PROWESS

Panther TPS - Stereotactic Radiosurgery (SRS) and Body Radiotherapy (SBRT)



"We have used the Stereotactic module from Prowess and we have actually published a paper to compare the system with the well established Cyberknife systems. Our results have demonstrated that the new system can generate comparable or slightly better dose distribution to critical structures/organs at risk, enhancing the focal quality because of rotating concept while retaining the precision focusing of the non-rotational Leksell GammaKnife, yet allowing for dynamic gamma beams instead of static beams"

> Ahmed Eldib, PhD Medical Physicist Fox Chase Cancer Center

Stereotactic radiosurgery and body radiotherapy are non-surgical treatments that allows clinicians to treat cancer and abnormalities with a higher accuracy and dose per fraction than traditional radiotherapy. In order to achieve the precision planning required for stereotactic deliveries, Prowess has introduced several new tools to manage the workflow and added support for modeling various new treatment machine types.

These new capabilities are available within the Stereotactic customized workflow Ribbon and include a new dose based optimization objective function that has been developed to allow fast creation of plans based directly on the criteria that is used during evaluation. In addition, support for patient positioning frames, and absolute couch setups ensure the dose can be delivered with smaller margins.

Benefits and features include:

Support for a variety of stereotactic machines including those with:

- Rotational and static shots
- Multiple shot sizes (collimators)
- Shot blocking and partial arcs

DVH and Dose based optimization approaches

- DVH based constraints such as: max. dose, min. dose, points less than or greater than and EUD
- Dose based constraints such as: coverage, selectivity, gradient, and beam on time

Advanced patient setup

- Imaging center point support for fast creation of setup fields
- Automatic and manual frame registration with three transitional and three rotational parameters
- Enhanced 3D Rooms Eye View visualization of table, frame and treatment machine