Validation Study for AP 200 Criteria and Intentional Down-Staging Trial for Advanced HCC

YM Park1, DD Dung1, HD Nam1, KW Kim1, KM Moon1, CW Chu1, TB Lee2, SJ Ryong2, BH Choi2, KH Yang2, JH Ryu2
1Department of Hepato-Biliary-Pancreatic Surgery and Liver Transplantation, Vinmec Times City International Hospital, Hanoi, Viet Nam1, Pusan National University Yangsan Hospital, Korea2

BACKGROUND
- Hepatocellular carcinoma (HCC) treatment guideline are widely accepted based on morphological aspect.
- However, there remains a 7–20% possibility of HCC recurrence, even among patients who fulfill the Milan or BCLC criteria.
- Recently many reports have reflected tumor biologic factor such as serum alpha fetoprotein (AFP) or protein induced by vitamin K absence-II (PIVKAII) to find out optimal treatment for advanced HCC.

AP CRITERIA for LDLT for HCC

DEFINITION OF AP CRITERIA
- AFP ≤ 200 ng/mL and PIVKA-II ≤ 200 mAU/mL.

PATIENTS AND METHOD
- From May 2010 to April 2016
- Total 121 patients (5 exclusions)
- Pusan National University Yangsan Hospital (PNUYH)

RESULTS

<table>
<thead>
<tr>
<th>Within Milan</th>
<th>Within AP</th>
<th>Above AP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1YDFS</td>
<td>19.5%</td>
<td>71.4%</td>
</tr>
<tr>
<td>3YDFS</td>
<td>92.2%</td>
<td>57.1%</td>
</tr>
<tr>
<td>Recur</td>
<td>5/77</td>
<td>3/7</td>
</tr>
<tr>
<td>Above AP</td>
<td>90.0%</td>
<td>55.9%</td>
</tr>
<tr>
<td>1YDFS</td>
<td>90.0%</td>
<td>41.9%</td>
</tr>
<tr>
<td>Recur</td>
<td>2/21</td>
<td>9/19</td>
</tr>
</tbody>
</table>

- Even within Milan group, Recurrence was frequent in above AP group. On the other hand, even above Milan group, recurrence rate was significantly low in within AP group.
- These criteria might be useful for expanding the selection criteria for LT among patients with HCC to identify all patients who might experience a significant benefit.

CONCLUSION
- The A-P 200 criteria can be used to predict recurrence after liver transplantation among patients with HCC.
- We could adjust the classical criteria to improve disease recurrence of advanced HCC by successful downstaging based on this modification.