PreciseART™ ADAPTIVE RADIATION THERAPY OPTION

MAKING ADAPTIVE RADIOTHERAPY PRACTICAL FOR EVERY CLINIC

Fully integrated and automated re-planning

The PreciseART Radiation Therapy Option extends adaptive radiotherapy possibilities, delivering an entirely new level of system integration and workflow automation. The PreciseART Option enables clinicians to monitor every patient and efficiently adapt plans, helping clinics of all sizes deliver more precise treatments to more patients.

- Automated processing of daily imaging enables clinicians to monitor all patients and set protocol-specific action levels to flag cases for review and possible plan adaptation

- Streamlined re-planning capabilities leverage full integration of treatment delivery, planning and database systems to allow clinicians to efficiently generate new treatment plans based on previous plan data

- Maintain the integrity of original treatment plans to ensure tumor coverage, preserve OAR doses and reduce toxicity

TRENDING OF TARGET VOLUMES
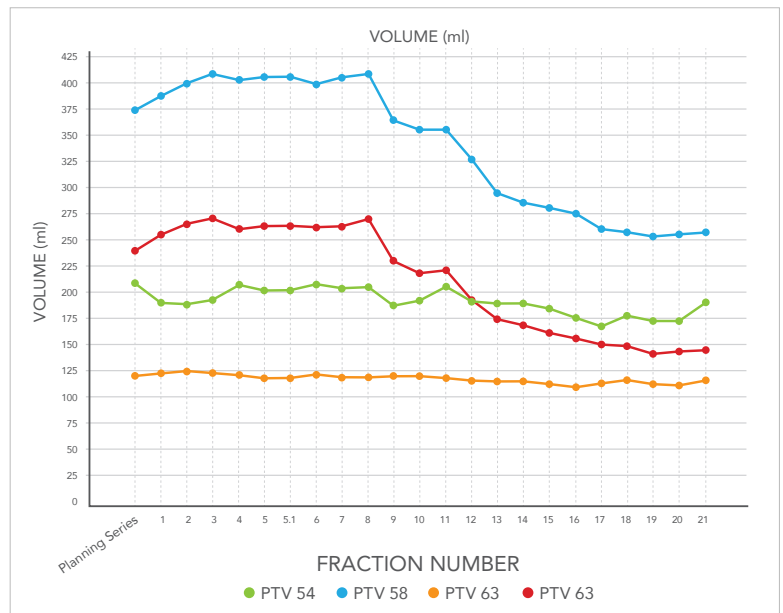
Monitor automated report of trends in dose, dose-volume, target or OAR absolute volumes.

TOTAL PLANNED DOSE VS PROJECTED DOSE
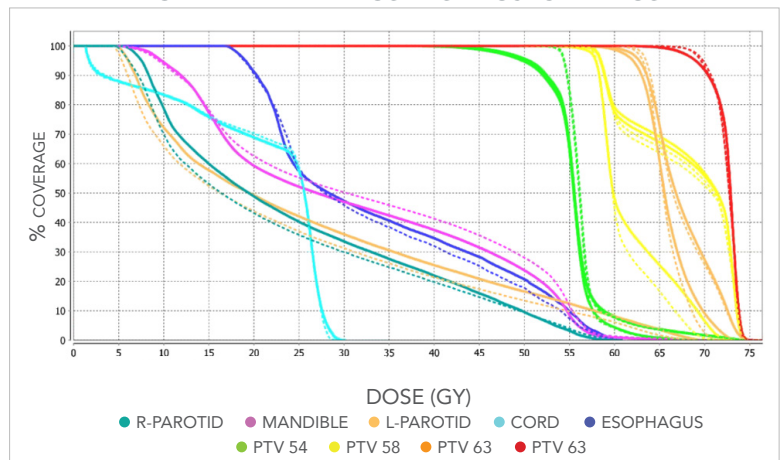
Efficiently assess the impact of anatomical changes on treatment plans.

PreciseART™
ACCURAY®

Quantitative Images

Fan Beam MVCT images allow for treatment-plan-quality dose calculations using the daily IGRT Images.

- Accurate, heterogeneous superposition dose calculation without additional modification or special QA*

- Automatically augments daily MVCT with superior, inferior and axias aspects from kVCT

- Incorporates daily patient treatment shifts in adaptive calculations

*Langen, K., Meeks, S., Poole, D. (2005). The Use of Megavoltage CT (MVCT) Images for Dose Recomputation. Med. Phys. Medical Physics, 32(6), 2025. doi:10.1118/1.1998053

Automated Monitoring

Automating key processes allows clinicians to monitor all patients and immediately identify candidates for re-planning.

- Deforms the planning VOIs onto the daily image

- Calculates the dose on the daily image

- Deforms and accumulates daily dose onto treatment planning CT

- Generates user-defined reports

- Flags fractions with structure(s) exceeding user-defined dose or dose-volume tolerance

MAXIMUM DOSE

DOSE (Gy) vs REPORT FRACTION NUMBER

● R-PAROTID ● MANDIBLE ● L-PAROTID ● CORD ● ESOPHAGUS
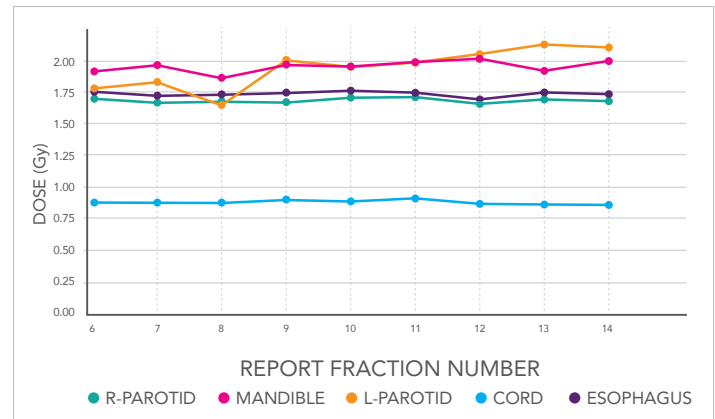
See trends in maximum dose data.

Efficient Evaluation

Fully integrated treatment planning and delivery data helps clinicians quickly identify patients that will benefit most from re-planning.

- Review daily dose and registrations, cumulative dose, dose differences and trending data

- Compare fractions and see original and deformed contours on daily merged image

- Evaluate deformation with built-in QA tools
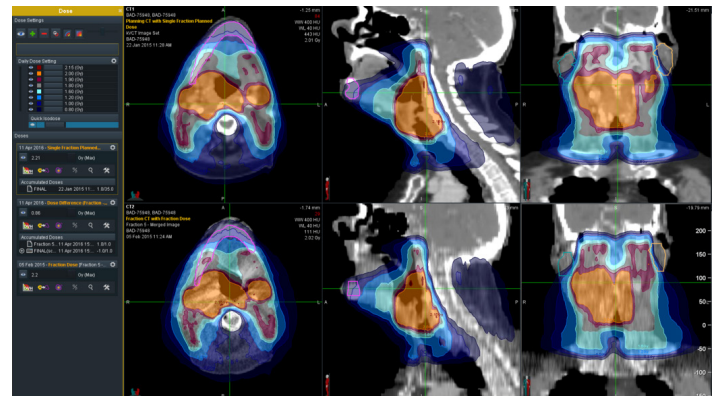
Visualize the re-calculated dose relative to the planned dose.

Deliver more precise treatments to more patients.

Important Safety Information:
Most side effects of radiotherapy, including radiotherapy delivered with Accuray systems, are mild and temporary, often involving fatigue, nausea, and skin irritation. Side effects can be severe, however, leading to pain, alterations in normal body functions (for example, urinary or salivary function), deterioration of quality of life, permanent injury and even death. Side effects can occur during or shortly after radiation treatment or in the months and years following radiation. The nature and severity of side effects depend on many factors, including the size and location of the treated tumor, the treatment technique (for example, the radiation dose), the patient's general medical condition, to name a few. For more details about the side effects of your radiation therapy, and if treatment with an Accuray product is right for you, ask your doctor.

ACCURAY®
Precise, innovative tumor treatments™