

## Appendix

**Table A Demographics, comorbid conditions, and disease characteristics of HCC patients, by race**

| Patient characteristics          | <i>P</i><br>(univariate) | <i>P</i><br>(pairwise<br>Fishers)<br>H vs AA | <i>P</i><br>(pairwise<br>Fishers)<br>H vs W | <i>P</i><br>(pairwise<br>Fishers)<br>AA vs W | <i>P</i> <sup>a</sup> |
|----------------------------------|--------------------------|--|---|--|-----------------------|
| <b>Demographics</b>              |                          |  |   |  |                       |
| Age (Mean years $\pm$ SD)        | 0.0945                   | 0.7429                                       | 0.0378                                      | 0.0084                                       | * HW, AW              |
| Female                           | 0.0223                   |  |   |  |                       |
| Insurance                        | 0.759                    |  |   |  |                       |
| Medicare/Medicaid                |                          | 0.0491                                       | 1   | 0.0228                                       | * HA, AW              |
| Private                          | 0.5074                   |  |   |  |                       |
| None                             | 0.0346                   |  |   |  |                       |
| BMI > 24.9                       |                          |  |   |  |                       |
| Metabolic Syndrome               |                          |  |   |  |                       |
| <b>Comorbid Conditions</b>       |                          |  |   |  |                       |
| Hyperlipidemia                   | 0.0001                   | 0.0004                                       | 0.001                                       | 0.5786                                       | ** HW, HA             |
| On dialysis <sup>b</sup>         | 0.0057                   | 0.0074                                       | 0.0074                                      | 0.2359                                       | ** HNH                |
| Diabetes Mellitus 2              | 0.0019                   | 0.0007                                       | 0.0648                                      | 0.045  | ** HA, *AW            |
| History smoking                  | 0.0056                   | 0.0022                                       | 0.0102                                      | 0.0332                                       | ** HW, HA;            |
| Current Smoker                   | <.0001                   | <.0001                                       | <.0001                                      | 0.0332                                       | *AW                   |
| Triglycerides (median+SD)        | 0.5846                   |  |   |  | ** HW, HA;            |
| History alcohol use              | 0.1604                   |  |   |  | *AW                   |
| <b>Cirrhosis Characteristics</b> |                          |  |   |  |                       |
| Etiology <sup>c</sup>            | <.0001                   | <.0001                                       | 0.0005                                      | 0.2558                                       | ** HW, HA             |
| HCV                              | 0.3526                   |  |   |  |                       |
| HBV                              | 0.4248                   |  |   |  |                       |
| ETOH                             | 0.0021                   | 0.0007                                       | 0.0187                                      | 0.1319                                       | ** HA, * HW           |
| NASH                             | 0.0562                   |  |   | 0.2729                                       | *HA, **AW             |
| Other <sup>d</sup>               | 0.0002                   | 0.0159                                       | 0.1569                                      | <.0001                                       |                       |
| MELD (Median $\pm$ SD)           |                          |  |   |  |                       |
| AFP                              | 0.1986                   |  |   |  |                       |
| Median (IQ Range)                | 0.0055                   | 0.035  | 0.3618                                      | 0.001  | *HA, **AW             |
|                                  | 0.0002                   | 0.0087                                       | 0.3554                                      | <0.0001                                      | *HA, ** AW            |
| AFP > 200                        | 0.0008                   | 0.006  | 0.042                                       | 0.0037                                       | *HW, HA, AW           |
| Hepatic Encephalopathy           | 0.1909                   |  |   |  |                       |
| Ascites                          |                          |  |   |  |                       |
| HCC surveillance performed       |                          |  |   |  |                       |

|                         |            |            |            |           |  |
|-------------------------|------------|------------|------------|-----------|--|
| <b>Tumor Parameters</b> |            |            |            |           |  |
| Tumor size (cm)         |            |            |            |           |  |
| Median (+ SD)           | 0.8529     |            |            |           |  |
| (IQ Range)              | (2.0-6.0)  | (2.0-5.0)  | (2.0-6.0)  | (2.0-6.0) |  |
| > 5cm (n, %)            | 0.7724     |            |            |           |  |
| Median >5 cm            | (6.0-12.0) | (7.5-13.0) | (6.0-11.0) | (6.0-8.0) |  |
| (IQ)                    | 0.757      |            |            |           |  |
| Stage at diagnosis      |            |            |            |           |  |
| Unifocal                |            |            |            |           |  |
| Multifocal              |            |            |            |           |  |
| Metastatic              | 0.43       |            |            |           |  |
| Portal Vein             | 0.7758     |            |            |           |  |
| Involvement             | 0.8401     |            |            |           |  |
| Poorly differentiated   |            |            |            |           |  |
| Within Milan Criteria   |            |            |            |           |  |

<sup>a</sup>P values from chi-square tests (two-sided) for overall race effect followed by pairwise comparisons between races, for p values < 0.05. A significance level of 0.05 was used for the overall race comparisons. <sup>b</sup>Given N < 5 for AA (N=0) and W (N=2), limited statistical tests for Hispanic to Non-Hispanic with p = 0.0074. <sup>c</sup>Some patients with more than one listed etiology of cirrhosis. <sup>d</sup>Other: cryptogenic, hemochromatosis, autoimmune, other not specified. \*P < 0.05; \*P < 0.001. H: Hispanics; A: African Americans; W: non-Hispanic Caucasians; SD: standard deviation; IQ: percentile interquartile range (25%, 75%); HW: Hispanics compared to Whites; HA: Hispanics compared to African Americans; AW: African Americans compared to Whites; HNH: Hispanics compared to Non-Hispanics.

**Table B Treatment patterns of non-metastatic patients with HCC, by race**

| First line treatment characteristics, non metastatic patients | <i>P</i><br>(univariate) | <i>P</i><br>(pairwise<br>Fishers)<br>H vs AA | <i>P</i><br>(pairwise<br>Fishers)<br>H vs W | <i>P</i><br>(pairwise<br>Fishers)<br>AA vs W | <i>P</i> <sup>a</sup> |
|---|--------------------------|--|---|--|-----------------------|
| Surgery   |                          |  |   |  |                       |
| Liver directed  | 0.1168                   |  |   |  |                       |
| Chemotherapy  |                          |  |   |  |                       |
| Observation   |                          |  |   |  |                       |
| Lost to follow up   |                          |  |   |  |                       |
| Met Milan Criteria  | 0.8401                   |  |   |  |                       |
| Transplanted  | 0.176                    |  |   |  |                       |
| Listed  | 0.1743                   |  |   |  |                       |
| Tumor exception points  | 0.3698                   |  |   |  |                       |
| Transplanted  | 0.0482                   | 0.3682                                       | 0.1305                                      | 0.0165                                       | *AW                   |
| Removed from list   | 0.0297                   | 0.2307                                       | 0.1557                                      | 0.0084                                       | **AW                  |
| Death   |                          |  |   |  |                       |
| Progression   |                          |  |   |  |                       |
| Transfer of care  |                          |  |   |  |                       |
| Other   |                          |  |   |  |                       |

For N smaller than 5 per group (H, AA, W),  $\chi^2$  results were not calculated given uncertain significance level. <sup>a</sup> *P* values from chi-square tests (two-sided) for overall race effect followed by pairwise comparisons between races, for *p* values < 0.05. A significance level of 0.05 was used for the overall race comparisons. <sup>b</sup>Some patients with more than one listed etiology of cirrhosis. <sup>c</sup>Other: Cryptogenic, hemochromatosis, autoimmune, other not specified. \**P* < 0.05; \*\**P* < 0.001. H: Hispanics; A: African Americans; W: non-Hispanic Caucasians; SD: standard deviation; IQ: percentile interquartile range (25%, 75%); HW: Hispanics compared to Whites; HA: Hispanics compared to African Americans; AW: African Americans compared to Whites; HNH: Hispanics compared to Non-Hispanics.