

Supplemental Figure 1 OS and PFS comparison of ITT and BEP populations in each treatment arm.
KM curves of OS (A and B) and PFS (C and D) stratified by ITT and IGF-1 BEP populations are shown for patients treated with either Atezo +Bev or sorafenib.


Supplemental Figure 2. Comparison of overall survival modeling of IGF-1 and IGF-CTP scores with additional known prognostic factors. Results of within-arm cox proportional hazards overall survival modeling for various factors known or hypothesized to be prognostic. Hazard ratio is of the first group defined by each factor vs. the other. $95 \%$ Wald CI is the $95 \%$ confidence interval of hazard ratio as determined by the Wald Test. Tumor burden is the fraction of the total tumor volume divided by the total liver volume, as assessed by CT. Portal Venous Tumor Thrombus groups are as determined by the Liver Cancer Study Group of Japan classification.


## Supplemental Figure 3 Kinetics of IGF-1 levels or IGF-CTP classes in association with PFS of Atezo + Bev or sorafenib treatment.

A and B, KM curves of PFS stratified by IGF-1 levels after 1 cycle of Atezo+Bev (A) or sorafenib (B) treatment stay at Point 1 (Stable Point 1), decreased from Point 1 to Point $2 / 3=$ (Deteriorated) or stays at Point $2 / 3$ (Stable Point $2 / 3$ ). C and D, KM curves of PFS stratified by IGF-CTP classes after treatment stay at A (Stable A), changed to B/C (Deteriorated) or stay at B/C (Stable Class B/C).

