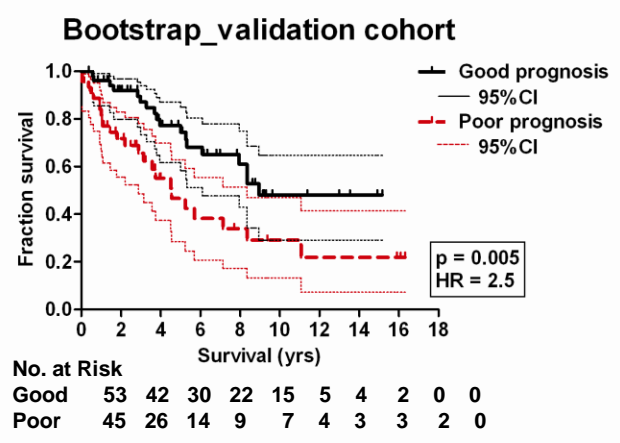
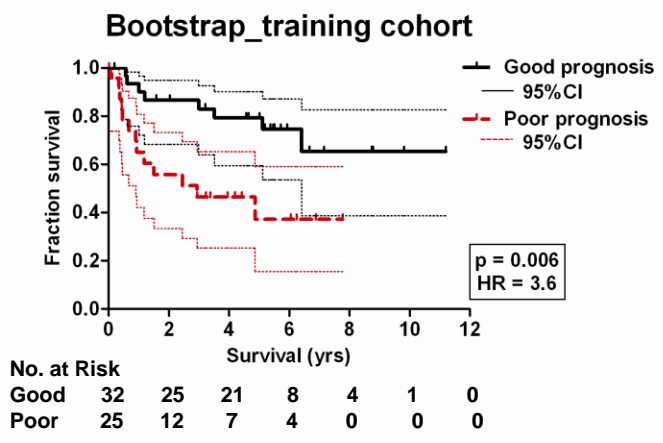
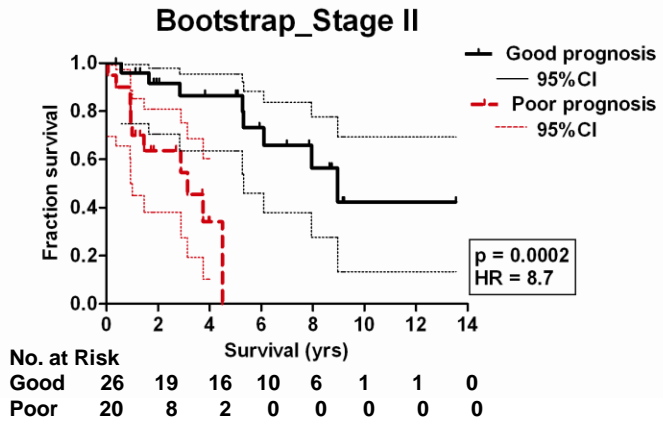
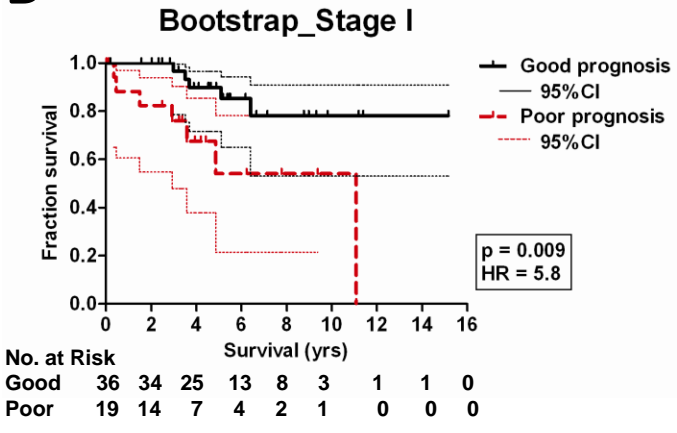


**A****B**

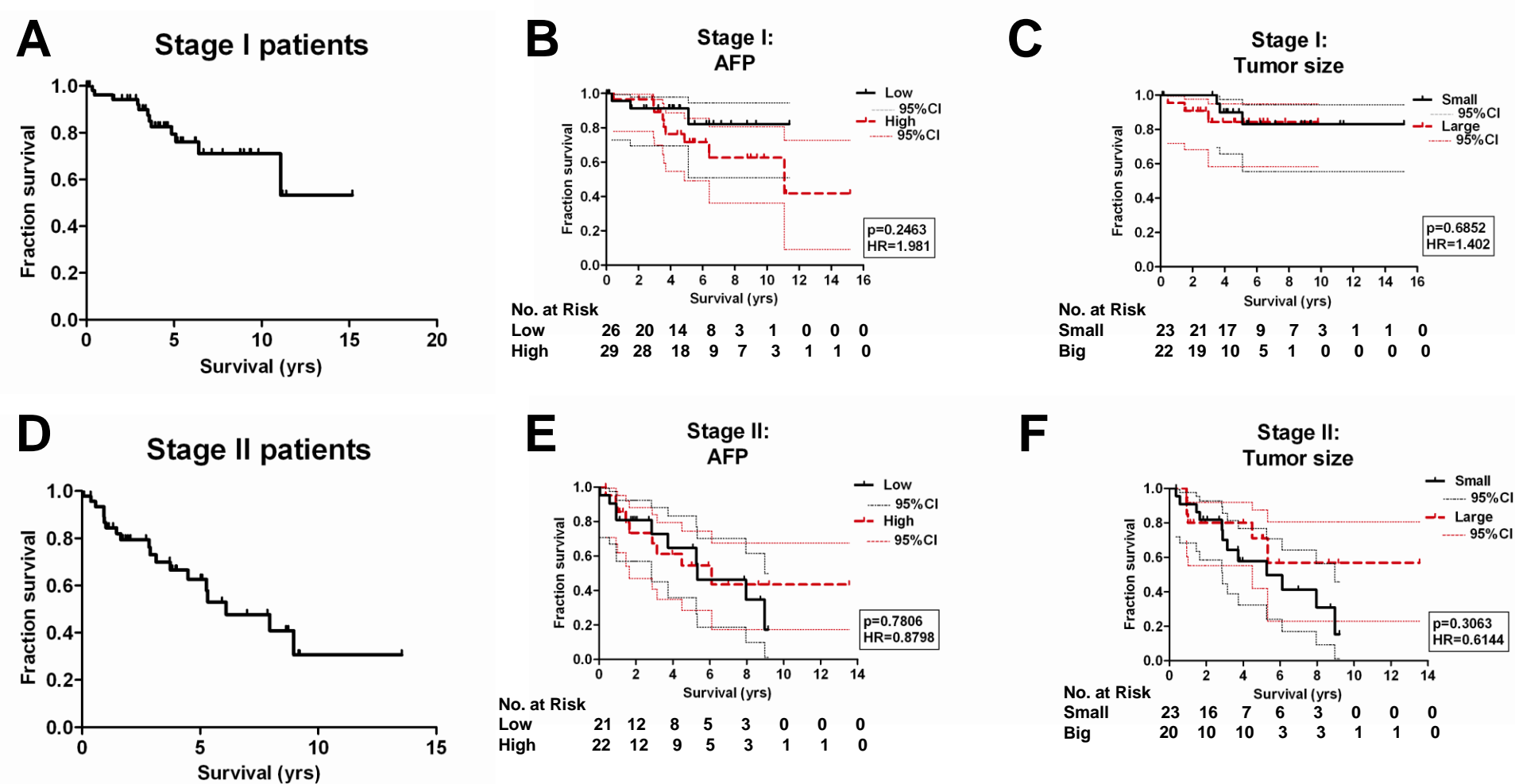
**Supplementary Figure 1: Validation of NTP analysis by Bootstrapping analysis.**

- (A) Kaplan Meier analyses on training cohort (Sg n=55) and validation cohort (HK, n= 43 and Zurich, n=55) based on Bootstrapping analysis. p= log rank p value; 95% CI= 95% confidence interval.
- (B) Kaplan Meier analyses on Stage I (n=55) and Stage II n=46) HCC patients based on Bootstrapping analysis. p= log rank p value; 95% CI= 95% confidence interval.

Supplementary Table 1:

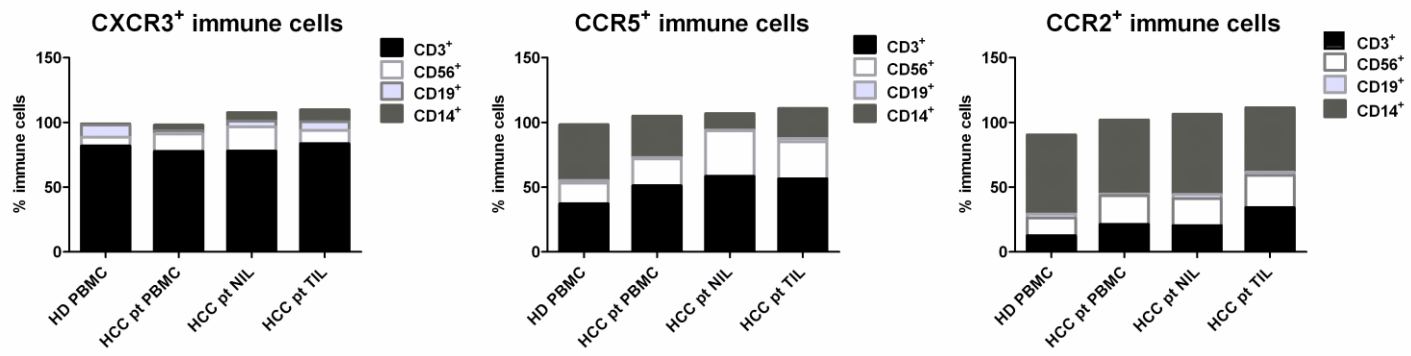
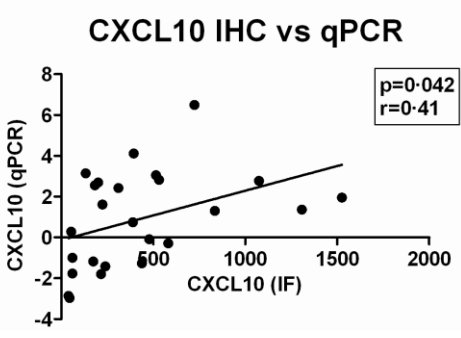
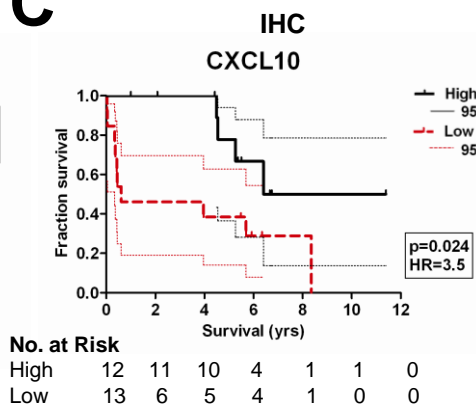
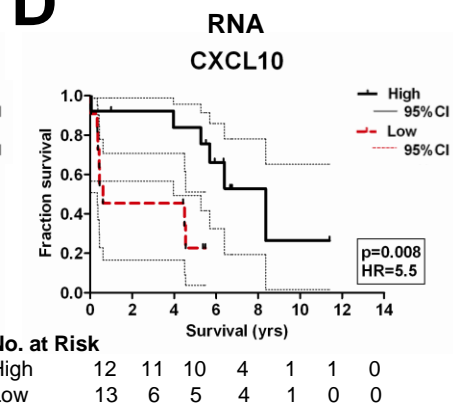
The list of 14 immune genes in order of decreasing importance based on the cox score of each gene in training cohort, *IL-6* being the most important and *CEACAM8* the least. Note that a negative value represents a positive correlation with survival.

<b>Gene</b>	<b>cox score</b>
<i>IL6</i>	-2.683275671
<i>TLR4</i>	-2.305472414
<i>NCR3</i>	-2.224820683
<i>CCL2</i>	-2.181026188
<i>CXCL10</i>	-1.712844345
<i>CCR2</i>	-1.709388501
<i>CCL5</i>	-1.601773463
<i>TNF</i>	-1.566062324
<i>FCGR1A</i>	-1.154882937
<i>TLR3</i>	-0.538128834
<i>IFNG</i>	-0.348678936
<i>TBX21</i>	-0.223167598
<i>CD8A</i>	-0.095256421
<i>CEACAM8</i>	0.275850045



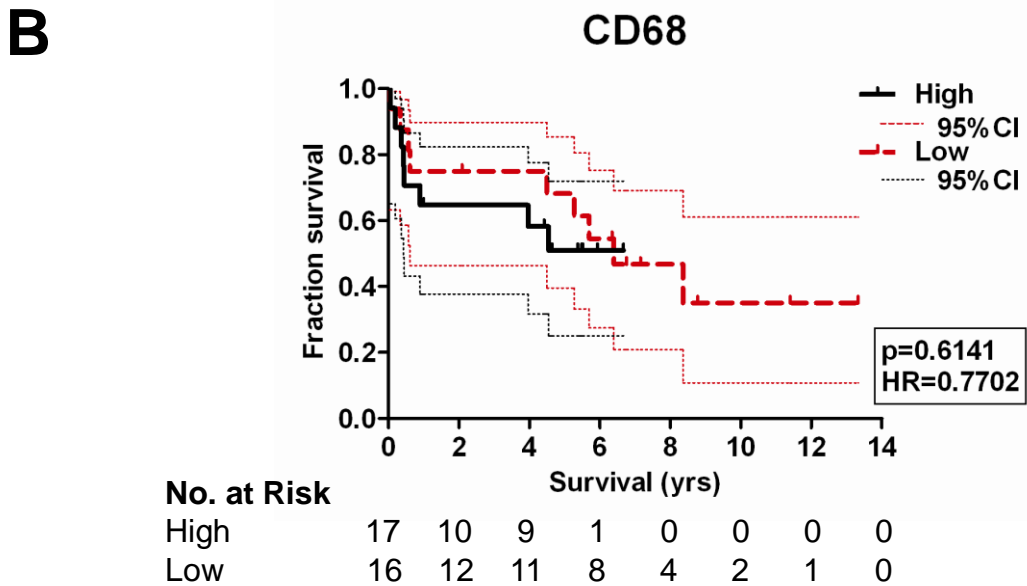
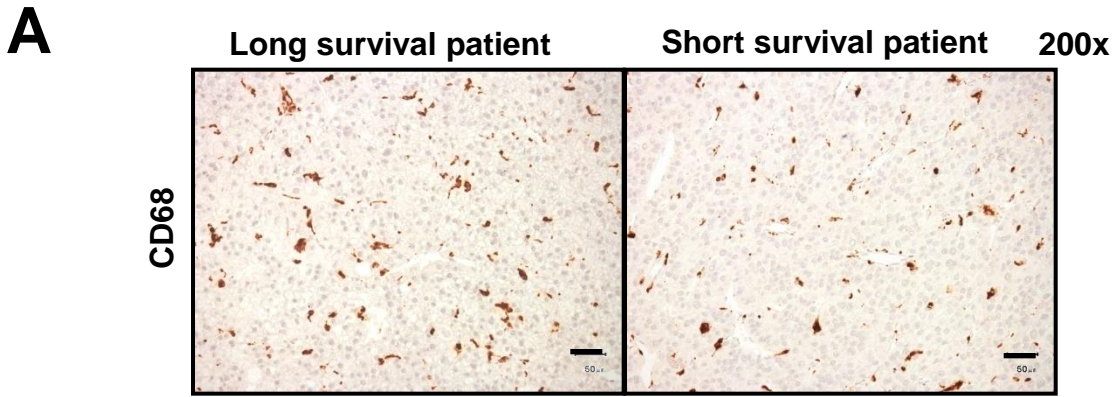
**Supplementary Figure 2: Lack of predictive power of clinical parameters for overall survival in stage I HCC patients.**

- (A) Overall survival profile for Stage I patients (n=55, both training and validation cohort).
- (B) Graph shows Kaplan-Meier analysis (log rank p value) Stage I patients according to alfa-fetoprotein (AFP) level (Median 17 ng/ml). 95% CI= 95% confidence interval.
- (C) Graph shows Kaplan-Meier analysis (log rank p value) Stage I patients according to tumor size, cm (Median= 4 cm). 95% CI= 95% confidence interval.
- (D) Overall survival profile for Stage II patients (n=46, both training and validation cohort).
- (E) Graph shows Kaplan-Meier analysis (log rank p value) Stage II patients according to alfa-fetoprotein (AFP) level (Median 30 ng/ml). 95% CI= 95% confidence interval.
- (F) Graph shows Kaplan-Meier analysis (log rank p value) Stage II patients according to tumor size, cm (Median= 5 cm). 95% CI= 95% confidence interval.

**A****B****C****D**

**Supplemental Figure 3: CXCL10 protein expression correlates with RNA expression and patient survival.**

- (A) Percentage of various immune subsets expressing CXCR3, CCR5 and, CCR2 in PBMC from healthy donors (HD) or HCC patients (HCC pt), non-tumor tissue-infiltrating leukocytes (NIL), or tumor-infiltrating leukocytes (TIL). Analysis performed with flow cytometry. HD PBMC n=10, HCC pt PBMC, TIL and NIL n=5. Blood samples from healthy donors were obtained from the Singapore Health Science Authority blood bank and blood and tumor tissues from HCC patients were obtained from Singapore General Hospital (SGH), all with Ethics Committee approval.
- (B) CXCL10 IF staining area correlates with RNA expression analyzed by qPCR (Sg n=13, HK n=8, Zurich n=4).  $r$ =Pearson correlation coefficient.
- (C) Kaplan meier analysis of CXCL10 IF staining area shows its correlation with superior patient survival (Sg n=13, HK n=7, Zurich n=5). Median staining area=346  $\mu\text{m}^2$ .  $p$ = log rank  $p$  value; 95% CI= 95% confidence interval.
- (D) Kaplan meier analysis of CXCL10 RNA from qPCR shows its correlation with superior patient survival (Sg n=13, HK n=7, Zurich n=5). Median staining area=346  $\mu\text{m}^2$ .  $p$ = log rank  $p$  value; 95% CI= 95% confidence interval.



**Supplementary Figure 4: Lack of association of patient survival with the density of tumor-infiltrating CD68+macrophages**

(A) Representative images of CD68 IHC staining in tumors (red) showing no difference between long versus short survival patients. Bar=50  $\mu$ m; 200x magnification. Median survival=3.9 yrs.

(B) Kaplan Meier analysis on density of CD68+cells quantified in 10-15 random 100x magnification fields in patient tumor samples (Sgn=20, HK n=8, Zurich n=5) and showed no association with patient survival. Median value for CD68+cells was 353 cells per field. 95%CI= 95% confidence interval