## SUPPLEMENTAL DATA

## Supplemental Table1

| AJCC Pancreatic Cancer Staging $7^{\text {th }}$ edition |  |  |  |
| :---: | :---: | :---: | :---: |
| Anatomic Stage/Prognostic Groups |  |  |  |
| Stage 0 | Tis | N0 | M0 |
| Stage IA | T1 | N0 | M0 |
| Stage IB | T2 | N0 | M0 |
| Stage IIA | T3 | N0 | M0 |
| Stage |  |  |  |
| IIB | T1 | N1 | M0 |
|  | T2 | N1 | M0 |
|  | T3 | N1 | M0 |
| Stage III | T4 | Any N | M0 |
| Stage IV | Any T | Any N | M1 |

Definitions
Primary Tumor (T)
Tx Primary tumor cannot be assessed
T0 No evidence of primary tumor
Tis Carcinoma in situ
T1 Tumor limited to the pancreas, 2 cm or less in greatest dimension
T2 Tumor limited to the pancreas, more than 2 cm in greatest dimension
T3 Tumor extends beyond the pancreas but without involvement of the celiac axis or the superior mesenteric artery
T4 Tumor involves the celiac axis or the superior mesenteric artery (unresectable primary tumor)

Regional lymph nodes ( N )
Nx Regional lymph nodes cannot be assessed
N0 No regional lymph node metastasis
N1 Regional lymph node metastasis

Distant Metastasis (M)
M0 No distant metastasis
M1 Distant metastasis

## Supplemental Table 2

Estimates from multiple linear regression models for age, adjusting for patient race, sex, tumor location and grade among patients with stage IV disease only (first column) and all stages (second column). Separate models were estimated for varying subgroups of patient stage of disease. Values given are mean differences in ages by T stage, with $95 \%$ confidence intervals.

| Stage IV | Stages I to IV |
| :--- | :--- |
| $63.75[61,66.49]$ | $61.43[60.23,62.63]$ |
| $-0.16[-2.48,2.16], \mathrm{P}=0.89$ | $0.54[-0.41,1.49], \mathrm{P}=0.26$ |
| $-1.74[-4.03,0.54], \mathrm{P}=0.14$ | $0.5[-0.38,1.39], \mathrm{P}=0.26$ |
| $-1.8[-4.14,0.54], \mathrm{P}=0.13$ | $0.49[-0.48,1.45], \mathrm{P}=0.33$ |

Supplemental Table 3: Estimates from a multiple linear regression model for age, adjusting for patient race, sex, tumor location and grade. All patients were included in the models. Values given are mean differences in ages by clinical stage and T stage, with $95 \%$ confidence intervals.

| Adjusted Mean Age (years), Stage IA | 61.23 [59.86, 62.61] |
| :--- | :--- |
| Age difference (years): IB v IA | $-0.19[-1.53,1.16], \mathrm{P}=0.79$ |
| Age difference (years): IIA v IA | $1.67[0.46,2.87], \mathrm{P}=0.007$ |
| Age difference (years): IIB, T1 v IA | $-0.9[-2.9,1.1], \mathrm{P}=0.38$ |
| Age difference (years): IIB, T2 v IA | $-0.37[-1.77,1.03], \mathrm{P}=0.6$ |
| Age difference (years): IIB, T3 v IA | $0.28[-0.87,1.43], \mathrm{P}=0.63$ |
| Age difference (years): III v IA | $0.81[-0.45,2.06], \mathrm{P}=0.21$ |
| Age difference (years): IV, T1 v IA | $2.14[-0.21,4.5], \mathrm{P}=0.07$ |
| Age difference (years): IV, T2 v IA | $1.93[0.64,3.22], \mathrm{P}=0.003$ |
| Age difference (years): IV, T3 v IA | $0.34[-0.89,1.58], \mathrm{P}=0.59$ |
| Age difference (years): IV, T4 v IA | $0.37[-0.96,1.7], \mathrm{P}=0.58$ |

Adjusted Mean Age (years), Stage IB 61.05 [59.87, 62.22]
Age difference (years): IA v IB0.19 [-1.16, 1.53], $\mathrm{P}=0.79$ Age difference
(years): IIA v IB $\quad 1.85[0.91,2.8], \mathrm{P}=1 \mathrm{e}-04$ Age
difference (years): IIB, T1 v IB $\quad-0.71$ [-2.57, 1.14], P = 0.45
Age difference (years): IIB, T2 v IB $\quad-0.19[-1.37,1], \mathrm{P}=0.76$
Age difference (years): IIB, T3 v IB $\quad 0.47$ [-0.41, 1.34], $\mathrm{P}=0.3$
Age difference (years): III v IB $\quad 0.99[-0.02,2], \mathrm{P}=0.05$
Age difference (years): IV, T1 v IB 2.33 [0.1, 4.56], P = 0.04
Age difference (years): IV, T2 v IB 2.12 [1.07, 3.17], P < 0.0001
Age difference (years): IV, T3 v IB $\quad 0.53$ [-0.46, 1.51], $\mathrm{P}=0.29$
Age difference (years): IV, T4 v IB $\quad 0.56[-0.54,1.66], \mathrm{P}=0.32$

| Adjusted Mean Age (years), Stage IIA | $62.9[61.84,63.97]$ |
| :--- | :--- |
| Age difference (years): IA v IIA | $-1.67[-2.87,-0.46], \mathrm{P}=0.007$ Age |
| difference (years): IB v IIA | $-1.85[-2.8,-0.91], \mathrm{P}=1 \mathrm{e}-04$ Age |
| difference (years): IIB, T1 v IIA | $-2.57[-4.31,-0.82], \mathrm{P}=0.004$ |
| Age difference (years): IIB, T2 v IIA | $-2.04[-3.05,-1.03], \mathrm{P}=0.0001$ |
| Age difference (years): IIB, T3 v IIA | $-1.39[-1.99,-0.79], \mathrm{P}=0.0001$ |
| Age difference (years): III v IIA | $-0.86[-1.65,-0.07], \mathrm{P}=0.03$ |
| Age difference (years): IV, T1 v IIA | $0.48[-1.66,2.62], \mathrm{P}=0.66$ |
| Age difference (years): IV, T2 v IIA | $0.26[-0.59,1.11], \mathrm{P}=0.54$ Age |
| difference (years): IV, T3 v IIA | $-1.33[-2.09,-0.56], \mathrm{P}=7 \mathrm{e}-04$ Age |
| difference (years): IV, T4 v IIA | $-1.3[-2.21,-0.39], \mathrm{P}=0.005$ |

## Supplemental Table 4:

Estimates from a multiple linear regression model for age, adjusting for patient race, sex, tumor location and grade, among patients with stage I, II or III disease only. Values given are mean differences in ages by tumor size and stage of disease, with $95 \%$ confidence intervals.

| Adjusted Mean Age (years), Stage IB | 60.63 [59.32, 61.94] |
| :---: | :---: |
| Age difference (years): IA v IB | 0.15 [-1.17, 1.46], $\mathrm{P}=0.83$ |
| Age difference (years): IIA, <= 2cm v IB | 1.65 [0.25, 3.05], $\mathrm{P}=0.02$ |
| Age difference (years): IIA, 2-4 cm v IB | 2.23 [1.21, 3.26], $\mathrm{P}<0.0001$ |
| Age difference (years): IIA, > 4cm v IB | 1.24 [-0.03, 2.5], $\mathrm{P}=0.05$ |
| Age difference (years): IIB, <= $2 \mathrm{~cm} v$ IB | -0.32 [-1.45, 0.8], $\mathrm{P}=0.58$ |
| Age difference (years): IIB, 2-4 cm v IB | 0.7 [-0.19, 1.59], $\mathrm{P}=0.12$ |
| Age difference (years): IIB, > 4cm v IB | 0.06 [-0.92, 1.05], $\mathrm{P}=0.9$ |
| Age difference (years): III, <= 2cm v IB | 1.54 [-0.82, 3.89], $\mathrm{P}=0.2$ |
| Age difference (years): III, 2-4 cm v IB | 0.92 [-0.27, 2.1], $\mathrm{P}=0.13$ |
| Age difference (years): III, > 4cm v IB | 1.15 [-0.02, 2.32], $\mathrm{P}=0.05$ |
| Adjusted Mean Age (years), Stage IIB, $<=2 \mathrm{~cm}$ | - 60.31 [58.91, 61.71] |
| Age difference (years): IA v IIB, $<=2 \mathrm{~cm}$ | 0.47 [-0.87, 1.81], $\mathrm{P}=0.49$ |
| Age difference (years): IB v IIB, $<=2 \mathrm{~cm}$ | 0.32 [-0.8, 1.45], $\mathrm{P}=0.58$ |
| Age difference (years): IIA, <= 2cm v IIB, <= | cm 1.98 [0.58, 3.37], $\mathrm{P}=0.006$ |
| Age difference (years): IIA, $2-4 \mathrm{~cm} v$ IIB, $<=2$ | 2 cm 2.56 [1.53, 3.58], $\mathrm{P}<0.0001$ |
| Age difference (years): IIA, > 4cm v IIB, <= 2c | cm 1.56 [0.28, 2.84], $\mathrm{P}=0.02$ |
| Age difference (years): IIB, 2-4 cm v IIB, $<=2$ | 2 cm 1.02 [0.14, 1.9], $\mathrm{P}=0.02$ |
| Age difference (years): IIB, > 4cm v IIB, <= 2c | cm 0.39 [-0.61, 1.38], $\mathrm{P}=0.45$ |
| Age difference (years): III, <= 2cm v IIB, <= 2 c | cm 1.86 [-0.5, 4.21], $\mathrm{P}=0.12$ |
| Age difference (years): III, 2-4 cm v IIB, <= 2c | cm 1.24 [0.05, 2.42], $\mathrm{P}=0.04$ |
| Age difference (years): III, > 4cm v IIB, <= 2cm | m 1.47 [0.29, 2.65], $\mathrm{P}=0.01$ |

