**Supplementary Document**

**Supplementary Figures**

Supplementary Figure 1 – Whole-body scintigraphy: analysis of a representative patient

Supplementary Figure 2 – Thyroid cancer-specific mortality

**Supplementary Figure legends**

**Supplementary Figure 1.** A representative patient: whole-body scintigraphy and 131I-avid accumulation counts using the study method

**Supplementary Figure 2.** Kaplan‒Meier analysis of thyroid cancer-specific mortality. Thyroid cancer-specific mortality did not differ significantly between the RAI-non-avid and RAI-avid DM groups (post hoc analysis, p = 1.000). RAI-non-avid DM, RAI-avid DM, and non-DM groups are indicated by black, red, and green lines, respectively. DM, distant metastases.

**Supplementary Tables**

Supplementary Table 1. Definitions of TNM classification

Supplementary Table 2. Clinical characteristics of the diffuse pulmonary 131I accumulation group (n = 11)

Supplementary Table 3. Clinical course of 14 patients with bone metastases who had ≥2 years of follow-up