

Best **nomos**[®]
healthcare for everyone



nomosSTAT[™]
SERIAL TOMOTHERAPY



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*.

nomosSTAT™ SERIAL TOMOTHERAPY

Adaptable and affordable

The only after-market, add-on serial tomotherapy delivery package offered as an upgrade to an existing linear accelerator, nomosSTAT is adaptable to analog/digital, Varian, Siemens, Elekta, Philips, Mitsubishi and Beijing Medical Equipment Institute linear accelerators.

Precise conformality

Steep dose gradients and sensitive structure avoidance enable delivery of higher doses in critical areas. Serial tomotherapy IMRT does not trade conformality for treatment time.

Non-coplanar treatment capability

Treat at multiple couch angles to optimize where beam is entering the patient, further enhancing target conformality and sparing sensitive structures.

Flexibility

nomosSTAT delivers a full range of intracranial and extracranial IMRT treatments as well as radiosurgical treatments with 4mm resolution. Resolution options for large- and small-field treatments – all from a single multileaf collimator.

Simple pneumatics for high reliability

The nomosSTAT MLC is more reliable than complex, motor-driven MLCs because of its pneumatic, binary design and operation. 98% uptime is guaranteed.

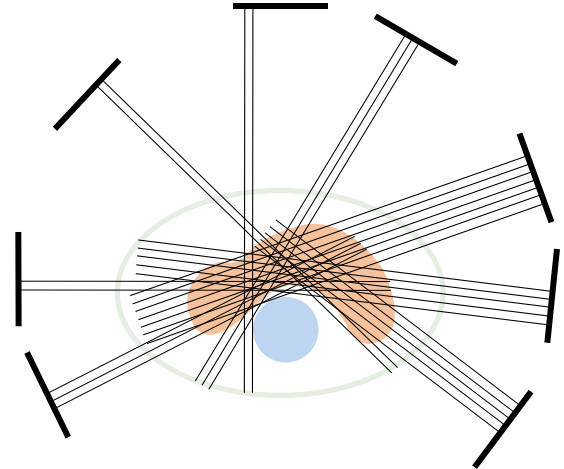
On-site support and hands-on training

Comprehensive services include on-site commissioning services and training with a medical physicist and on-call technical support.

WHAT IS SERIAL TOMOTHERAPY?

RADIATION THAT FIGHTS CANCER, NOT PATIENTS.

nomos*STAT* serial tomotherapy delivery technology fires thousands of individual beams of radiation from virtually any radial angle around the patient with beams that can vary in intensity in 10% steps. Carving out extremely conformal dose distributions and steep dose gradients, serial tomotherapy delivers the beams to, and tangential to, the target, sparing sensitive structures.



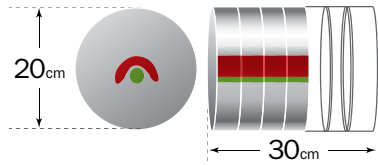
DEGREES OF FREEDOM

Compared to step-and-shoot techniques that deliver multiple overlapping segments to modulate field intensity at a limited number of angle positions, tomotherapy provides more degrees of freedom. It deposits the dose to the target while avoiding completely, or softening the impact on, critical structures – in similar and often faster delivery times.

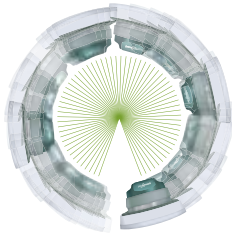
INTENSITY MODULATION AND OPTIMIZED BEAM PLACEMENT

nomosSTAT's dynamic arc delivery shapes and modulates the beam while the gantry is rotating, providing up to 40 individual intensity-modulated beams per every 5 degrees of rotation.

Arcs as long as 340 degrees can be delivered, each arc delivering a cylinder of radiation 20cm in diameter over a cumulative 30cm field length in 1cm, 2cm or 4mm slices, and delivering two slices at a time.

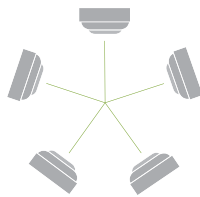


nomosSTAT MLC



340° nomosSTAT MLC dynamic arc delivery

Other

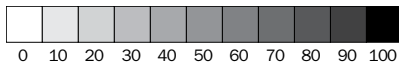


5-field MLC static gantry delivery

VS.

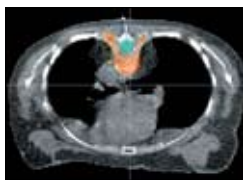
INTENSITY MODULATION

Each of the potential 2,560 pencil beams per arc can be modulated in 10% steps.

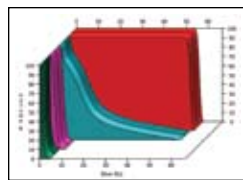


TANGENTIAL BEAM DELIVERY

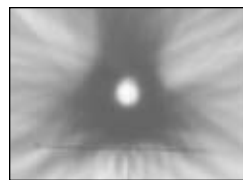
Intensity-modulated beams are delivered individually, not as overlapping field segments, allowing beams to be placed on the tangent of a target or sensitive structure, carving out steep dose gradients.



Metastatic T-spine with tumor wrapped around spinal cord



Tangential beam delivery carves out steep dose gradients



Dose is delivered to the tumor while avoiding the spinal cord

ADD nomosSTAT RADIOSURGERY TO YOUR CAPABILITIES



Position accuracy with TALON®

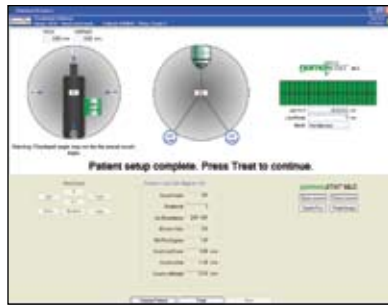
For multi-fraction radiosurgery of intracranial targets the TALON System provides 1mm positioning accuracy and repeatability.

- TALON includes titanium screws, adjustment tools and a patented, detachable TALON assembly for patient positioning on imaging and treatment tables.
- After administration of a local anesthetic, two self-tapping titanium screws are inserted into the patient's skull – a 20-minute process that can take place in the operating room or in an outpatient surgical suite.
- The target box ensures accurate patient set-up by providing laser alignment, light-field alignment and radiopaque fiducial markers for film verification.
- The TALON assembly can be removed and reattached without loss of localization accuracy. For patients receiving fractionated treatments, the assembly is removed after each stereotactic treatment.

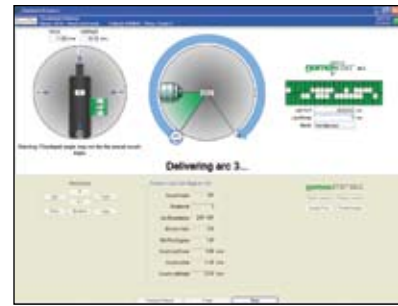
INTEGRATED TOMOTHERAPY DELIVERY



Patient selection



Alignment



Treatment delivery

nomosSTAT MLC
Pneumatically-driven, binary collimator
with interleaf leakage and through-leaf
transmission of less than 1%.



Console



Control
Cabinets

In-room



Touch-screen
user interface

AutoCrane™
Automatic table indexing accurate
to within 0.1mm per table index.



nomosSTAT combines CORVUS® inverse treatment planning and serial tomotherapy delivery and is the core architecture for integrating BATCAM™ ultrasound image guidance and nTRAK™ patient positioning and monitoring. It serves as the platform for future planar x-ray localization and volumetric image acquisition for adaptive therapy applications.



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