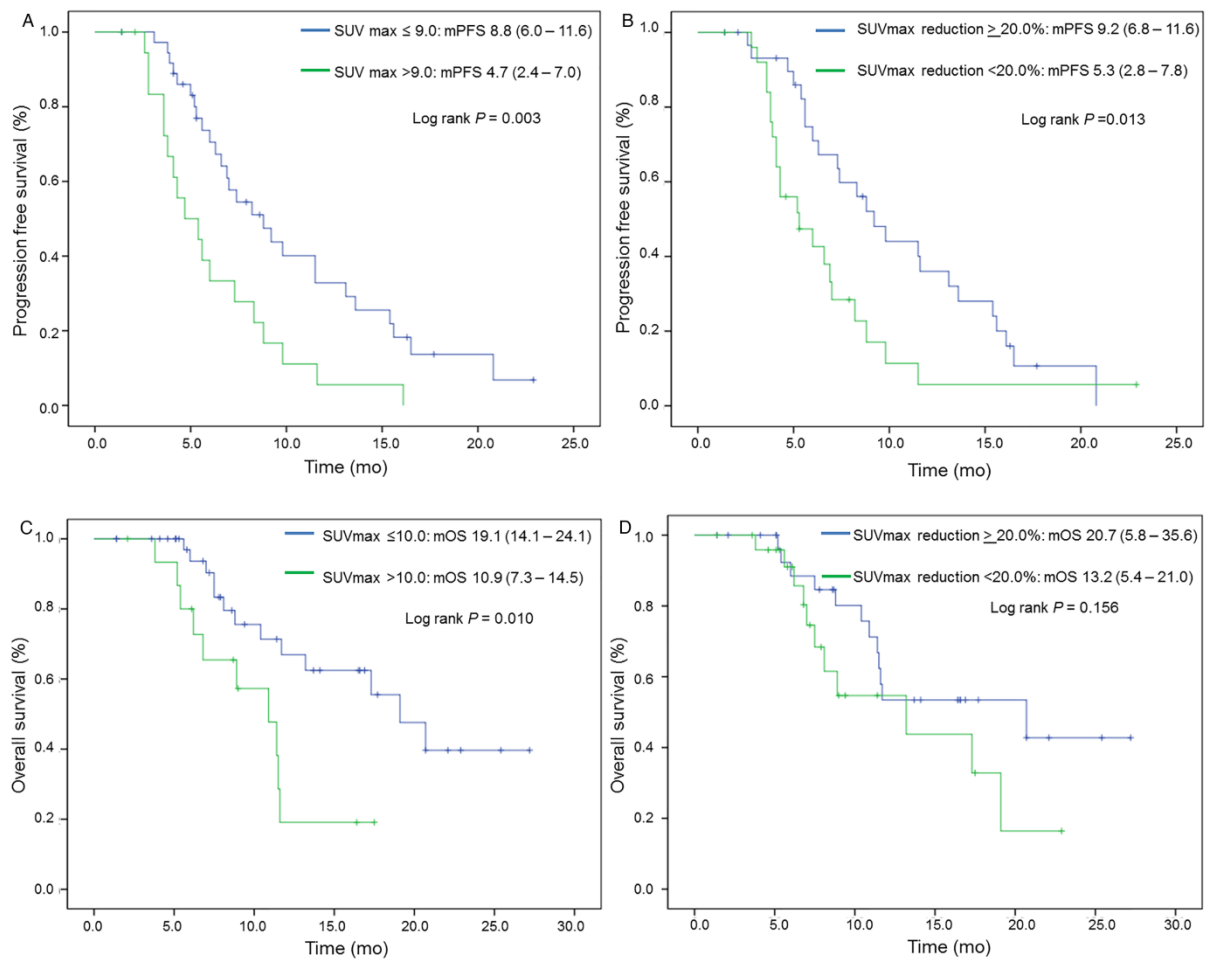


**Supplemental FIGURE 1.** Waterfall plot according to change in SUVmax and disease response according to RECIST 1.1 using the corresponding contrast-enhanced computed tomography method.



**Supplemental FIGURE 2.** Progression-free survival and overall survival according to the initial  $SUV_{max}$  (A and C) and  $SUV_{max}$  reduction at best metabolic response (B and D) among patients who achieved disease control.

**Supplemental Table 1. Distribution of Initial SUV<sub>max</sub> and <sup>18</sup>F-FDG PET Response**

Initial SUV <sub>max</sub>	
Among all lesions, median (range)	8.6 (1.0–20.5)
Among primary lesions, median (range)	3.9 (1.0–20.5)
Among metastatic lesions, median (range)	5.8 (1.0–15.2)
SUV <sub>max</sub> reduction among all lesions at	
Best <sup>18</sup> F-FDG PET response (%), median (range)	9.5% (-162.5–88.8%)
1 <sup>st</sup> <sup>18</sup> F-FDG PET evaluation (%), median (range)	5.2% (-162.5–85.3%)
Initial number of organs with FDG uptake	
Median (range)	2 (0–5)
Initial number of lesions with FDG uptake	
Median (range)	2 (0–41)

Abbreviations: SUV, standardized uptake value; FDG, fluorodeoxyglucose; PET, positron emission tomography.

**Supplemental Table 2. Initial SUV<sub>max</sub> and SUV<sub>max</sub> Reduction Cut-off to Predict PFS and OS**

Initial SUV <sub>max</sub>	<i>P</i> value for PFS	<i>P</i> value for OS	SUV <sub>max</sub> reduction at best <sup>18</sup> F-FDG PET response	<i>P</i> value for PFS	<i>P</i> value for OS
5	0.201	0.12	≥-10.0%	<b>&lt;0.001</b>	0.921
6	0.171	0.106	≥0.0%	<b>&lt;0.001</b>	0.146
7	0.057	0.077	≥10.0%	<b>0.001</b>	0.156
8	<b>0.032</b>	0.12	≥20.0%	<b>&lt;0.001</b>	<b>0.074</b>
9	<b>0.002</b>	<b>0.047</b>	≥30.0%	<b>0.005</b>	0.096
10	<b>0.007</b>	<b>0.003</b>	≥40.0%	<b>0.005</b>	0.08
11	0.065	<b>0.016</b>	≥50.0%	<b>0.029</b>	0.119

Abbreviations: SUV, standardized uptake value; PFS, progression free survival; OS, overall survival; FDG, fluorodeoxyglucose; PET, positron emission tomography.

**Supplemental Table 3. Comparison of Initial SUV<sub>max</sub> According to Patient Characteristics**

Characteristics	No.	Mean SUV <sub>max</sub> ± SD	P value
Age, y			0.893
≤ 65	43	8.0 ± 4.8	
> 65	32	8.2 ± 3.4	
Sex			0.811
Women	32	8.2 ± 4.0	
Men	43	8.0 ± 4.4	
Primary tumor origin			0.120
GB cancer	28	9.1 ± 4.9	
IHCC	22	8.1 ± 4.3	
EHCC	19	6.2 ± 3.0	
AoV cancer	6	8.9 ± 1.6	
Histologic Differentiation			0.233
WD	3	8.8 ± 4.5	
MD	38	6.4 ± 3.6	
PD	12	8.1 ± 3.4	
HER2 IHC			0.150
Neg to 1+	33	7.8 ± 3.6	
2 to 3+	10	9.8 ± 4.6	
c-MET IHC (cytoplasm)			0.875
Neg to 1+	36	8.1 ± 4.1	
2+ to 3+	7	7.9 ± 4.0	
c-MET IHC (membrane)			0.690
Neg to 1+	16	7.8 ± 3.4	
2+ to 3+	27	8.3 ± 4.4	
c-Myc			<b>0.017</b>
Neg	28	7.0 ± 3.2	
Pos	12	10.4 ± 5.2	
Initial presentation at enroll			<b>0.001</b>
Recurrent disease	40	6.6 ± 3.3	
Unresectable disease	35	9.8 ± 4.6	
CEA, ng/mL			0.089
≤5.0	53	7.5 ± 4.2	
>5.0	20	9.4 ± 4.2	
CA 19-9, U/mL			0.540
≤37.0	27	7.7 ± 4.3	
>37.0	46	8.3 ± 4.2	
WBC, /μL			<b>0.001</b>

≤10,000	69	7.6 ± 3.9	
>10,000	6	13.6 ± 4.3	
Total bilirubin, mg/dL			0.136
≤1.2	64	8.4 ± 4.2	
>1.2	11	6.3 ± 3.8	
Albumin, mg/dL			0.794
≤3.9	44	8.0 ± 4.4	
>3.9	31	8.2 ± 4.1	
Organs with FDG uptake			<b>&lt;0.001</b>
0 to 2	56	7.1 ± 3.9	
≥3	19	11.0 ± 3.8	
Lesions with FDG uptake			<b>&lt;0.001</b>
0 to 2	41	6.6 ± 4.0	
≥3	34	9.9 ± 3.8	
Objective response			0.414
Yes	12	9.1 ± 4.3	
No	60	8.0 ± 4.2	
Disease control			0.149
Yes	57	7.8 ± 4.1	
No	15	9.6 ± 4.2	

Abbreviations: SUV, standardized uptake value; SD, standard deviation; GB, gall bladder; IHCC, intrahepatic cholangiocarcinoma; EHCC, extrahepatic cholangiocarcinoma; AoV, Ampulla of Vater; WD, well differentiated; MD, moderately differentiated; PD, poorly differentiated; HER-2, human epidermal growth factor receptor 2; CEA, carcinoembryonic antigen; CA 19-9, carbohydrate antigen 19-9; WBC, white blood cell; FDG, fluorodeoxyglucose.