| **Supplementary Table 2a. Post-Propensity Matching Comparison Of Patients With And Without Malnutrition; Clinical Outcomes Of Those Who Underwent Total Hepatectomy, Partial Hepatectomy And Other Liver Procedures** |
| --- |
|  | **Post-Match Patients With Malnutrition Vs Without Malnutrition Undergoing Total Hepatectomy** |
|  | **Patients With Malnutrition** | **Patients Without Malnutrition** |  |  | **Univariate Analysis** |  | **Multivariate Analysis** |  |
| **Hospital Outcomes** | **n = 194** | **(50.00 %)** | **n = 194** | **(50.00 %)** | **p-value** |  | **OR** | **95% CI** |  | **aOR** | **95% CI** | **p-value** |  |
| Mortality (%) | 7.22 | % | 10.30 | % | 0.370 |  | 0.68 | (0.33 - 1.38) |  | 0.72 | (0.34 - 1.53) | 0.394 |  |
| Length of Stay (days) | 24.50 | days | 16.50 | days | < 0.001 |  |  |  |  | 1.51 | (1.45 - 1.58) | < 0.001 | † |
| Hospitalization Costs ($) | 588,922 | $ | 418,758 | $ | < 0.001 |  |  |  |  | 1.42 | (1.42 - 1.42) | < 0.001 | † |
| Disposition at Discharge |  |  |  |  | 0.003 |  |  |  |  |  |  |  |  |
|  Routine (%) | 37.10 | % | 52.10 | % |  |  |  |  |  |  |  |  |  |
|  Short-term Hospital (%) | 1.55 | % | 1.03 | % |  |  |  |  |  |  |  |  |  |
|  Skilled Nursing or other Facility (%) | 27.30 | % | 12.90 | % |  |  |  |  |  |  |  |  |  |
|  Home Health Care (%) | 26.80 | % | 23.20 | % |  |  |  |  |  |  |  |  |  |
|  Against Medical Advice (%) | 0.00 | % | 0.00 | % |  |  |  |  |  |  |  |  |  |
|  Died (%) | 7.22 | % | 10.30 | % |  |  |  |  |  |  |  |  |  |
|  Unknown (%) | 0.00 | % | 0.52 | % |  |  |  |  |  |  |  |  |  |
| **Postoperative complications** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Postoperative Bleeding (%) | 13.40 | % | 16.50 | % | 0.480 |  | 0.78 | (0.45 - 1.37) |  |  |  |  |  |
| Postoperative Infection (%) | 1.55 | % | 3.09 | % | 0.500 | ‡ | 0.49 | (0.08 - 2.35) |  |  |  |  |  |
| Postoperative Wound Complications (%) | 3.61 | % | 1.03 | % | 0.170 | ‡ | 3.58 | (0.67 - 35.79) |  |  |  |  |  |
| Postoperative Respiratory Failure (%) | 12.40 | % | 13.40 | % | 0.880 |  | 0.91 | (0.50 - 1.65) |  |  |  |  |  |
|  |
|  | **Post-Match Patients With Malnutrition Vs Without Malnutrition Undergoing Partial Hepatectomy** |
|  | **Patients With Malnutrition** | **Patients Without Malnutrition** |  |  | **Univariate Analysis** |  | **Multivariate Analysis** |  |
| **Hospital Outcomes** | **n = 1,785** | **(50.00 %)** | **n = 1,785** | **(50.00 %)** | **p-value** |  | **OR** | **95% CI** |  | **aOR** | **95% CI** | **p-value** |  |
| Mortality (%) | 6.50 | % | 4.82 | % | 0.036 |  | 1.37 | (1.03 - 1.83) |  | 1.36 | (1.02 - 1.82) | 0.036 |  |
| Length of Stay (days) | 17.70 | days | 8.73 | days | < 0.001 |  |  |  |  | 2.03 | (2.00 - 2.07) | < 0.001 | † |
| Hospitalization Costs ($) | 257,584 | $ | 134,857 | $ | < 0.001 |  |  |  |  | 1.96 | (1.96 - 1.96) | < 0.001 | † |
| Disposition at Discharge |  |  |  |  | < 0.001 |  |  |  |  |  |  |  |  |
|  Routine (%) | 41.30 | % | 66.30 | % |  |  |  |  |  |  |  |  |  |
|  Short-term Hospital (%) | 1.40 | % | 0.78 | % |  |  |  |  |  |  |  |  |  |
|  Skilled Nursing or other Facility (%) | 23.50 | % | 9.64 | % |  |  |  |  |  |  |  |  |  |
|  Home Health Care (%) | 27.00 | % | 18.40 | % |  |  |  |  |  |  |  |  |  |
|  Against Medical Advice (%) | 0.28 | % | 0.06 | % |  |  |  |  |  |  |  |  |  |
|  Died (%) | 6.50 | % | 4.82 | % |  |  |  |  |  |  |  |  |  |
|  Unknown (%) | 0.00 | % | 0.00 | % |  |  |  |  |  |  |  |  |  |
| **Postoperative complications** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Postoperative Bleeding (%) | 5.77 | % | 2.63 | % | < 0.001 |  | 2.26 | (1.59 - 3.22) |  |  |  |  |  |
| Postoperative Infection (%) | 7.90 | % | 2.41 | % | < 0.001 |  | 3.47 | (2.45 - 4.92) |  |  |  |  |  |
| Postoperative Wound Complications (%) | 4.71 | % | 0.95 | % | < 0.001 |  | 5.14 | (3.04 - 8.69) |  |  |  |  |  |
| Postoperative Respiratory Failure (%) | 9.41 | % | 3.64 | % | < 0.001 |  | 2.75 | (2.05 - 3.69) |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| † Used Poisson regression analysis |
| ‡ Fisher's Test |
| The following variables were included in the propensity-score matching procedure: age, gender: female, race, diabetes, hyperlipidemia, hypertension, chronic obstructive pulmonary disease, coronary artery disease, chronic kidney disease, congestive heart failure, coagulopathy, alcohol use disorder, cigarette use, obesity, elective (vs emergent) procedure, alcoholic liver disease, hepatitis b, hepatitis c, non-alcoholic fatty liver disease, cirrhosis |

| **Supplementary Table 2b. Post-Propensity Matching Comparison Of Patients With And Without Malnutrition; Clinical Outcomes Of Those Who Underwent Total Hepatectomy, Partial Hepatectomy And Other Liver Procedures** |
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|  | **Post-Match Patients With Malnutrition Vs Without Malnutrition Undergoing Hepatectomy For Other Liver Procedures** |
|  | **With Malnutrition** | **Without Malnutrition** |  |  | **Univariate Analysis** |  | **Multivariate Analysis** |  |
| **Hospital Outcomes** | **n = 472** | **(50.00 %)** | **n = 472** | **(50.00 %)** | **p-value** |  | **OR** | **95% CI** |  | **aOR** | **95% CI** | **p-value** |  |
| Mortality (%) | 6.14 | % | 3.18 | % | 0.045 |  | 1.99 | (1.05 - 3.77) |  | 2.28 | (1.18 - 4.39) | 0.014 |  |
| Length of Stay (days) | 17.20 | days | 9.02 | days | < 0.001 |  |  |  |  | 1.90 | (1.83 - 1.97) | < 0.001 | † |
| Hospitalization Costs ($) | 227,981 | $ | 129,143 | $ | < 0.001 |  |  |  |  | 1.74 | (1.74 - 1.75) | < 0.001 | † |
| Disposition at Discharge |  |  |  |  | < 0.001 |  |  |  |  |  |  |  |  |
|  Routine (%) | 41.30 | % | 63.60 | % |  |  |  |  |  |  |  |  |  |
|  Short-term Hospital (%) | 1.91 | % | 2.97 | % |  |  |  |  |  |  |  |  |  |
|  Skilled Nursing or other Facility (%) | 28.80 | % | 11.70 | % |  |  |  |  |  |  |  |  |  |
|  Home Health Care (%) | 21.60 | % | 17.60 | % |  |  |  |  |  |  |  |  |  |
|  Against Medical Advice (%) | 0.21 | % | 0.85 | % |  |  |  |  |  |  |  |  |  |
|  Died (%) | 6.14 | % | 3.18 | % |  |  |  |  |  |  |  |  |  |
|  Unknown (%) | 0.00 | % | 0.21 | % |  |  |  |  |  |  |  |  |  |
| **Postoperative complications** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Postoperative Bleeding (%) | 5.51 | % | 3.60 | % | 0.210 |  | 1.56 | (0.84 - 2.92) |  |  |  |  |  |
| Postoperative Infection (%) | 4.45 | % | 2.12 | % | 0.068 |  | 2.15 | (1.00 - 4.62) |  |  |  |  |  |
| Postoperative Wound Complications (%) | 4.45 | % | 1.48 | % | 0.013 |  | 3.09 | (1.30 - 7.35) |  |  |  |  |  |
| Postoperative Respiratory Failure (%) | 8.05 | % | 2.12 | % | < 0.001 |  | 4.05 | (1.99 - 8.22) |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| † Used Poisson regression analysis |
| ‡ Fisher's Test |
| The following variables were included in the propensity-score matching procedure: age, gender: female, race, diabetes, hyperlipidemia, hypertension, chronic obstructive pulmonary disease, coronary artery disease, chronic kidney disease, congestive heart failure, coagulopathy, alcohol use disorder, cigarette use, obesity, elective (vs emergent) procedure, alcoholic liver disease, hepatitis b, hepatitis c, non-alcoholic fatty liver disease, cirrhosis |