

Supplemental Table Correlates of Tumor Growth Patterns

Patient Characteristic	Rapid growth	Indolent growth	Lack of Significant Association
Age			Kim 2017 An 2015 Villa 2014 Furlan 2012 Cucchetti 2005 Matsuhashi 1996 Sheu 1985
Sex			Kim 2017 An 2015 Villa 2014 Furlan 2012 Cucchetti 2005 Sheu 1985
Elevated AFP	Rich 2019 An 2015 Villa 2015 Cucchetti 2005		Kim 2017 Rowe 2014 Furlan 2012 Sheu 1985 Yoshino 1983 Barbara 1992
AFP Doubling Time	Shingaki 2013 Mochizuki 2012 Yoshino 1983 Sheu 1985 Ebara 1986*		An 2015
Liver disease etiology	Rich 2019 An 2015 Yoshino 1983		Kim 2017 An 2015 Villa 2016 Furlan 2012 Cucchetti 2005 Sheu 1985
Child Pugh Class	Kim 2017		An 2015 Villa 2015 Furlan 2012 Cucchetti 2005 Sheu 1985 Yoshino 1983 Matsuhashi 1996
Smaller tumor diameter (continuous)		Rich 2019# Kim 2017 An 2015 Jha 2014 Taouli 2005 Sheu 1985	Shingaki 2013 Villa 2015 Rowe 2014 Yoshino 1983 Matsuhashi 1996 Barbara 1992

*Association with visual inspection of changes in AFP instead of AFP doubling time.

Comparted TVDT among tumors with diameter 1-2 cm, 2-5 cm, >5 cm. Others noted linear correlation between TVDT and tumor size.

Supplemental Figure 1 Funnel Plot Analysis for Publication Bias

Supplemental Figure 2 Subgroup analysis of Tumor Volume Doubling Time based on Location