

Supplementary Table S1: Results of the univariate analysis

Variable		Clinical outcome				Univariate analysis			
		Cured	Stable with BMZ	Stable without BMZ	Progressive disease	Groupwise comparison		Pairwise comparison for progressive and controlled disease	
						effect size	p	effect size	p
Demographic variables									
Gender	N male (%*)	13 (13.8)	53 (56.4)	16 (17.0)	12 (12.8)	Chi-square-test:		Chi-square-test:	
	N female (%*)	25 (18.8)	77 (57.9)	21 (15.8)	10 (7.5)	X <sup>2</sup> (3) = 2.450	0.484	X <sup>2</sup> (1) = 0.206	0.650
Age at first diagnosis	N	30	130	37	22	ANOVA:		t-test:	
	M	42.5	57.6	47.8	50.7	F(3) = 9.319	< 0.001	t(41) = 0.829	0.412
	SD	16.4	16.1	19.6	51.5				
	MD	43	58	51.0	18.1				
	Min	15	17	11	23				
	Max	70	89	79	78				
Occupational disease	N yes (%*)	4 (12.1)	19 (57.6)	4 (12.1)	6 (18.2)	Chi-square-test:		Chi-square-test:	
	N no (%*)	34 (17.9)	111 (58.4)	33 (17.4)	12 (6.3)	X <sup>2</sup> (3) = 5.925	0.115	X <sup>2</sup> (1) = 1.850	0.174
Co-morbidities									
Immuno-supression	N yes (%*)	5 (13.9)	20 (55.6)	8 (22.2)	3 (8.3)	Chi-square-test:		Chi-square-test:	
	N no (%*)	33 (17.3)	110 (57.6)	29 (15.2)	19 (9.9)	X <sup>2</sup> (3) = 1.232	0.745	X <sup>2</sup> (1) = 1.448	0.229
Malignancy	N yes (%*)	4 (13.3)	22 (73.3)	2 (6.7)	2 (6.7)	Chi-square-test:		Chi-square-test:	
	N no (%**)	34 (17.3)	108 (54.8)	35 (17.8)	20 (10.2)	X <sup>2</sup> (3) = 4.092	0.252	X <sup>2</sup> (1) = 0.002	0.961
Clinical presentation and staging									
Clinical symptoms	N yes (%**)	28 (73.7)	89 (69.0)	23 (60.5)	15 (88.2)	Chi-square-test:		Chi-square-test:	
	N no (%**)	10 (26.3)	40 (31.0)	15 (39.5)	2 (11.8)	X <sup>2</sup> (3) = 4.804	0.187	X <sup>2</sup> (1) = 4.416	0.036
P	1: N (%**)	1 (2.6)	3 (2.4)	1 (2.7)	0 (0)	Kruskal-Wallis-test:		Mann-Whitney-U-test	
	2: N (%**)	22 (57.9)	30 (23.6)	22 (59.5)	1 (4.5)	X <sup>2</sup> (3) = 35.536	< 0.001	U(42) = 30.500	< 0.001
	3: N (%**)	6 (15.8)	29 (22.8)	6 (16.2)	3 (13.6)				
	4: N (%**)	9 (23.7)	64 (50.4)	8 (21.6)	18 (81.8)				
N	0: N (%**)	27 (75.0)	76 (61.8)	27 (79.4)	7 (31.8)	Chi-square-test:		Chi-square-test:	
	1: N (%**)	9 (25.0)	47 (38.2)	7 (20.6)	15 (68.2)	X <sup>2</sup> (3) = 15.487	0.001	X <sup>2</sup> (1) = 15.465	< 0.001

<b>M</b>	0: <i>N</i> (%**)	37 (97.4)	110 (88.0)	35 (94.6)	18 (81.8)	Chi-square-test:		Chi-square-test:	
	1: <i>N</i> (%**)	1 (2.6)	15 (12.0)	2 (5.4)	4 (18.2)	$\chi^2(3) = 5.393$	0.145	$\chi^2(1) = 0.170$	0.345
<b>Staging</b>	Stage I: <i>N</i> (%**)	1 (2.6%)	3 (2.3%)	1 (2.6%)	0 (0%)	Chi-square-test:		Chi-square-test:	
	Stage II: <i>N</i> (%**)	19 (48.7%)	23 (17.4%)	22 (56.4%)	0 (0%)	$\chi^2(12) = 56.313$	< <b>0.001</b>	$\chi^2(8) = 44.562$	< <b>0.001</b>
	Stage IIIa: <i>N</i> (%**)	5 (12.8%)	21 (15.9%)	5 (12.8%)	1 (4.5%)				
	Stage IIIb: <i>N</i> (%**)	7 (17.9%)	44 (33.3%)	3 (7.7%)	5 (22.7%)				
	Stage IV: <i>N</i> (%**)	7 (17.9%)	41 (31.1%)	8 (20.5%)	16 (72.7%)				
<b>Curative resection possible</b>	<i>N</i> yes (%*)	38 (36.1)	38 (36.1)	25 (24.9)	3 (2.9)	Chi-square-test:		Chi-square-test:	
	<i>N</i> no (%*)	0.0 (0)	91 (74.6)	12 (9.8)	19 (15.6)	$\chi^2(3) = 75.021$	< <b>0.001</b>	$\chi^2(1) = 10.714$	<b>0.002</b>
Laboratory results at first presentation									
<b>ALT</b> in IU/l	<i>N</i>	31	113	30	19	ANOVA:		<i>t</i> -test	
	<b><i>M</i></b>	<b>51.6</b>	<b>59.8</b>	<b>52.2</b>	<b>90.4</b>	$F(3) = 0.666$	0.574	$t(35) = -1.020$	0.315
	<i>SD</i>	50.7	104.0	54.1	192.3				
	<i>MD</i>	31.0	28.0	28.0	23.0				
	<i>Min</i>	13.0	11.0	11.0	13.0				
	<i>Max</i>	239.0	796.0	264	850.0				
<b>γGT</b> in IU/l	<i>N</i>	31	113	30	19	ANOVA:		<i>t</i> -test	
	<b><i>M</i></b>	<b>70.5</b>	<b>122.9</b>	<b>112.8</b>	<b>183.7</b>	$F(3) = 1.348$	0.260	$t(35) = -1.916$	0.064
	<i>SD</i>	95.4	161.3	297.6	289.0				
	<i>MD</i>	36.0	60.0	31.0	82.0				
	<i>Min</i>	10.0	4.0	12.0	13.0				
	<i>Max</i>	490.0	902.0	1,606	1,117.0				
<b>AP</b> in IU/l	<i>N</i>	24	98	23	17	ANOVA:		<i>t</i> -test	
	<b><i>M</i></b>	<b>86.8</b>	<b>126.5</b>	<b>124.0</b>	<b>224.4</b>	$F(3) = 2.129$	0.099	$t(29) = -1.458$	0.156
	<i>SD</i>	56.8	123.8	184.2	402.5				
	<i>MD</i>	70.5	88.5	70.0	80.0				
	<i>Min</i>	34.0	30.0	36.0	27.0				
	<i>Max</i>	306.0	880.0	812.0	1,720.0				
<b>Bilirubin</b> in mmol/l	<i>N</i>	24	84	20	17	ANOVA:		<i>t</i> -test	
	<b><i>M</i></b>	<b>8.4</b>	<b>18.6</b>	<b>13.4</b>	<b>26.8</b>	$F(3) = 0.969$	0.409	$t(27) = -0.734$	0.469
	<i>SD</i>	3.0	33.5	10.1	75.5				
	<i>MD</i>	8.3	8.0	11.0	9.0				

	Min	2.0	2.0	4.0	4.0				
	Max	17.0	211.0	46.0	319.0				
CRP in mg/l	N	19	61	19	13	ANOVA:		t-test	
	M	12.1	13.9	7.0	17.3	F(3) = 0.458	0.712	t(22) = -0.704	0.489
	SD	29.7	28.4	17.2	27.2				
	MD	3.3	3.2	2.7	6.3				
	Min	0.4	0.4	0.3	1.5				
	Max	125.0	171.4	76.1	100.0				
IgE in IU/ml	N	38	129	37	22	ANOVA:		t-test	
	M	821.3	1,123.0	210.4	1,833.9	F(3) = 2.713	0.046	t(41) = -3.026	0.004
	SD	2,344.7	2,459.6	497.7	2640.5				
	MD	149.5	237.0	36.0	513.5				
	Min	1.0	1.0	1.0	8.0				
	Max	13,400.0	16,637.0	2,469.0	8,987.0				
Ech. IHA 1:	N	36	104	37	21	Kruskal-Wallis-test:		Mann-Whitney-U-test	
	M	1,008.0	712.0	73.7	1,076.6	X <sup>2</sup> (3) = 23.907	< 0.001	U(42) = 75.000	< 0.001
	SD	5,448.7	3,299.1	334.8	1,944.3				
	MD	16.0	48.0	0.0	100.0				
	Min	0.0	0.0	0.0	0.0				
	Max	32,768	32,768	2,024	8,192				
Ech. EIA IgG in U/l <sup>1</sup>	N	4	78	8	12	ANOVA:		t-test	
	M	91.6	75.6	32.1	128.6	F(3) = 4.020	0.010	t(17) = -3.021	0.008
	SD	149.4	57.3	38.4	77.4				
	MD	27.0	65.6	22.8	100.0				
	Min	0	0	0	49				
	Max	312.0	329.0	108	299				
Em2+	N negative (%**)	8 (21.6)	19 (15.0)	21 (58.3)	1 (4.5)	Chi-square-test:		Chi-square-test:	
	N positive (%**)	29 (78.4)	108 (85.0)	15 (41.7)	21 (95.5)	X <sup>2</sup> (3) = 35.188	< 0.001	X <sup>2</sup> (1) = 22.051	< 0.001
Imaging at first presentation (US)									
Largest diameter in mm	N	23	103	27	18	ANOVA:		t-test	
	M	71.5	64.0	38.0	107.4	F(3) = 11.614	< 0.001	t(17) = -6.468	< 0.001
	SD	48.6	35.3	37.2	47.8				
	MD	61.0	62.0	22.0	101.5				
	Min	12	7	10	34				

	Max	177	181	177	222				
Number of lesions	N	37	108	36	20	ANOVA:		t-test	
	M	1.14	2.7	1.72	1.55				
	SD	1.3	2.8	2.0	0.95	F(3) = 4.997	0.002	t(39) = -1.761	0.086
	MD	1.0	2.0	1.0	1.0				
	Min	0	1	1	1				
	Max	5	20	20	4				
	Imaging during course of disease (US/CT/MRI/ PET-scan)								
Morphology (EMUC-US) N (%*) <sup>2</sup>	hailstorm	0 (0)	49 (79.0)	6 (9.7)	7 (11.3)	Chi-square-test:		Chi-square-test:	
	haemangioma-like	0 (0)	9 (69.2)	2 (15.4)	2 (15.4)	X <sup>2</sup> (21) = 148.512	< 0.001	X <sup>2</sup> (7) = 19.231	0.007
	pseudocystic	0 (0)	10 (58.8)	0 (0)	7 (41.2)				
	ossification	0 (0)	1 (50.0)	1 (50.0)	0 (0)				
	metastasis-like	0 (0)	14 (60.9)	9 (39.1)	0 (0)				
Cholestasis	N yes (%**)	3 (7.9)	24 (18.6)	6 (16.2)	7 (43.8)	Chi-square-test:		Chi-square-test:	
	N no (%**)	35 (92.1)	105 (81.4)	31 (83.8)	9 (56.3)	X <sup>2</sup> (3) = 9.846	0.020	X <sup>2</sup> (1) = 11.331	0.001
Portal vein involvement	N yes (%**)	4 (10.5)	25 (19.4)	2 (5.2)	10 (62.5)	Chi-square-test:		Chi-square-test:	
	N no (%**)	34 (89.5)	104 (80.6)	35 (94.6)	6 (37.5)	X <sup>2</sup> (3) = 26.269	< 0.001	X <sup>2</sup> (1) = 17.986	< 0.001
V. cava involvement	N yes (%**)	3 (7.9)	29 (22.5)	3 (8.1)	6 (37.5)	Chi-square-test:		Chi-square-test:	
	N no (%**)	35 (92.1)	199 (77.5)	34 (91.9)	10 (62.5)	X <sup>2</sup> (3) = 10.608	0.014	X <sup>2</sup> (1) = 6.345	0.012
Treatment									
Unplanned treatment interruption	N yes (%**)	7 (18.9)	12 (9.2)	7 (21.2)	8 (36.4)	Chi-square-test:		Chi-square-test:	
	N no (%**)	30 (81.1)	118 (90.8)	26 (78.8)	14 (63.6)	X <sup>2</sup> (3) = 12.481	0.006	X <sup>2</sup> (1) = 0.005	0.945
Mean albendazole blood level	N	36	126	34	20	ANOVA:		t-test	
	M	0.70	0.37	0.48	0.43	F(3) = 3.082	< 0.001	t(36) = -0.157	0.876
	SD	0.46	0.39	0.38	0.41				
	MD	0.68	0.29	0.51	0.43				
	Min	0.0	0.0	0.0	0.0				
	Max	1.75	1.40	1.50	1.29				

\* percentage of patients from all patients with/without respective variable      \*\* percentage of patients from all patients with respective outcome

- 1 = the serological test for EIA IgG was introduced in 2018. Additionally, we were able to examine several samples from 2012 to 2018 retrospectively, however, not for all patients in our cohort. That explains the proportion of missing values.
- 2 = The morphological classification of AE lesions according to EMUC-US was introduced during the study period. Therefore, morphology descriptions from the last visit were evaluated. Hence, cured patients who underwent surgery did no longer have any AE lesions.