

Abstract Title: 4 π VMAT for Efficient Delivery of Highly Conformal Non-Coplanar Plans

Session Title: Novel Treatment Delivery and Verification Strategies

Date and Time: 08/02/2018 | 7:30AM — 9:30AM

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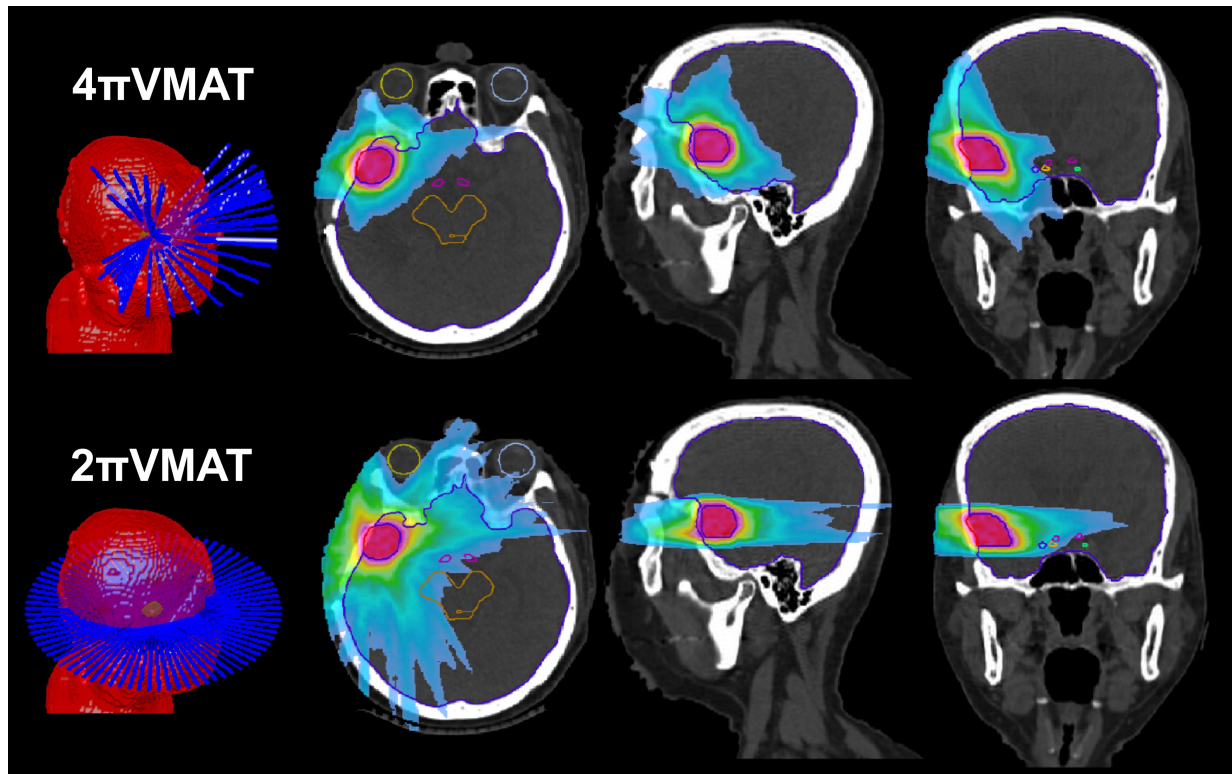


Figure 1: Selected beams and dose wash comparison of the 4 π VMAT and the 2 π VMAT for a GBM patient

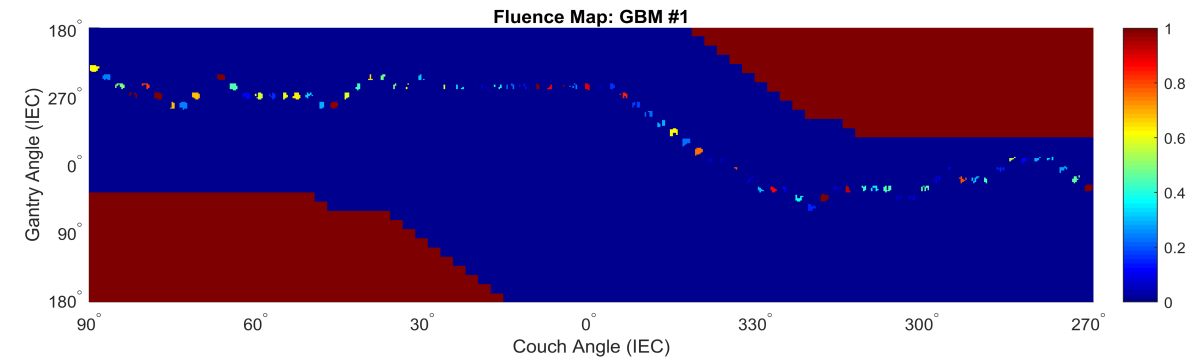


Figure 2: Normalized fluence map on the Gantry/Couch graph. Red regions indicate candidate beams leading to collisions.

- By using **non-coplanar beams**, 4 π VMAT has the flexibility to distribute the dose in any non-colliding direction (Figure 1), and remarkably **reduced the dose to OARs** while achieving comparable or better PTV statistics
- Selected beams are distributed on a **continuous trajectory** on the gantry/couch graph (Figure 2), allowing **rapid delivery** of the non-coplanar beams