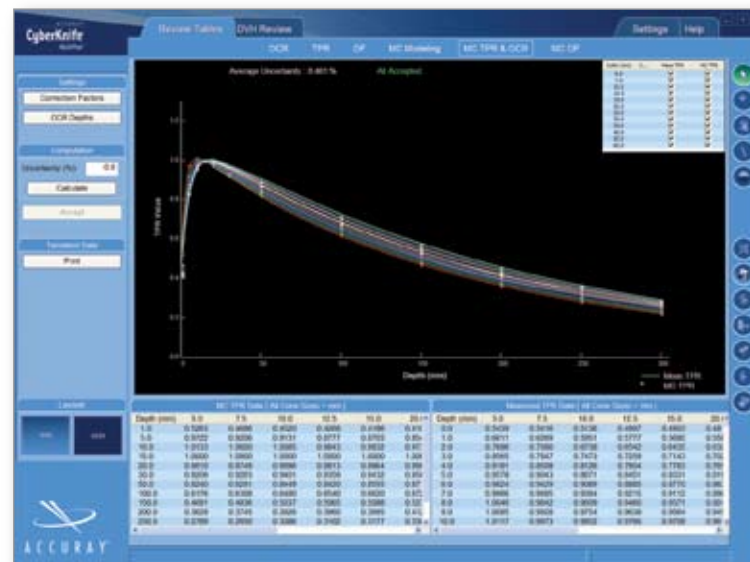
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MULTIPLAN®

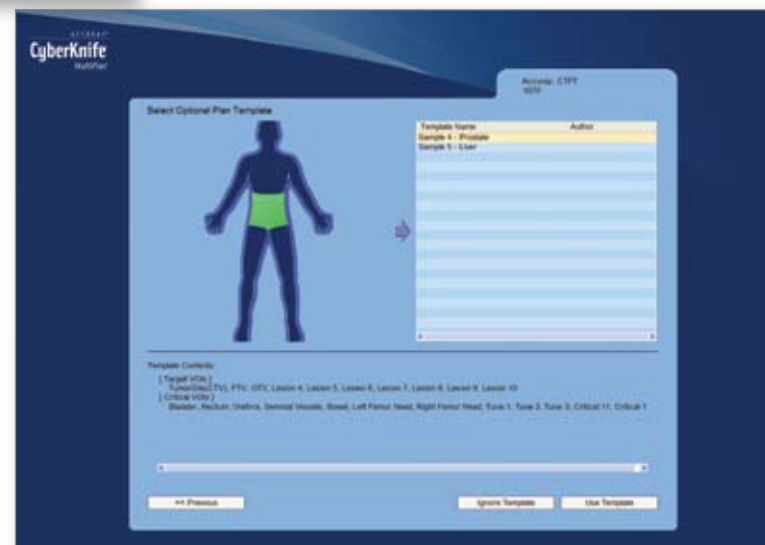
TREATMENT PLANNING SYSTEM



MULTIPLAN® TREATMENT PLANNING SYSTEM



Review and approve stored beam data prior to using the data for plan generation.



Create and select planning templates for each anatomic region.



Delineate the targets and critical structures.

Sl.	VCI Name	Objective	Goal Value	Relaxation	Plan.
1	PTV	Optimize Minimum Dose (OM)	3000.00 cGy	100.00 cGy	
2	PTV	Optimize Homogeneity (OH)	-4000.00 cGy	200.00 cGy	
3	Uniflow	Optimize Mean Dose (OM)	3000.00 cGy	100.00 cGy	
4	Planum	Optimize Mean Dose (OM)	2000.00 cGy	100.00 cGy	
5	Bladder	Optimize Mean Dose (OM)	2000.00 cGy	100.00 cGy	
6	MJ	Optimize Total MU (OM)	0.00 MU	0.00 MU	

Select planning options to generate beams.

MULTIPLAN TREATMENT PLANNING SYSTEM



Evaluate, prescribe and review plan prior to saving.

Algorithms	Beam Tracking	Path/Trade	Collimator	MU	Critical Intersections	Blocked	Target X	Target Y	Target Z	Source X	Source Y	Source Z
1	Yes	1.1	12.50	500.00	5	No	27.35	-12.70	-107.00	-84.54	-871.88	127.70
2	Yes	1.1	12.50	500.00	5	No	1.00	-44.00	-108.25	-400.00	-466.82	-107.24
3	Yes	1.1	12.50	500.00	5	No	13.10	-48.00	-108.25	-150.48	-466.82	-107.24
4	Yes	1.1	12.50	500.00	5	No	9.42	-5.77	-100.75	-811.53	-871.88	-126.46
5	Yes	1.1	12.50	500.00	4	No	28.22	-28.32	-108.25	-487.24	-416.94	-108.71
6	Yes	1.1	12.50	500.00	2	No	-8.01	-18.00	-100.75	-448.88	-839.42	-121.74
7	Yes	1.1	12.50	500.00	3	No	1.00	-12.07	-108.75	-107.83	-759.20	-494.06
8	Yes	1.1	12.50	500.00	2	No	22.34	-4.77	-100.75	-755.89	-127.13	-126.83
9	Yes	1.1	12.50	400.38	3	No	23.34	-18.00	-100.75	-488.24	-408.53	-126.78
10	Yes	1.1	12.50	447.25	2	No	17.43	-30.23	-103.26	-218.52	-722.70	-148.19
11	Yes	1.1	12.50	429.94	1	No	9.42	-28.32	-103.26	-488.24	-19.18	-425.11
12	Yes	1.1	12.50	416.73	3	No	-5.03	-31.25	-102.00	-626.90	-73.92	-107.46
13	Yes	1.1	12.50	429.44	1	No	-2.96	-13.03	-122.00	-305.11	-83.63	-194.94
14	Yes	1.1	12.50	406.38	3	Yes	8.83	-32.23	-105.75	-406.41	-712.87	-131.43
15	Yes	1.1	12.50	404.70	4	No	-6.04	-14.00	-122.00	-31.61	-468.77	-162.81
16	Yes	1.1	12.50	381.51	4	No	-18.88	-24.41	-107.00	-768.16	-493.26	-12.25
17	Yes	1.1	12.50	376.71	3	No	19.38	-33.20	-109.50	-802.04	-29.18	-425.11
18	Yes	1.1	12.50	385.47	3	No	8.83	-45.00	-122.00	-347.14	-716.32	-448.82
19	Yes	1.1	12.50	404.13	4	No	-7.88	-31.88	-104.00	-817.88	-113.11	-173.11

Display and modify selected beams using the Finetune feature.

A highly intelligent workflow-based treatment planning system dedicated to the creation of treatment plans for the CyberKnife® Robotic Radiosurgery System.

Create better treatment plans faster

The MultiPlan® System provides the most comprehensive set of tools available for high-precision radiosurgery treatment planning.

In addition to conventional image registration and contour delineation tools, the MultiPlan System provides a wide range of optimization and dose calculation options, allowing the clinician to choose the planning method that best fits the needs of the patient.

Treatment decisions are documented and planning objectives are met starting with the choices made in the treatment planning system. Whether the goal is to deliver a homogeneous or a heterogeneous dose to the target, the MultiPlan System provides the means to achieve these goals.

For treatment targets within the lung – or any other region with large variations in density – the MultiPlan System provides the ability to calculate dose quickly and efficiently using the Monte Carlo Dose Calculation option. For treatment targets within the prostate – or any other region in close proximity to critical structures – the MultiPlan System provides the ability to generate plans with extremely steep dose gradients using the Sequential Optimization option. For each radiosurgery clinical application there is an optimization or dose calculation tool available in the MultiPlan System.

Enhanced cross-functional workflow

Oncologists and surgeons will be satisfied with the comprehensive selection of physician-optimized tools available with the MultiPlan System. Using the MultiPlan MD Suite option, pre-planning tasks such as target and critical structure delineation can be performed at the most convenient location for the physician – at their desk. Department-specific and physician-specific treatment protocols can be established using planning templates, and with the optional

Sequential Optimization feature, using scripts. With the MultiPlan Quick Review option, post-planning tasks such as plan review and comparison can be performed side-by-side with the physicist at the MultiPlan System workstation - without interrupting an ongoing optimization task.

In addition, the MultiPlan System supports commissioning and Quality Assurance (QA) tasks such as End-to-End testing for system QA and the Phantom Overlay procedure for plan QA.

Superior care delivered with greater efficiency

The capability of the MultiPlan System to generate treatment plans that consist of non-coplanar beams, both isocentrically and non-isocentrically targeted, provides the flexibility to deliver accurate treatment to targets of any shape or size, meeting virtually any objective.

The versatility of the CyberKnife Treatment Delivery System to accurately deliver treatments anywhere in the body is fully supported in the MultiPlan System.

- Set appropriate Treatment Parameters, such as collimator type (Fixed Collimator or the Iris™ Variable Aperture Collimator) and path set for the clinical application being treated
- Select the Synchrony® Respiratory Tracking System to track targets that move with respiration, such as those in the lung, and use it with either the Fiducial Tracking System or non-invasively with the Xsight® Lung Tracking System
- Select the InTempo™ Adaptive Imaging feature to assist with tracking unpredictable intra-fraction motion of the prostate