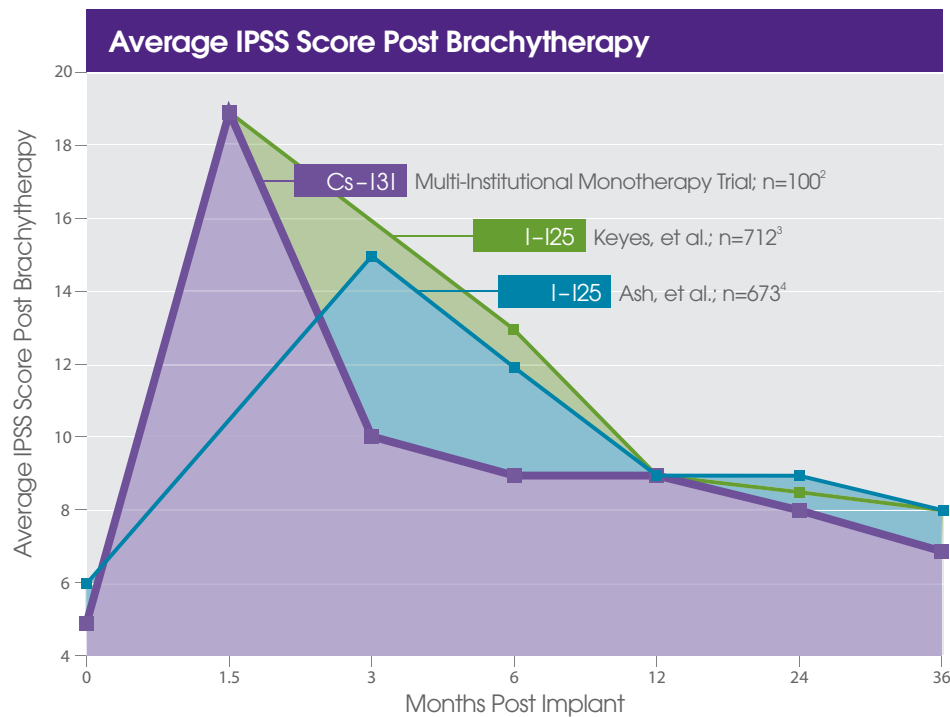


ADVANTAGES OF PROXCELAN

9.7 Day half-life; 30.4 KeV average photon energy

Rapid resolution of common brachytherapy-related morbidities

IPSS scores showed resolution of mild to moderate urinary symptoms typically within 4–6 weeks post implant supporting theoretical argument that dose related side effects dissipate faster with the shorter lived isotopes.¹

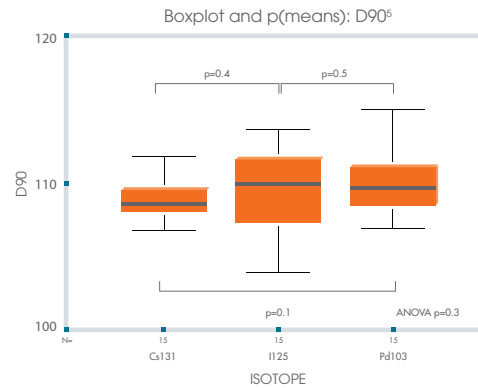
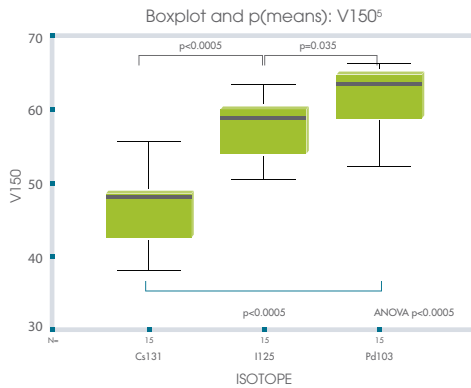


Isotope Dose Delivery Over Time				
Isotope	Half-Life	Energy	90% Dose	Total Dose
Cs-131	9.7 days	30.4 KeV	33 days	115 Gy
Pd-103	17 days	20.8 KeV	58 days	125 Gy
I-125	60 days	28.5 KeV	204 days	145 Gy

1. Prestidge B, et al. "Cesium-131 Permanent Prostate Brachytherapy: An Initial Report." International Journal of Radiation Oncology Biology Physics 63(1):S336-S337, 2005.
2. Bice, W. "Permanent prostate brachytherapy using Cs-131 for localized prostatic carcinoma: a phase II study." Presented at the 2008 Cesium Advisory Group Meeting November 2008. Tucson, Arizona, U.S.A.
3. Keyes M, et al. "Predictive factors for acute and late urinary toxicity after permanent prostate brachytherapy: long-term outcomes in 712 consecutive patients." International Journal of Radiation Oncology, Biology and Physics 73(4):1023-32, 2009.
4. Ash D, et al. "A prospective analysis of long-term quality of life after permanent I-125 brachytherapy for localized prostate cancer." Radiotherapy and Oncology 84(2):135-9, 2007.

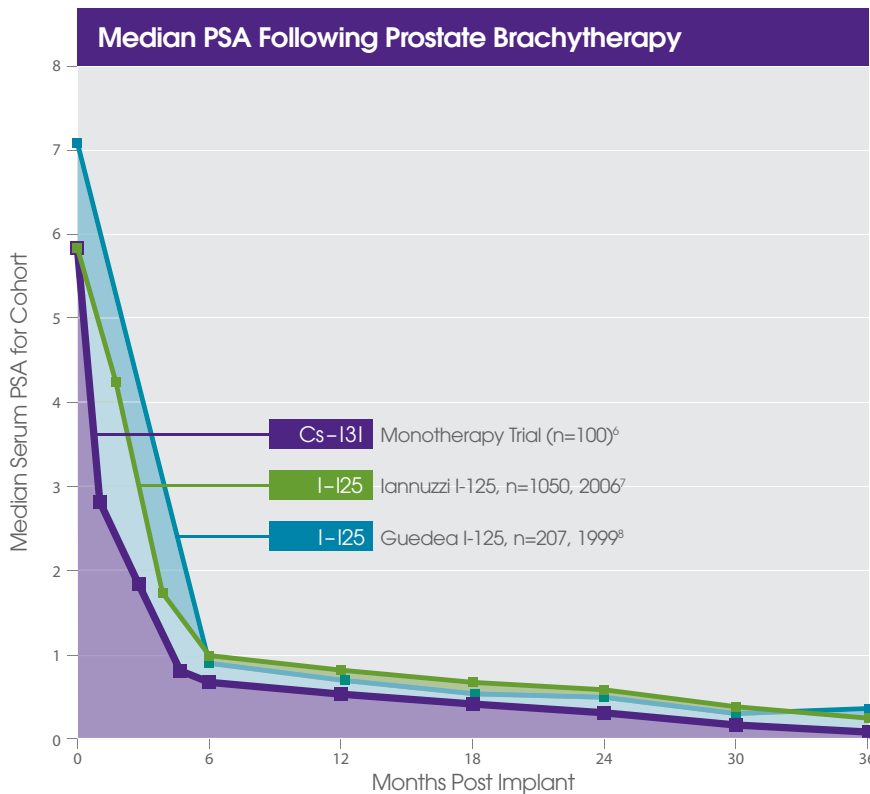
Homogenous Dose Delivery

For prostate plans, the relatively high average photon energy of Cs-131 allows the brachytherapy team to achieve excellent prescription dose coverage of the gland while minimizing V150 and other measures of excessive dose.



Durable serum PSA response post-brachytherapy

A 100 patient multi-institutional Cs-131 monotherapy trial has demonstrated PSA declines comparable to historical I-125 series at three years median follow-up.



5. Yaparpalvi R, et al. "Is Cs-131 or I-125 or Pd-103 the ideal isotope for prostate boost brachytherapy? A dosimetric viewpoint." *International Journal of Radiation Oncology Biology and Physics* 69(3):S677-8, 2007.
6. Cs-131: 1. Bice W. "Permanent prostate brachytherapy using Cs-131 for localized prostatic carcinoma: a phase II study." Presented at the 2008 Cesium Advisory Group Meeting November 2008. Tucson, Arizona, U.S.A.
7. Iannuzzi: Iannuzzi CM, et al. "PSA kinetics following I-125 radioactive seed implantation in the treatment of T1-T2 prostate cancer." *Radiation Oncology Investigations* 7(1):30-5, 1999.
8. Guedea: Guedea F, et al. "Early biochemical outcomes following permanent interstitial brachytherapy as monotherapy in 1050 patients with clinical T1-T2 prostate cancer." *Radiotherapy and Oncology* 80(1):57-61, 2006.