**Supplementary Table**

**Supplementary Table 2.** Demographics, clinical, and pathological characteristics of patients evaluated by immunohistochemistry.

|                          | Localized n = 9 | Metastatic n = 9 | P-value$^c$ |
|--------------------------|-----------------|------------------|-------------|
| Age, mean                | 55.1 ± (17.7)   | 59.0 ±(20.0)     | 0.758       |
| Female sex, n (%)        | 2 (22.2%)       | 7 (77.8%)        | 0.154       |
| Tumor location, n (%)    |                 |                  |             |
| Head                     | 4 (44.4%)       | 3 (33.3%)        | 0.788       |
| Body                     | 1 (11.1%)       | 2 (22.2%)        |             |
| Tail                     | 4 (44.4%)       | 4 (44.4%)        |             |
| Functional, n (%)$^a$    | 4 (44.4%)       | 1 (12.5%)        | 0.294       |
| Grade (2017 WHO), n (%)  |                 |                  |             |
| Grade 1                  | 5 (55.6%)       | 1 (12.5%)        | 0.094       |
| Grade 2                  | 4 (44.4%)       | 5(62.5%)         |             |
| Grade 3                  | 0               | 2 (25%)          |             |
| Tumor size (cm), mean    | 2.0 ± 0.9       | 4.0 ± 2.3        | 0.028       |
| Pathological tumor stage, n (%)$^d$ |          |                  |             |
| pT1                      | 6 (66.6%)       | 2(25%)           | 0.207       |
| pT2                      | 2 (22.2%)       | 3 (37.5%)        |             |
| pT3                      | 1 (11.1%)       | 3 (37.5%)        |             |
| pN1, n (%)               | 0 (0%)          | 8 (88.9%)        |             |
| pM1, n (%)               | 0 (0%)          | 7 (77.9%)        |             |

$^a$Localized functional tumors were all insulinomas, whereas the functional metastatic tumor was a VIPoma.

$^b$All specimens were well-differentiated pancreatic neuroendocrine tumors. Tumors were considered metastatic if they were N1 or M1. Clinical information was limited for one patient in the
metastatic cohort. Therefore, the reported percentages for functional status, grade, and pT stage for the metastatic group utilize a denominator of 8. Otherwise, a denominator of 9 was utilized.

\(^c\)P-values were determined by Student’s t test and Fisher’s exact test for continuous and categorical variables, respectively.

\(^d\) AJCC Cancer Staging Manual, 7th edition.