

**Erratum: “Uniqueness theorems in bioluminescence tomography”**  
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Ge Wang<sup>a)</sup>

*Bioluminescence Tomography Laboratory and CT/Micro-CT Laboratory, Departments of Radiology, Biomedical Engineering, and Mathematics, University of Iowa, Iowa City, Iowa 52242*

Yi Li<sup>b)</sup>

*Hunan Normal University, Changsha 410081, Hunan, China  
 and Department of Mathematics, University of Iowa, Iowa City, Iowa 52242*

Ming Jiang<sup>c)</sup>

*LMAM, School of Mathematical Sciences, Peking University, Beijing 100871, China*

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In this Erratum, we present a correction to our proof of Theorem D.4 in Ref. 1. In the proof of Theorem D.4 on p. 2298 in Ref. 1, Eq. (D26) does not hold on the specified domain  $R^N \setminus \{\cup_{i=1}^m \{x_i\} \cup \cup_{j=1}^M \{x_j\}\}$ . The proof after Eq. (D25) can be refined as follows. Let

$$\begin{aligned} \bar{W}(x) = & \sum_{i=1}^m \lambda_i \left( \int_{r_0^i}^{r_1^i} \omega_N r^{N-1} \varphi_1(r) dr \right) F_1(x, x_i) \\ & - \sum_{j=1}^M \Lambda_j \left( \int_{R_0^j}^{R_1^j} \omega_N r^{N-1} \varphi_1(r) dr \right) F_1(x, X_j), \end{aligned} \quad (1)$$

for  $x \in R^N \setminus \{\cup_{i=1}^m \{x_i\} \cup \cup_{j=1}^M \{x_j\}\}$ . It follows from Eq. (D25) that

$$\bar{W}(x) = 0, \quad \text{for } x \in R^N \setminus \bar{\Omega}_1, \quad (2)$$

and

$$-D_1 \Delta \bar{W} + \mu_1 \bar{W} = 0, \quad \text{on } R^N \setminus \left\{ \cup_{i=1}^m \{x_i\} \cup \cup_{j=1}^M \{x_j\} \right\}. \quad (3)$$

Then, the unique continuation theory (cf. Ref. 27 in Ref. 1) implies that

$$\bar{W}(x) \equiv 0, \quad \text{on } R^N \setminus \left\{ \cup_{i=1}^m \{x_i\} \cup \cup_{j=1}^M \{x_j\} \right\}, \quad (4)$$

which immediately leads to Theorem D.4.

<sup>a)</sup>Electronic mail: ge-wang@ieee.org

<sup>b)</sup>Electronic mail: yi-li@uiowa.edu

<sup>c)</sup>Electronic mail: jiangm@math.pku.edu.cn

<sup>1</sup>G. Wang, Y. Li, and M. Jiang, “Uniqueness Theorems in Bioluminescence Tomography,” *Med. Phys.* **31**, 2289–2299 (2004).