

Erratum: "Update of AAPM Task Group No. 43 Report: A revised AAPM protocol for brachytherapy dose calculations" [Med. Phys. 31, 633–674 (2004)]^{a)}

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(Received 17 August 2004; accepted for publication 15 September 2004)

We offer this corrigendum as a means to both correct typographical errors and add to the content of the updated AAPM Task Group No. 43 Report (AAPM TG-43U1).¹

Regarding the typographical errors:

1. In Table XIII on page 651, the unit of the air kerma rate constant for both ¹²⁵I and ¹⁰³Pd should be $\mu\text{Gy} \cdot \text{m}^2 \cdot \text{h}^{-1} \cdot \text{MBq}^{-1}$ instead of $\mu\text{Gy} \cdot \text{m}^2 \cdot \text{h}^{-1} \cdot \text{Bq}^{-1}$ as also incorrectly specified in Table 5 of the NIST report.²
2. In Ref. 150 on page 674, the associated URL may not hyperlink to the NIST website. The filename should be J85SEL1.pdf instead of J85SELL.pdf.²
3. In column 1 of page 643, last paragraph of Sec. IV.B.2., Ref. 158 should be replaced with Ref. 36.
4. In column 1 of page 655 under Sec. V.E.2(1), the words "other solid water substitutes" should be replaced with the words "other liquid water substitutes."
5. In column 1 on page 639 above Eq. (6), the text should read "... is equal to unity at $r=1$ cm" instead of "... is equal to unity at $r_0=1$ cm."
6. In Table VI on page 645, the values for $F(1,0)$ and $F(2,0)$ for the Best[®] model 2301 ¹²⁵I seed should be 0.867 and 0.854 instead of 0.367 and 0.454, respectively, as mistakenly transcribed from Table 4 of Sowards and Meigooni.³ Additionally, the values for $\phi(1)$ and $\phi(2)$ should be 0.986 and 0.976 instead of 0.945 and 0.987, respectively. Consequently, the 1-D dose rate data listed

in Table XV on page 657 should be 3.978, 1.004, 0.419, and 0.217 $\text{cGy} \cdot \text{h}^{-1} \cdot \text{U}^{-1}$ for $r=0.5$, 1.0, 1.5, and 2.0 cm, respectively. While not the case with this dataset, there may be minor differences in $\phi(r)$ values presented in TG-43U1 compared to values published in the publications from which candidate datasets were derived. Slight differences were expected as interpolation was used to obtain consensus datasets with common datapoints, yet provide interpolation errors of less than $\pm 2\%$. This methodology was described in Sec. IV.(g).

Regarding additions to the content of TG-43U1, the consensus dataset methodology was developed with Chan *et al.*⁴ which was unpublished at the time of TG-43U1 report completion. Furthermore, a supplement to TG-43U1 is underway to include AAPM-approved consensus datasets for additional source models. This supplement should be available next year.

We appreciate the contributions to this corrigendum from Dr. Robert van der Laarse, Dr. Trent Ning, Mr. Zein Tjen, and Mr. Christopher Melhus.

^{a)}This work was presented in part at the 46th annual meeting of the American Association of Physicists in Medicine on 29 July 2004 in Pittsburgh, PA.

- ¹M. J. Rivard, B. M. Coursey, L. A. DeWerd, W. F. Hanson, M. S. Huq, G. S. Ibbott, M. G. Mitch, R. Nath, and J. F. Williamson, "Update of AAPM Task Group No. 43 Report: A revised AAPM protocol for brachytherapy dose calculations," AAPM Report No. 84, *Med. Phys.* **31**, 633–674 (2004).
- ²S. M. Seltzer, P. J. Lamperti, R. Loevinger, M. G. Mitch, J. T. Weaver, and B. M. Coursey, "New national air-kerma-strength standards for ¹²⁵I and ¹⁰³Pd brachytherapy seeds," *J. Res. Natl. Inst. Stand. Technol.* **108**, 337–358 (2003), online version <http://nvl.nist.gov/pub/nistpubs/jres/108/5/j85se11.pdf> last accessed November 20, 2004.
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- ⁴G. H. Chan, R. Nath, and J. F. Williamson, "On the development of consensus values of reference dosimetry parameters for interstitial brachytherapy sources," *Med. Phys.* **31**, 1040–1046 (2004).