

Cancer-associated fibroblasts infiltration of ACC

| | Low (n=31) | Medium(n=46) | High (n=2) | Total (n=79) | <i>P</i> Value |
|---------------------------|------------|--------------|------------|--------------|----------------|
| T stage | | | | | |
| T1-2 | 22 (71.0%) | 29 (65.9%) | 0 (0.0%) | 51 (66.2%) | >0.1 |
| T3-4 | 9 (29.0%) | 15 (34.1%) | 2 (100.0%) | 26 (33.8%) | |
| LN metastasis | | | | | |
| N+ | 5 (16.1%) | 4 (9.1%) | 0 (0.0%) | 9 (11.7%) | >0.1 |
| N0 | 26 (83.9%) | 40 (90.9%) | 2 (100.0%) | 68 (88.3%) | |
| Pathological stage | | | | | |
| Stage I-II | 18 (58.1%) | 28 (63.6%) | 0 (0.0%) | 46 (59.7%) | >0.1 |
| Stage III-IV | 13 (41.9%) | 16 (36.4%) | 2 (100.0%) | 31 (40.3%) | |
| TP53 | | | | | |
| Wildtype | 25 (80.6%) | 37 (80.4%) | 2 (100.0%) | 64 (81.0%) | >0.1 |
| Mutant | 6 (19.4%) | 9 (19.6%) | 0 (0.0%) | 15 (19.0%) | |
| BRAF | | | | | |
| Wildtype | 30 (96.8%) | 46 (100.0%) | 2 (100.0%) | 78 (98.7%) | >0.1 |
| Mutant | 1 (3.2%) | 0 (0.0%) | 0 (0.0%) | 1 (1.3%) | |
| EGFR | | | | | |
| Wildtype | 30 (96.8%) | 46 (100.0%) | 2 (100.0%) | 78 (98.7%) | >0.1 |
| Mutant | 1 (3.2%) | 0 (0.0%) | 0 (0.0%) | 1 (1.3%) | |
| Gender | | | | | |
| Female | 20 (64.5%) | 27 (58.7%) | 1 (50.0%) | 48 (60.8%) | >0.1 |
| Male | 11 (35.5%) | 19 (41.3%) | 1 (50.0%) | 31 (39.2%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of BLCA

| | Low (n=89) | Medium(n=174) | High (n=151) | Total (n=414) | <i>P</i> Value |
|---------------------------|------------|---------------|--------------|---------------|----------------|
| T stage | | | | | |
| T1-2 | 64 (71.9%) | 88 (50.6%) | 52 (34.4%) | 204 (49.3%) | <0.01* |
| T3-4 | 25 (28.1%) | 86 (49.4%) | 99 (65.6%) | 210 (50.7%) | |
| LN metastasis | | | | | |
| N+ | 34 (39.5%) | 61 (35.7%) | 74 (49.0%) | 169 (41.4%) | <0.05* |
| N0 | 52 (60.5%) | 110 (64.3%) | 77 (51.0%) | 239 (58.6%) | |
| Pathological stage | | | | | |
| Stage I-II | 53 (60.9%) | 59 (33.9%) | 22 (14.6%) | 134 (32.5%) | <0.01* |
| Stage III-IV | 34 (39.1%) | 115 (66.1%) | 129 (85.4%) | 278 (67.5%) | |
| TP53 | | | | | |
| Wildtype | 52 (58.4%) | 88 (50.6%) | 79 (52.3%) | 219 (52.9%) | >0.1 |
| Mutant | 37 (41.6%) | 86 (49.4%) | 72 (47.7%) | 195 (47.1%) | |
| BRAF | | | | | |
| Wildtype | 87 (97.8%) | 169 (97.1%) | 150 (99.3%) | 406 (98.1%) | >0.1 |
| Mutant | 2 (2.2%) | 5 (2.9%) | 1 (0.7%) | 8 (1.9%) | |
| EGFR | | | | | |
| Wildtype | 87 (97.8%) | 170 (97.7%) | 151 (100.0%) | 408 (98.6%) | >0.1 |
| Mutant | 2 (2.2%) | 4 (2.3%) | 0 (0.0%) | 6 (1.4%) | |
| KRAS | | | | | |
| Wildtype | 84 (94.4%) | 169 (97.1%) | 145 (96.0%) | 398 (96.1%) | >0.1 |
| Mutant | 5 (5.6%) | 5 (2.9%) | 6 (4.0%) | 16 (3.9%) | |
| Age | | | | | |
| <=50 | 8 (10.1%) | 12 (7.2%) | 4 (2.8%) | 24 (6.2%) | <0.1 |
| >50 | 71 (89.9%) | 155 (92.8%) | 139 (97.2%) | 365 (93.8%) | |
| Gender | | | | | |
| Female | 17 (19.1%) | 43 (24.7%) | 49 (32.5%) | 109 (26.3%) | <0.1 |
| Male | 72 (80.9%) | 131 (75.3%) | 102 (67.5%) | 305 (73.7%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of BRCA

| | Low (n=26) | Medium(n=231) | High (n=852) | Total (n=1109) | <i>P</i> Value |
|---------------------------|-------------|---------------|--------------|----------------|----------------|
| T stage | | | | | |
| T1-2 | 20 (76.9%) | 193 (83.5%) | 713 (83.8%) | 926 (83.6%) | >0.1 |
| T3-4 | 6 (23.1%) | 38 (16.5%) | 138 (16.2%) | 182 (16.4%) | |
| LN metastasis | | | | | |
| N+ | 12 (46.2%) | 103 (44.6%) | 472 (55.5%) | 587 (53.0%) | <0.05* |
| N0 | 14 (53.8%) | 128 (55.4%) | 379 (44.5%) | 521 (47.0%) | |
| Pathological stage | | | | | |
| Stage I-II | 18 (75.0%) | 189 (82.5%) | 607 (73.0%) | 814 (75.0%) | <0.05* |
| Stage III-IV | 6 (25.0%) | 40 (17.5%) | 225 (27.0%) | 271 (25.0%) | |
| TP53 | | | | | |
| Wildtype | 9 (42.9%) | 122 (57.8%) | 524 (68.5%) | 655 (65.7%) | <0.01* |
| Mutant | 12 (57.1%) | 89 (42.2%) | 241 (31.5%) | 342 (34.3%) | |
| BRAF | | | | | |
| Wildtype | 21 (100.0%) | 211 (100.0%) | 759 (99.2%) | 991 (99.4%) | >0.1 |
| Mutant | 0 (0.0%) | 0 (0.0%) | 6 (0.8%) | 6 (0.6%) | |
| EGFR | | | | | |
| Wildtype | 21 (100.0%) | 210 (99.5%) | 756 (98.8%) | 987 (99.0%) | >0.1 |
| Mutant | 0 (0.0%) | 1 (0.5%) | 9 (1.2%) | 10 (1.0%) | |
| KRAS | | | | | |
| Wildtype | 21 (100.0%) | 211 (100.0%) | 759 (99.2%) | 991 (99.4%) | >0.1 |
| Mutant | 0 (0.0%) | 0 (0.0%) | 6 (0.8%) | 6 (0.6%) | |
| Age | | | | | |
| ≤50 | 5 (19.2%) | 63 (27.3%) | 271 (31.8%) | 339 (30.6%) | >0.1 |
| >50 | 21 (80.8%) | 168 (72.7%) | 580 (68.2%) | 769 (69.4%) | |
| Gender | | | | | |
| Female | 26 (100.0%) | 228 (98.7%) | 842 (98.9%) | 1096 (98.9%) | >0.1 |
| Male | 0 (0.0%) | 3 (1.3%) | 9 (1.1%) | 12 (1.1%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of CESC

| | Low (n=96) | Medium(n=160) | High (n=50) | Total (n=306) | <i>P</i> Value |
|----------------------|------------|---------------|-------------|---------------|----------------|
| T stage | | | | | |
| T1-2 | 69 (85.2%) | 113 (81.3%) | 30 (73.2%) | 212 (81.2%) | >0.1 |
| T3-4 | 12 (14.8%) | 26 (18.7%) | 11 (26.8%) | 49 (18.8%) | |
| LN metastasis | | | | | |
| N+ | 38 (46.9%) | 70 (50.4%) | 19 (46.3%) | 127 (48.7%) | >0.1 |
| N0 | 43 (53.1%) | 69 (49.6%) | 22 (53.7%) | 134 (51.3%) | |
| TP53 | | | | | |
| Wildtype | 80 (88.9%) | 141 (91.6%) | 44 (100.0%) | 265 (92.0%) | <0.1 |
| Mutant | 10 (11.1%) | 13 (8.4%) | 0 (0.0%) | 23 (8.0%) | |
| BRAF | | | | | |
| Wildtype | 89 (98.9%) | 152 (98.7%) | 44 (100.0%) | 285 (99.0%) | >0.1 |
| Mutant | 1 (1.1%) | 2 (1.3%) | 0 (0.0%) | 3 (1.0%) | |
| EGFR | | | | | |
| Wildtype | 87 (96.7%) | 151 (98.1%) | 44 (100.0%) | 282 (97.9%) | >0.1 |
| Mutant | 3 (3.3%) | 3 (1.9%) | 0 (0.0%) | 6 (2.1%) | |
| KRAS | | | | | |
| Wildtype | 82 (91.1%) | 149 (96.8%) | 41 (93.2%) | 272 (94.4%) | >0.1 |
| Mutant | 8 (8.9%) | 5 (3.2%) | 3 (6.8%) | 16 (5.6%) | |
| Age | | | | | |
| <=50 | 53 (55.2%) | 102 (63.7%) | 33 (66.0%) | 188 (61.4%) | >0.1 |
| >50 | 43 (44.8%) | 58 (36.2%) | 17 (34.0%) | 118 (38.6%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of CHOL

| | Low (n=3) | Medium(n=20) | High (n=13) | Total (n=36) | <i>P</i> Value |
|---------------------------|------------|--------------|-------------|--------------|----------------|
| T stage | | | | | |
| T1-2 | 3 (100.0%) | 17 (85.0%) | 11 (84.6%) | 31 (86.1%) | >0.1 |
| T3-4 | 0 (0.0%) | 3 (15.0%) | 2 (15.4%) | 5 (13.9%) | |
| LN metastasis | | | | | |
| N0 | 3 (100.0%) | 15 (75.0%) | 8 (61.5%) | 26 (72.2%) | >0.1 |
| N+ | 0 (0.0%) | 5 (25.0%) | 5 (38.5%) | 10 (27.8%) | |
| Pathological stage | | | | | |
| Stage I-II | 3 (100.0%) | 15 (75.0%) | 10 (76.9%) | 28 (77.8%) | >0.1 |
| Stage III-IV | 0 (0.0%) | 5 (25.0%) | 3 (23.1%) | 8 (22.2%) | |
| TP53 | | | | | |
| Wildtype | 1 (33.3%) | 19 (95.0%) | 12 (92.3%) | 32 (88.9%) | <0.05* |
| Mutant | 2 (66.7%) | 1 (5.0%) | 1 (7.7%) | 4 (11.1%) | |
| BRAF | | | | | |
| Mutant | 0 (0.0%) | 0 (0.0%) | 1 (7.7%) | 1 (2.8%) | >0.1 |
| Wildtype | 3 (100.0%) | 20 (100.0%) | 12 (92.3%) | 35 (97.2%) | |
| KRAS | | | | | |
| Mutant | 0 (0.0%) | 0 (0.0%) | 2 (15.4%) | 2 (5.6%) | >0.1 |
| Wildtype | 3 (100.0%) | 20 (100.0%) | 11 (84.6%) | 34 (94.4%) | |
| Gender | | | | | |
| Male | 3 (100.0%) | 7 (35.0%) | 6 (46.2%) | 16 (44.4%) | >0.1 |
| Female | 0 (0.0%) | 13 (65.0%) | 7 (53.8%) | 20 (55.6%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of COAD

| | Low (n=52) | Medium(n=253) | High (n=175) | Total (n=480) | <i>P</i> Value |
|---------------------------|------------|---------------|--------------|---------------|----------------|
| T stage | | | | | |
| T1-2 | 14 (26.9%) | 54 (21.5%) | 26 (14.9%) | 94 (19.7%) | <0.1 |
| T3-4 | 38 (73.1%) | 197 (78.5%) | 148 (85.1%) | 383 (80.3%) | |
| LN metastasis | | | | | |
| N+ | 13 (25.0%) | 96 (38.2%) | 85 (48.9%) | 194 (40.7%) | <0.01* |
| N0 | 39 (75.0%) | 155 (61.8%) | 89 (51.1%) | 283 (59.3%) | |
| Pathological stage | | | | | |
| Stage I-II | 36 (70.6%) | 143 (58.4%) | 88 (51.8%) | 267 (57.3%) | <0.1 |
| Stage III-IV | 15 (29.4%) | 102 (41.6%) | 82 (48.2%) | 199 (42.7%) | |
| TP53 | | | | | |
| Wildtype | 23 (48.9%) | 100 (48.1%) | 66 (40.7%) | 189 (45.3%) | >0.1 |
| Mutant | 24 (51.1%) | 108 (51.9%) | 96 (59.3%) | 228 (54.7%) | |
| BRAF | | | | | |
| Wildtype | 41 (87.2%) | 177 (85.1%) | 136 (84.0%) | 354 (84.9%) | >0.1 |
| Mutant | 6 (12.8%) | 31 (14.9%) | 26 (16.0%) | 63 (15.1%) | |
| EGFR | | | | | |
| Wildtype | 46 (97.9%) | 201 (96.6%) | 158 (97.5%) | 405 (97.1%) | >0.1 |
| Mutant | 1 (2.1%) | 7 (3.4%) | 4 (2.5%) | 12 (2.9%) | |
| KRAS | | | | | |
| Wildtype | 22 (46.8%) | 125 (60.1%) | 102 (63.0%) | 249 (59.7%) | >0.1 |
| Mutant | 25 (53.2%) | 83 (39.9%) | 60 (37.0%) | 168 (40.3%) | |
| Age | | | | | |
| <=50 | 4 (7.7%) | 30 (12.0%) | 28 (16.1%) | 62 (13.0%) | >0.1 |
| >50 | 48 (92.3%) | 221 (88.0%) | 146 (83.9%) | 415 (87.0%) | |
| Gender | | | | | |
| Female | 23 (44.2%) | 121 (48.2%) | 82 (47.1%) | 226 (47.4%) | >0.1 |
| Male | 29 (55.8%) | 130 (51.8%) | 92 (52.9%) | 251 (52.6%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of DLBC

| | Low (n=6) | Medium(n=37) | High (n=5) | Total (n=48) | <i>P</i> Value |
|---------------|------------|--------------|------------|--------------|----------------|
| TP53 | | | | | |
| Wildtype | 4 (80.0%) | 25 (89.3%) | 3 (75.0%) | 32 (86.5%) | >0.1 |
| Mutant | 1 (20.0%) | 3 (10.7%) | 1 (25.0%) | 5 (13.5%) | |
| BRAF | | | | | |
| Wildtype | 5 (100.0%) | 27 (96.4%) | 4 (100.0%) | 36 (97.3%) | >0.1 |
| Mutant | 0 (0.0%) | 1 (3.6%) | 0 (0.0%) | 1 (2.7%) | |
| KRAS | | | | | |
| Wildtype | 5 (100.0%) | 26 (92.9%) | 4 (100.0%) | 35 (94.6%) | >0.1 |
| Mutant | 0 (0.0%) | 2 (7.1%) | 0 (0.0%) | 2 (5.4%) | |
| Age | | | | | |
| <=50 | 1 (16.7%) | 11 (29.7%) | 2 (40.0%) | 14 (29.2%) | >0.1 |
| >50 | 5 (83.3%) | 26 (70.3%) | 3 (60.0%) | 34 (70.8%) | |
| Gender | | | | | |
| Female | 5 (83.3%) | 18 (48.6%) | 3 (60.0%) | 26 (54.2%) | >0.1 |
| Male | 1 (16.7%) | 19 (51.4%) | 2 (40.0%) | 22 (45.8%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of ESCA

| | Low (n=13) | Medium(n=77) | High (n=72) | Total (n=162) | <i>P</i> Value |
|---------------------------|-------------|--------------|-------------|---------------|----------------|
| T stage | | | | | |
| T1-2 | 7 (53.8%) | 35 (45.5%) | 24 (33.3%) | 66 (40.7%) | >0.1 |
| T3-4 | 6 (46.2%) | 42 (54.5%) | 48 (66.7%) | 96 (59.3%) | |
| LN metastasis | | | | | |
| N+ | 9 (69.2%) | 47 (61.0%) | 41 (56.9%) | 97 (59.9%) | >0.1 |
| N0 | 4 (30.8%) | 30 (39.0%) | 31 (43.1%) | 65 (40.1%) | |
| Pathological stage | | | | | |
| Stage I-II | 8 (72.7%) | 42 (64.6%) | 35 (53.0%) | 85 (59.9%) | >0.1 |
| Stage III-IV | 3 (27.3%) | 23 (35.4%) | 31 (47.0%) | 57 (40.1%) | |
| TP53 | | | | | |
| Wildtype | 4 (30.8%) | 16 (20.8%) | 7 (9.9%) | 27 (16.8%) | <0.1 |
| Mutant | 9 (69.2%) | 61 (79.2%) | 64 (90.1%) | 134 (83.2%) | |
| BRAF | | | | | |
| Wildtype | 13 (100.0%) | 77 (100.0%) | 70 (98.6%) | 160 (99.4%) | >0.1 |
| Mutant | 0 (0.0%) | 0 (0.0%) | 1 (1.4%) | 1 (0.6%) | |
| EGFR | | | | | |
| Wildtype | 13 (100.0%) | 75 (97.4%) | 68 (95.8%) | 156 (96.9%) | >0.1 |
| Mutant | 0 (0.0%) | 2 (2.6%) | 3 (4.2%) | 5 (3.1%) | |
| KRAS | | | | | |
| Wildtype | 13 (100.0%) | 76 (98.7%) | 70 (98.6%) | 159 (98.8%) | >0.1 |
| Mutant | 0 (0.0%) | 1 (1.3%) | 1 (1.4%) | 2 (1.2%) | |
| Gender | | | | | |
| Female | 2 (15.4%) | 13 (16.9%) | 8 (11.1%) | 23 (14.2%) | >0.1 |
| Male | 11 (84.6%) | 64 (83.1%) | 64 (88.9%) | 139 (85.8%) | |
| Cancer type | | | | | |
| Adenocarcinomas | 6 (46.2%) | 39 (50.6%) | 35 (48.6%) | 80 (49.4%) | >0.1 |
| Squamous | 7 (53.8%) | 38 (49.4%) | 37 (51.4%) | 82 (50.6%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of GBM

| | Medium(n=155) | High (n=14) | Total (n=169) | <i>P</i> Value |
|---------------|---------------|-------------|---------------|----------------|
| TP53 | | | | |
| Wildtype | 101 (68.7%) | 5 (38.5%) | 106 (66.2%) | <0.1 |
| Mutant | 46 (31.3%) | 8 (61.5%) | 54 (33.8%) | |
| BRAF | | | | |
| Wildtype | 146 (99.3%) | 12 (92.3%) | 158 (98.8%) | >0.1 |
| Mutant | 1 (0.7%) | 1 (7.7%) | 2 (1.2%) | |
| EGFR | | | | |
| Wildtype | 110 (74.8%) | 13 (100.0%) | 123 (76.9%) | <0.1 |
| Mutant | 37 (25.2%) | 0 (0.0%) | 37 (23.1%) | |
| KRAS | | | | |
| Wildtype | 146 (99.3%) | 13 (100.0%) | 159 (99.4%) | >0.1 |
| Mutant | 1 (0.7%) | 0 (0.0%) | 1 (0.6%) | |
| Age | | | | |
| <=50 | 39 (25.5%) | 3 (21.4%) | 42 (25.1%) | >0.1 |
| >50 | 114 (74.5%) | 11 (78.6%) | 125 (74.9%) | |
| Gender | | | | |
| Female | 55 (35.9%) | 4 (28.6%) | 59 (35.3%) | >0.1 |
| Male | 98 (64.1%) | 10 (71.4%) | 108 (64.7%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of HNSC

| | Low (n=33) | Medium(n=307) | High (n=162) | Total (n=502) | <i>P</i> Value |
|---------------------------|-------------|---------------|--------------|---------------|----------------|
| T stage | | | | | |
| T1-2 | 10 (30.3%) | 111 (36.2%) | 57 (35.2%) | 178 (35.5%) | >0.1 |
| T3-4 | 23 (69.7%) | 196 (63.8%) | 105 (64.8%) | 324 (64.5%) | |
| LN metastasis | | | | | |
| N+ | 18 (54.5%) | 158 (51.5%) | 85 (52.5%) | 261 (52.0%) | >0.1 |
| N0 | 15 (45.5%) | 149 (48.5%) | 77 (47.5%) | 241 (48.0%) | |
| Pathological stage | | | | | |
| Stage I-II | 5 (16.7%) | 60 (23.2%) | 30 (20.7%) | 95 (21.9%) | >0.1 |
| Stage III-IV | 25 (83.3%) | 199 (76.8%) | 115 (79.3%) | 339 (78.1%) | |
| TP53 | | | | | |
| Wildtype | 20 (60.6%) | 106 (35.0%) | 42 (26.6%) | 168 (34.0%) | <0.01* |
| Mutant | 13 (39.4%) | 197 (65.0%) | 116 (73.4%) | 326 (66.0%) | |
| BRAF | | | | | |
| Wildtype | 32 (97.0%) | 299 (98.7%) | 157 (99.4%) | 488 (98.8%) | >0.1 |
| Mutant | 1 (3.0%) | 4 (1.3%) | 1 (0.6%) | 6 (1.2%) | |
| EGFR | | | | | |
| Wildtype | 33 (100.0%) | 297 (98.0%) | 155 (98.1%) | 485 (98.2%) | >0.1 |
| Mutant | 0 (0.0%) | 6 (2.0%) | 3 (1.9%) | 9 (1.8%) | |
| Age | | | | | |
| <=50 | 4 (12.1%) | 52 (17.0%) | 32 (19.8%) | 88 (17.6%) | >0.1 |
| >50 | 29 (87.9%) | 254 (83.0%) | 130 (80.2%) | 413 (82.4%) | |
| Gender | | | | | |
| Female | 8 (24.2%) | 85 (27.7%) | 41 (25.3%) | 134 (26.7%) | >0.1 |
| Male | 25 (75.8%) | 222 (72.3%) | 121 (74.7%) | 368 (73.3%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of KICH

| | Low (n=15) | Medium(n=49) | High (n=1) | Total (n=65) | <i>P</i> Value |
|---------------------------|------------|--------------|------------|--------------|----------------|
| T stage | | | | | |
| T1-2 | 11 (73.3%) | 34 (69.4%) | 0 (0.0%) | 45 (69.2%) | >0.1 |
| T3-4 | 4 (26.7%) | 15 (30.6%) | 1 (100.0%) | 20 (30.8%) | |
| LN metastasis | | | | | |
| N+ | 9 (60.0%) | 16 (32.7%) | 1 (100.0%) | 26 (40.0%) | <0.05* |
| N0 | 6 (40.0%) | 33 (67.3%) | 0 (0.0%) | 39 (60.0%) | |
| Pathological stage | | | | | |
| Stage I-II | 11 (73.3%) | 34 (69.4%) | 0 (0.0%) | 45 (69.2%) | >0.1 |
| Stage III-IV | 4 (26.7%) | 15 (30.6%) | 1 (100.0%) | 20 (30.8%) | |
| TP53 | | | | | |
| Wildtype | 11 (73.3%) | 35 (71.4%) | 0 (0.0%) | 46 (70.8%) | >0.1 |
| Mutant | 4 (26.7%) | 14 (28.6%) | 1 (100.0%) | 19 (29.2%) | |
| Age | | | | | |
| <=50 | 7 (46.7%) | 26 (53.1%) | 0 (0.0%) | 33 (50.8%) | >0.1 |
| >50 | 8 (53.3%) | 23 (46.9%) | 1 (100.0%) | 32 (49.2%) | |
| Gender | | | | | |
| Female | 3 (20.0%) | 23 (46.9%) | 0 (0.0%) | 26 (40.0%) | <0.1 |
| Male | 12 (80.0%) | 26 (53.1%) | 1 (100.0%) | 39 (60.0%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of KIRC

| | Low (n=18) | Medium(n=422) | High (n=99) | Total (n=539) | P Value |
|---------------------------|-------------|---------------|-------------|---------------|---------|
| T stage | | | | | |
| T1-2 | 17 (94.4%) | 279 (66.6%) | 52 (52.5%) | 348 (64.9%) | <0.01* |
| T3-4 | 1 (5.6%) | 140 (33.4%) | 47 (47.5%) | 188 (35.1%) | |
| LN metastasis | | | | | |
| N+ | 11 (61.1%) | 236 (56.3%) | 51 (51.5%) | 298 (55.6%) | >0.1 |
| N0 | 7 (38.9%) | 183 (43.7%) | 48 (48.5%) | 238 (44.4%) | |
| Pathological stage | | | | | |
| Stage I-II | 15 (83.3%) | 264 (63.0%) | 51 (53.1%) | 330 (61.9%) | <0.05* |
| Stage III-IV | 3 (16.7%) | 155 (37.0%) | 45 (46.9%) | 203 (38.1%) | |
| TP53 | | | | | |
| Wildtype | 12 (85.7%) | 259 (98.9%) | 59 (96.7%) | 330 (97.9%) | <0.05* |
| Mutant | 2 (14.3%) | 3 (1.1%) | 2 (3.3%) | 7 (2.1%) | |
| BRAF | | | | | |
| Wildtype | 14 (100.0%) | 261 (99.6%) | 61 (100.0%) | 336 (99.7%) | >0.1 |
| Mutant | 0 (0.0%) | 1 (0.4%) | 0 (0.0%) | 1 (0.3%) | |
| EGFR | | | | | |
| Wildtype | 14 (100.0%) | 260 (99.2%) | 61 (100.0%) | 335 (99.4%) | >0.1 |
| Mutant | 0 (0.0%) | 2 (0.8%) | 0 (0.0%) | 2 (0.6%) | |
| KRAS | | | | | |
| Wildtype | 14 (100.0%) | 262 (100.0%) | 60 (98.4%) | 336 (99.7%) | >0.1 |
| Mutant | 0 (0.0%) | 0 (0.0%) | 1 (1.6%) | 1 (0.3%) | |
| Age | | | | | |
| <=50 | 3 (16.7%) | 87 (20.8%) | 24 (24.2%) | 114 (21.3%) | >0.1 |
| >50 | 15 (83.3%) | 332 (79.2%) | 75 (75.8%) | 422 (78.7%) | |
| Gender | | | | | |
| Female | 4 (22.2%) | 154 (36.8%) | 27 (27.3%) | 185 (34.5%) | >0.1 |
| Male | 14 (77.8%) | 265 (63.2%) | 72 (72.7%) | 351 (65.5%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of KIRP

| | Low (n=195) | Medium(n=86) | High (n=8) | Total (n=289) | P Value |
|---------------------------|-------------|--------------|------------|---------------|---------|
| T stage | | | | | |
| T1-2 | 170 (87.2%) | 64 (74.4%) | 2 (25.0%) | 236 (81.7%) | <0.01* |
| T3-4 | 25 (12.8%) | 22 (25.6%) | 6 (75.0%) | 53 (18.3%) | |
| LN metastasis | | | | | |
| N+ | 94 (48.2%) | 46 (53.5%) | 6 (75.0%) | 146 (50.5%) | >0.1 |
| N0 | 101 (51.8%) | 40 (46.5%) | 2 (25.0%) | 143 (49.5%) | |
| Pathological stage | | | | | |
| Stage I-II | 138 (80.7%) | 56 (69.1%) | 0 (0.0%) | 194 (74.6%) | <0.01* |
| Stage III-IV | 33 (19.3%) | 25 (30.9%) | 8 (100.0%) | 66 (25.4%) | |
| TP53 | | | | | |
| Wildtype | 183 (97.3%) | 82 (98.8%) | 8 (100.0%) | 273 (97.8%) | >0.1 |
| Mutant | 5 (2.7%) | 1 (1.2%) | 0 (0.0%) | 6 (2.2%) | |
| BRAF | | | | | |
| Wildtype | 186 (98.9%) | 82 (98.8%) | 8 (100.0%) | 276 (98.9%) | >0.1 |
| Mutant | 2 (1.1%) | 1 (1.2%) | 0 (0.0%) | 3 (1.1%) | |
| KRAS | | | | | |
| Wildtype | 184 (97.9%) | 82 (98.8%) | 8 (100.0%) | 274 (98.2%) | >0.1 |
| Mutant | 4 (2.1%) | 1 (1.2%) | 0 (0.0%) | 5 (1.8%) | |
| Age | | | | | |
| <=50 | 28 (14.6%) | 18 (20.9%) | 1 (12.5%) | 47 (16.4%) | >0.1 |
| >50 | 164 (85.4%) | 68 (79.1%) | 7 (87.5%) | 239 (83.6%) | |
| Gender | | | | | |
| Female | 40 (20.5%) | 34 (39.5%) | 3 (37.5%) | 77 (26.6%) | <0.01* |
| Male | 155 (79.5%) | 52 (60.5%) | 5 (62.5%) | 212 (73.4%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of LAML

| | Low (n=148) | Medium(n=3) | Total (n=151) | <i>P</i> Value |
|---------------|-------------|-------------|---------------|----------------|
| TP53 | | | | |
| Wildtype | 96 (93.2%) | 2 (66.7%) | 98 (92.5%) | >0.1 |
| Mutant | 7 (6.8%) | 1 (33.3%) | 8 (7.5%) | |
| KRAS | | | | |
| Wildtype | 99 (96.1%) | 3 (100.0%) | 102 (96.2%) | >0.1 |
| Mutant | 4 (3.9%) | 0 (0.0%) | 4 (3.8%) | |
| Age | | | | |
| <=50 | 57 (38.5%) | 0 (0.0%) | 57 (37.7%) | >0.1 |
| >50 | 91 (61.5%) | 3 (100.0%) | 94 (62.3%) | |
| Gender | | | | |
| Female | 67 (45.3%) | 1 (33.3%) | 68 (45.0%) | >0.1 |
| Male | 81 (54.7%) | 2 (66.7%) | 83 (55.0%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of LGG

| | Low (n=1) | Medium(n=523) | High (n=5) | Total (n=529) | <i>P</i> Value |
|---------------|------------|---------------|------------|---------------|----------------|
| TP53 | | | | | |
| Wildtype | 0 (0.0%) | 276 (53.9%) | 2 (40.0%) | 278 (53.7%) | >0.1 |
| Mutant | 1 (100.0%) | 236 (46.1%) | 3 (60.0%) | 240 (46.3%) | |
| BRAF | | | | | |
| Wildtype | 1 (100.0%) | 509 (99.4%) | 5 (100.0%) | 515 (99.4%) | >0.1 |
| Mutant | 0 (0.0%) | 3 (0.6%) | 0 (0.0%) | 3 (0.6%) | |
| EGFR | | | | | |
| Wildtype | 1 (100.0%) | 482 (94.1%) | 5 (100.0%) | 488 (94.2%) | >0.1 |
| Mutant | 0 (0.0%) | 30 (5.9%) | 0 (0.0%) | 30 (5.8%) | |
| KRAS | | | | | |
| Wildtype | 1 (100.0%) | 511 (99.8%) | 5 (100.0%) | 517 (99.8%) | >0.1 |
| Mutant | 0 (0.0%) | 1 (0.2%) | 0 (0.0%) | 1 (0.2%) | |
| Age | | | | | |
| <=50 | 1 (100.0%) | 369 (70.7%) | 3 (60.0%) | 373 (70.6%) | >0.1 |
| >50 | 0 (0.0%) | 153 (29.3%) | 2 (40.0%) | 155 (29.4%) | |
| Gender | | | | | |
| Female | 1 (100.0%) | 238 (45.6%) | 0 (0.0%) | 239 (45.3%) | <0.05* |
| Male | 0 (0.0%) | 284 (54.4%) | 5 (100.0%) | 289 (54.7%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of LIHC

| | Low (n=194) | Medium(n=165) | High (n=15) | Total (n=374) | <i>P</i> Value |
|---------------------------|-------------|---------------|-------------|---------------|----------------|
| T stage | | | | | |
| T1-2 | 150 (77.7%) | 118 (72.0%) | 10 (66.7%) | 278 (74.7%) | >0.1 |
| T3-4 | 43 (22.3%) | 46 (28.0%) | 5 (33.3%) | 94 (25.3%) | |
| LN metastasis | | | | | |
| N+ | 62 (32.0%) | 52 (31.7%) | 5 (33.3%) | 119 (31.9%) | >0.1 |
| N0 | 132 (68.0%) | 112 (68.3%) | 10 (66.7%) | 254 (68.1%) | |
| Pathological stage | | | | | |
| Stage I-II | 144 (77.8%) | 107 (71.3%) | 9 (60.0%) | 260 (74.3%) | >0.1 |
| Stage III-IV | 41 (22.2%) | 43 (28.7%) | 6 (40.0%) | 90 (25.7%) | |
| TP53 | | | | | |
| Wildtype | 131 (68.9%) | 114 (72.2%) | 10 (71.4%) | 255 (70.4%) | >0.1 |
| Mutant | 59 (31.1%) | 44 (27.8%) | 4 (28.6%) | 107 (29.6%) | |
| EGFR | | | | | |
| Wildtype | 186 (97.9%) | 157 (99.4%) | 14 (100.0%) | 357 (98.6%) | >0.1 |
| Mutant | 4 (2.1%) | 1 (0.6%) | 0 (0.0%) | 5 (1.4%) | |
| KRAS | | | | | |
| Wildtype | 187 (98.4%) | 157 (99.4%) | 13 (92.9%) | 357 (98.6%) | >0.1 |
| Mutant | 3 (1.6%) | 1 (0.6%) | 1 (7.1%) | 5 (1.4%) | |
| Age | | | | | |
| ≤50 | 35 (18.1%) | 36 (21.8%) | 7 (46.7%) | 78 (20.9%) | <0.05* |
| >50 | 158 (81.9%) | 129 (78.2%) | 8 (53.3%) | 295 (79.1%) | |
| Gender | | | | | |
| Female | 48 (24.7%) | 67 (40.6%) | 6 (40.0%) | 121 (32.4%) | <0.01* |
| Male | 146 (75.3%) | 98 (59.4%) | 9 (60.0%) | 253 (67.6%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of LUAD

| | Low (n=22) | Medium(n=246) | High (n=267) | Total (n=535) | <i>P</i> Value |
|---------------------------|------------|---------------|--------------|---------------|----------------|
| T stage | | | | | |
| T1-2 | 20 (90.9%) | 212 (86.2%) | 232 (86.9%) | 464 (86.7%) | >0.1 |
| T3-4 | 2 (9.1%) | 34 (13.8%) | 35 (13.1%) | 71 (13.3%) | |
| LN metastasis | | | | | |
| N+ | 6 (27.3%) | 87 (35.5%) | 93 (34.8%) | 186 (34.8%) | >0.1 |
| N0 | 16 (72.7%) | 158 (64.5%) | 174 (65.2%) | 348 (65.2%) | |
| Pathological stage | | | | | |
| Stage I-II | 16 (76.2%) | 192 (78.7%) | 209 (79.8%) | 417 (79.1%) | >0.1 |
| Stage III-IV | 5 (23.8%) | 52 (21.3%) | 53 (20.2%) | 110 (20.9%) | |
| TP53 | | | | | |
| Wildtype | 15 (71.4%) | 123 (51.0%) | 144 (54.8%) | 282 (53.7%) | >0.1 |
| Mutant | 6 (28.6%) | 118 (49.0%) | 119 (45.2%) | 243 (46.3%) | |
| BRAF | | | | | |
| Wildtype | 18 (85.7%) | 222 (92.1%) | 248 (94.3%) | 488 (93.0%) | >0.1 |
| Mutant | 3 (14.3%) | 19 (7.9%) | 15 (5.7%) | 37 (7.0%) | |
| EGFR | | | | | |
| Wildtype | 19 (90.5%) | 212 (88.0%) | 228 (86.7%) | 459 (87.4%) | >0.1 |
| Mutant | 2 (9.5%) | 29 (12.0%) | 35 (13.3%) | 66 (12.6%) | |
| KRAS | | | | | |
| Wildtype | 16 (76.2%) | 185 (76.8%) | 199 (75.7%) | 400 (76.2%) | >0.1 |
| Mutant | 5 (23.8%) | 56 (23.2%) | 64 (24.3%) | 125 (23.8%) | |
| Age | | | | | |
| <=50 | 4 (18.2%) | 24 (10.3%) | 13 (5.0%) | 41 (7.9%) | <0.05* |
| >50 | 18 (81.8%) | 210 (89.7%) | 247 (95.0%) | 475 (92.1%) | |
| Gender | | | | | |
| Female | 9 (40.9%) | 121 (49.2%) | 156 (58.4%) | 286 (53.5%) | <0.1 |
| Male | 13 (59.1%) | 125 (50.8%) | 111 (41.6%) | 249 (46.5%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of LUSC

| | Low (n=27) | Medium(n=267) | High (n=208) | Total (n=502) | <i>P</i> Value |
|---------------------------|-------------|---------------|--------------|---------------|----------------|
| T stage | | | | | |
| T1-2 | 24 (88.9%) | 219 (82.0%) | 165 (79.3%) | 408 (81.3%) | >0.1 |
| T3-4 | 3 (11.1%) | 48 (18.0%) | 43 (20.7%) | 94 (18.7%) | |
| LN metastasis | | | | | |
| N+ | 9 (33.3%) | 98 (36.7%) | 75 (36.1%) | 182 (36.3%) | >0.1 |
| N0 | 18 (66.7%) | 169 (63.3%) | 133 (63.9%) | 320 (63.7%) | |
| Pathological stage | | | | | |
| Stage I-II | 23 (85.2%) | 215 (81.1%) | 169 (82.0%) | 407 (81.7%) | >0.1 |
| Stage III-IV | 4 (14.8%) | 50 (18.9%) | 37 (18.0%) | 91 (18.3%) | |
| TP53 | | | | | |
| Wildtype | 6 (22.2%) | 54 (20.5%) | 53 (26.6%) | 113 (23.1%) | >0.1 |
| Mutant | 21 (77.8%) | 209 (79.5%) | 146 (73.4%) | 376 (76.9%) | |
| BRAF | | | | | |
| Wildtype | 27 (100.0%) | 253 (96.2%) | 198 (99.5%) | 478 (97.8%) | <0.05* |
| Mutant | 0 (0.0%) | 10 (3.8%) | 1 (0.5%) | 11 (2.2%) | |
| EGFR | | | | | |
| Wildtype | 27 (100.0%) | 260 (98.9%) | 195 (98.0%) | 482 (98.6%) | >0.1 |
| Mutant | 0 (0.0%) | 3 (1.1%) | 4 (2.0%) | 7 (1.4%) | |
| KRAS | | | | | |
| Wildtype | 26 (96.3%) | 261 (99.2%) | 195 (98.0%) | 482 (98.6%) | >0.1 |
| Mutant | 1 (3.7%) | 2 (0.8%) | 4 (2.0%) | 7 (1.4%) | |
| Age | | | | | |
| >50 | 27 (100.0%) | 254 (96.9%) | 192 (94.1%) | 473 (95.9%) | >0.1 |
| <=50 | 0 (0.0%) | 8 (3.1%) | 12 (5.9%) | 20 (4.1%) | |
| Gender | | | | | |
| Female | 5 (18.5%) | 74 (27.7%) | 52 (25.0%) | 131 (26.1%) | >0.1 |
| Male | 22 (81.5%) | 193 (72.3%) | 156 (75.0%) | 371 (73.9%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of MESO

| | Medium(n=36) | High (n=50) | Total (n=86) | <i>P</i> Value |
|---------------------------|--------------|-------------|--------------|----------------|
| T stage | | | | |
| T1-2 | 17 (47.2%) | 23 (46.0%) | 40 (46.5%) | >0.1 |
| T3-4 | 19 (52.8%) | 27 (54.0%) | 46 (53.5%) | |
| LN metastasis | | | | |
| N+ | 15 (41.7%) | 28 (56.0%) | 43 (50.0%) | >0.1 |
| N0 | 21 (58.3%) | 22 (44.0%) | 43 (50.0%) | |
| Pathological stage | | | | |
| Stage I-II | 11 (30.6%) | 15 (30.0%) | 26 (30.2%) | >0.1 |
| Stage III-IV | 25 (69.4%) | 35 (70.0%) | 60 (69.8%) | |
| TP53 | | | | |
| Wildtype | 29 (85.3%) | 38 (84.4%) | 67 (84.8%) | >0.1 |
| Mutant | 5 (14.7%) | 7 (15.6%) | 12 (15.2%) | |
| KRAS | | | | |
| Wildtype | 34 (100.0%) | 44 (97.8%) | 78 (98.7%) | >0.1 |
| Mutant | 0 (0.0%) | 1 (2.2%) | 1 (1.3%) | |
| Gender | | | | |
| Female | 7 (19.4%) | 8 (16.0%) | 15 (17.4%) | >0.1 |
| Male | 29 (80.6%) | 42 (84.0%) | 71 (82.6%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of OV

| | Low (n=46) | Medium(n=205) | High (n=128) | Total (n=379) | <i>P</i> Value |
|-------------|-------------|---------------|--------------|---------------|----------------|
| TP53 | | | | | |
| Wildtype | 4 (12.1%) | 8 (5.2%) | 10 (11.2%) | 22 (8.0%) | >0.1 |
| Mutant | 29 (87.9%) | 146 (94.8%) | 79 (88.8%) | 254 (92.0%) | |
| BRAF | | | | | |
| Wildtype | 33 (100.0%) | 152 (98.7%) | 89 (100.0%) | 274 (99.3%) | >0.1 |
| Mutant | 0 (0.0%) | 2 (1.3%) | 0 (0.0%) | 2 (0.7%) | |
| EGFR | | | | | |
| Wildtype | 33 (100.0%) | 154 (100.0%) | 85 (95.5%) | 272 (98.6%) | <0.05* |
| Mutant | 0 (0.0%) | 0 (0.0%) | 4 (4.5%) | 4 (1.4%) | |
| KRAS | | | | | |
| Wildtype | 32 (97.0%) | 153 (99.4%) | 87 (97.8%) | 272 (98.6%) | >0.1 |
| Mutant | 1 (3.0%) | 1 (0.6%) | 2 (2.2%) | 4 (1.4%) | |
| Age | | | | | |
| <=50 | 8 (17.4%) | 48 (23.5%) | 35 (27.3%) | 91 (24.1%) | >0.1 |
| >50 | 38 (82.6%) | 156 (76.5%) | 93 (72.7%) | 287 (75.9%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of PAAD

| | Low (n=6) | Medium(n=15) | High (n=157) | Total (n=178) | <i>P</i> Value |
|----------------------|------------|--------------|--------------|---------------|----------------|
| T stage | | | | | |
| T1-2 | 2 (33.3%) | 2 (13.3%) | 27 (17.3%) | 31 (17.5%) | >0.1 |
| T3-4 | 4 (66.7%) | 13 (86.7%) | 129 (82.7%) | 146 (82.5%) | |
| LN metastasis | | | | | |
| N+ | 4 (66.7%) | 10 (66.7%) | 113 (72.4%) | 127 (71.8%) | >0.1 |
| N0 | 2 (33.3%) | 5 (33.3%) | 43 (27.6%) | 50 (28.2%) | |
| TP53 | | | | | |
| Wildtype | 5 (100.0%) | 9 (64.3%) | 56 (42.1%) | 70 (46.1%) | <0.01* |
| Mutant | 0 (0.0%) | 5 (35.7%) | 77 (57.9%) | 82 (53.9%) | |
| BRAF | | | | | |
| Wildtype | 5 (100.0%) | 13 (92.9%) | 133 (100.0%) | 151 (99.3%) | >0.1 |
| Mutant | 0 (0.0%) | 1 (7.1%) | 0 (0.0%) | 1 (0.7%) | |
| EGFR | | | | | |
| Wildtype | 5 (100.0%) | 14 (100.0%) | 132 (99.2%) | 151 (99.3%) | >0.1 |
| Mutant | 0 (0.0%) | 0 (0.0%) | 1 (0.8%) | 1 (0.7%) | |
| KRAS | | | | | |
| Wildtype | 4 (80.0%) | 9 (64.3%) | 58 (43.6%) | 71 (46.7%) | >0.1 |
| Mutant | 1 (20.0%) | 5 (35.7%) | 75 (56.4%) | 81 (53.3%) | |
| Age | | | | | |
| >50 | 6 (100.0%) | 15 (100.0%) | 134 (85.4%) | 155 (87.1%) | >0.1 |
| <=50 | 0 (0.0%) | 0 (0.0%) | 23 (14.6%) | 23 (12.9%) | |
| Gender | | | | | |
| Male | 6 (100.0%) | 9 (60.0%) | 83 (52.9%) | 98 (55.1%) | <0.1 |
| Female | 0 (0.0%) | 6 (40.0%) | 74 (47.1%) | 80 (44.9%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of PCPG

| | Low (n=23) | Medium(n=155) | High (n=5) | Total (n=183) | <i>P</i> Value |
|---------------|-------------|---------------|------------|---------------|----------------|
| BRAF | | | | | |
| Wildtype | 22 (100.0%) | 154 (99.4%) | 5 (100.0%) | 181 (99.5%) | >0.1 |
| Mutant | 0 (0.0%) | 1 (0.6%) | 0 (0.0%) | 1 (0.5%) | |
| Gender | | | | | |
| Female | 16 (69.6%) | 84 (54.2%) | 2 (40.0%) | 102 (55.7%) | >0.1 |
| Male | 7 (30.4%) | 71 (45.8%) | 3 (60.0%) | 81 (44.3%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of PRAD

| | Low (n=156) | Medium(n=332) | High (n=11) | Total (n=499) | <i>P</i> Value |
|----------------------|-------------|---------------|-------------|---------------|----------------|
| T stage | | | | | |
| T1-2 | 125 (80.6%) | 252 (76.4%) | 6 (54.5%) | 383 (77.2%) | >0.1 |
| T3-4 | 30 (19.4%) | 78 (23.6%) | 5 (45.5%) | 113 (22.8%) | |
| LN metastasis | | | | | |
| N+ | 27 (20.3%) | 51 (18.0%) | 1 (11.1%) | 79 (18.5%) | >0.1 |
| N0 | 106 (79.7%) | 233 (82.0%) | 8 (88.9%) | 347 (81.5%) | |
| TP53 | | | | | |
| Wildtype | 141 (90.4%) | 285 (89.3%) | 8 (72.7%) | 434 (89.3%) | >0.1 |
| Mutant | 15 (9.6%) | 34 (10.7%) | 3 (27.3%) | 52 (10.7%) | |
| BRAF | | | | | |
| Wildtype | 154 (98.7%) | 315 (98.7%) | 11 (100.0%) | 480 (98.8%) | >0.1 |
| Mutant | 2 (1.3%) | 4 (1.3%) | 0 (0.0%) | 6 (1.2%) | |
| EGFR | | | | | |
| Wildtype | 155 (99.4%) | 317 (99.4%) | 11 (100.0%) | 483 (99.4%) | >0.1 |
| Mutant | 1 (0.6%) | 2 (0.6%) | 0 (0.0%) | 3 (0.6%) | |
| KRAS | | | | | |
| Wildtype | 155 (99.4%) | 318 (99.7%) | 11 (100.0%) | 484 (99.6%) | >0.1 |
| Mutant | 1 (0.6%) | 1 (0.3%) | 0 (0.0%) | 2 (0.4%) | |
| Age | | | | | |
| <=50 | 12 (7.7%) | 22 (6.6%) | 1 (9.1%) | 35 (7.0%) | >0.1 |
| >50 | 144 (92.3%) | 310 (93.4%) | 10 (90.9%) | 464 (93.0%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of READ

| | Low (n=16) | Medium(n=95) | High (n=56) | Total (n=167) | <i>P</i> Value |
|---------------------------|-------------|--------------|-------------|---------------|----------------|
| T stage | | | | | |
| T1-2 | 6 (37.5%) | 25 (26.6%) | 6 (11.1%) | 37 (22.6%) | <0.05* |
| T3-4 | 10 (62.5%) | 69 (73.4%) | 48 (88.9%) | 127 (77.4%) | |
| LN metastasis | | | | | |
| N+ | 10 (62.5%) | 42 (44.7%) | 28 (51.9%) | 80 (48.8%) | >0.1 |
| N0 | 6 (37.5%) | 52 (55.3%) | 26 (48.1%) | 84 (51.2%) | |
| Pathological stage | | | | | |
| Stage I-II | 5 (35.7%) | 51 (54.8%) | 25 (51.0%) | 81 (51.9%) | >0.1 |
| Stage III-IV | 9 (64.3%) | 42 (45.2%) | 24 (49.0%) | 75 (48.1%) | |
| TP53 | | | | | |
| Wildtype | 6 (42.9%) | 15 (21.1%) | 10 (21.3%) | 31 (23.5%) | >0.1 |
| Mutant | 8 (57.1%) | 56 (78.9%) | 37 (78.7%) | 101 (76.5%) | |
| BRAF | | | | | |
| Wildtype | 14 (100.0%) | 68 (95.8%) | 45 (95.7%) | 127 (96.2%) | >0.1 |
| Mutant | 0 (0.0%) | 3 (4.2%) | 2 (4.3%) | 5 (3.8%) | |
| EGFR | | | | | |
| Wildtype | 14 (100.0%) | 69 (97.2%) | 47 (100.0%) | 130 (98.5%) | >0.1 |
| Mutant | 0 (0.0%) | 2 (2.8%) | 0 (0.0%) | 2 (1.5%) | |
| KRAS | | | | | |
| Wildtype | 6 (42.9%) | 39 (54.9%) | 30 (63.8%) | 75 (56.8%) | >0.1 |
| Mutant | 8 (57.1%) | 32 (45.1%) | 17 (36.2%) | 57 (43.2%) | |
| Age | | | | | |
| <=50 | 2 (12.5%) | 14 (14.7%) | 6 (10.9%) | 22 (13.3%) | >0.1 |
| >50 | 14 (87.5%) | 81 (85.3%) | 49 (89.1%) | 144 (86.7%) | |
| Gender | | | | | |
| Female | 9 (56.2%) | 41 (43.2%) | 25 (45.5%) | 75 (45.2%) | >0.1 |
| Male | 7 (43.8%) | 54 (56.8%) | 30 (54.5%) | 91 (54.8%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of SARC

| | Medium(n=89) | High (n=174) | Total (n=263) | <i>P</i> Value |
|---------------|--------------|--------------|---------------|----------------|
| TP53 | | | | |
| Wildtype | 43 (53.8%) | 110 (69.2%) | 153 (64.0%) | <0.05* |
| Mutant | 37 (46.2%) | 49 (30.8%) | 86 (36.0%) | |
| BRAF | | | | |
| Wildtype | 80 (100.0%) | 158 (99.4%) | 238 (99.6%) | >0.1 |
| Mutant | 0 (0.0%) | 1 (0.6%) | 1 (0.4%) | |
| EGFR | | | | |
| Wildtype | 80 (100.0%) | 157 (98.7%) | 237 (99.2%) | >0.1 |
| Mutant | 0 (0.0%) | 2 (1.3%) | 2 (0.8%) | |
| KRAS | | | | |
| Wildtype | 80 (100.0%) | 158 (99.4%) | 238 (99.6%) | >0.1 |
| Mutant | 0 (0.0%) | 1 (0.6%) | 1 (0.4%) | |
| Gender | | | | |
| Female | 56 (62.9%) | 88 (50.6%) | 144 (54.8%) | <0.1 |
| Male | 33 (37.1%) | 86 (49.4%) | 119 (45.2%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of SKCM

| | Low (n=121) | Medium(n=276) | High (n=74) | Total (n=471) | <i>P</i> Value |
|---------------------------|-------------|---------------|-------------|---------------|----------------|
| T stage | | | | | |
| T1-2 | 30 (26.5%) | 64 (24.7%) | 26 (37.7%) | 120 (27.2%) | <0.1 |
| T3-4 | 83 (73.5%) | 195 (75.3%) | 43 (62.3%) | 321 (72.8%) | |
| LN metastasis | | | | | |
| N+ | 54 (47.0%) | 131 (49.4%) | 29 (42.0%) | 214 (47.7%) | >0.1 |
| N0 | 61 (53.0%) | 134 (50.6%) | 40 (58.0%) | 235 (52.3%) | |
| Pathological stage | | | | | |
| Stage I-II | 64 (57.7%) | 133 (53.6%) | 34 (51.5%) | 231 (54.4%) | >0.1 |
| Stage III-IV | 47 (42.3%) | 115 (46.4%) | 32 (48.5%) | 194 (45.6%) | |
| TP53 | | | | | |
| Wildtype | 96 (80.0%) | 241 (88.0%) | 66 (90.4%) | 403 (86.3%) | <0.1 |
| Mutant | 24 (20.0%) | 33 (12.0%) | 7 (9.6%) | 64 (13.7%) | |
| BRAF | | | | | |
| Wildtype | 76 (63.3%) | 125 (45.6%) | 31 (42.5%) | 232 (49.7%) | <0.01* |
| Mutant | 44 (36.7%) | 149 (54.4%) | 42 (57.5%) | 235 (50.3%) | |
| EGFR | | | | | |
| Wildtype | 113 (94.2%) | 256 (93.4%) | 70 (95.9%) | 439 (94.0%) | >0.1 |
| Mutant | 7 (5.8%) | 18 (6.6%) | 3 (4.1%) | 28 (6.0%) | |
| KRAS | | | | | |
| Wildtype | 114 (95.0%) | 271 (98.9%) | 72 (98.6%) | 457 (97.9%) | <0.05* |
| Mutant | 6 (5.0%) | 3 (1.1%) | 1 (1.4%) | 10 (2.1%) | |
| Age | | | | | |
| ≤50 | 31 (26.1%) | 82 (30.3%) | 28 (38.9%) | 141 (30.5%) | >0.1 |
| >50 | 88 (73.9%) | 189 (69.7%) | 44 (61.1%) | 321 (69.5%) | |
| Gender | | | | | |
| Female | 44 (36.4%) | 115 (41.8%) | 20 (27.0%) | 179 (38.1%) | <0.1 |
| Male | 77 (63.6%) | 160 (58.2%) | 54 (73.0%) | 291 (61.9%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of STAD

| | Low (n=12) | Medium(n=128) | High (n=235) | Total (n=375) | <i>P</i> Value |
|---------------------------|-------------|---------------|--------------|---------------|----------------|
| T stage | | | | | |
| T1-2 | 9 (75.0%) | 44 (34.4%) | 46 (19.6%) | 99 (26.4%) | <0.01* |
| T3-4 | 3 (25.0%) | 84 (65.6%) | 189 (80.4%) | 276 (73.6%) | |
| LN metastasis | | | | | |
| N+ | 5 (41.7%) | 92 (72.4%) | 165 (70.5%) | 262 (70.2%) | <0.1 |
| N0 | 7 (58.3%) | 35 (27.6%) | 69 (29.5%) | 111 (29.8%) | |
| Pathological stage | | | | | |
| Stage I-II | 7 (63.6%) | 62 (50.8%) | 95 (43.4%) | 164 (46.6%) | >0.1 |
| Stage III-IV | 4 (36.4%) | 60 (49.2%) | 124 (56.6%) | 188 (53.4%) | |
| TP53 | | | | | |
| Wildtype | 7 (63.6%) | 61 (49.2%) | 138 (59.2%) | 206 (56.0%) | >0.1 |
| Mutant | 4 (36.4%) | 63 (50.8%) | 95 (40.8%) | 162 (44.0%) | |
| BRAF | | | | | |
| Wildtype | 10 (90.9%) | 120 (96.8%) | 223 (95.7%) | 353 (95.9%) | >0.1 |
| Mutant | 1 (9.1%) | 4 (3.2%) | 10 (4.3%) | 15 (4.1%) | |
| EGFR | | | | | |
| Wildtype | 11 (100.0%) | 117 (94.4%) | 225 (96.6%) | 353 (95.9%) | >0.1 |
| Mutant | 0 (0.0%) | 7 (5.6%) | 8 (3.4%) | 15 (4.1%) | |
| KRAS | | | | | |
| Wildtype | 10 (90.9%) | 114 (91.9%) | 218 (93.6%) | 342 (92.9%) | >0.1 |
| Mutant | 1 (9.1%) | 10 (8.1%) | 15 (6.4%) | 26 (7.1%) | |
| Age | | | | | |
| <=50 | 1 (8.3%) | 9 (7.0%) | 19 (8.2%) | 29 (7.8%) | >0.1 |
| >50 | 11 (91.7%) | 119 (93.0%) | 212 (91.8%) | 342 (92.2%) | |
| Gender | | | | | |
| Female | 3 (25.0%) | 53 (41.4%) | 78 (33.2%) | 134 (35.7%) | >0.1 |
| Male | 9 (75.0%) | 75 (58.6%) | 157 (66.8%) | 241 (64.3%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of TGCT

| | Medium(n=119) | High (n=37) | Total (n=156) | <i>P</i> Value |
|---------------------------|---------------|-------------|---------------|----------------|
| T stage | | | | |
| T1-2 | 111 (98.2%) | 23 (88.5%) | 134 (96.4%) | <0.1 |
| T3-4 | 2 (1.8%) | 3 (11.5%) | 5 (3.6%) | |
| LN metastasis | | | | |
| N+ | 44 (38.9%) | 10 (38.5%) | 54 (38.8%) | >0.1 |
| N0 | 69 (61.1%) | 16 (61.5%) | 85 (61.2%) | |
| Pathological stage | | | | |
| Stage I-II | 60 (85.7%) | 8 (66.7%) | 68 (82.9%) | >0.1 |
| Stage III-IV | 10 (14.3%) | 4 (33.3%) | 14 (17.1%) | |
| TP53 | | | | |
| Wildtype | 108 (99.1%) | 25 (100.0%) | 133 (99.3%) | >0.1 |
| Mutant | 1 (0.9%) | 0 (0.0%) | 1 (0.7%) | |
| EGFR | | | | |
| Wildtype | 109 (100.0%) | 24 (96.0%) | 133 (99.3%) | >0.1 |
| Mutant | 0 (0.0%) | 1 (4.0%) | 1 (0.7%) | |
| KRAS | | | | |
| Wildtype | 99 (90.8%) | 25 (100.0%) | 124 (92.5%) | >0.1 |
| Mutant | 10 (9.2%) | 0 (0.0%) | 10 (7.5%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of THCA

| | Low (n=62) | Medium(n=400) | High (n=48) | Total (n=510) | P Value |
|---------------------------|-------------|---------------|-------------|---------------|---------|
| T stage | | | | | |
| T1-2 | 32 (51.6%) | 257 (64.2%) | 21 (43.8%) | 310 (60.8%) | <0.01* |
| T3-4 | 30 (48.4%) | 143 (35.8%) | 27 (56.2%) | 200 (39.2%) | |
| LN metastasis | | | | | |
| N+ | 40 (64.5%) | 205 (51.2%) | 36 (75.0%) | 281 (55.1%) | <0.01* |
| N0 | 22 (35.5%) | 195 (48.8%) | 12 (25.0%) | 229 (44.9%) | |
| Pathological stage | | | | | |
| Stage I-II | 37 (60.7%) | 279 (69.9%) | 22 (45.8%) | 338 (66.5%) | <0.01* |
| Stage III-IV | 24 (39.3%) | 120 (30.1%) | 26 (54.2%) | 170 (33.5%) | |
| TP53 | | | | | |
| Wildtype | 61 (100.0%) | 381 (99.5%) | 46 (100.0%) | 488 (99.6%) | >0.1 |
| Mutant | 0 (0.0%) | 2 (0.5%) | 0 (0.0%) | 2 (0.4%) | |
| BRAF | | | | | |
| Wildtype | 22 (36.1%) | 166 (43.3%) | 9 (19.6%) | 197 (40.2%) | <0.01* |
| Mutant | 39 (63.9%) | 217 (56.7%) | 37 (80.4%) | 293 (59.8%) | |
| KRAS | | | | | |
| Wildtype | 60 (98.4%) | 380 (99.2%) | 46 (100.0%) | 486 (99.2%) | >0.1 |
| Mutant | 1 (1.6%) | 3 (0.8%) | 0 (0.0%) | 4 (0.8%) | |
| Age | | | | | |
| <=50 | 34 (54.8%) | 232 (58.0%) | 26 (54.2%) | 292 (57.3%) | >0.1 |
| >50 | 28 (45.2%) | 168 (42.0%) | 22 (45.8%) | 218 (42.7%) | |
| Gender | | | | | |
| Female | 44 (71.0%) | 292 (73.0%) | 35 (72.9%) | 371 (72.7%) | >0.1 |
| Male | 18 (29.0%) | 108 (27.0%) | 13 (27.1%) | 139 (27.3%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of THYM

| | Low (n=28) | Medium(n=88) | High (n=3) | Total (n=119) | <i>P</i> Value |
|---------------|-------------|--------------|------------|---------------|----------------|
| TP53 | | | | | |
| Wildtype | 26 (96.3%) | 84 (96.6%) | 3 (100.0%) | 113 (96.6%) | >0.1 |
| Mutant | 1 (3.7%) | 3 (3.4%) | 0 (0.0%) | 4 (3.4%) | |
| BRAF | | | | | |
| Wildtype | 26 (96.3%) | 87 (100.0%) | 3 (100.0%) | 116 (99.1%) | >0.1 |
| Mutant | 1 (3.7%) | 0 (0.0%) | 0 (0.0%) | 1 (0.9%) | |
| KRAS | | | | | |
| Wildtype | 27 (100.0%) | 86 (98.9%) | 3 (100.0%) | 116 (99.1%) | >0.1 |
| Mutant | 0 (0.0%) | 1 (1.1%) | 0 (0.0%) | 1 (0.9%) | |
| Gender | | | | | |
| Female | 14 (50.0%) | 43 (48.9%) | 0 (0.0%) | 57 (47.9%) | >0.1 |
| Male | 14 (50.0%) | 45 (51.1%) | 3 (100.0%) | 62 (52.1%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of UCEC

| | Low (n=97) | Medium(n=370) | High (n=85) | Total (n=552) | <i>P</i> Value |
|-------------|------------|---------------|-------------|---------------|----------------|
| TP53 | | | | | |
| Wildtype | 56 (61.5%) | 221 (61.0%) | 55 (67.9%) | 332 (62.2%) | >0.1 |
| Mutant | 35 (38.5%) | 141 (39.0%) | 26 (32.1%) | 202 (37.8%) | |
| BRAF | | | | | |
| Wildtype | 89 (97.8%) | 341 (94.2%) | 74 (91.4%) | 504 (94.4%) | >0.1 |
| Mutant | 2 (2.2%) | 21 (5.8%) | 7 (8.6%) | 30 (5.6%) | |
| EGFR | | | | | |
| Wildtype | 86 (94.5%) | 339 (93.6%) | 77 (95.1%) | 502 (94.0%) | >0.1 |
| Mutant | 5 (5.5%) | 23 (6.4%) | 4 (4.9%) | 32 (6.0%) | |
| KRAS | | | | | |
| Wildtype | 75 (82.4%) | 298 (82.3%) | 65 (80.2%) | 438 (82.0%) | >0.1 |
| Mutant | 16 (17.6%) | 64 (17.7%) | 16 (19.8%) | 96 (18.0%) | |
| Age | | | | | |
| <=50 | 1 (1.0%) | 31 (8.4%) | 17 (20.2%) | 49 (8.9%) | <0.01* |
| >50 | 95 (99.0%) | 338 (91.6%) | 67 (79.8%) | 500 (91.1%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of UCS

| | Low (n=4) | Medium(n=21) | High (n=31) | Total (n=56) | <i>P</i> Value |
|-------------|------------|--------------|-------------|--------------|----------------|
| TP53 | | | | | |
| Wildtype | 0 (0.0%) | 4 (19.0%) | 1 (3.2%) | 5 (8.9%) | >0.1 |
| Mutant | 4 (100.0%) | 17 (81.0%) | 30 (96.8%) | 51 (91.1%) | |
| BRAF | | | | | |
| Mutant | 0 (0.0%) | 1 (4.8%) | 0 (0.0%) | 1 (1.8%) | >0.1 |
| Wildtype | 4 (100.0%) | 20 (95.2%) | 31 (100.0%) | 55 (98.2%) | |
| KRAS | | | | | |
| Wildtype | 3 (75.0%) | 16 (76.2%) | 30 (96.8%) | 49 (87.5%) | <0.05* |
| Mutant | 1 (25.0%) | 5 (23.8%) | 1 (3.2%) | 7 (12.5%) | |

* Statistically significant

Cancer-associated fibroblasts infiltration of UVM

| | Low (n=61) | Medium(n=19) | Total (n=80) | <i>P</i> Value |
|---------------------------|------------|--------------|--------------|----------------|
| T stage | | | | |
| T1-2 | 4 (6.6%) | 1 (5.3%) | 5 (6.2%) | >0.1 |
| T3-4 | 57 (93.4%) | 18 (94.7%) | 75 (93.8%) | |
| LN metastasis | | | | |
| N+ | 3 (4.9%) | 1 (5.3%) | 4 (5.0%) | >0.1 |
| N0 | 58 (95.1%) | 18 (94.7%) | 76 (95.0%) | |
| Pathological stage | | | | |
| Stage I-II | 32 (53.3%) | 7 (36.8%) | 39 (49.4%) | >0.1 |
| Stage III-IV | 28 (46.7%) | 12 (63.2%) | 40 (50.6%) | |
| Gender | | | | |
| Female | 26 (42.6%) | 9 (47.4%) | 35 (43.8%) | >0.1 |
| Male | 35 (57.4%) | 10 (52.6%) | 45 (56.2%) | |

* Statistically significant

Pan-cancer cancer-associated fibroblasts infiltration

| | Low (n=1223) | Medium (n=3868) | High (n=2713) | Total (n=7804) | <i>P</i> Value |
|---------------------------|-----------------|--------------------|------------------|-------------------|----------------|
| T stage | | | | | |
| T1-2 | 809 (66.1%) | 2339 (60.5%) | 1552 (57.2%) | 4700 (60.2%) | <0.01 * |
| T3-4 | 414 (33.9%) | 1529 (39.5%) | 1161 (42.8%) | 3104 (39.8%) | |
| LN metastasis | | | | | |
| N+ | 463 (38.6%) | 1670 (43.7%) | 1422 (52.5%) | 3555 (46.0%) | <0.01 * |
| N0 | 738 (61.4%) | 2153 (56.3%) | 1288 (47.5%) | 4179 (54.0%) | |
| Pathological stage | | | | | |
| Stage I-II | 638 (68.2%) | 2021 (62.3%) | 1577 (61.5%) | 4236 (62.8%) | <0.01 * |
| Stage III-IV | 298 (31.8%) | 1225 (37.7%) | 989 (38.5%) | 2512 (37.2%) | |
| TP53 | | | | | |
| Wildtype | 1157 (77.3%) | 3363 (65.4%) | 1631 (56.0%) | 6151 (64.4%) | <0.01 * |
| Mutant | 339 (22.7%) | 1782 (34.6%) | 1284 (44.0%) | 3405 (35.6%) | |
| BRAF | | | | | |
| Wildtype | 1391 (93.0%) | 4664 (90.7%) | 2763 (94.8%) | 8818 (92.3%) | <0.01 * |
| Mutant | 105 (7.0%) | 481 (9.3%) | 152 (5.2%) | 738 (7.7%) | |
| Gender | | | | | |
| Female | 677 (42.3%) | 2776 (50.0%) | 1905 (59.9%) | 5358 (51.9%) | <0.01 * |
| Male | 924 (57.7%) | 2777 (50.0%) | 1274 (40.1%) | 4975 (48.1%) | |
| Cancer type | | | | | |
| Adenocarcinomas | 442 (27.6%) | 1934 (34.7%) | 2014 (63.1%) | 4390 (42.4%) | <0.01 * |
| Kidney | 228 (14.2%) | 557 (10.0%) | 108 (3.4%) | 893 (8.6%) | |
| Ly-Hem | 182 (11.4%) | 128 (2.3%) | 8 (0.3%) | 318 (3.1%) | |
| Misc | 376 (23.5%) | 821 (14.7%) | 266 (8.3%) | 1463 (14.1%) | |
| Neuronal | 206 (12.9%) | 1128 (20.3%) | 98 (3.1%) | 1432 (13.8%) | |
| Sar | 4 (0.2%) | 110 (2.0%) | 205 (6.4%) | 319 (3.1%) | |
| Squamous | 163 (10.2%) | 772 (13.9%) | 457 (14.3%) | 1392 (13.4%) | |
| SC | 0 (0.0%) | 119 (2.1%) | 37 (1.2%) | 156 (1.5%) | |

* significant