Appendix:
Supplement 1: EQ-5D-3L Domains

EQ-5D-3L Dimensions N*(%)*									
	All (n=411)	Malleolar Fracture (AO44, n=45)	Proximal Femur Fracture (AO31, n=59)	Distal Radius Fracture (AO23, n=115)	Proximal Humerus Fracture (AO11, n=67)	p-value	Lower extremity	Upper extremity	p-value
Mobility	No Problems	36*(81.8)*	33*(55.9)*	97*(86.6)*	49 *(79.0)*	**<0.001**	103*(70.1)*	190(85.6)	**<0.001**
	Problems	8*(18.2)*	26*(44.1)*	15*(13.4)*	13 *(21.0)*		44*(29.9)*	32*(14.4)*	
Self-care	No Problems	42*(95.5)*	46*(78.0)*	104*(92.9)*	54*(87.1)*	**0.039**	130*(88.4)*	204*(91.9)*	0.494
	Problem	2*(4.5)*	13*(22.0)*	8*(7.1)*	8*(12.9)*		17*(11.6)*	18*(8.1)*	
Usual Activities	No Problems	39*(88.6)*	38*(64.4)*	95*(84.8)*	45*(72.6)*	**0.016**	110*(74.8)*	182*(82.4)*	0.153
	Problem	5*(11.4)*	21*(35.6)*	17*(15.2)*	17*(27.4)*		37*(25.2)*	39*(17.6)*	
Pain	No Problems	27*(61.4)*	26*(44.0)*	69*(61.6)*	32*(51.6)*	0.162	75*(51.0)*	131*(59.0)*	0.182
	Problem	17*(38.6)*	33*(56.0)*	43*(38.4)*	30*(48.4)*		72*(49.0)*	91*(41.0)*	
Anxiety/ depression	No Problems	33*(75.0)*	45*(76.3)*	99*(88.4)*	50*(80.6)*	0.378	113*(76.9)*	192*(86.5)*	**0.045**
	Problem	11(*25.0)*	14*(23.7)*	13(*11.6)*	12*(19.4)*		34*(23.1)*	30*(13.5)*	

N: number of patients. Numbers are noted in percentages of the total number of analyzed study patients per fracture location. EuroQol-5 Dimension 3-Level. Missing values were excluded from analysis.

Supplement 2: Postoperative outcomes: Means

Fracture location	All (n=411)	Malleolar Fracture (AO44, n=45)	Proximal Femur Fracture (AO31, n=59)	Distal Radius Fracture (AO23, n=115)	Proximal Humerus Fracture (AO11, n=67)	Lower extremity	Upper extremity
EQ-5D-3L Index score Mean±*SD*	0.86±*0.2*	0.88±*0.15*	0.77±*0.24*	0.89±*0.18*	0.85±*0.20*	0.83±*0.21*	0.89±*0.18*
EQ-5D VAS score Mean±*SD*	82.1±*17.2*	86.2±*15.4*	77.3±*18.1*	85.6±*16.1*	80.8±*16.9*	80.9±*17.1*	84.1±*16.7*
Patient satisfaction Mean±*SD*	90.3±*16.8*	95.0±*10.0*	85.1±*22.9*	94.0±*12.3*	87.6±*18.0*	89.3±*18.5*	91.9±*14.6*
Physiotherapy sessions Mean±*SD*	20.9±*18.7*	19.6±*12.4*	20.5±*19.5*	15.3±*13.0*	30.8±*20.3*	21.9±*20.1*	20.8±*18.2*
N: number of patients. Numbers are noted in percentages of the total number of analyzed study patients per fracture location. SD: Standard Deviatoin. EuroQol-5 Dimension 3-Level. VAS: Visual analogue scale. Missing values were excluded from analysis.							

Supplement 3: Subanalysis of patients 65-74 years of age

		All (n=139)	Malleolar Fracture (AO44, n=18)	Proximal Femur Fracture (AO31, n=17)	Distal Radius Fracture (AO23, n=36	Proximal Humerus Fracture (AO11, n=29)	p-value	Lower extremity	Upper extremity	p-value
EQ-5D-3L Index score Median (*IQR)*		1.0 *(0.85;1.0)*	0.90*(0.84;1.00)*	0.90*(0.74;1.00)*	1.0*(0.90;1.00)*	1.0*(0.79;1.00)*	0.549	0.90*(0.78;1.00)*	1.0*(0.90;1.00)*	0.063
EQ-5D VAS score Median(*IQR)*		90*(80;95)*	90*(90;95)*	90*(70;90)*	90*(85.;95)*	85*(74;95)*	0.754	*90 (75;95)*	90*(80;95)*	0.220
Patient satisfaction Median(*IQR)*		100*(90;100)*	100*(98;100)*	100*(84;100)*	100*(90;100)*	95*(85;100)*	0.311	100*(90;100)*	100*(90;100)*	0.848
Use of Analgesics N *(%)*	Use	42*(33.3)*	6*(37.5)*	4*(28.6)*	7*(21.2)*	9*(34.6)*	0.589	46*(43.8)*	63*(36.3)*	0.221
	No use	84*(66.7)*	10*(62.5)*	10*(71.4)*	26*(78.8)*	17*(65.4)*		59*(56.2)*	110*(63.6)*	
Physiotherapy sessions Median*(IQR)*		18*(9;27)*	18*(9;32)*	10*(9;27)*	9*(6;18)*	32*(18;40)*	**<0.001**	18*(9;30)*	18*(9;27)*	0.679
Strength training (lower extremity) N *(%)*	Yes	77*(62.1)*	5*(33.3)*	12*(80.0)*	16*(50.0)*	15*(57.7*)	0.243	35*(74.5)*	39*(54.2*	**<0.020**
	No	47*(37.9)*	10*(66.7)*	3*(20.0)*	16*(50.0)*	11*(42.3)*		12*(25.5)*	33*(35.8)*	
Balance training N *(%)*	Yes	51*(41.5)*	10*(62.5)*	13*(86.7)*	6*(18.7)*	6*(23.1)*	**<0.001**	35*(74.5)*	14*(19.4)*	**<0.001**
	No	72*(58.5)*	6*(37.5)*	2*(13.3)*	26*(81.3)*	20*(76.9)*		12*(25.5)*	58*(80.6)*	
Home exercise after fracture N *(%)*	Yes	58*(47.2)*	8*(53.3)*	10*(66.7)*	13*(40.6)*	14*(53.8)*	0.397	24*(52.2)*	33*(45.8)*	0.311
	No	65*(52.8)*	7*(46.7)*	5*(33.3)*	19*(59.4)*	12*(46.2)*		22*(47.8)*	39*(54.2)*	
Home exercise after one year N *(%)*	Yes	57*(54.4)*	7*(43.7)*	6*(40.0)*	9*(28.1)*	18*(69.2)*	**0.018**	21*(43.8)*	32*(42.4)*	0.545
	No	68*(45.6)*	9*(56.3)*	9*(60.0)*	23*(71.9)*	8*(30.8)*		27*(56.3)*	40*(55.6)*	

N: number of patients. Numbers are noted in percentages of the total number of analyzed study patients per fracture location. IQR: Inter Quartile Range. EuroQol-5 Dimension 3-Level. VAS: Visual analogue scale. Missing values were excluded from analysis.

Supplement 4: Subanalysis of patients ≥ 75 years of age

		All (n=179)	Malleolar Fracture (AO44, n=9)	Proximal Femur Fracture (AO31, n=38)	Distal Radius Fracture (AO23, n=52	Proximal Humerus Fracture (AO11, n=32)	p-value	Lower extremity	Upper extremity	p-value
EQ-5D-3L Index score Median (*IQR)*		0.90 *(0.74;1.0)*	0.75*(0.74;1.00)*	0.75*(0.70;1.00)*	0.9*(0.75;1.00)*	0.90*(0.74;1.00)*	**0.045**	0.90*(0.74;1.00)*	1.0*(0.79;1.00)*	0.209
EQ-5D VAS score Median(*IQR)*		80*(70;90)*	90*(70;90)*	80*(70;90)*	80*(70.0;95)*	85*(60;95)*	0.713	82*(70;90)*	90*(77.5;95)*	0.619
Patient satisfaction Median(*IQR)*		100*(80;100)*	100*(95;100)*	90*(80;100)*	100*(90;100)*	90*(80;100)*	0.247	100*(80;100)*	100*(90;100)*	0.913
Use of Analgesics N *(%)*	Use	86*(48.9)*	3*(33.3)*	20*(52.6)*	19*(38.0)*	17*(54.8)*	0.319	30*(51.7)*	42*(42.0)*	0.155
	No use	90*(50.3)*	6*(66.7)*	18*(47.4)*	31*(62.0)*	14*(45.2)*		28*(48.3)*	58*(58.0)*	
Physiotherapy sessions Median*(IQR)*		18*(9;27)*	18*(12;27)*	18*(9;27)*	10*(9;18)*	27*(18;36)*	**0.020**	18*(9;27)*	18*(9;27)*	0.502
Strength training (lower extremity) N *(%)*	Yes	107*(63.3)*	8*(100)*	32*(88.9)*	15*(31.9)*	19*(61.3*)	**<0.001**	49*(89.1)*	45*(46.9)*	**<0.001**
	No	62*(36.7)*	0*(0)*	4*(11.1)*	*32(68.1)*	12*(38.7)*		6*(10.9)*	51*(53.1)*	
Balance training N *(%)*	Yes	85*(49.7)*	7*(87.5)*	29*(78.4)*	14*(29.2)*	14*(45.2)*	**<0.001**	43*(76.8)*	34*(35.1)*	**<0.001**
	No	86*(50.3)*	1*(12.5)*	8*(21.6)*	34*(70.8)*	17*(54.8)*		13*(23.2)*	63*(64.9)*	
Home exercise after fracture N *(%)*	Yes	90*(53.3)*	7*(87.5)*	20*(54.1)*	21*(44.7)*	19*(61.3)*	0.116	34*(61.8)*	47*(49.0)*	0.087
	No	79*(46.7)*	1*(12.5)*	17*(45.9)*	26*(55.3)*	12*(38.7)*		21*(38.2)*	49*(51.0)*	
Home exercise after one year N *(%)*	Yes	83*(49.1)*	7*(100)*	20*(55.6)*	14*(29.2)*	17*(56.7)*	**0.001**	34*(63.0)*	38*(39.2)*	**0.004**
	No	86*(50.9)*	0*(0)*	16*(44.4)*	34*(70.8)*	13*(43.3)*		20*(37.0)*	59*(60.8)*	

N: number of patients. Numbers are noted in percentages of the total number of analyzed study patients per fracture location. IQR: Inter Quartile Range. EuroQol-5 Dimension 3-Level. VAS: Visual analogue scale. Missing values were excluded from analysis.

Supplement 5: Subanalysis of patients 50-64 years of age

	All (n=93)	Malleolar Fracture (AO44, n=18)	Proximal Femur Fracture (AO31, n=4)	Distal Radius Fracture (AO23, n=27)	Proximal Humerus Fracture (AO11, n=6)	p-value	Lower extremity	Upper extremity	p-value

EQ-5D-3L Index score Median (*IQR)*		1.00 (*0.79-1.00)*	0.95*(0.76;1.00)*	0.95*(0.54;1.00)*	1.0*(1.00;1.00)*	0.85*(0.76;1.00)*	0.115	1.00*(0.76;1.00)*	0.90*(0.90;1.00)*	**0.041**
EQ-5D VAS score Median(*IQR)*		90*(80;95)*	95*(80;95)*	91*(70;93)*	97*(90;100)*	90*(70;91)*	**0023**	90*(80;95)*	95*(89;100)*	**0.047**
Patient satisfaction Median(*IQR)*		100*(90;100)*	100*(90;100)*	93*(45;98)*	100*(95;100)*	100*(80;100)*	0.510	100*(90;100)*	100*(90;100)*	0.479
Use of Analgesics N *(%)*	Use	29*(34.1)*	11(*61.1)*	*2(50.0)*	5*(20.0)*	*4(66.7)*	0.110	13*(34.2)*	14*(33.3)*	1.000
	No use	56*(65.9)*	*7(38.9)*	*2(50.0)*	*20(80.0)*	*2(33.3)*		*25(65.8)*	*28(66.7)*	
Physiotherapy sessions Median*(IQR)*		18*(10;27)*	18*(7;27)*	9*(0;30)*	18*(10;20)*	28.5*(18;36)*	0.214	18*(9;28.5)*	18*10;19)*	0.500
Strength training (lower extremity) N *(%)*	Yes	54*(65.9)*	14*(82.4)*	3*(75.0)*	10 *(40.0)*	3*(50.0)*	**0.032**	29*(80.6)*	*22(53.7)*	**0.016**
	No	28*(34.1)*	3*(17.6)*	1*(25.0)*	15*(60.0)*	3*(50.0)*		7*(19.4)*	19*(46.3)*	
Balance training N *(%)*	Yes	34*(43.6)*	12*(70.6)*	2*(66.7)*	2*(8.7)*	1*(16.7)*	**<0.001**	27*(77.1)*	5*(13.2)*	**<0.001**
	No	44*(56.4)*	5*(29.4)*	1*(33.3)*	21*(91.3)*	5 *(83.3)*		8*(22.9)*	33*(86.8)*	
Home exercise after fracture N *(%)*	Yes	41*(49.4)*	10*(58.5)*	1*(33.3)*	10*(40.0)*	3 *(50.0)*	0.612	19*(54.3)*	20*(47.6)*	0.649
	No	40*(50.6)*	*7(41.2)*	2*(66.7)*	15*(60.0)*	3*(50.0)*		16*(45.7)*	22*(52.4)*	
Home exercise after one year N *(%)*	Yes	31*(37.3)*	8*(47.1)*	2*(50.0)*	7*(28.0)*	2*(33.3)*	0.600	12*(28.6)*	17*(47.2)*	0.105
	No	52*(62.7)*	9*(52.9)*	2*(50.0*	18*(72.0)*	4(*66.7)*		30*(71.4)*	19*(52.8)*	
N: number of patients. Numbers are noted in percentages of the total number of analyzed study patients per fracture location. IQR: Inter Quartile Range. EuroQol-5 Dimension 3-Level. VAS: Visual analogue scale. Missing values were excluded from analysis.										

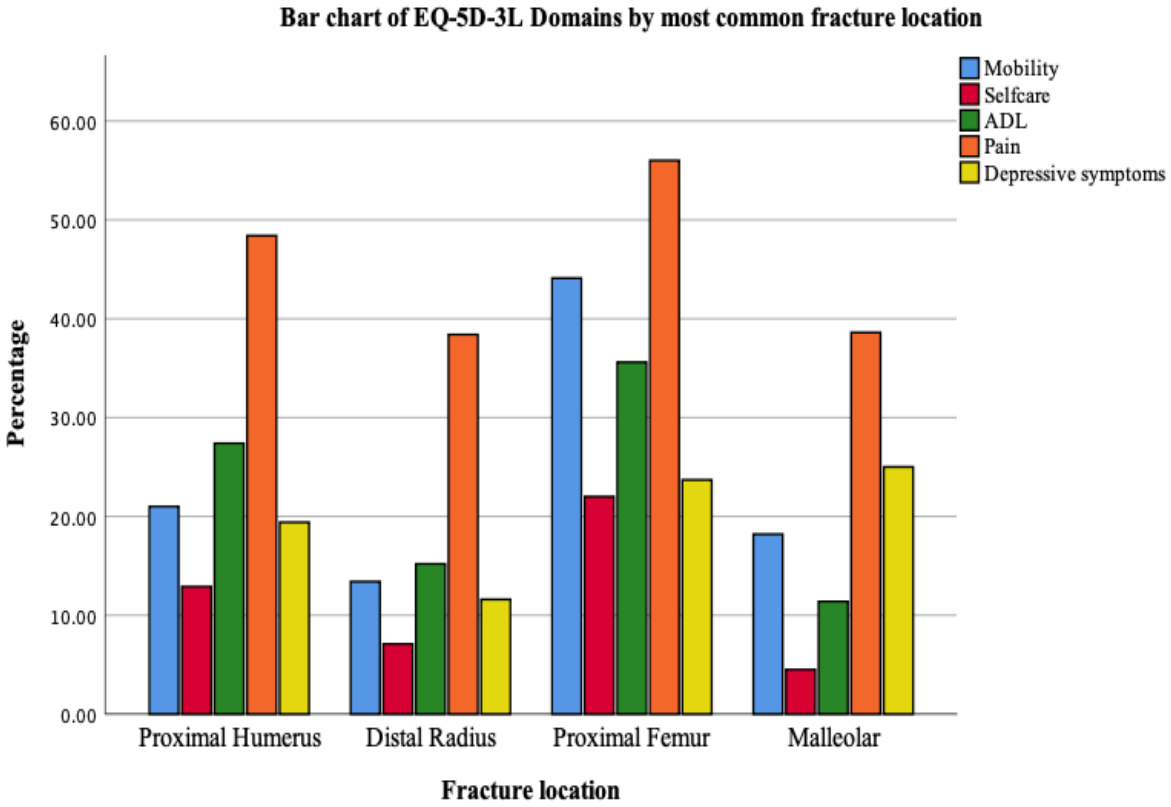
Supplement 6A: Means of patients 65-74 years of age

Fracture location	All (n=139)	Malleolar Fracture (AO44, n=27)	Proximal Femur Fracture (AO31, n=55)	Distal Radius Fracture (AO23, n=88)	Proximal Humerus Fracture (AO11, n=61)	Lower extremity	Upper extremity
EQ-5D-3L Index score Mean±*SD*	0.90±*0.14*	0.91±*0.11*	0.82±*0.23*	0.94±*0.10*	0.89±*0.15*	0.88±*0.16*	0.93±*0.12*
EQ-5D VAS score Mean±*SD*	85.1±*15.5*	89.5±*8.7*	76.8±*22.6*	87.2±*15.7*	83.8±*14.1*	82.2±*17.3*	86.9±*14.2*
Patient satisfaction Mean±*SD*	92.2±*13.7*	96.8±*6.6*	90.8±*14.9*	94.9±*10.5*	88.5±*17.7*	92.0±*13.9*	92.7±*13.4*
Physiotherapy sessions Mean±*SD*	21.8±*20.5*	20.9±*13.8*	23.7±*31.3*	12.7±*8.6*	34.0±*21.4*	20.9±*18.3*	23.6±*24.1*
N: number of patients. Numbers are noted in percentages of the total number of analyzed study patients per fracture location. SD: Standard Deviation. VAS: Visual analogue scale. EuroQol-5 Dimension 3-Level. Missing values were excluded from analysis.							

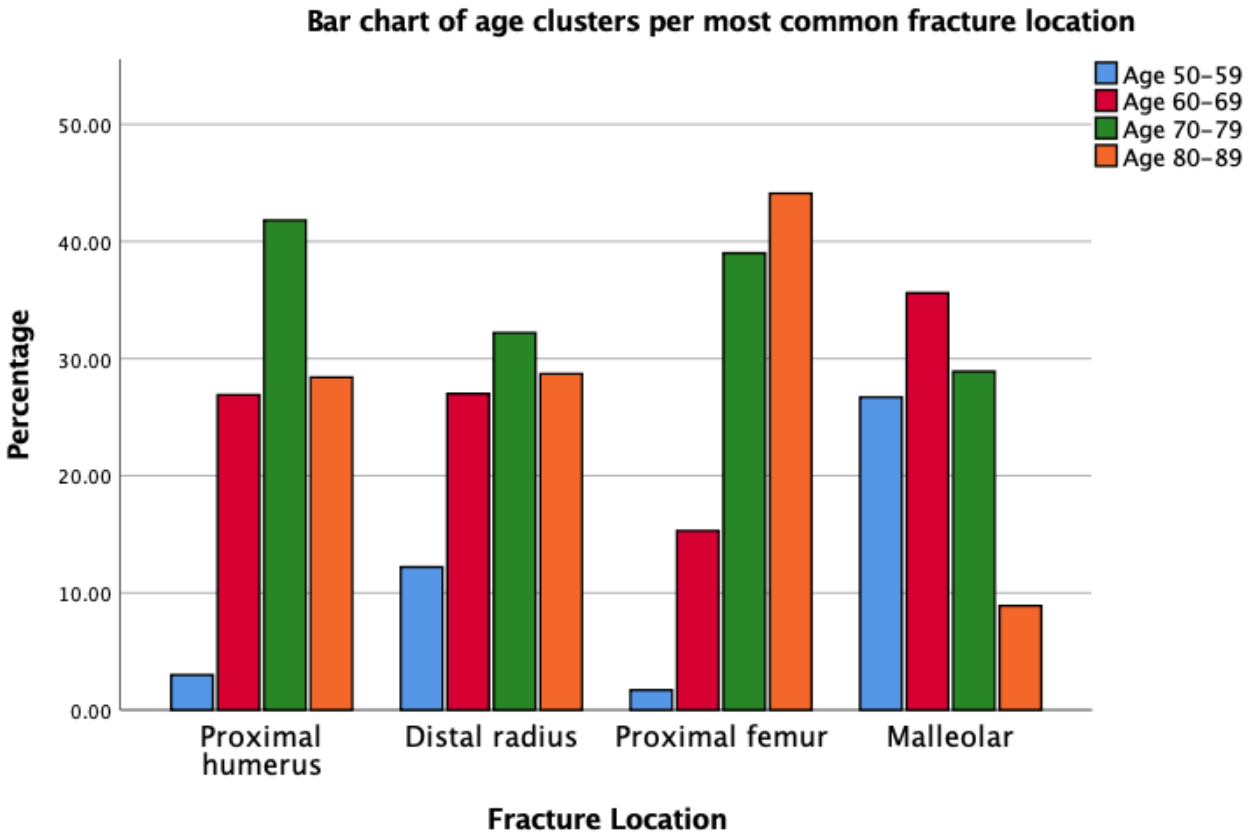
Supplement 6B: Means of patients ≥ 75 years of age

Fracture location	All (n=179)	Malleolar Fracture (AO44, n=9)	Proximal Femur Fracture (AO31, n=38)	Distal Radius Fracture (AO23, n=52)	Proximal Humerus Fracture (AO11, n=32)	Lower extremity	Upper extremity
EQ-5D-3L Index score Mean±*SD*	0.81±*0.23*	0.83±*0.17*	0.75±*0.24*	0.84±*0.20*	0.82±*0.24*	0.77±*0.24*	0.84±*0.21*
EQ-5D VAS score Mean±*SD*	77.5±*18.4*	81.7±*20.5*	77.1±*15.9*	80.7±*15.5*	78.0±*19.4*	77.3±*17.5*	79.1±*18.0*
Patient satisfaction Mean±*SD*	87.6±*19.4*	95.6±*9.8*	84.1±*22.3*	93.7±*12.3*	85.9±*19.4*	86.1±*21.5*	90.4±*16.1*
3Physiotherapy sessions Mean±*SD*	20.2±*17.4*	20.0±*9.1*	19.9±*12.9*	15.4±*15.7*	28.3±*20.6*	19.0±*11.8*	21.5±*20.3*
N: number of patients. Numbers are noted in percentages of the total number of analyzed study patients per fracture location. SD: Standard Deviation. VAS: Visual analogue scale. EuroQol-5 Dimension 3-Level. Missing values were excluded from analysis.							

Supplement 7: Postoperative outcomes: Figure 1



Supplement 8: Postoperative outcomes: Figure 2



Supplement 9: Postoperative outcomes: Figure 3

