

Improving Dose Prescriptions for Safety, Reporting, and Clinical Guideline Consistency

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ICRU-83: Guidelines and Compliance in IMRT

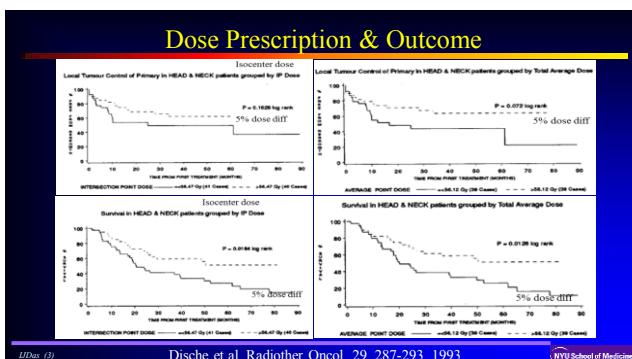
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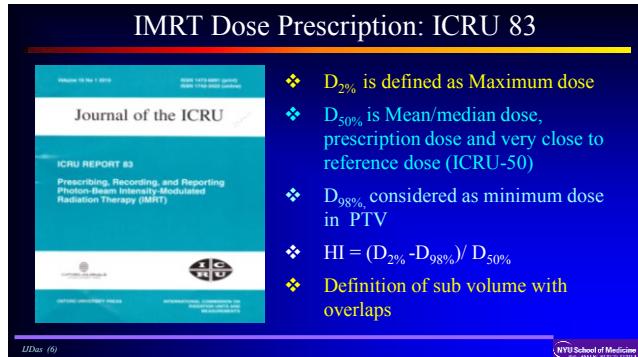
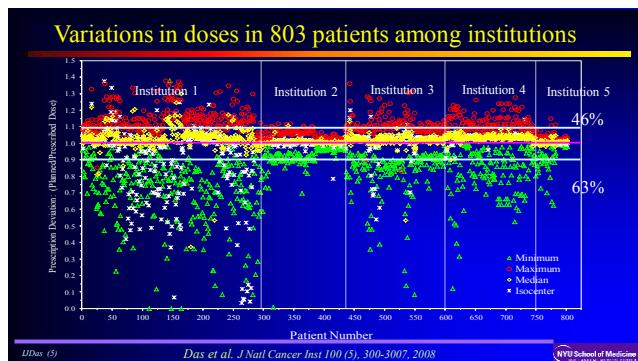
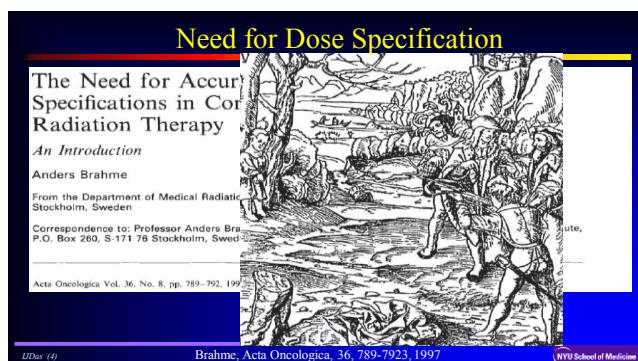
ICRU:International Commission on Radiation Units and Measurements

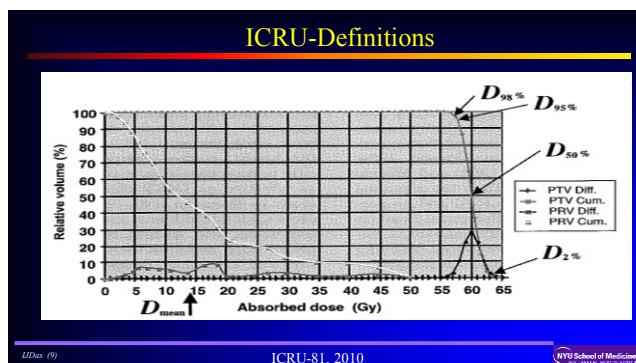
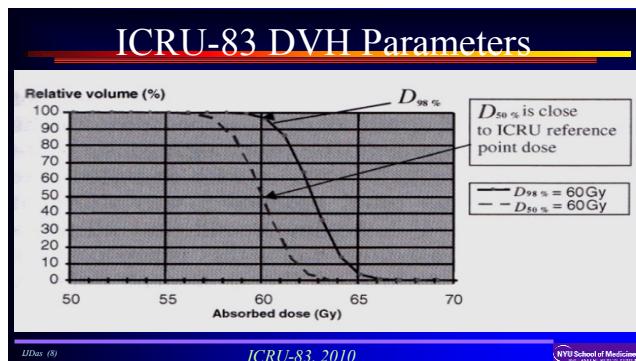
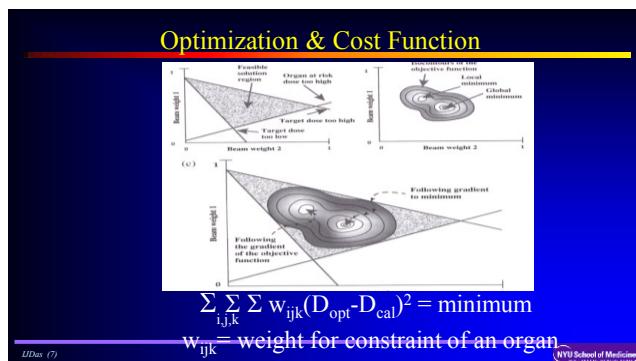
- ❖ 1978 , ICRU-29; Dose specification for reporting external beam therapy with photon and electron beams.
- ❖ 1993, ICRU-50; Prescribing, recording and reporting photon beam therapy.
- ❖ 1999, ICRU-62; Prescribing, recording and reporting photon beam therapy (Supplement to ICRU 50).

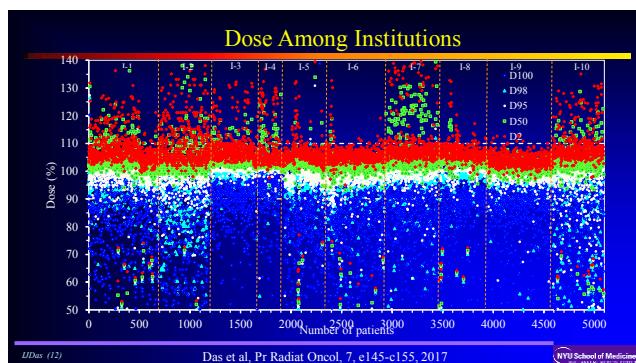
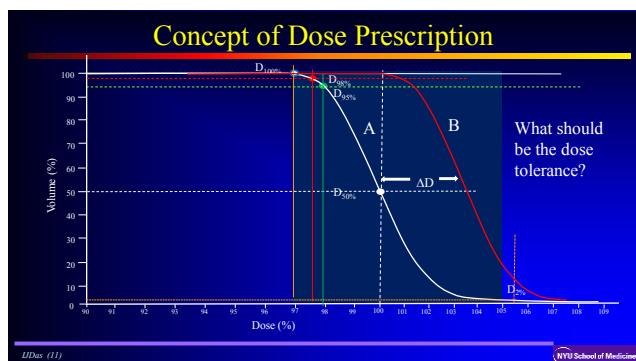
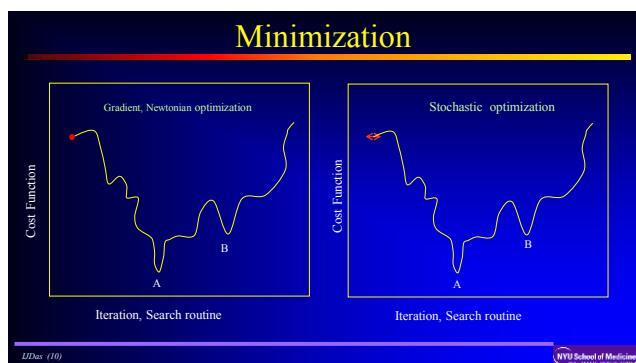
ICRU REPORT 50
Prescribing, Recording, and Reporting Photon Beam Therapy
INTERNATIONAL COMMISSION ON RADIATION UNITS AND MEASUREMENTS

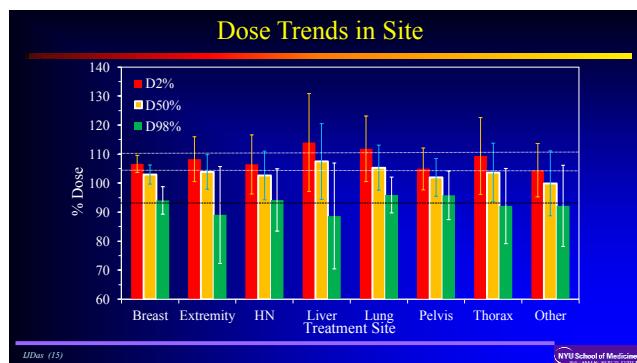
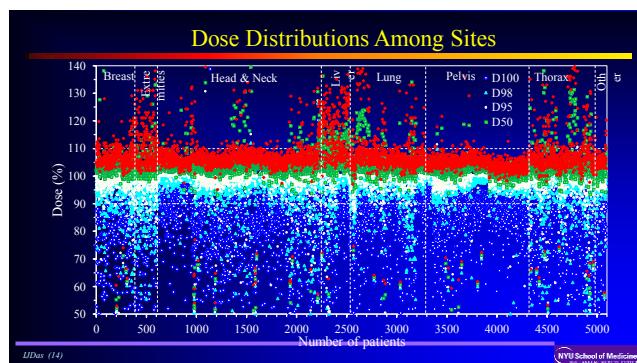
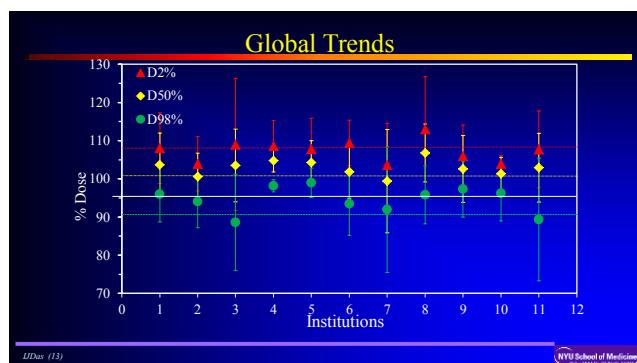
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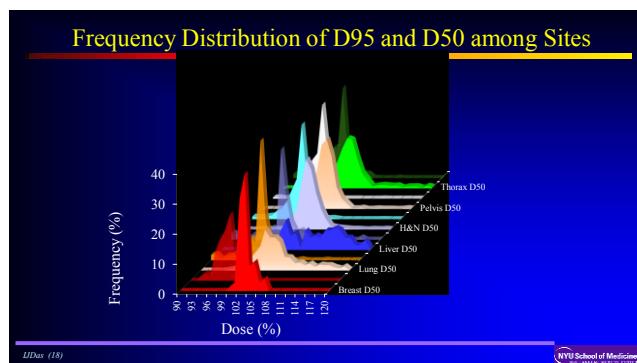
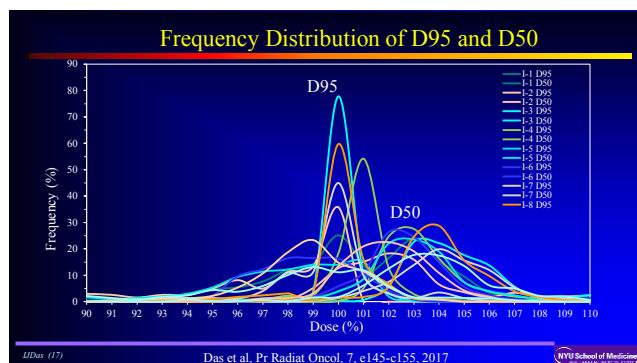
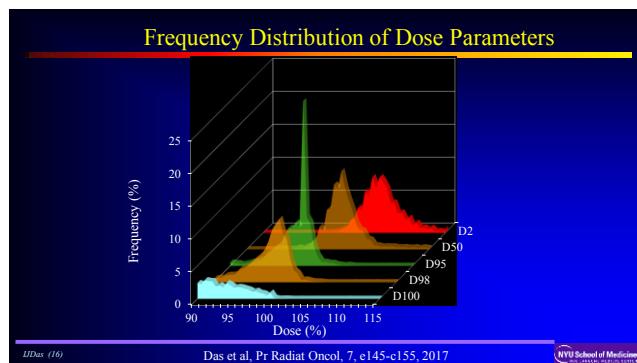


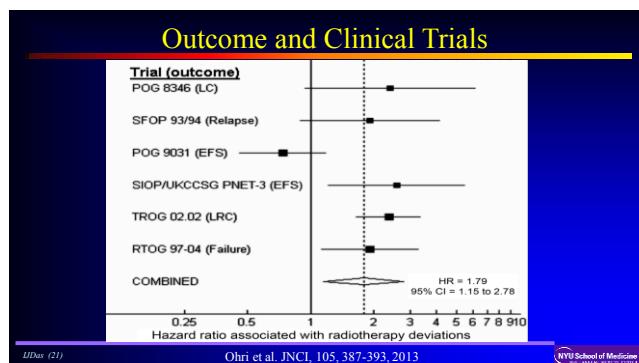
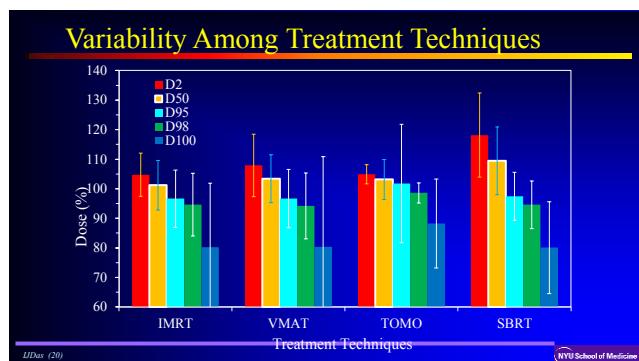
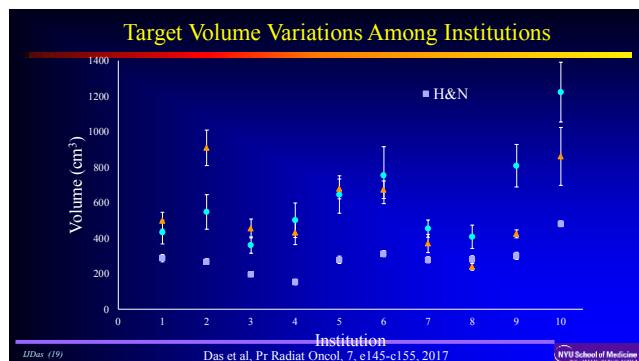


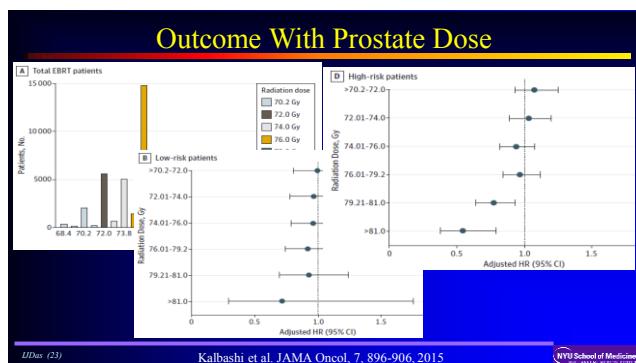
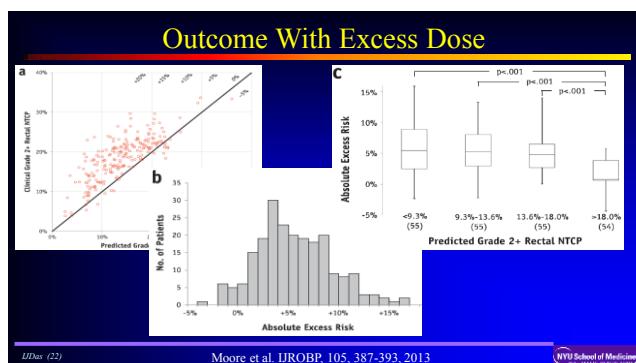












Conclusions

- ❖ Adoption of target volume nomenclature is extremely poor and variable even after ICRU-50 (1993) for 3DCRT
- ❖ ICRU-83 adoption is poor indicated in large variability in dose prescription/delivery in IMRT and even in academic institutions
- ❖ Head & Neck and pelvis have better uniformity in dose prescription compared to other disease sites
- ❖ Clinical trials should emphasize the need for uniformity in dose prescription for a meaningful treatment outcome
- ❖ Mere $\pm 10\%$ dose difference has shown significant outcome difference