**Supplementary Data**

**Supplementary Table 1. Clinico-pathological Factors in the Metformin and Non-Metformin Subgroups of Diabetic Patients with Cervical Lymph Node Metastasis of DTC**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Non-metformin (n = 8) | Metformin  (n = 22) | *p* |
| Age (years) | 59.2 ± 5.6 | 58.8 ± 7.1 | 0.89 |
| Sex (female) | 5 (63) | 16 (73) | 0.67 |
| BMI (kg/m2) | 24.9 ± 1.6 | 25.4 ± 2.0 | 0.49 |
| Duration of diabetes | 5.7 ± 5.5 | 5.6 ± 5.4 | 0.96 |
| HbA1c (%) | 6.9 ± 0.7 | 7.4 ± 1.2 | 0.32 |
| C-peptide (ng/mL) | 4.6 ± 2.2 | 3.9 ± 3.1 | 0.67 |
| Surgeons |  |  | 0.8 |
| Surgeon A | 7 (88) | 15 (68) |  |
| Surgeon B | 1 (12) | 3 (14) |  |
| Surgeon C | 0 (0) | 4 (18) |  |
| Extent of surgery |  |  | 0.59 |
| TT with CND | 6 (75) | 19 (86) |  |
| TT with MRND | 2 (25) | 3 (14) |  |
| Tumor size (cm) | 1.9 ± 0.8 | 1.9 ± 0.7 | 0.85 |
| Histology |  |  | NA |
| Classical PTC | 8 (100) | 22 (100) |  |
| Extra-thyroidal extension | 7 (88) | 15 (68) | 0.39 |
| Tumor at resection margin | 3 (38) | 5 (23) | 0.64 |
| N1b | 2 (25) | 3 (14) | 0.59 |
| Radioiodine remnant ablation | 8 (100) | 21 (95) | 0.99 |
| 131I dose at ablation (mCi) | 132 ± 34 | 126 ± 49 | 0.69 |
| Tg at ablation (µg/L) | 32.3 ± 73.8 | 2.7 ± 4.1 | 0.29 |
| Recurrence | 3 (38) | 2 (9) | 0.1 |

HbA1c data were available for 27 diabetic patients with lymph node metastasis (90%) including 20 patients (91%) in the metformin subgroup and 7 patients (88%) in the non-metformin subgroup. C-peptide was measured in 16 diabetic patients with lymph node metastasis (53%) including 11 patients (50%) in the metformin subgroup and 5 patients (63%) in the non-metformin subgroup.

Continuous variables including age, BMI, time interval between diagnosis of diabetes and surgery, HbA1c, C-peptide, tumor size, 131I dose, and serum thyroglobulin at ablation are reported as mean ± SD.

DTC, differentiated thyroid cancer; BMI, body mass index at surgery; TT, total thyroidectomy; CND, central neck dissection; MRND, modified radical neck dissection; NA, not applicable; PTC, papillary thyroid carcinoma; FTC, follicular thyroid carcinoma; ETE, extra-thyroid extension; Tg, thyroglobulin.