**Supplementary Table 1. Patient characteristics of the control cohorts assessed with ELISA.**

|  |  |  |
| --- | --- | --- |
| Variable |  | Value |
| Age - year | Median | 64.5 |
|  | Range | 34-82 |
| Gender - no. (%) | Male | 18 (75) |
|  | Female | 6 (25) |
| Child-Pugh class – no. (%) | A | 22 (92) |
|  | B | 2 (8) |
| Etiology of liver diseases - no. (%) | HBV | 5 (21) |
|  | HCV | 11 (46) |
|  | NASH | 8 (33) |
| AST - U/l | Median | 44 |
|  | Range | 12-575 |
| ALT - U/l | Median | 58.5 |
|  | Range | 13-1101 |
| PLT - 10^6/µl | Median | 17.6 |
|  | Range | 6.8-33 |
| FIB-4 | Median | 2.1 |
|  | Range | 0.64-9.7 |

HBV, hepatitis B virus; HCV, hepatitis C virus; NASH, nonalcoholic steato-hepatitis; NGSP, National Glycohemoglobin Standardization Program; FIB-4, the Fibrosis-4 index; NA, not available.

**Supplementary Table 2. Tumor objective response in RECIST according to FGFR4-IHC.**

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PD, progression of disease; PR, partial response; SD, stable disease.

**Supplementary Table 3. Tumor objective response in mRECIST and RECIST according to FGFR4-ELISA.**



**Supplementary Fig. 1. Expression patterns of ligands of receptor tyrosine kinases (RTKs).**

**テキスト, 地図 が含まれている画像

自動的に生成された説明**

(A) mRNA expression in liver tumors and surrounding liver tissues. Each dot is a single case. (B) Cross-cancer comparison. The red line indicates 1E+6 FPKM-UQ. When log expression was required for zero FPKM-UQ, 1 was added as an offset. FPKM, fragments per kilobase of transcript per million mapped reads. Each dot is a single case.

**Supplementary Fig. 2. Overall survival in gastric cancer according to the tissue *FGFR4* mRNA level.**

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自動的に生成された説明**

High expression of FGFR4 was related to significantly longer survival (2.1 vs. 3.6 years).

**Supplementary Fig. 3. Overall survival according to FGFR4-IHC.**

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(A) OS according to the percent FGFR-positive cells in tumor tissue. Median OS for low (0-10%), moderate (10-50%), and high (>50%) were 11.3 months, ‘not reached’, and 10.4 months, respectively (p = 0.9). (C) OS according to FGFR-IHC. Median OS for negative and high FGFR4-IHC were 11.3 months and ‘not reached’, respectively (p = 0.9).