**Supplementary Tables**

**Supplementary Table 1.** The Bethesda system performance in nodules classified as II, V, and VI (171 nodules).

|  |  |  |  |
| --- | --- | --- | --- |
| Bethesda result | Cancer | Benign | Test Performance |
| II | 7 | 101 | S: 89.5% E: 97.1%  PPV: 95.2% NPV: 93.5%  Accuracy: 94.1% |
| V or VI | 60 | 3 |

S: sensitivity, E: specificity, PPV: positive predictive value, NPV: negative predictive value.

**Supplementary Table 2.** iFS performance in all thyroidectomies (316 nodules).

|  |  |  |  |
| --- | --- | --- | --- |
| iFS result | Cancer | Benign | Test Performance |
| Benign | 16 | 232 | S: 80.9% E: 100%  PPV: 100% NPV: 93.5%  Accuracy: 94.9% |
| Malignant | 68 | 0 |

S: sensitivity, E: specificity, PPV: positive predictive value, NPV: negative predictive value.

**Supplementary Table 3.** iFS performance in Bethesda I nodules (21 nodules).

|  |  |  |  |
| --- | --- | --- | --- |
| iFS result | Cancer | Benign | Test Performance |
| Benign | 1 | 19 | S: 50% E: 100%  PPV: 100% NPV: 95%  Accuracy: 95.2% |
| Malignant | 1 | 0 |

S: sensitivity, E: specificity, PPV: positive predictive value, NPV: negative predictive value.

**Supplementary Table 4.** iFS performance in Bethesda II, V, and VI nodules (171 nodules).

|  |  |  |  |
| --- | --- | --- | --- |
| iFS result | Cancer | Benign | Test Performance |
| Benign | 5 | 104 | S: 92.5% E: 100%  PPV: 100% NPV: 95.4%  Accuracy: 97% |
| Malignant | 62 | 0 |

S: sensitivity, E: specificity, PPV: positive predictive value, NPV: negative predictive value.

**Supplementary Table 5.** iFS performance in diagnostic thyroidectomies (Bethesda III and IV nodules) (80 nodules)

|  |  |  |  |
| --- | --- | --- | --- |
| iFS result | Cancer | Benign | Test Performance |
| Benign | 9 | 68 | S: 25% E: 100%  PPV: 100% NPV: 88.3%  Accuracy: 88.7% |
| Malignant | 3 | 0 |

S: sensitivity, E: specificity, PPV: positive predictive value, NPV: negative predictive value.