**Table 3.** Mean monthly cost estimates by stage at diagnosis by treatment modality, and significant predictors of cancer-attributable costs during the staging phase\*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  | *Total Cost Predictors* |
|  | N (%) | Monthly Patient-liability cost (95% CI) | Monthly Total cost (95% CI) | Year | Age | Year\_Age |
| ***AJCC Stage*** |  |  |  |  |  |  |
| **Stage I** |  |  |  |  |  |  |
| Best supportive care | 287 (38.0) | $1,581 ($1,409-$1,752) | $17,662 ($15,400-$19,925) |  | **+** |  |
| Radiation | 118 (15.6) | $1,704 ($1,445-$1,964) | $15,865 ($12,953-$18,776) |  |  |  |
| Chemotherapy | 112 (14.8) | $1,650 ($1,487-$1,814) | $15,888 ($13,117-$18,659) |  |  |  |
| Chemoradiation | 239 (31.6) | $1,739 ($1,601-$1,878) | $14,242 ($12,403-$16,081) |  |  |  |
| **Stage II** |  |  |  |  |  |  |
| Best supportive care | 788 (31.8) | $1,597 ($1,492-$1,703) | $17,951 ($16,604-$19,298) | **-** | **+** |  |
| Radiation | 295 (11.9) | $1,836 ($1,697-$1,976) | $20,279 ($17,188-$23,371) |  |  |  |
| Chemotherapy | 485 (19.6) | $1,731 ($1,638-$1,824) | $16,661 ($15,228-$18,093) | **-** |  |  |
| Chemoradiation | 908 (36.7) | $1,920 ($1,834-$2,006) | $17,072 ($15,928-$18,217) |  |  |  |
| **Stage III** |  |  |  |  |  |  |
| Best supportive care | 185 (17.3) | $1,516 ($1,297-$1,734) | $16,560 ($13,938-$19,182) |  |  |  |
| Radiation | 148 (13.8) | $1,551 ($1,340-$1,761) | $14,822 ($12,118-$17,526) |  |  |  |
| Chemotherapy  | 256 (24.0) | $1,545 ($1,425-$1,665) | $15,737 ($13,225-$18,249) |  |  |  |
| Chemoradiation | 480 (44.9) | $1,715 ($1.620-$1,810) | $14,064 (12,850-$15,277) | **-** |  |  |
| **Stage IV** |  |  |  |  |  |  |
| Best supportive care | 727 (16.8) | $765 ($527-$1,111) | $16,301 ($14,819-$17,782) |  |  |  |
| Chemotherapy | 1,547 (35.7) | $931 ($744-$1,165) | $14,107 ($13,334-$14,880) |  |  |  |
| Chemoradiation | 1,687 (39.0) | $966 ($833-$1,121) | $6,001 ($4,882-$7,375) | **-** |  |  |
|  |  |  |  |  |  |  |
| ***Historic Stage*** |  |  |  |  |  |  |
| **Local** |  |  |  |  |  |  |
| Best supportive care | 287 (38.0) | $1,460 ($1,360-$1,560) | $17,662 ($15,400-$19,925) | **+** |  |  |
| Radiation | 118 (15.6) | $1,617 ($1,567-$1,666) | $15,865 ($12,953-$18,776) |  |  |  |
| Chemotherapy  | 112 (14.8) | $1,650 ($1,487-$1,814) | $15,888 ($13,117-$18,659) |  |  |  |
| Chemoradiation | 239 (31.6) | $1,659 ($1,609-$1,710) | $14,622 ($13,819-$15.425) |  |  |  |
| **Regional** |  |  |  |  |  |  |
| Best supportive care | 877 (28.2) | $1,553 ($1,455-$1,651) | $17,396 ($16,145-$18,647) | **-** | **+** |  |
| Radiation | 393 (12.6) | $1,745 ($1,628-$1,862) | $18,389 ($15,951-$20,827) |  |  |  |
| Chemotherapy  | 603 (19.4) | $1,678 ($1,596-$1,761) | $16,380 ($14,926-$17,834) | **-** |  |  |
| Chemoradiation | 1,237 (39.8) | $1,853 ($1,783-$1,923) | $16,090 ($15,169-$17,012) |  |  |  |
| **Distant** |  |  |  |  |  |  |
| Best supportive care | 821 (17.3) | $1,505 ($1,407-$1,603) | $16,773 ($15,378-$18,167) |  |  |  |
| Radiation | 417 (8.8) | $1,703 ($1,554-$1,851) | $18,526 ($18,392-$20,660) |  |  |  |
| Chemotherapy  | 1,683 (35.4) | $1,616 ($1,569-$1,663) | $14,274 ($13,535-$15,014) |  |  |  |
| Chemoradiation | 1,836 (38.6) | $1,673 ($1,624-$1,721) | $14,698 ($13,935-$15,460) | **-** |  |  |

\*A positive (+) symbol indicates that the covariate in the regression model has a parameter estimate greater than 0, while a negative (-) symbol indicates that the parameter estimate is less than 0. Treatment strategy costs are not shown if less than 10% of patients within a stage received that treatment.

CI: Confidence Interval

**Supplemental Digital Content 4:** Mean monthly cost estimates during the one-month surgery phase, by stage at diagnosis\*

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  | Monthly Patient-liability cost (95% CI) | Monthly Total cost (95% CI) |
| ***AJCC Stage*** |  |  |
| Stage I | $2,462 ($2,308-$2,616) | $57,003 ($53,407-$60,601) |
| Stage II | $2,541 ($2,448-$2,635) | $61,806 ($60,057-$63,555) |
| Stage III | $2,814 ($2,393-$3,234) | $58,780 ($52,851-$64,707) |
| Stage IV | $2,483 ($2,173-$2,793) | $55,538 ($49,545-$61,532) |
|  |  |  |
| ***Historic Stage*** |  |  |
| Local | $2,462 ($2,308-$2,616) | $57,003 ($53,407-$60,601) |
| Regional | $2,555 ($2,460-$2,650) | $62,070 ($60,302-$63,838) |
| Distant | $2,500 (42,289-$2,711) | $55,458 ($51,507-$59,409) |

\*There were no significant parameter estimates in the linear regression models for the monthly surgery costs

CI: Confidence Interval

**Supplemental Digital Content 5.** Mean monthly costs by historic stage at diagnosis by treatment modality, and significant predictors of cancer-attributable costs during the initial and continuing phases\*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | *Cancer-attributable Cost Predictors* |
|  | N (%) | Monthly Total cost (95% CI) | Monthly Patient-liability cost (95% CI) | Monthly Cancer-attributable cost (95% CI) | Year | Age | Year\_Age |
| ***Initial Phase*** |  |  |  |  |  |  |  |
| **Local** |  |  |  |  |  |  |  |
| Best supportive care | 229 (20.5) | $5,020 ($4,189-$5,850) | $407 ($325-$489) | $3,544 ($2,634-$5,851) |  | **+** |  |
| Surgery | 212 (19.0) | $3,452 ($2,562-$4,343) | $466 ($328-$604) | $2,232 ($1,278-$3,185) |  |  |  |
| Chemoradiation | 218 (19.5) | $10,987 ($9,717-$12,257) | $1,598 ($1,492-$1,704) | $9,860 ($8,554-$11,167) | **+** |  |  |
| Surgery, chemo, and radiation  | 133 (11.9) | $7,240 ($5,898-$8,583) | $1,228 ($1,127-$1,329) | $6,171 ($4,751-$7,591) | **+** |  |  |
| **Regional** |  |  |  |  |  |  |  |
| Best supportive care | 739 (14.7) | $5,825 ($5,279-$6,372) | $426 ($373-$480) | $4,497 ($3,899-$5,095) |  |  |  |
| Surgery | 539 (10.7) | $5,495 ($4,689-$6,302) | $712 ($558-$865) | $4,289 ($3,456-$5,122) |  |  |  |
| Chemotherapy | 554 (11.0) | $9,439 ($8,859-$10,019) | $1,280 ($1,218-$1,343) | $8,099 ($7,481-$8,718) | **+** |  |  |
| Chemoradiation | 1,156 (23.0) | $10,644 ($10,245-$11,042) | $1,610 ($1,570-$1,650) | $9,580 ($9,169-$9,993) | **+** | **-** |  |
| Surgery, chemo, and radiation  | 1,016 (20.2) | $7,415 ($7,130-$7,700) | $1,330 ($1,272-$1,388) | $6,327 ($5,999-$6,657) | **+** | **-** |  |
| **Distant** |  |  |  |  |  |  |  |
| Best supportive care | 595 (14.4) | $6,409 ($5,777-$7,041) | $530 ($461-$599) | $5,072 ($4,421-$5,722) |  |  |  |
| Chemotherapy  | 1,404 (33.9) | $9,027 ($8,688-$9,365) | $1,370 ($1,330-$1,410) | $7,743 ($7,369-$8,118) | **+** | **+** | **-** |
| Chemoradiation | 1,593 (38.4) | $10,180 ($9,844-$10,517) | $1,485 ($1,446-$1,524) | $9,047 ($8,695-$9,399) |  | **-** |  |
|  |  |  |  |  |  |  |  |
| ***Continuing Phase*** |  |  |  |  |  |  |  |
| **Local** |  |  |  |  |  |  |  |
| Best supportive care | 160 (15.9) | $4,204 ($3,284-$5,123) | $398 ($314-$483) | $3,075 ($2,110-$4,041) |  |  |  |
| Surgery | 281 (27.9) | $2,549 ($2,177-$2,921) | $361 ($300-$423) | $1,503 ($1,079-$1,926) |  |  |  |
| Chemoradiation | 135 (13.4) | $7,007 ($5,945-$8,069) | $878 ($762-$993) | $6,053 ($4,958-$7,149) |  |  |  |
| Surgery, chemo, and radiation  | 169 (16.8) | $3,181 ($2,669-$3,693) | $475 ($392-$557) | $2,187 ($1,602-$2,773) |  |  |  |
| **Regional** |  |  |  |  |  |  |  |
| Best supportive care | 337 (8.9) | $4,354 ($3,474-$5,233) | $399 ($326-$472) | $2,973 ($2,013-$3,933) |  |  |  |
| Surgery | 498 (13.1) | $3,174 ($2,761-$3,588) | $411 ($363-$459) | $1,619 ($1,068-$2,169) | **+** | **+** | **-** |
| Surgery and chemotherapy | 413 (10.9) | $4,119 ($3,708-$4,530) | $629 ($573-$684) | $3,016 ($2,312-$3,720) | **+** | **+** | **-** |
| Chemoradiation | 714 (18.8) | $6,842 ($6,141-$7,543) | $950 ($867-$1,033) | $5,712 ($4,989-$6,435) | **+** | **-** |  |
| Surgery, chemo, and radiation  | 1,095 (28.8) | $3,912 ($3,642-$4,181) | $578 ($546-$611) | $2,971 ($2,684-$3,258) | **+** | **+** | **-** |
| **Distant** |  |  |  |  |  |  |  |
| Best supportive care | 140 (8.3) | $3,323 ($2,571-$4,074) | $376 ($288-$465) | $1,978 ($1,214-$2,741) |  |  |  |
| Chemotherapy  | 530 (31.6) | $6,988 ($6,555-$7,420) | $1,076 ($1,019-$1,134) | $5,565 ($5,061-$6,069) | **+** | **+** | **-** |
| Chemoradiation | 716 (42.6) | $7,561 ($7,161-$7,963) | $1,159 ($1,108-$1,211) | $6,379 ($5,962-$6,796) |  | **-** |  |

\*A positive (+) symbol indicates that the covariate in the regression model has a parameter estimate greater than 0, while a negative (-) symbol indicates that the parameter estimate is less than 0. Except for best supportive care costs, treatment strategy costs are not shown if less than 10% of patients within a stage/histology group received that treatment.

CI: Confidence Interval

**Supplemental Digital Content 6.** Mean monthly costs by historic stage at diagnosis by treatment modality, and significant predictors of cancer-attributable costs during the terminal phase\*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | *Cancer-attributable Cost Predictors* |
|  | N (%) | Total cost (95% CI) | Patient-liability cost (95% CI) | Cancer-attributable cost (95% CI) | Year | Age | Year\_Age |
| ***Terminal Phase*** |  |  |  |  |  |  |  |
| **Local** |  |  |  |  |  |  |  |
| Best supportive care | 465 (33.1) | $11,426 ($10,302-$12,551) | $828 ($745-$912) | $8,830 ($7,568-$10,091) |  | **-** |  |
| Surgery | 196 (14.0) | $18,626 ($14,174-$23,077) | $1,065 ($887-$1,243) | $14,076 ($9,266-$18,887) |  |  |  |
| Radiation | 174 (12.9) | $11,470 ($10,029-$12,590) | $960 ($795-$1,125) | $9,464 ($7,911-$11,018) |  | **-** |  |
| Chemoradiation | 263 (18.7) | $12,260 ($10,700-$13,820) | $1,122 ($1,006-$1,238) | $10,448 ($8,817-$12,079) | **-** | **-** | **+** |
| **Regional** |  |  |  |  |  |  |  |
| Best supportive care | 1,651 (25.5) | $12,375 ($11,699-$13,051) | $823 ($782-$865) | $10,251 ($9,540-$10,963) |  |  |  |
| Surgery | 678 (10.5) | $19,318 ($16,628-422,008) | $648 ($567-$741) | $16,349 ($13,592-$19,107) |  |  |  |
| Chemotherapy | 674 (10.4) | $11,807 ($11,009-$12606) | $1,005 ($931-$1,078) | $10,026 ($9,157-$10,896) |  | **-** |  |
| Chemoradiation | 1,353 (20.9) | $12,145 ($11,618-$12,672) | $1,145 ($1,092-$1,199) | $9,809 ($9,163-$10,456) | **+** | **-** |  |
| Surgery, chemo, and radiation | 914 (14.1) | $12,138 ($11,486-$12,791) | $1,080 ($1,025-$1,134) | $9,466 ($8,704-$10,228) | **+** | **-** |  |
| **Distant** |  |  |  |  |  |  |  |
| Best supportive care | 3,697 (33.9) | $15,564 ($15,125-$16,003) | $1,146 ($1,111-$1,181) | $13,157 ($12,682-$13,632) |  | **-** |  |
| Radiation | 1,669 (15.3) | $17,003 ($16,351-$17,656) | $1,284 ($1,242-$1,326) | $14,299 ($13,566-$15,030) |  | **-** |  |
| Chemotherapy | 2,724 (25.0) | $13,448 ($13,046-$13,851) | $1,298 ($1,267-$1,330) | $11,473 ($11,040-$11.905) | **+** | **-** |  |
| Chemoradiation | 2,467 (22.7) | $14,056 ($13,667-$14,446) | $1,351 ($1,316-$1,386) | $11,990 ($11,538-$12,442) |  | **-** |  |

\*A positive (+) symbol indicates that the covariate in the regression model has a parameter estimate greater than 0, while a negative (-) symbol indicates that the parameter estimate is less than 0. Treatment strategy costs are not shown if less than 10% of patients within a stage received that treatment.

CI: Confidence Interval