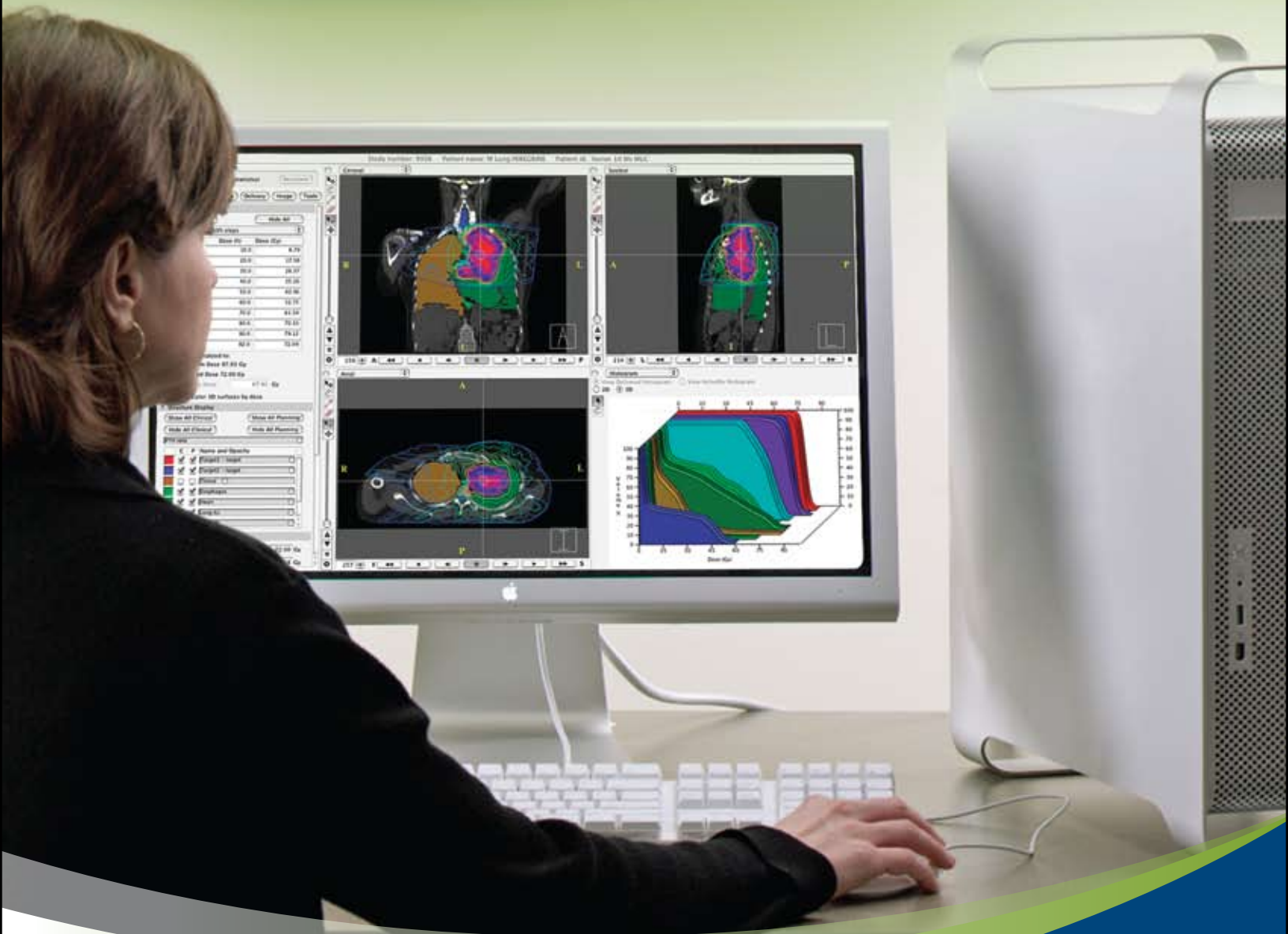


**Best nomos**<sup>®</sup>  
healthcare for everyone



**CORVUS**<sup>®</sup>

INVERSE TREATMENT PLANNING

# Your Single Source Oncology Solutions Provider *Plan. Target. Treat.*

At Best® nomos® we design products and solutions that help medical professionals treat a variety of cancers. Our products are used extensively to accurately plan, target, and deliver radiation treatments to patients all around the world. We are best known for our innovations in IMRT and IGRT, having delivered the first commercial IMRT system, the PEACOCK® in 1992. As one of the newest members of the Best family of companies, we are excited to expand our product offerings beyond IMRT and IGRT. Our aim is to be the Single Source Oncology Solutions provider of choice for our customers. We can now offer our customers a wide array of best in class products used in brachytherapy as well as external beam radiation. It is through our commitment to our customers that we will succeed in our mission to provide *healthcare for everyone*.

## OPTIMIZED TREATMENT PLANNING WITH CORVUS®

Widely recognized as the gold standard in IMRT treatment planning, the CORVUS® treatment planning system continues to be the most flexible IMRT treatment planning system available today. With advancements in plan creation tools such as nFUSION™ and ActiveRx™, as well as advances in system architecture, operating system and hardware, CORVUS is an indispensable tool. It also offers the added benefit of providing capability across major OEM MLCs for static, dynamic and serial tomotherapy delivery. Chosen by elite cancer hospitals for its clinical capability and leading reputation, CORVUS offers a practical way for smaller community hospitals and freestanding centers to provide clinical excellence to a broader reach of patients.

## CORVUS TREATMENT PLANNING SYSTEM – AT A GLANCE

### **Save time with ActiveRx**

CORVUS is the only treatment planning system with ActiveRx. It provides the ability to manipulate isodose lines after plan calculation to improve the plan with immediate, graphical feedback, eliminating the trial and error process.

### **New nFUSION technology**

Based on a mutual-information algorithm, CORVUS lets you co-register CT, MR and PET images to your base CT image set automatically. This eliminates the need to enter matching fiducial points between image sets and provides consistently better image registration than manual techniques.

### **Multiple optimization algorithms and efficiency options**

CORVUS uses simulated annealing algorithms and supports a gradient descent algorithm, provides optimization efficiency choices and FAST IMRT to set level of intensity modulation. Tailor your treatment planning process to the complexities of the cases you are treating.

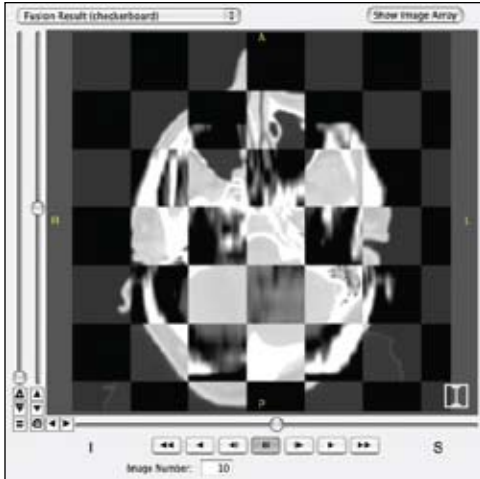
### **Highest resolution dose calculation grid**

CORVUS offers the highest resolution dose calculation grid capability, 1 mm<sup>3</sup>.

### **Exclusive on-site commissioning service**

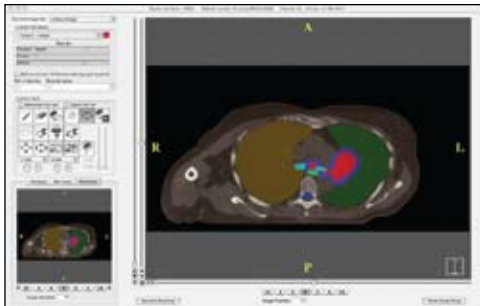
Best® nomos® is the only vendor to provide on-site commissioning service – commissioning to first patient treatment in only a few weeks after installation.

# CORVUS TREATMENT PLANNING PROCESS FAST, ACCURATE, CONSISTENT



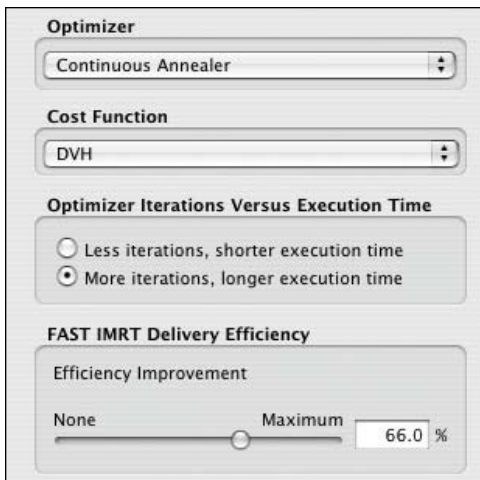
## nFUSION INCREASES POSITION ACCURACY

IMRT depends on precise target localization. Based on a mutual information fusion algorithm, nFUSION aligns and co-registers image sets from CT, MR or PET to the base CT image set. Unique in display, the nFUSION checkerboard offers a more efficient way to verify fused images by providing image window quadrants. Often these are easier to evaluate than images placed side-by-side.



## REAL-TIME STRUCTURE CONTOURING

CORVUS provides unique contouring tools for quick and accurate segmentation. Different and more powerful than standard drawing and paint tools, CORVUS offers “lasso” and “flood fill” features and an ability to record multiple actions into a repeatable macro – automation features that simplify the contouring process.

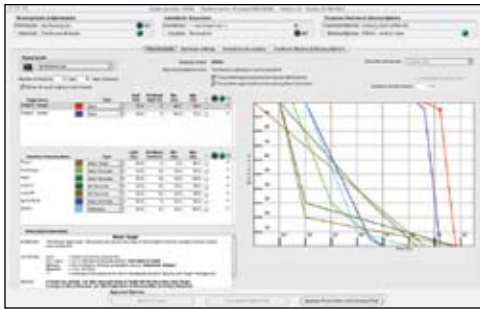


## PLAN OPTIMIZATION FLEXIBILITY

CORVUS supports both simulated annealing and gradient descent optimization methods. These can be run in four separate modes, depending on plan complexity and desired results:

- Continuous Anneal
- Conformal Anneal
- Discrete Anneal
- Smooth Downhill Search

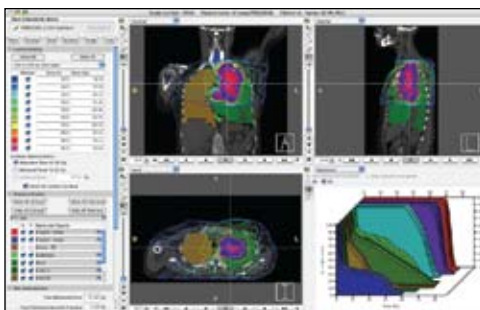
FAST IMRT Efficiency Slider allows you to choose the level of intensity modulation that you desire – from no modulation to complete modulation and anywhere in-between. You have ultimate control over segments and monitor units to meet your planning and delivery goals.



## DOSE PRESCRIPTION

Select tissue and structure types to meet planning goals. Prescription instructions are provided to guide your selections. Adjust prescription with the interactive CDVH display.

Prescription Instructions	
<b>Basic Target</b>	
<b>PURPOSE:</b>	The default target type. The system will use the full target of the Target's CDVH to achieve the best overall dose distribution.
<b>SETTINGS:</b>	<ul style="list-style-type: none"> <li>Goal: + Default structure, both to Min</li> <li>Vol &amp; Goal: + 95% of dosing structure amount, whichever is lower</li> <li>Minimum: + 95% of local or central structure amount, whichever is lower</li> <li>Maximum: + 125% of Goal</li> <li>TT: + Structure was target at the time of deconvolved Structure Spacing and Target Homogeneity</li> </ul>
<b>NOTES:</b>	If target has priority, set: Max Structure Dose to Target Min for structures near Target. If using a Critical Structure, set: Min Target Dose to Structure Max for Critical Structure.



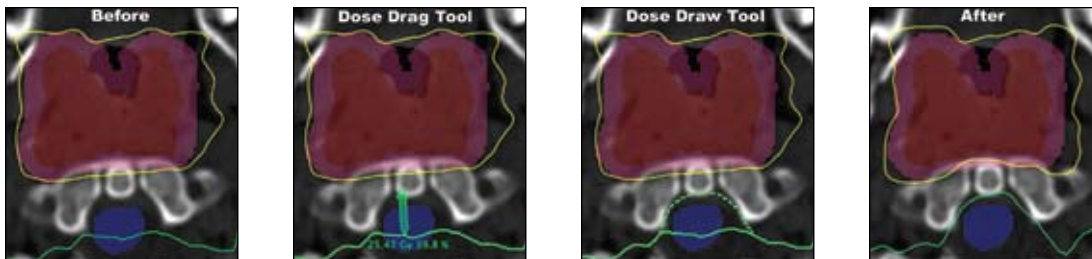
## PLAN EVALUATION

From the display results panel CORVUS gives you the tools and views to thoroughly evaluate your treatment plan. Display any of the following on any of the four panels or as one large view: axial, coronal and sagittal dose distributions, 3D dose wash surfaces, DRRs, dose profiles, prescribed doses, plan statistics, 2D and 3D DVHs, treatment view and the treatment delivery plan.

# FEATURES NOT FOUND ON ANY OTHER IMRT TREATMENT PLANNING SYSTEM

## ActiveRx SHOWS THE IMPLICATIONS OF DOSE ADJUSTMENTS IN MINUTES

When a physician asks for a change in the treatment plan using a variety of on-screen dose adjustment tools, ActiveRx immediately shows the implications of that change. Even for complex IMRT treatments, where thousands of beams are used, ActiveRx produces results in minutes. This allows clinicians to quickly understand the subtle interplays of competing goals and move directly to the point of best balance for their patients.



## PATIENT TREATMENT

CORVUS creates plans that can be delivered on virtually all OEM MLCs, both static and dynamic delivery, and provides the horsepower to plan for the highly conformal demands of serial tomotherapy delivery.

# THE CORVUS TREATMENT PLANNING SYSTEM

## THE POWERFUL CORVUS WORKSTATION

Treatment planning systems require operating systems and hardware that are well-suited for complex graphics and processing of scientific data. This is why CORVUS is deployed on the latest Apple® Macintosh® technology using OSX.



### User-friendly, fast and efficient

CORVUS Workstation. Latest Apple Mac technology, OSX Tiger™ operating system, 4 GB DDR400 SDRAM, Dual 250GB SATA drives, 23" Apple Titanium flat panel display.

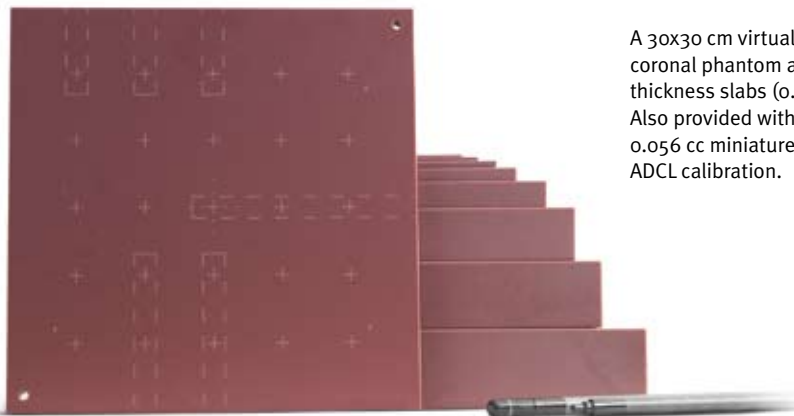
### Remote compute engine

Dual 3.2 GHz Intel® Xeon™ processors, Solaris™ 10 operating system.



## SAVE TIME WITH OUR REMOTE COMPUTE ENGINE

A distributed architecture provides the most efficient planning process, allowing you to create plans on the CORVUS Workstation at the same time plans are calculating on the remote compute engine. By dedicating processors to optimization and dose calculation, even the most complex treatment plans can be calculated in just minutes. This architecture also allows work grouping of remote workstations, providing planning capability at just about any location.



A 30x30 cm virtual water phantom with a 2 cm coronal phantom and one each of the following thickness slabs (0.2, 0.3, 0.5, 1, 2, 4, 5, 6 cm). Also provided with a 0.60 cc farmer type and 0.056 cc miniature ion chamber, both with ADCL calibration.

## TREATMENT PLAN QUALITY ASSURANCE

CORVUS offers an IMRT Phantom and Phantom Plan capability to streamline your plan Quality Assurance process.

# SPECIALIZED SUPPORT TEAMS STAND BEHIND YOU

To ensure that you can offer treatment with confidence, we're committed to providing the most comprehensive customer training and support in the industry. These four specialized teams are available for customer support.

## SPECIALISTS ON CALL TO SERVE YOU

Our specialists are on call Monday through Friday, 8 am to 6 pm EST. After-hours support is available via a paging system. Our personnel can provide multiple services including:

- Commissioning and verification for CORVUS
- Training tailored to your staff
- Support to help your team learn how to QA each patient
- Assistance in helping your site develop an efficient IMRT treatment process

## OUR FIELD SERVICE ENGINEERS RESPOND QUICKLY

We're committed to responding promptly to your needs, and providing the highest level of customer support available.

## YOU ARE UP AND RUNNING FAST WITH ON-SITE APPLICATIONS SUPPORT

Our highly experienced team provides hands-on training so you're up and running quickly.

# DEDICATED TO PROVIDING TREATMENT OPTIONS

At Best nomos, everything we do is designed to provide targeted, accurate and effective treatment for patients who are fighting cancer. By making our advanced technology available and affordable, we're helping more oncologists and clinicians treat more patients at more locations than ever before.

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