

Supplementary table 2A Differences in neutral N-glycosylation between adenomas and carcinomas

Neutral N-glycan structure	Adenomas (N=5) Mean value %(S.E.M.)	Carcinomas (N=18) Mean value %(S.E.M.)	Ratio of means, carcinoma/adenoma	P- value*
High-mannose type	63,50 (1,88)	53,97 (2,18)	0,85	0,024
Monoantennary	20,39 (1,67)	28,46 (0,96)	1,40	0,0001
Small high-mannose type	16,51 (1,28)	27,97 (2,42)	1,69	0,012
Terminal HexNAc i	44,36 (3,42)	29,75 (2,14)	0,67	0,004
Pauci-mannose	9,13 (0,89)	14,02 (2,11)	1,54	0,080

S.E.M.= Standard Error of the Mean *=Mann-Whitney-test

Supplementary table 2B Differences in acidic N-glycosylation between adenomas and carcinomas

Acidic N-glycan structure	Adenomas (N=5) Mean value % (S.E.M.)	Carcinomas (N=18) Mean value % (S.E.M.)	Ratio of means, carcinoma/adenoma	P- value*
Glycan size, N5	20,41 (1,84)	10,62 (0,85)	0,52	0,0001
Complex fucosylation	36,67 (8,83)	15,07 (3,13)	0,41	0,002
Sialylated	57,73 (9,54)	80,53 (4,62)	1,39	0,024
Acidic ester	42,62 (9,55)	19,90 (4,63)	0,47	0,024
Monoantennary	27,41 (4,10)	47,12 (3,94)	1,72	0,030
Terminal HexNAc	15,89 (1,79)	6,34 (1,27)	0,40	0,002
Complex fucosylation in sialylated glycans	4,39 (0,91)	5,54 (0,53)	1,26	0.325

S.E.M.= Standard Error of the Mean *=Mann-Whitney-test

Supplementary table 2C Differences in acidic N-glycosylation between local and locoregional carcinomas

Acidic N-glycan structure	Local carcinoma (N=8) Mean value % (S.E.M.)	Locoregional carcinoma (N=4) Mean value % (S.E.M.)	Ratio of means, Locoregional/local carcinoma	P- value*
Glycan size, N5	9,81 (0,86)	14,10 (1,80)	1,44	0.048
Monoantennary	55,12 (4,55)	32,02 (8,89)	0,58	0.048

S.E.M.= Standard Error of the Mean *=Mann-Whitney-test

Supplementary table 2D Differences in acidic N-glycan signals between local and advanced carcinomas

Acidic N-glycan signal	Local carcinoma (N=8) Mean value % (S.E.M.)	Advanced carcinoma (N=10) Mean value % (S.E.M.)	Ratio of means, advanced/local carcinoma	P- value*
H5N4P1	0,14 (0,05)	1,29 (0,68)	9,46	0.021
H4N5F1P1	0,12 (0,03)	0,78 (0,28)	6,35	0.012
H5N4F1P1	0,70 (0,23)	3,80 (1,29)	5,40	0.009
H4N5F2P1	0,28 (0,10)	0,84 (0,24)	3,05	0.034
H5N4F2P1	0,41 (0,13)	1,20 (0,35)	2.91	0.027

S.E.M.= Standard Error of the Mean *=Mann-Whitney-test