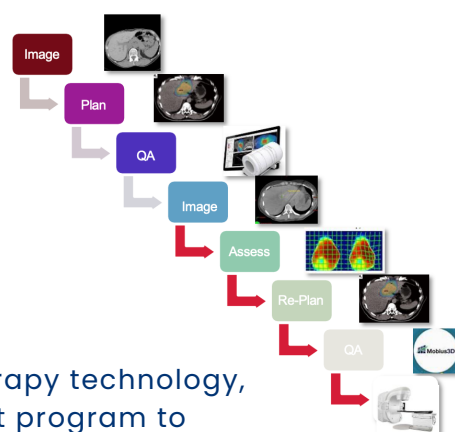
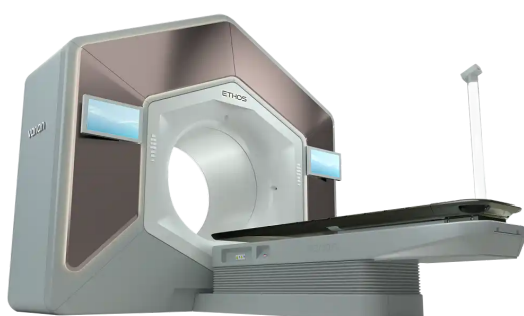


RADIATION ONCOLOGY

CLINIC UPDATES

Online CT-based Adaptive Radiation Therapy (OART)

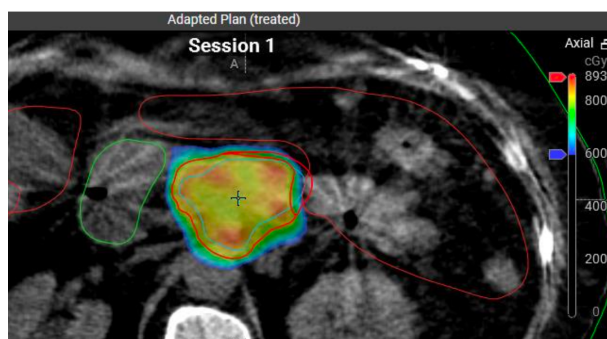
Using artificial intelligence, we are able to quickly re-plan patients while they are on the treatment machine. Columbia is at the forefront of adaptive RT planning, and to date we have completed over 800 adaptive treatments in our department.



Using the Varian ETHOS online adaptive radiotherapy technology, we are rapidly expanding our adaptive treatment program to include:

- Pancreas SBRT
- Rectum
- Anus
- Bladder
- Prostate SBRT
- Cervix
- Esophagus
- Head and Neck
- Kidney

Here you can see one of our pancreas SBRT plans with the adapted plan resulting in improved coverage as well as bowel sparing.



PTV_4000

4 goals

Dmax 0.00 cm3 < 115.0 %

V 95.0 % > 95.0 %

Scheduled

Adapted

P: 3 113.5%
111.2%

110.2%
111.2%

P: 2 87.9%
98.7%

99.0%
98.7%

Spc_Bowel

5 goals

Scheduled

Adapted

D 0.03 cm3 < 3500 cGy
(D 0.03 cm3 < 700 cGy / Fx)

P: 1 836 cGy
564 cGy

598 cGy
564 cGy

D 0.03 cm3 < 3000 cGy
(D 0.03 cm3 < 600 cGy / Fx)

P: 2 836 cGy
564 cGy

598 cGy
564 cGy

D 5.00 cm3 < 2500 cGy
(D 5.00 cm3 < 500 cGy / Fx)

P: 2 549 cGy
419 cGy

468 cGy
419 cGy

[Read More](#)