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## Results with 95% confidence level

Table S2 Outcomes in all patients during the entire study period, by treatment  $\operatorname{arm}$ 

Outcome	ATLS, $N = 44$	PTC, N = 130	Standard care, $N = 2$
30 day mortality			
Yes	2.5 (0, 15)	$7.3\ (2.9,\ 13)$	13 (7.49, 17)
No	98 (85, 100)	93 (86, 96)	87 (81, 91)
Missing	4(1, 9)	20 (12, 29)	29 (19, 40)
24 hour mortality			
Yes			0.5 (0, 1.6)
No			99 (98, 99)
Missing	4(1, 9)	13(6,20)	7(3, 12)
In-hospital mortality			
Yes	2.3(0, 13.39)	5.4(2.1, 10)	11 (6.67, 15)
No	98 (86, 100)	95 (90, 98)	90 (85, 93)
Missing	1(0, 3)	, ,	2(0,5)
Self-ambulatory at discharge	· , ,		( ' /
Yes	97 (81, 100)	97 (91, 99)	98 (93.35, 99)
No	2.8(0,17.91)	3.4 (0.9, 8.11)	2.3 (0.6, 6)
Missing	8 (3, 13.73)	11 (5, 17)	26 (16, 35)
Return to work	- (-, )	(-)	- ( - , )
Yes	64 (40.57, 80)	72 (62, 80)	51 (42, 59)
No	36 (18, 57)	28 (18, 36)	49 (39, 56)
Missing	19 (11, 27)	31 (21, 42)	68 (53, 82)
Pulmonary complication	15 (11, 21)	01 (21, 42)	00 (99, 02)
Yes		0.9(0, 3.5)	
No		99 (95, 100)	
Missing	11 (5, 18)	21 (13, 30)	35 (24, 46)
Septic complication	11 (5, 16)	21 (15, 50)	55 (24, 40)
Yes		3.7 (0.9, 8.3)	1.2(0, 3.7)
No		96 (90, 98)	99 (94, 99)
Missing	11 (5 10)	\ ' '	,
Renal failure	$11\ (5,\ 18)$	$22\ (13,\ 31)$	$34\ (23,\ 45)$
Yes			
No M:	10 (4 16)	01 (19, 90)	22 (21 57 42)
Missing	10 (4, 16)	$21\ (13,\ 30)$	$33\ (21.57,\ 43)$
Coagulopathy	9 (0, 10)		
Yes	3 (0, 16)		
No	97 (84, 100)	22 (11 22)	22 (21 77 12)
Missing	11 (5, 18)	$22\ (14,\ 32)$	$33\ (21.57,\ 43)$
Need for reexploration or resurgery			
Yes		1.8 (0, 5.6)	$1.9 \ (0, \ 5.16)$
No		98 (93, 99)	98 (94, 99)
Missing	10 (5, 16.51)	20 (12, 28)	43 (31, 55)
Failure of conservative management			
No	94 (79, 100)	98 (92, 99)	99 (95, 99)
Yes	6.5 (0, 20)	1.9 (0, 6.09)	1.3 (0, 4.1)
Missing	13 (7, 20)	$23\ (14,\ 32)$	46 (33, 58)
EQ-5D mobility at discharge			•
I have no problems in walking	80 (58, 91)	88 (77, 93)	62 (54, 69)
I have some problems in walking	10 (2.8, 27.13)	7.9(3.66, 15)	18 (11, 23)

I am confined to bed	$10 \ (2.8, \ 25)$	4 (1.1, 9.95)	20 (13, 26)
Missing	$14 \ (7.11, \ 22)$	29 (19, 39)	45 (33, 57)
EQ-5D self-care at discharge	,		, ,
I have no problems with self-care	63 (42, 78.24)	83 (74, 88)	52 (43, 59)
I have some problems bathing or dressing myself	13 (3.1, 27.28)	$9.9\ (4.95,\ 16)$	27 (19.37, 33)
I am unable to bathe or dress myself	$23 \ (8.05, 39)$	6.9(3, 13)	$21\ (14,\ 27)$
Missing	$14 \ (7.11, \ 22)$	29 (19, 39)	45 (33, 57)
EQ-5D usual activities at discharge			
I have no problems in performing my usual activities	57 (36.2, 74)	81 (72, 87)	48 (39, 54.34)
I have some problems in performing my usual activities	23 (8.3, 40)	$11 \ (5.13, \ 17)$	36 (29, 43)
I am unable to perform my usual activities	$20 \ (6.75, \ 37)$	7.9 (3.7, 14.71)	16 (9.88, 21)
Missing	$14 \ (7.11, \ 22)$	29 (19, 39)	45 (33, 57)
EQ-5D pain/discomfort at discharge			
I have no pain or discomfort	43 (26, 61.31)	52 (41, 60)	$27\ (20,\ 33)$
I have moderate pain or discomfort	57 (36.59, 72)	44 (34, 53.16)	36 (28, 43)
I have extreme pain or discomfort		4(1, 9.38)	36 (27.04, 43)
Missing	$14 \ (7.11, \ 22)$	29 (19, 39)	45 (33, 57)
EQ-5D anxiety/depression at discharge			
I am not anxious or depressed	70 (50, 85)	$86\ (77.13,\ 91)$	89 (83, 93)
I am moderately anxious or depressed	$30\ (13,\ 47)$	13 (6.92, 19)	9.6 (5.84, 15)
I am extremely anxious or depressed		1(0, 4.37)	1.9(0, 4.7)
Missing	14 (7.11, 22)	29(19, 39)	45 (33, 57)
EQ-5D mobility at 30 day follow-up			
I have no problems in walking	77 (55.4, 89)	95 (88, 97)	74 (65, 80)
I have some problems in walking	19 (6.39, 38)	3(0.9, 8.4)	16 (9.25, 22)
I am confined to bed	3.8(0, 23.3)	2(0, 6.18)	9.8 (5.6, 16)
Missing	18 (10, 26)	29 (19, 39)	69 (54, 83)
EQ-5D self-care at 30 day follow-up			
I have no problems with self-care	81 (58, 92.79)	94 (85.78, 97)	77 (68, 82)
I have some problems bathing or dressing myself	12 (0, 29.99)	2(0, 7.22)	13 (7.2, 19)
I am unable to bathe or dress myself	7.7 (0, 24.36)	4(1, 9.3)	9.8 (5.7, 16)
Missing	18 (10, 26)	29 (19, 39)	69 (54, 83)
EQ-5D usual activities at 30 day follow-up	, ,	, ,	, , ,
I have no problems in performing my usual activities	81 (60, 93)	93 (85, 96)	79 (70, 85)
I have some problems in performing my usual activities	12 (3.4, 31.69)	3(0.9, 8.5)	14 (8.4, 20)
I am unable to perform my usual activities	7.7 (0, 24.36)	4(1, 9.3)	7.5 (3.8, 14)
Missing	18 (10, 26)	29 (19, 39)	69 (54, 83)
EQ-5D pain/discomfort at 30 day follow-up	( , ,	( , ,	( , ,
I have no pain or discomfort	77 (57, 91)	82 (73, 88)	78 (69, 84)
I have moderate pain or discomfort	23 (7.7, 42)	17 (9.3, 24)	20 (13, 26)
I have extreme pain or discomfort	, ,	1(0, 4.3)	1.5(0, 5.1)
Missing	18 (10, 26)	29 (19, 39)	69 (54, 83)
EQ-5D anxiety/depression at 30 day follow-up	( , ,	( , ,	( , ,
I am not anxious or depressed	88 (65, 96)	92 (84, 95)	95 (88, 97)
I am moderately anxious or depressed	12 (3.4, 31.69)	6.9(2.9, 14)	3.8(1.5, 9)
I am extremely anxious or depressed	(- , )	1(0, 4.3)	0.8 (0, 4.3)
Missing	18 (10, 26)	29 (19, 39)	69 (54, 83)
Patient satisfaction	- ( - ) - )	- ( - ) )	(- ,)
Very satisfied	74 (57, 86.02)	85 (77, 90)	69 (60, 74)
Somewhat satisfied	21 (8.8, 34)	9.9 (5, 16)	16 (10, 20)
Somewhat dissatisfied	2.6 (0, 13)	1.7 (0, 5.15)	9 (5.1, 14)
Very dissatisfied	2.6 (0, 12.43)	3.3 (0.8, 7.71)	5.1 (2.3, 9.06)
Missing	6 (2, 11)	9 (3, 15)	25 (15, 34)
Number of hospitalizations for this injury	( ) -/	(-, -)	- ( 0, 0-)
1			

Missing	13(7,20)	19 (11, 27)	36(25,47)
EQ-5D health state at discharge	60 (50, 60)	80 (79, 79)	50(4,50)
Missing	15 (8, 23)	35(25,47)	58 (44, 72)
EQ-5D health state at 30 day follow-up	88 (80, 100)	100 (99, 99)	80 (9, 90)
Missing	18 (10, 26)	32(22,44)	75 (59, 90)
Cost of treatment	5000 (0, 14000)	$2000 \ (1040.14, \ 2499)$	3000 (1000, 8000)
Missing	$35\ (24,\ 48)$	39 (29, 51.46)	113 (96, 130)

Table S3 Outcomes in all patients before training, by treatment arm

Outcome	ATLS, $N = 16$	PTC, $N = 57$	Standard care, $N = 41$
30 day mortality			
Yes		10(2.32, 20)	2.6 (0, 14.5)
No		$90 \ (78.57, 96)$	97 (81, 100)
Missing	2(0, 5)	8(3, 14)	3(0,7)
24 hour mortality			
Yes			2.4 (0, 11.05)
No			98 (88, 100)
Missing	2(0, 5)	5(1, 9)	
In-hospital mortality			
Yes		7(1.9, 16)	4.9(0,17)
No		93 (81.7, 97)	95 (81, 98)
Missing			
Self-ambulatory at discharge			
Yes	92 (55.29, 100)	96 (84, 98)	95 (78.8, 100)
No	8.3 (0, 42.23)	4.1 (0, 13.82)	5.1 (0, 17)
Missing	4 (1, 8)	8(3, 13.13)	2(0,5)
Return to work			
Yes	83 (0, 100)	74 (58, 85)	41 (23, 58)
No	17 (0, 70.86)	26 (12, 39)	59 (37.73, 75)
Missing	10 (4, 16)	15 (8, 22)	12 (6, 19)
Pulmonary complication		· · · /	<b>,</b> ,
Yes		2.2(0, 11.73)	
No		98 (88, 100)	
Missing	6(2,11)	11 (5, 18)	2(0,5)
Septic complication	( ' /	· · /	· ,
Yes		4.4(0, 14)	2.5 (0, 16.45)
No		96 (85.26, 100)	98 (83, 100)
Missing	6(2,11)	12 (6, 19)	1(0, 3)
Renal failure	· ,	· / /	· ,
Yes			
No			
Missing	5(1, 10)	11 (5, 18)	1(0,3)
Coagulopathy	· ,	· / /	· ,
Yes			
No			
Missing	6(2,11)	12(6, 19)	1(0,3)
Need for reexploration or resurgery	· ,	( , ,	· ,
Yes		2.1 (0, 11.23)	
No		98 (86, 100)	
Missing	4 (1, 8)	10 (4, 16)	1(0,3)
Failure of conservative management	- (-, -)	- (-,)	(", ")
No		98 (85, 100)	
Yes		2.2 (0, 14.13)	
Missing	10 (4, 16)	11 (5, 17)	2(0,5)
EQ-5D mobility at discharge	(1, 10)	(3, 2.)	- (3, 3)
I have no problems in walking	67 (30.53, 89)	83 (66.74, 92)	62 (44, 75)
I have some problems in walking	8.3 (0, 36.88)	12 (2.6, 24)	18 (7.1, 31.39)
I am confined to bed	25 (0, 56)	4.9 (0, 16.18)	21 (9.3, 35)
Missing	4 (1, 8)	16 (8, 24)	2(0,5)
EQ-5D self-care at discharge	1 (1, 0)	10 (0, 21)	2 (0, 0)
La or soil out an amonaige			

I have no problems with self-care I have some problems bathing or dressing myself	58 (25, 87.2) 17 (0, 50)	80 (64, 90) 12 (2.97, 24)	59 (41, 73.74) 15 (4.97, 27.42)
I am unable to bathe or dress myself	25 (0, 56)	7.3 (2.2, 20)	,
v	` ' /	16 (8, 24)	$26 (13, 40) \\ 2 (0, 5)$
Missing FO 5D yavel activities at discharge	4(1, 8)	10 (6, 24)	2 (0, 3)
EQ-5D usual activities at discharge	FO (17 7F)	76 (61 07)	T4 (20, c0)
I have no problems in performing my usual activities	50 (17, 75)	76 (61, 87)	54 (38, 69)
I have some problems in performing my usual activities	25 (0, 54.17)	15 (5.7, 28)	28 (14, 42)
I am unable to perform my usual activities	25 (0, 56)	9.8 (2.7, 23)	18 (7.1, 32)
Missing	4(1, 8)	16 (8, 24)	2(0, 5)
EQ-5D pain/discomfort at discharge	22 (2.2.22)	2.4 (2.2 = 2.2)	22 (12 12 22)
I have no pain or discomfort	33 (8.3, 63)	34 (20, 50)	33 (19, 48.33)
I have moderate pain or discomfort	67 (30.09, 89)	63 (44.05, 76)	41 (24, 56)
I have extreme pain or discomfort		2.4 (0, 13)	26 (14, 40.01)
Missing	4(1, 8)	16 (8, 24)	2(0,5)
EQ-5D anxiety/depression at discharge			
I am not anxious or depressed	50 (17, 75)	73 (57, 85)	79 (62.02, 89)
I am moderately anxious or depressed	50 (14, 75)	24 (11, 38)	18 (6.97, 32)
I am extremely anxious or depressed		2.4(0, 13)	2.6(0, 14)
Missing	4(1, 8)	16(8, 24)	2(0,5)
EQ-5D mobility at 30 day follow-up			
I have no problems in walking	67(0, 100)	91 (77.53, 97)	65 (46.25, 81)
I have some problems in walking	17 (0, 70.43)	7 (2.02, 19)	13 (3.12, 27)
I am confined to bed	17 (0, 70.86)	2.3(0, 13.05)	23 (9.02, 39)
Missing	10 (4, 16)	14 (7, 21)	10 (4, 17)
EQ-5D self-care at 30 day follow-up	( , ,	( ) /	( ) /
I have no problems with self-care	83 (0.05, 100)	91 (79.35, 97)	71 (53, 85)
I have some problems bathing or dressing myself	17 (0, 70.43)	4.7 (0, 16)	6.5 (0, 31.44)
I am unable to bathe or dress myself	. (-))	4.7 (0, 15.32)	23 (11, 40)
Missing	10 (4, 16)	14 (7, 21)	10 (4, 17)
EQ-5D usual activities at 30 day follow-up	10 (1, 10)	11 (1, 21)	10 (1, 11)
I have no problems in performing my usual activities		91 (79.35, 97)	71 (52.15, 85)
I have some problems in performing my usual activities		4.7 (0, 16)	19 (6.7, 35)
I am unable to perform my usual activities		4.7 (0, 15.32)	9.7 (2.46, 25.76)
Missing	10 (4, 16)	14 (7, 21)	10 (4, 17)
EQ-5D pain/discomfort at 30 day follow-up	10 (4, 10)	14 (1, 21)	10 (4, 17)
I have no pain or discomfort	67 (0, 100)	77 (61.95, 88)	74 (52.26, 85)
I have moderate pain or discomfort	33 (0, 75)	21 (8.6, 33)	26 (12, 44.69)
-	33 (0, 73)	, ,	20 (12, 44.09)
I have extreme pain or discomfort	10 (4 16)	2.3 (0, 12.93)	10 (4 17)
Missing	10 (4, 16)	14 (7, 21)	10 (4, 17)
EQ-5D anxiety/depression at 30 day follow-up		00 (71 41 04)	07 (01 100)
I am not anxious or depressed		86 (71.41, 94)	97 (81, 100)
I am moderately anxious or depressed		12 (2.9, 24.57)	3.2 (0, 18.59)
I am extremely anxious or depressed	10 (1 10)	$2.3 \ (0, 12.93)$	10 (1 15)
Missing	10 (4, 16)	14 (7, 21)	10 (4, 17)
Patient satisfaction			
Very satisfied	64 (33.23, 87)	73 (60, 83)	67 (49, 79)
Somewhat satisfied	36 (11, 63)	16 (6.66, 27)	$23\ (11,\ 35.02)$
Somewhat dissatisfied		3.9(0, 13)	$7.7\ (2.2,\ 21)$
Very dissatisfied		7.8 (2.1, 18.06)	2.6 (0, 17)
Missing	2(0,5)	6(2,11)	2(0, 5)
Number of hospitalizations for this injury			
Missing	10 (4, 16)	8(3, 14)	2(0, 5)
EQ-5D health state at discharge	60 (40, 81.8)	80 (60, 80)	50 (3, 80)
Missing	5(1, 10)	16 (8, 24)	10 (4, 17)

EQ-5D health state at 30 day follow-up	100 (55, 100)	100 (90, 100)	10 (8, 100)
Missing	10(4, 16)	$15 \ (8.11, \ 23)$	14 (8, 22)
Cost of treatment	7000 (0, 14000)	2025 (600, 6000)	14000 (500, 35000)
Missing	14(7, 22)	18 (11, 26)	$23\ (14.12,\ 33)$

Table S4 Outcomes in all patients after training, by treatment arm

Outcome	ATLS, $N = 28$	PTC, $N = 73$	Standard care, $N = 161$
30 day mortality			
Yes	3.8 (0, 20.98)	4.9(0, 13)	16 (9.28, 21)
No	96 (78, 100)	95 (84, 98)	84 (77, 89)
Missing	2(0,5)	12(6, 19)	26 (17, 36)
24 hour mortality			
Yes			
No			
Missing	2(0,5)	8(3, 14)	7(3, 12)
In-hospital mortality			
Yes	3.7 (0, 20.68)	4.1 (0, 11)	12 (6.43, 16)
No	96 (79, 100)	96 (87.42, 99)	88 (81, 91)
Missing	1(0, 3)	, ,	2(0,5)
Self-ambulatory at discharge	( ) /		
Yes		97 (86, 99)	99 (94, 100)
No		2.9(0, 9.08)	1.5(0,5.59)
Missing	4 (1, 8)	3(0,7)	24 (14, 32.64)
Return to work	( ) - /	- (-) -)	( ) )
Yes	58 (33, 78)	70 (55, 80)	53 (43, 61.06)
No	42 (21, 66.95)	30 (18, 42.29)	47 (36, 56)
Missing	9 (4, 15)	16 (9, 24)	56 (43, 69.34)
Pulmonary complication	0 (1, 13)	10 (0, 21)	30 (13, 00.01)
Yes			
No			
Missing	5 (1, 9)	10 (5, 17)	33 (22, 43)
Septic complication	0 (1, 0)	10 (0, 11)	99 (22, 19)
Yes		3.2 (0, 11)	0.8(0,4)
No		97 (88, 100)	99 (96, 99)
Missing	5 (1, 9)	10 (5, 17)	33 (22, 43)
Renal failure	0 (1, 9)	10 (0, 11)	33 (22, 43)
Yes			
No			
Missing	5 (1, 9)	10 (5, 17)	32 (21, 42)
Coagulopathy	$S(1, \theta)$	10 (5, 17)	32 (21, 42)
Yes	4.3 (0, 22.71)		
No	96 (77, 100)		
Missing		10 (5, 17)	29 (91 49)
~	5(1, 9)	10(5,17)	$32\ (21,\ 42)$
Need for reexploration or resurgery		1 6 (0, 0.91)	25 (0.7)
Yes		1.6 (0, 9.21)	2.5 (0, 7)
No	0 (0 11)	98 (90, 100)	97 (92, 98)
Missing	6(2,11)	10 (5, 17)	42 (30.18, 54)
Failure of conservative management	00 (51 100)	00 (00 400)	00 (00 00)
No	92 (71, 100)	98 (90, 100)	98 (93, 99)
Yes	8 (0, 24.44)	1.6 (0, 7.99)	1.7 (0, 5.8)
Missing	3(0,6)	12 (6, 19.14)	44 (32, 56)
EQ-5D mobility at discharge	,		_ ,
I have no problems in walking	89 (60, 100)	92 (80.1, 97)	62 (52, 70)
I have some problems in walking	$11\ (0,\ 33)$	5 (1.5, 13.83)	$19\ (12,\ 27)$
I am confined to bed		3.3 (0, 11)	19(11, 26)
Missing	10 (4, 17)	13 (6, 21)	$43 \ (30.04, 54)$
EQ-5D self-care at discharge			

I have no problems with self-care	67 (34.68, 87)	85 (72, 92)	50 (40, 58)
I have some problems bathing or dressing myself	11 (0, 33.5)	$8.3\ (2.56,\ 17.71)$	$31\ (22,\ 39)$
I am unable to bathe or dress myself	22(4.52, 44)	$6.7\ (1.76,\ 16)$	19(11, 25)
Missing	10(4,17)	13(6,21)	43 (30.04, 54)
EQ-5D usual activities at discharge			
I have no problems in performing my usual activities	61 (33, 82.01)	85 (72, 92)	47 (38, 56)
I have some problems in performing my usual activities	22 (5.6, 50)	8.3 (2.56, 17.71)	38 (28, 45)
I am unable to perform my usual activities	17 (0, 39.02)	6.7 (1.76, 16)	15 (8.29, 21)
Missing	10 (4, 17)	13 (6, 21)	43 (30.04, 54)
EQ-5D pain/discomfort at discharge	( , ,	· · · /	, ,
I have no pain or discomfort	50(25,71)	65 (52, 76)	25 (16.01, 32)
I have moderate pain or discomfort	50 (22, 69)	30 (18, 41)	35 (27, 44)
I have extreme pain or discomfort	, ,	5 (1.5, 14)	40 (31, 48)
Missing	10(4, 17)	13 (6, 21)	43 (30.04, 54)
EQ-5D anxiety/depression at discharge	( , ,	( ) /	, , ,
I am not anxious or depressed	83 (57, 95.75)	95 (84.84, 98)	92 (85, 96)
I am moderately anxious or depressed	17 (0, 41)	5 (0.6, 13)	6.8 (3.4, 13)
I am extremely anxious or depressed	_, (°,)	3 (3.3, 23)	1.7 (0, 5.3)
Missing	10 (4, 17)	13 (6, 21)	43 (30.04, 54)
EQ-5D mobility at 30 day follow-up	(-, )	(-,)	(
I have no problems in walking	80 (53, 93.32)	98 (90, 100)	77 (67, 83.81)
I have some problems in walking	20 (5.9, 44)	00 (00, 200)	17 (9.4, 24)
I am confined to bed	20 (0.0, 11)	1.7(0, 8.79)	5.9 (2.1, 12)
Missing	8 (3, 14)	15 (8, 23)	59 (46, 72.14)
EQ-5D self-care at 30 day follow-up	0 (0, 11)	10 (0, 20)	00 (10, 12.11)
I have no problems with self-care	80 (56, 94)	97 (88, 100)	79 (68.15, 85)
I have some problems bathing or dressing myself	10 (0, 31)	01 (00, 100)	15 (8.23, 23)
I am unable to bathe or dress myself	10 (0, 31.74)	3.4(0, 12)	5.9 (2.13, 12)
Missing	8 (3, 14)	15 (8, 23)	59 (46, 72.14)
EQ-5D usual activities at 30 day follow-up	0 (0, 11)	10 (0, 20)	00 (10, 12.11)
I have no problems in performing my usual activities	75 (50, 91)	95 (83.7, 98)	81 (70, 87)
I have some problems in performing my usual activities	15 (4.2, 38)	1.7 (0, 7.68)	12 (6.3, 19)
I am unable to perform my usual activities	10 (0, 31.74)	3.4 (0, 12)	6.9 (2.9, 13)
Missing	8 (3, 14)	15 (8, 23)	59 (46, 72.14)
EQ-5D pain/discomfort at 30 day follow-up	0 (0, 11)	10 (0, 20)	00 (10, 12.11)
I have no pain or discomfort	80 (56.42, 94)	86 (73, 93)	79 (69, 85)
I have moderate pain or discomfort	20 (5.3, 41.4)	14 (5.3, 23.93)	19 (11, 27)
I have extreme pain or discomfort	20 (0.0, 11.1)	11 (0.0, 20.00)	2(0, 8.07)
Missing	8 (3, 14)	15 (8, 23)	59 (46, 72.14)
EQ-5D anxiety/depression at 30 day follow-up	0 (0, 14)	10 (0, 20)	00 (40, 12.14)
I am not anxious or depressed	85 (60.19, 95)	97 (88.33, 100)	95 (87, 97)
I am moderately anxious or depressed	15 (4.2, 38)	3.4 (0, 11)	3.9 (1, 9.9)
I am extremely anxious or depressed	10 (4.2, 00)	0.4 (0, 11)	1 (0, 4.95)
Missing	8 (3, 14)	15 (8, 23)	59 (46, 72.14)
Patient satisfaction	0 (0, 14)	10 (0, 20)	00 (40, 12.14)
Very satisfied	79 (57, 93)	94 (83, 97)	70 (61, 76)
Somewhat satisfied	13 (3.29, 32)	5.7 (1.5, 13)	14 (8.04, 19)
Somewhat dissatisfied	4.2 (0, 20.59)	0.7 (1.0, 10)	9.4 (5.58, 16)
Very dissatisfied	4.2 (0, 20.33) $4.2 (0, 20.74)$		5.8 (2.2, 10)
Missing	4.2 (0, 20.74) $4 (1, 8)$	3(0,7)	23 (13, 31)
Number of hospitalizations for this injury	<del>-</del> (1, 0)	5 (0, 1)	20 (10, 01)
Missing	3(0,6)	11 (5, 18)	34 (23.34, 46)
EQ-5D health state at discharge	65 (50, 80)	90 (80, 90)	50 (4, 50)
Missing	10 (4, 17)	19 (11, 28)	48 (35, 61)
MINORITE	10 (4, 11)	10 (11, 20)	40 (30, 01)

EQ-5D health state at 30 day follow-up	83 (70, 100)		83 (10, 100)
Missing	8 (3, 14)	17 (9, 25.63)	61 (47, 74)
Cost of treatment	5000 (0, 15000)	1500 (250, 1600)	2500 (1000, 8000)
Missing	$21\ (12,\ 30)$	$21\ (12.87,\ 30)$	90 (74, 106)

Table S5 Absolute change from baseline for all outcomes, comparing the period after training with the period before training, by treatment arms

Outcome	ATLS, $N = 28$	PTC, $N = 73$	Standard care, N
30 day mortality			
Yes	$3.8 \ (0, \ 20.98)$	$-5.1 \ (-16.57, \ 4.76)$	13.4(3, 20)
No	-4 (-22, 0)	5 (-6, 14)	-13 (-20, -3
Missing	$0\ (-4.9,\ 3)$	4 (-5, 12)	23 (14, 34)
24 hour mortality			
Yes			-2.4 (-12, 0
No			2(0,7)
Missing	$0\ (-4.9,\ 3)$	3(-4, 10)	7(3, 12)
In-hospital mortality			
Yes	3.7 (0, 20.68)	-2.9 (-12.79, 4.2)	7.1 (-4, 13.
No	-4 (-21, 0)	3(-5, 11)	-7 (-14, 2
Missing	$1\ (0,\ 3)$		2(0, 5)
Self-ambulatory at discharge			
Yes	8(0,37)	1 (-6, 8)	4 (-2, 14)
No	-8.3 (-44.67, 0)	-1.2 (-9.5, 4.8)	-3.6 (-14.56,
Missing	0 (-7, 4)	-5 (-13.26, 0)	22 (12, 30
Return to work			
Yes	-25 (-56, 21)	-4 (-24, 12)	12 (-10, 30
No	25 (-27.41, 55)	4 (-15, 21)	-12 (-35, 7
Missing	-1 (-11, 6)	1 (-10.1, 11)	44 (29, 58
Pulmonary complication			
Yes		-2.2 (-12, 0)	
No		2(0,7)	
Missing	-1 (-9, 4)	-1 (-11, 7)	31 (19, 41
Septic complication		, ,	,
Yes		-1.2 (-10.31, 5.5)	-1.7 (-11.72,
No		1 (-6, 8.2)	1(-2, 7)
Missing	-1 (-9, 4)	-2(-12, 6)	32 (21, 42
Renal failure		, ,	,
Yes			
No			
Missing	0 (-7, 5)	-1 (-11, 7)	31 (20, 41
Coagulopathy	( , ,	, ,	,
Yes	4.3 (0, 22.71)		
No	-4 (-23, 0)		
Missing	-1 (-9, 4)	-2 (-12, 5)	31 (20, 41
Need for reexploration or resurgery	( , ,	, ,	,
Yes		-0.5 (-8.44, 3.3)	2.5(0,7)
No		0 (-5.44, 4)	-3 (-8, -2)
Missing	2 (-5, 7)	0 (-9, 8)	41 (29, 54
Failure of conservative management	( - ) - )	( - ) - /	( - ) 0 -
No	-8 (-29, 0)	0 (-6.06, 4)	-2 (-7, -1)
Yes	8 (0, 24.45)	-0.6 (-9.45, 3.2)	1.7 (0, 5.8)
Missing	-7 (-16.47, -2)	1 (-8, 10)	42 (29, 54
EQ-5D mobility at discharge	. (, -)	( ~, -~)	(,,
I have no problems in walking	22 (-12, 56)	9 (-5, 23)	0 (-17, 19.8
I have some problems in walking	2.7 (-23.17, 20)	-7 (-19.12, 4.99)	1 (-16.13, 1
I am confined to bed	-25 (-60.74, -7.1)	-1.6 (-11.5, 5.8)	-2 (-22, 10
Missing	6 (-2, 12)	-3 (-14, 7)	41 (29, 53
1,11001119	0 (-2, 12)	- <del>0 (-14, 1)</del>	41 (23, 30

EO IDIf dih			
EQ-5D self-care at discharge I have no problems with self-care	9 (-31.87, 47.44)	5 (-11, 20)	-9 (-27, 8)
I have some problems bathing or dressing myself	-6 (-39.79, 15)	-3.7 (-16.9, 8.16)	16 (0, 29.13
I am unable to bathe or dress myself	-3 (-42.58, 26.36)	-0.6 (-11.51, 10)	-7 (-25.46,
Missing	6 (-2, 12)	-3 (-14, 7)	41 (29, 53
EQ-5D usual activities at discharge	(	( , ,	,
I have no problems in performing my usual activities	11 (-30.58, 46)	9 (-9, 23.11)	-7 (-26, 11
I have some problems in performing my usual activities	-3 (-37, 28.8)	-6.7 (-21.53, 4.5)	10 (-7.49, 2
I am unable to perform my usual activities	-8 (-43, 21)	-3.1 (-15.5, 7.7)	-3 (-20, 8.1
Missing	6 (-2, 12)	-3 (-14, 7)	41 (29, 53
EQ-5D pain/discomfort at discharge			
I have no pain or discomfort	17 (-23, 51)	31 (9, 47)	-8 (-26.97,
I have moderate pain or discomfort	-17 (-52, 20)	-33 (-52.63, -12)	-6 (-24, 13
I have extreme pain or discomfort		2.6 (-4.7, 9.7)	14 (-6.34, 2
Missing	6 (-2, 12)	-3 (-14, 7)	41 (29, 53)
EQ-5D anxiety/depression at discharge	(	()	(
I am not anxious or depressed	33 (-5.81, 64)	22 (7, 37)	13 (0, 29)
I am moderately anxious or depressed	-33 (-67, 3)	-19 (-35.39, -5.8)	-11.2 (-27.48,
I am extremely anxious or depressed	0 (0 10)	-2.4 (-17, 0)	-0.9 (-10.47,
Missing	6 (-2, 12)	-3 (-14, 7)	41 (29, 53
EQ-5D mobility at 30 day follow-up	19 ( 90 15 (1)	7 (0. 17)	10 ( 0 20
I have no problems in walking	13 (-29.15, 61)	7 (-2, 17)	12 (-9, 30)
I have some problems in walking I am confined to bed	3 (-50, 29)	-7 (-19.34, -2.1) -0.6 (-8.96, 3.82)	4 (-14, 15) -17.1 (-36.1, -3
Missing	-17 (-100, 0) -2 (-12, 5)	1 (-10, 11)	49 (34, 63
EQ-5D self-care at 30 day follow-up	-2 (-12, 3)	1 (-10, 11)	49 (34, 03
I have no problems with self-care	-3 (-28.6, 53)	6 (-4, 16)	8 (-11, 26
I have some problems bathing or dressing myself	-7 (-64.7, 16.07)	-4.7 (-17.2, 0)	8.5 (-5, 18
I am unable to bathe or dress myself	10 (0, 31.59)	-1.3 (-10.45, 5.7)	-17.1 (-35.9, -
Missing	-2 (-12, 5)	1 (-10, 11)	49 (34, 63
EQ-5D usual activities at 30 day follow-up	2 (12, 0)	1 (10, 11)	10 (01, 00
I have no problems in performing my usual activities	-25 (-50, -9)	4 (-8, 13)	10 (-8.1, 28
I have some problems in performing my usual activities	15 (4.2, 38)	-3 (-14, 2.1)	-7 (-24.6, 6
I am unable to perform my usual activities	10 (0, 31.59)	-1.3 (-10.45, 5.7)	-2.8 (-17.58,
Missing	-2 (-12, 5)	1 (-10, 11)	49 (34, 63
EQ-5D pain/discomfort at 30 day follow-up	( , ,	( , , ,	,
I have no pain or discomfort	13 (-30, 62)	9 (-8, 23)	5 (-10, 23
I have moderate pain or discomfort	-13 (-65, 28)	-7 (-23.4, 8)	-7 (-27, 7)
I have extreme pain or discomfort		-2.3 (-16, 0)	2 (0, 8.07)
Missing	-2(-12, 5)	1 (-10, 11)	49 (34, 63
EQ-5D anxiety/depression at 30 day follow-up			
I am not anxious or depressed	-15 (-39.72, -5)	$11\ (0,\ 24)$	-2 (-8, 8)
I am moderately anxious or depressed	15 (4.2, 38)	-8.6 (-22, 1.02)	0.7 (-13.46, 5)
I am extremely anxious or depressed		-2.3 (-16, 0)	1 (0, 4.95)
Missing	-2 (-12, 5)	1 (-10, 11)	49 (34, 63
Patient satisfaction			,
Very satisfied	15 (-15, 45)	21 (8, 32)	3 (-14, 19)
Somewhat satisfied	-23 (-54, 4)	-10.3 (-22.87, 0)	-9 (-25.8, 3
Somewhat dissatisfied	4.2 (0, 20.59)	-3.9 (-13, 0)	1.7 (-11.7, 9
Very dissatisfied	4.2 (0, 20.74)	-7.8 (-20, -2.28)	3.2 (-8, 7.6
Missing	2(-3, 6)	-3 (-10, 2)	21 (11, 30
Number of hospitalizations for this injury	0 (-1, 0)	2 ( 6 10)	90 /01 44
Missing FO 5D health state at discharge	-7 (-16.47, -2) 5 (30, 30)	3 (-6, 12)	32 (21, 44
EQ-5D health state at discharge	5 (-30, 30)	10 (-10, 10)	0 (-68.09, 5

Missing	5 (-3.48, 11)	3 (-9, 14)	38 (22, 52
EQ-5D health state at 30 day follow-up	-17 (-33.16, 20)		73 (-13, 92
Missing	-2 (-12, 5)	2(-10, 12)	47 (30, 61.5
Cost of treatment	-2000 (-14000, 13000)	-525 (-4922.65, 1000)	-11500 (-49000,
Missing	7 (-7, 17)	3 (-10, 14)	67 (45.64, 8

Table S6 Relative change from baseline for all outcomes, comparing the period after training with the period before training, by treatment arms

Outcome	ATLS, $N = 28$	PTC, N = 73	Standard care, $N = 161$
30 day mortality			
Yes		0.49 (0, 2.31)	$6.15\ (2.62,10.91)$
No	0.96 (0.78, 1)	$1.06 \ (0.95, \ 1.2)$	$0.87 \ (0.8, \ 0.97)$
Missing	1(0, 4)	1.5 (0.56, 4)	8.67 (2.89, 27.17)
24 hour mortality			
Yes			
No			$1.02 \ (1, \ 1.08)$
Missing	$1\ (0,\ 4)$	1.6 (0.5, 6)	
In-hospital mortality			
Yes		0.59 (0, 2.89)	$2.45 \ (0.77, 6.19)$
No	0.96 (0.79, 1)	$1.03 \ (0.95, \ 1.15)$	$0.93 \ (0.86, \ 1.03)$
Missing			
Self-ambulatory at discharge			
Yes	1.09 (1, 1.59)	$1.01 \ (0.95, \ 1.1)$	$1.04 \ (0.98, \ 1.17)$
No		0.71(0,4)	$0.29 \ (0, \ 1.52)$
Missing	$1\ (0,\ 3.5)$	0.38 (0, 1.57)	12 (3.73, 29)
Return to work		,	
Yes	$0.7 \ (0.41, \ 1.42)$	$0.95 \ (0.73, \ 1.2)$	$1.29 \ (0.85, \ 2.24)$
No	2.47 (1.11, 7.14)	$1.15 \ (0.61, \ 2.48)$	$0.8 \ (0.55, 1.2)$
Missing	$0.9 \ (0.29, \ 2.25)$	$1.07 \ (0.5, \ 2.25)$	4.67 (2.52, 9)
Pulmonary complication			
Yes			
No	0.00 (0.11.0.07)	1.02 (1, 1.08)	107 (711 00)
Missing	$0.83 \ (0.14, \ 2.67)$	$0.91 \ (0.36, \ 2.5)$	16.5 (5.11, 39)
Septic complication		0.70 (0.001)	0.00 (0.1.00)
Yes		0.73 (0, 3.81)	0.32 (0, 1.62)
No	0.00 (0.14.0.05)	1.01 (0.94, 1.1)	1.01 (0.98, 1.08)
Missing	$0.83 \ (0.14,  2.67)$	$0.83 \ (0.33, \ 2)$	33 (12.33, 44.32)
Renal failure			
Yes			
No	1 (0.11 0)	0.01 (0.00 0.7)	90 (11 7 40)
Missing	$1\ (0.11,\ 3)$	$0.91 \ (0.36, \ 2.5)$	32 (11.5, 42)
Coagulopathy			
Yes	0.00 (0.77 1)		
No Minimum	0.96 (0.77, 1)	0.00 (0.00 0.07)	20 (11 5 40)
Missing	$0.83 \ (0.14, \ 2.67)$	$0.83 \ (0.33, \ 2.07)$	$32\ (11.5,\ 42)$
Need for reexploration or resurgery		0.76 (0. 4.47)	
Yes		0.76 (0, 4.47)	0.07 (0.00, 0.00)
No Minimum	1 7 (0.00 0)	1 (0.95, 1.04)	0.97 (0.92, 0.98)
Missing	1.5 (0.26, 6)	$1\ (0.36,\ 2.5)$	$42 \ (16.32, 55.43)$
Failure of conservative management	0.00 (0.71 1)	1 (0 04 1 04)	0.00 (0.02 0.00)
No Vos	$0.92\ (0.71,\ 1)$	1 (0.94, 1.04)	$0.98 \ (0.93, \ 0.99)$
Yes Missing	0.2 (0. 1.91)	0.73 (0, 4.65)	22 (6.02 £1)
Missing FO 5D mobility at disabance	0.3 (0, 1.21)	$1.09 \ (0.47, \ 2.6)$	22 (6.82, 51)
EQ-5D mobility at discharge I have no problems in walking	1 99 (0 00 0 47)	1 11 (0 06 1 22)	1 (0.77 1.49)
I have no problems in walking I have some problems in walking	$1.33 \ (0.88, \ 2.47)$	$1.11 \ (0.96, 1.33)$	1 (0.77, 1.42)
I nave some problems in walking I am confined to bed	$1.33 \ (0.27, 5.5)$	0.42 (0, 2.49)	1.06 (0.48, 3.01)
Missing	$2.5\ (0.62,8)$	0.67 (0, 4.06) $0.81 (0.37, 1.85)$	$0.9 \ (0.42, \ 1.87)$
MISSIM	2.0 (0.02, 8)	$0.01 \ (0.57, 1.85)$	21.5 (7.3, 50)

EQ-5D self-care at discharge			
I have no problems with self-care	1.16 (0.63, 2.62)	1.06 (0.88, 1.31)	0.85 (0.62, 1.22)
I have some problems bathing or dressing myself	0.65(0, 3.36)	0.69 (0.14, 2.77)	2.07(1, 6.19)
I am unable to bathe or dress myself	$0.88 \ (0.09, \ 3.72)$	0.92(0.18, 4.6)	0.73 (0.37, 1.38)
Missing	2.5(0.62, 8)	0.81 (0.37, 1.85)	21.5 (7.3, 50)
EQ-5D usual activities at discharge	, , ,	, , ,	, ,
I have no problems in performing my usual activities	1.22 (0.58, 2.89)	1.12 (0.93, 1.37)	$0.87 \ (0.63, 1.31)$
I have some problems in performing my usual activities	$0.88 \ (0.17, \ 3.75)$	$0.55 \ (0.11, 1.75)$	1.36 (0.86, 2.72)
I am unable to perform my usual activities	0.68 (0, 3.3)	$0.68 \ (0.12, \ 3.59)$	0.83 (0.38, 2.01)
Missing	2.5 (0.62, 8)	$0.81\ (0.37,\ 1.85)$	21.5 (7.3, 50)
EQ-5D pain/discomfort at discharge			
I have no pain or discomfort	1.52 (0.6, 4.73)	$1.91\ (1.2,\ 3.22)$	$0.76 \ (0.45, \ 1.36)$
I have moderate pain or discomfort	0.75 (0.35, 1.49)	$0.48 \ (0.28, \ 0.77)$	$0.85 \ (0.57, \ 1.54)$
I have extreme pain or discomfort		$2.08 \ (0.65,  6.54)$	$1.54 \ (0.87, \ 2.73)$
Missing	2.5 (0.62, 8)	$0.81\ (0.37,\ 1.85)$	21.5 (7.3, 50)
EQ-5D anxiety/depression at discharge			
I am not anxious or depressed	1.66 (0.94, 3.8)	1.3 (1.1, 1.65)	$1.16 \ (1.01, \ 1.51)$
I am moderately anxious or depressed	0.34 (0, 1.29)	$0.21 \ (0, \ 0.75)$	$0.38 \ (0.13, \ 1.23)$
I am extremely anxious or depressed			$0.65 \ (0.14, \ 2.38)$
Missing	2.5 (0.62, 8)	$0.81\ (0.37,\ 1.85)$	21.5 (7.3, 50)
EQ-5D mobility at 30 day follow-up			
I have no problems in walking	1.19 (0.7, 3.16)	$1.08 \ (0.99, \ 1.22)$	$1.18 \ (0.9, \ 1.62)$
I have some problems in walking	1.18 (0.42, 4)		$1.31\ (0.5,\ 4.52)$
I am confined to bed	/>	0.74 (0, 4.24)	$0.26 \ (0.07, \ 0.87)$
Missing	$0.8\ (0.23,\ 2)$	$1.07 \ (0.5, \ 2.25)$	5.9 (3.16, 12.8)
EQ-5D self-care at 30 day follow-up	0.00 (0.71 0.70)	4.05 (0.05 4.04)	4 44 (0 00 4 4=)
I have no problems with self-care	0.96 (0.71, 2.58)	$1.07 \ (0.97, \ 1.21)$	1.11 (0.89, 1.47)
I have some problems bathing or dressing myself	$0.59 \ (0.12, \ 3.12)$	0.70 (0.4)	$2.31 \ (0.72, 6.54)$
I am unable to bathe or dress myself	0.0.(0.00.0)	0.72 (0, 4)	0.26 (0.08, 0.77)
Missing	0.8 (0.23, 2)	$1.07 \ (0.5, \ 2.25)$	5.9 (3.16, 12.8)
EQ-5D usual activities at 30 day follow-up	0.75 (0.5 0.01)	1.04 (0.00 1.10)	1 14 (0 01 1 50)
I have no problems in performing my usual activities	$0.75 \ (0.5, \ 0.91)$	1.04 (0.93, 1.18)	1.14 (0.91, 1.53)
I have some problems in performing my usual activities		0.36 (0, 3.19)	0.63 (0.28, 1.97)
I am unable to perform my usual activities	0.0 (0.00.0)	0.72 (0, 4)	$0.71 \ (0.17, 2.61)$
Missing  FO 5D pair /discomfort at 20 day follow up	$0.8\ (0.23,\ 2)$	$1.07 \ (0.5, \ 2.25)$	5.9 (3.16, 12.8)
EQ-5D pain/discomfort at 30 day follow-up	1 10 (0 71 2 22)	1 10 (0 00 1 27)	1.07 (0.89, 1.42)
I have no pain or discomfort I have moderate pain or discomfort	1.19 (0.71, 3.32) 0.61 (0.16, 2.41)	, , ,	, , ,
I have extreme pain or discomfort	$0.01 \ (0.10, 2.41)$	$0.67 \ (0.23, \ 1.91)$	$0.73 \ (0.34, 1.53)$
Missing	$0.8\ (0.23,\ 2)$	1.07 (0.5, 2.25)	5.9 (3.16, 12.8)
EQ-5D anxiety/depression at 30 day follow-up	0.6 (0.23, 2)	1.07 (0.5, 2.25)	5.9 (5.10, 12.6)
I am not anxious or depressed	$0.85 \ (0.6, \ 0.95)$	1.13 (1.02, 1.35)	0.98 (0.92, 1.09)
I am moderately anxious or depressed	0.65 (0.0, 0.55)	0.28 (0, 1.71)	$1.22 \ (0.37, \ 3.33)$
I am extremely anxious or depressed		0.28 (0, 1.71)	1.22 (0.51, 5.55)
Missing	$0.8\ (0.23,\ 2)$	1.07 (0.5, 2.25)	5.9 (3.16, 12.8)
Patient satisfaction	0.0 (0.25, 2)	1.07 (0.0, 2.20)	5.5 (5.10, 12.0)
Very satisfied	1.23 (0.84, 2.13)	1.29 (1.09, 1.52)	1.04 (0.83, 1.36)
Somewhat satisfied	0.36 (0, 1.64)	$0.36 \ (0.07, 1.12)$	0.61 (0.29, 1.23)
Somewhat dissatisfied	0.00 (0, 1.01)	0.00 (0.01, 1.12)	1.22 (0.38, 3.91)
Very dissatisfied			2.23 (0.78, 4.78)
Missing	2(0.19, 7)	0.5(0, 2)	11.5 (3.67, 28)
Number of hospitalizations for this injury	- (0.10, 1)	··· (··, ··)	22.0 (0.01, 20)
Missing	0.3(0, 1.21)	1.38 (0.5, 3.64)	17 (5.33, 41)
EQ-5D health state at discharge	1.08 (0.67, 1.75)	1.12 (0.89, 1.12)	1 (0.08, 15)
•	( , )	( //	( , = - )

Missing	2(0.5, 6)	1.19 (0.6, 2.45)	4.8 (2.38, 11)
EQ-5D health state at 30 day follow-up	$0.83\ (0.67,\ 1.33)$		$8.3\ (0.74,\ 11.14)$
Missing	0.8 (0.23, 2)	$1.13 \ (0.53, \ 2.27)$	$4.36\ (2.43,\ 7.75)$
Cost of treatment	$0.71\ (0.14,\ 5)$	$0.74\ (0.2,\ 2.69)$	0.18 (0.04, 4)
Missing	$1.5 \ (0.66, \ 2.75)$	$1.17 \ (0.6, \ 2.22)$	$3.91\ (2.37,\ 6.04)$

Table S7 Absolute and relative differences in outcomes after training, comparing standard care with  $\operatorname{ATLS}$ 

Outcome	Absolute difference	Relative difference
30 day mortality		
Yes	$12.2 \ (-8.05, \ 23.3)$	$4.21\ (1.36,\ 15.71)$
No	-12 (-23, 6)	$0.88 \ (0.75, \ 1.1)$
Missing	24 (15.57, 39)	13 (5.33, 40)
24 hour mortality		
Yes		
No		
Missing	5(0, 13)	3.5(1.6, 14)
In-hospital mortality		, , ,
Yes	8.3 (-5.9, 18)	3.24 (0.63, 13.64)
No	-8 (-18, 5)	0.92(0.82, 1.07)
Missing	$1\ (-3.52,\ 5)$	2(0.5, 5)
Self-ambulatory at discharge	( ) - )	(,-)
Yes	-1 (-9, 2)	0.99 (0.93, 1.03)
No	1.5 (-2.2, 8.92)	0.00 (0.00, 2.00)
Missing	20 (-23, 35)	6 (0.1, 33)
Return to work	20 (20, 00)	0 (0.1, 00)
Yes	-5 (-30, 29)	0.91 (0.6, 1.64)
No	5 (-30, 30)	1.12 (0.44, 2.41)
Missing	47 (30, 63)	6.22 (4.55, 53)
Pulmonary complication	47 (30, 03)	0.22 (4.00, 00)
Yes		
No No		
	29 (5 40)	66 (422 42)
Missing Sentia complication	28 (5, 49)	6.6 (4.33, 43)
Septic complication	0.9 ( 4.5.9.96)	
Yes	0.8 (-4.5, 8.26)	0.00 (0.0 1.02)
No	-1 (-11, 2)	0.99 (0.9, 1.03)
Missing	28 (1, 50)	6.6 (4.25, 43)
Renal failure		
Yes		
No	2= (4, 42)	0.4 (4.4440)
Missing	27 (4, 48)	6.4 (4.11, 42)
Coagulopathy		
Yes	-4.3 (-16, 0)	
No	4(0, 16)	1.04 (1, 1.19)
Missing	27 (4, 48)	6.4 (4.11, 42)
Need for reexploration or resurgery		
Yes	2.5 (0, 7.8)	
No	-3 (-8, -2)	$0.97 \ (0.92, \ 0.98)$
Missing	36 (-3.47, 56)	7(4.22, 48)
Failure of conservative management		
No	6(2, 26)	1.07 (1.02, 1.36)
Yes	-6.3 (-26, -2.4)	0.21 (0, 2.28)
Missing	41 (30, 56)	$14.67 \ (8.42, 55)$
EQ-5D mobility at discharge	· ,	` ' '
I have no problems in walking	-27 (-44, 31)	0.7 (0.55, 1.52)
I have some problems in walking	8 (-18.1, 23.91)	1.73 (0.08, 12.79)
I am confined to bed	19 (1.6, 30)	(,)
Missing	33 (-23, 50)	4.3 (2.38, 20.5)
	33 (23, 30)	1.5 (2.50, 20.5)

EQ-5D self-care at discharge		
I have no problems with self-care	-17 (-46.52, 43)	0.75 (0.48, 1.93)
I have some problems bathing or dressing myself	20 (-24.9, 36.87)	2.82 (0.2, 20.26)
I am unable to bathe or dress myself	-3 (-26.15, 19.7)	0.86 (0.07, 7.29)
Missing	33 (-23, 50)	4.3 (2.38, 20.5)
EQ-5D usual activities at discharge	00 ( 20, 00)	1.0 (2.00, 20.0)
I have no problems in performing my usual activities	-14 (-49, 47)	$0.77 \ (0.45, \ 2.14)$
I have some problems in performing my usual activities	16 (-36.56, 39.71)	1.73 (0.1, 12.04)
I am unable to perform my usual activities	-2 (-24.06, 14.32)	0.88 (0, 5.17)
Missing	33 (-23, 50)	4.3 (2.38, 20.5)
EQ-5D pain/discomfort at discharge	( -,,	- ()
I have no pain or discomfort	-25 (-52, 49)	0.5 (0.25, 3.07)
I have moderate pain or discomfort	-15 (-49, -3)	$0.7\ (0.26,\ 1.03)$
I have extreme pain or discomfort	40 (29.7, 55)	, , ,
Missing	33 (-23, 50)	4.3 (2.38, 20.5)
EQ-5D anxiety/depression at discharge	, , ,	( , , , ,
I am not anxious or depressed	9(2, 36)	1.11 (1.03, 1.68)
I am moderately anxious or depressed	-10.2 (-39.9, -3.9)	0.4(0, 1.24)
I am extremely anxious or depressed	1.7 (-1.5, 6.4)	( , , ,
Missing	33 (-23, 50)	4.3 (2.38, 20.5)
EQ-5D mobility at 30 day follow-up	, ,	, ,
I have no problems in walking	-3 (-28, 30)	0.96 (0.71, 1.43)
I have some problems in walking	-3 (-29, 22)	0.85(0, 5.21)
I am confined to bed	5.9 (0.97, 15)	
Missing	51 (34, 69)	7.38 (5.4, 53)
EQ-5D self-care at 30 day follow-up		
I have no problems with self-care	-1 (-25, 27)	0.99 (0.74, 1.39)
I have some problems bathing or dressing myself	5(-20, 22)	1.5 (0.83, 4.17)
I am unable to bathe or dress myself	-4.1 (-29, 1.5)	0.59 (0, 2.6)
Missing	51 (34, 69)	7.38 (5.4, 53)
EQ-5D usual activities at 30 day follow-up		
I have no problems in performing my usual activities	6(-21, 31)	$1.08 \ (0.79, 1.58)$
I have some problems in performing my usual activities	-3 (-20.77, 16.16)	0.8 (0, 11.66)
I am unable to perform my usual activities	-3.1 (-29, 5)	0.69 (0, 3.76)
Missing	51 (34, 69)	7.38 (5.4, 53)
EQ-5D pain/discomfort at 30 day follow-up		
I have no pain or discomfort	-1 (-18, 17)	0.99 (0.8, 1.24)
I have moderate pain or discomfort	-1 (-20, 13)	$0.95 \ (0.25, \ 2.7)$
I have extreme pain or discomfort	2(-1, 8.8)	,
Missing	51 (34, 69)	7.38 (5.4, 53)
EQ-5D anxiety/depression at 30 day follow-up	10 (0 00)	(
I am not anxious or depressed	10 (3, 36)	1.12 (1.03, 1.58)
I am moderately anxious or depressed	-11.1 (-35.8, -2.9)	0.26 (0, 1.11)
I am extremely anxious or depressed	1 (-0.9, 5.1)	- 00 (5 4 50)
Missing	51 (34, 69)	7.38 (5.4, 53)
Patient satisfaction	0 ( 01 00)	0.00 (0.07 1.40)
Very satisfied	-9 (-31, 30)	0.89 (0.67, 1.46)
Somewhat satisfied	1 (-15.8, 15.15)	1.08 (0.09, 6.5)
Somewhat dissatisfied	5.2 (-13, 15)	2.24 (1, 4.12)
Very dissatisfied	1.6 (-9.3, 9.53)	1.38 (0.81, 3.95)
Missing Number of heapitalizations for this injury	19 (-21, 34.53)	5.75 (0.11, 31.03)
Number of hospitalizations for this injury Missing	31 (21, 47)	11.33 (6.8, 48)
EQ-5D health state at discharge	-15 (-84, 75.14)	
nd-on nearm state at discharge	-10 (-04, 10.14)	$0.77 \ (0.06, 9.82)$

Missing	38 (24, 53)	4.8 (3.23, 23)
EQ-5D health state at 30 day follow-up	0 (-60, 50)	1(0.37, 2)
Missing	53 (40, 73)	7.62 (5.5, 53)
Cost of treatment	-2500 (-33500, 250)	0.5 (0, 1.5)
Missing	69 (-68, 98)	$4.29 \ (0.25, \ 9.3)$

Table S8 Absolute and relative differences in outcomes after training, comparing standard care with  $\operatorname{PTC}$ 

Outcome	Absolute difference	Relative difference
30 day mortality		
Yes	11.1 (-5.3, 22.33)	$3.27 \ (0.61, 18.82)$
No	-11 (-22.46, 4)	$0.88 \ (0.78, 1.05)$
Missing	14 (-24.07, 32)	2.17(0, 12)
24 hour mortality	,	, ,
Yes		
No		
Missing	-1 (-16, 4)	0.88(0, 3.33)
In-hospital mortality	, ,	, , ,
Yes	7.9 (-3.66, 16)	2.93 (0.74, 17.86)
No	-8 (-24, 2)	0.92 (0.8, 1.03)
Missing	2 (-1, 6)	(0.0, 2.00)
Self-ambulatory at discharge	2 (1,0)	
Yes	2 (-1, 12)	1.02 (1, 1.14)
No	-1.4 (-12, 0.7)	1.02 (1, 1.14)
Missing	21 (-1, 45)	8 (1.25, 46)
Return to work	21 (-1, 40)	0 (1.20, 40)
Yes	-17 (-41, -4)	$0.76\ (0.42,0.98)$
No	17 (1, 41)	
	40 (-36, 64)	1.57 (1.05, 6.48)
Missing  Dulmanany complication	40 (-30, 04)	3.5 (0.18, 12.99)
Pulmonary complication		
Yes		
No M:	09 ( 00 40)	9.9 (0.10, 14.05)
Missing	23 (-22, 40)	$3.3 \ (0.12, 14.65)$
Septic complication	2.4 ( 2.7, 2)	
Yes	-2.4 (-8.7, 0)	1.00 (1.1.1)
No	2(0, 9)	1.02(1, 1.1)
Missing	23 (-20, 41)	3.3 (0.13, 15)
Renal failure		
Yes		
No		
Missing	22 (-20, 39.08)	$3.2 \ (0.13, 14.5)$
Coagulopathy		
Yes	$0 \ (-17.31, \ 4.2)$	
No	0(-17, 0)	$1\ (0.83,\ 1)$
Missing	22 (-20, 39.08)	3.2 (0.13, 14.5)
Need for reexploration or resurgery		
Yes	0.9 (-5.32, 4.2)	
No	-1 (-5, 4)	0.99 (0.95, 1.04)
Missing	32 (-21.3, 51.96)	$4.2 \ (0.17, 17.75)$
Failure of conservative management		
No	0 (-22, 8)	1 (0.77, 1.09)
Yes	0.1 (-8.4, 22)	$1.06 \ (0.26, 17)$
Missing	32 (-35.17, 54)	3.67(0, 20.5)
EQ-5D mobility at discharge	, , ,	( , , ,
I have no problems in walking	-30 (-50, -1.99)	$0.67\ (0.5,\ 1)$
I have some problems in walking	14 (0.84, 33)	3.8 (2.06, 16.11)
prostomo m nomino	(0.01, 00)	3.0 ( <b>-</b> .30, 10.11)
I am confined to bed	15.7 (-15.7, 28)	

EQ-5D self-care at discharge		
I have no problems with self-care	-35 (-52, -23)	0.59 (0.44, 0.73)
I have some problems bathing or dressing myself	22.7 (0, 41)	3.73 (1.21, 20.62)
I am unable to bathe or dress myself	12.3 (-5.5, 44.8)	2.84 (0.88, 20)
Missing	30 (-10, 51)	3.31 (0.35, 13.38)
EQ-5D usual activities at discharge	( , ,	, , ,
I have no problems in performing my usual activities	-38 (-61, -23)	$0.55 \ (0.35, \ 0.69)$
I have some problems in performing my usual activities	29.7 (17, 46.5)	4.58 (2.2, 26.47)
I am unable to perform my usual activities	8.3 (-6, 33)	2.24 (0.76, 18.12)
Missing	30 (-10, 51)	3.31 (0.35, 13.38)
EQ-5D pain/discomfort at discharge		, , ,
I have no pain or discomfort	-40 (-62, -22)	$0.38\ (0.21,\ 0.57)$
I have moderate pain or discomfort	5 (-16, 45)	1.17 (0.69, 4.46)
I have extreme pain or discomfort	35 (-36.75, 49)	,
Missing	30 (-10, 51)	3.31 (0.35, 13.38)
EQ-5D anxiety/depression at discharge	, ,	,
I am not anxious or depressed	-3 (-40, 10)	0.97 (0.59, 1.13)
I am moderately anxious or depressed	1.8 (-11.4, 39.6)	1.36 (0.43, 19.33)
I am extremely anxious or depressed	1.7 (0, 6.4)	, , ,
Missing	30 (-10, 51)	3.31 (0.35, 13.38)
EQ-5D mobility at 30 day follow-up	, ,	,
I have no problems in walking	-21 (-50, -14)	0.79 (0.5, 0.86)
I have some problems in walking	17(5, 50)	,
I am confined to bed	4.2 (-3.7, 12)	
Missing	44 (-43.29, 69)	3.93 (0.16, 15.75)
EQ-5D self-care at 30 day follow-up		
I have no problems with self-care	-18 (-39, -10)	$0.81\ (0.61,\ 0.9)$
I have some problems bathing or dressing myself	15(7.4, 33)	
I am unable to bathe or dress myself	2.5 (-7, 25.9)	$1.74 \ (0.58, 11.76)$
Missing	44 (-43.29, 69)	$3.93 \ (0.16, 15.75)$
EQ-5D usual activities at 30 day follow-up		
I have no problems in performing my usual activities	-14 (-46, 1)	$0.85 \ (0.52, \ 1.03)$
I have some problems in performing my usual activities	10.3 (-1, 41.2)	7.06 (4.78, 23.89)
I am unable to perform my usual activities	3.5 (-5.6, 24.9)	$2.03 \ (0.84, 11.76)$
Missing	$44 \ (-43.29, 69)$	$3.93 \ (0.16, 15.75)$
EQ-5D pain/discomfort at 30 day follow-up		
I have no pain or discomfort	-7 (-28, 6)	$0.92 \ (0.72, \ 1.09)$
I have moderate pain or discomfort	5 (-10, 26.65)	1.36 (0.61, 14.5)
I have extreme pain or discomfort	2(0, 8.8)	
Missing	44 (-43.29, 69)	$3.93 \ (0.16, 15.75)$
EQ-5D anxiety/depression at 30 day follow-up		
I am not anxious or depressed	-2(-42, 7)	$0.98 \ (0.57, \ 1.09)$
I am moderately anxious or depressed	0.5 (-11, 42.2)	1.15 (0.31, 27.27)
I am extremely anxious or depressed	$1\ (0,\ 5.1)$	
Missing	$44 \ (-43.29, 69)$	$3.93 \ (0.16, 15.75)$
Patient satisfaction		
Very satisfied	-24 (-39, -17)	$0.74 \ (0.6, \ 0.84)$
Somewhat satisfied	$8.3 \ (-1.09, \ 35.6)$	$2.46 \ (1.09, 19.33)$
Somewhat dissatisfied	9.4 (4, 17)	
Very dissatisfied	5.8 (0, 13)	(, , _ , _ , _ )
Missing	20 (-1, 44)	7.67 (1.25, 45)
Number of hospitalizations for this injury	00 ( 07 40 07)	0.00 (0.45 5)
Missing	23 (-27, 42.97)	3.09 (0, 15.5)
EQ-5D health state at discharge	-40 (-89, -25)	$0.56 \ (0.06, \ 0.83)$

Missing	29 (-32, 53)	2.53 (0.18, 8.62)
EQ-5D health state at 30 day follow-up	-17 (-91, 5)	0.83 (0.09, 1.1)
Missing	44 (-47, 69.25)	3.59 (0.14, 14.75)
Cost of treatment	1000 (-5000, 27188.83)	$1.67 \ (0.4, \ 26.67)$
Missing	69 (-5, 98.46)	$4.29 \ (0.78, 10.67)$

Table S9 Absolute and relative differences in outcomes after training, comparing ATLS with PTC  $\,$ 

Outcome	Absolute difference	Relative difference
30 day mortality		
Yes	-1.1 (-22, 11.22)	0.78 (0, 4.44)
No	1(-12, 22)	$1.01 \ (0.88, \ 1.28)$
Missing	-10(-37, 9)	0.17 (0, 3.17)
24 hour mortality		
Yes		
No		
Missing	-6 (-15, -4)	0.25 (0, 0.88)
In-hospital mortality	, ,	
Yes	-0.4 (-17, 9.31)	0.9(0, 3.94)
No	0 (-11, 15)	1 (0.89, 1.19)
Missing	1 (-2, 6)	( , , ,
Self-ambulatory at discharge	( ) -)	
Yes	3(0, 14)	1.03 (1, 1.16)
No	-2.9 (-14, -1.4)	1.00 (1, 1.10)
Missing	1 (-28, 25)	1.33(0, 13)
Return to work	1 (-20, 20)	1.55 (0, 15)
Yes	-12 (-40, 7)	0.83 (0.42, 1.16)
No	12 (-9, 40)	1.4 (0.86, 4.93)
		, , ,
Missing	-7 (-59, 9)	$0.56 \ (0.05, \ 2.11)$
Pulmonary complication		
Yes		
No	F ( 10 F)	0 7 (0 0 0)
Missing	-5 (-42, 5)	0.5 (0, 2.2)
Septic complication	/	
Yes	-3.2 (-8.2, -0.8)	
No	3(0, 8)	1.03 (1, 1.09)
Missing	-5 (-41, 5)	0.5 (0, 2.2)
Renal failure		
Yes		
No		
Missing	-5 (-39, 5)	0.5 (0, 2.2)
Coagulopathy		
Yes	4.3(0, 16)	
No	-4 (-16, 0)	0.96 (0.84, 1)
Missing	-5 (-39, 5)	0.5(0, 2.2)
Need for reexploration or resurgery	, ,	
Yes	-1.6(-7.7,0)	
No	2(0, 8)	1.02(1, 1.09)
Missing	-4 (-46, 5)	0.6 (0, 2.4)
Failure of conservative management	(, -,	(-,)
No	-6 (-26, -1)	$0.94\ (0.73,\ 0.99)$
Yes	6.4 (0.9, 26.4)	5 (2.6, 27.14)
Missing	-9 (-52, 9)	0.25 (0, 3)
EQ-5D mobility at discharge	0 (02, 0)	0.20 (0, 0)
I have no problems in walking	-3 (-37.88, 35.16)	0.97 (0.61, 1.59)
I have some problems in walking		, , , , , , , , , , , , , , , , , , , ,
-	6 (-14, 25.04)	$2.2 \ (0.45, 14.67)$
I am confined to bed	-3.3 (-26, 3.6)	0.77 (0.11 0.05)
Missing	-3 (-51, 9)	$0.77 \ (0.11, \ 2.25)$

EQ-5D self-care at discharge		
I have no problems with self-care	-18 (-57, 21)	0.79 (0.41, 1.49)
I have some problems bathing or dressing myself	2.7 (-30, 29.35)	1.33 (0, 8)
I am unable to bathe or dress myself	15.3 (4, 42.8)	3.28 (1.16, 20)
Missing	-3 (-51, 9)	$0.77 \ (0.11, 2.25)$
EQ-5D usual activities at discharge	( , ,	( , , ,
I have no problems in performing my usual activities	-24 (-63, 10.64)	0.72 (0.28, 1.39)
I have some problems in performing my usual activities	13.7 (-21.15, 56)	2.65 (0.74, 23.16)
I am unable to perform my usual activities	10.3 (-1, 50.3)	2.54 (1.09, 18.33)
Missing	-3 (-51, 9)	0.77(0.11, 2.25)
EQ-5D pain/discomfort at discharge	, ,	, , ,
I have no pain or discomfort	-15 (-53, 33.45)	0.77 (0.3, 2.35)
I have moderate pain or discomfort	20 (3, 49)	1.67 (1.12, 4.46)
I have extreme pain or discomfort	-5 (-49, 5.8)	
Missing	-3 (-51, 9)	0.77 (0.11, 2.25)
EQ-5D anxiety/depression at discharge	, ,	, , ,
I am not anxious or depressed	-12 (-43, -4)	0.87 (0.55, 0.96)
I am moderately anxious or depressed	12 (1.7, 42.8)	$3.4 \ (1.17, \ 22.31)$
I am extremely anxious or depressed	0 (-6.8, 0)	,
Missing	-3 (-51, 9)	0.77 (0.11, 2.25)
EQ-5D mobility at 30 day follow-up	, ,	
I have no problems in walking	-18 (-55, -4)	$0.82\ (0.45,\ 0.98)$
I have some problems in walking	20 (11.9, 55)	
I am confined to bed	-1.7 (-12, 1.7)	
Missing	-7 (-65, 8)	$0.53 \ (0.05, \ 2.14)$
EQ-5D self-care at 30 day follow-up		
I have no problems with self-care	-17 (-38, -8)	$0.82\ (0.61,\ 0.94)$
I have some problems bathing or dressing myself	10 (-6, 30)	
I am unable to bathe or dress myself	6.6 (2.4, 24.3)	$2.94 \ (1.65, \ 13.89)$
Missing	-7 (-65, 8)	$0.53 \ (0.05, \ 2.14)$
EQ-5D usual activities at 30 day follow-up		
I have no problems in performing my usual activities	-20 (-46, -12)	$0.79 \ (0.53, \ 0.88)$
I have some problems in performing my usual activities	13.3 (5, 38)	8.82 (9.31, 21.11)
I am unable to perform my usual activities	6.6 (1.8, 24)	2.94 (1.7, 13.89)
Missing	-7 (-65, 8)	$0.53 \ (0.05, \ 2.14)$
EQ-5D pain/discomfort at 30 day follow-up		
I have no pain or discomfort	-6 (-29, 7)	$0.93 \ (0.69, 1.11)$
I have moderate pain or discomfort	6 (-8, 28)	$1.43 \ (0.67, \ 12)$
I have extreme pain or discomfort	0 (-6.6, 0)	
Missing	-7 (-65, 8)	$0.53 \ (0.05, \ 2.14)$
EQ-5D anxiety/depression at 30 day follow-up		
I am not anxious or depressed	-12 (-34, -3)	$0.88 \ (0.65, \ 0.98)$
I am moderately anxious or depressed	11.6 (-0.06, 34.4)	$4.41 \ (0.87, \ 23.75)$
I am extremely anxious or depressed	0 (-4.8, 0)	0 50 (0 05 0 44)
Missing	-7 (-65, 8)	$0.53 \ (0.05, \ 2.14)$
Patient satisfaction	15 ( 25 0)	0.04 (0.05 1.10)
Very satisfied	-15 (-35, 8)	0.84 (0.65, 1.16)
Somewhat satisfied	7.3 (-2.4, 26.7)	$2.28 \ (0.93, 12.14)$
Somewhat dissatisfied	4.2 (-7.79, 15.31)	
Very dissatisfied	4.2 (-3, 17)	1 22 (0 12)
Missing Number of heapitalizations for this injury	1 (-27.21, 24)	$1.33\ (0,\ 13)$
Number of hospitalizations for this injury	Q ( 11 O)	0.27 (02.75)
Missing FO-5D health state at discharge	-8 (-44, 8) 25 ( 85, 15)	0.27 (0, 2.75)
EQ-5D health state at discharge	-25 (-85, 15)	$0.72 \ (0.06, \ 1.39)$

Missing	-9 (-55, 10)	$0.53 \ (0.08, \ 1.92)$
EQ-5D health state at 30 day follow-up	-17 (-91, 0)	0.83 (0.09, 1)
Missing	-9 (-67, 9)	$0.47 \ (0.04, \ 2.25)$
Cost of treatment	3500 (0, 33000)	3.33(1,55.56)
Missing	0 (-95.49, 70)	1 (0.11, 4.45)

Table S10 Absolute and relative differences in changes from baseline for all outcomes, comparing standard care with  $\Lambda TLS$ 

Outcome	Absolute difference	Relative difference
30 day mortality		
Yes	9.6 (-25.64, 31.44)	
No	-9 (-31, 26)	
Missing	23 (-9.51, 43)	
24 hour mortality	, ,	
Yes	-2.4 (-9.8, 0)	
No	2 (-3, 10)	
Missing	7 (-1, 18)	
In-hospital mortality	. ( =, ==)	
Yes	3.4 (-16.6, 21.53)	
No	-3 (-22, 16)	
Missing	1 (-3.52, 5)	2(0.5, 5)
Self-ambulatory at discharge	1 (3.32, 3)	= (0.0, 0)
Yes	-4 (-38, 4)	
No	4.7 (-3.7, 38)	
Missing	22 (-31, 39.93)	
Return to work	22 ( 61, 65.56)	
Yes	37 (18, 86)	
No	-37 (-86, -19)	
Missing	45 (-39, 71)	
Pulmonary complication	10 ( 00, 11)	
Yes	0 (-12, 0)	
No	0 (-10, 2)	
Missing	32 (-33, 51.17)	
Septic complication	52 ( 55, 51.17)	
Yes	-1.7 (-12.85, 5.17)	
No	1 (-8, 10)	
Missing	33 (-36, 53.18)	
Renal failure	33 (30, 33.10)	
Yes		
No		
Missing	31 (-34, 50.16)	
Coagulopathy	01 (04, 00.10)	
Yes	-4.3 (-16, 0)	
No	4(0, 16)	
Missing	32 (-34, 51.29)	
Need for reexploration or resurgery	02 (01, 01.20)	
Yes	2.5 (-3.8, 10.29)	
No	-3 (-11, 1)	
Missing	39 (-43, 63.27)	20.5 (7.8, 58)
Failure of conservative management	99 (49, 00.21)	20.9 (1.0, 90)
No	6 (0, 26)	
Yes	-6.3 (-26, -1.5)	
Missing	49 (33, 66)	
EQ-5D mobility at discharge	45 (55, 55)	
I have no problems in walking	-22 (-78, -6)	
I have some problems in walking	-1.7 (-26.99, 20.5)	
I am confined to bed	23 (7.18, 63)	
Missing	35 (-51.8, 60.45)	
MIDSHIE	55 (-51.6, 00.45)	

TO TO 10		
EQ-5D self-care at discharge	10 (70 0)	
I have no problems with self-care	-18 (-56, 6)	
I have some problems bathing or dressing myself	22 (-5, 59)	
I am unable to bathe or dress myself	-4 (-42.7, 17.31)	
Missing	$35 \ (-51.8, \ 60.45)$	
EQ-5D usual activities at discharge		
I have no problems in performing my usual activities	-18 (-64, 15)	
I have some problems in performing my usual activities	$13 \ (-21.42, \ 46.56)$	
I am unable to perform my usual activities	5 (-12.9, 45)	
Missing	35 (-51.8, 60.45)	
EQ-5D pain/discomfort at discharge		
I have no pain or discomfort	-25 (-66.11, 51)	
I have moderate pain or discomfort	$11 \ (-43, \ 52.7)$	
I have extreme pain or discomfort	14 (-8, 37.6)	
Missing	35 (-51.8, 60.45)	
EQ-5D anxiety/depression at discharge		
I am not anxious or depressed	-20 (-73, -4)	0.39 (-30, 1.56)
I am moderately anxious or depressed	21.8 (6, 68)	0.34 (-264, 1.29)
I am extremely anxious or depressed	-0.9 (-9.42, 5.6)	
Missing	35 (-51.8, 60.45)	
EQ-5D mobility at 30 day follow-up	,	
I have no problems in walking	-1 (-42, 28)	
I have some problems in walking	1 (-33, 27)	
I am confined to bed	-0.1 (-29.57, 36.4)	
Missing	51 (-40, 74)	
EQ-5D self-care at 30 day follow-up	, ,	
I have no problems with self-care	11 (-6, 59)	
I have some problems bathing or dressing myself	15.5 (-8.77, 58.1)	
I am unable to bathe or dress myself	-27.1 (-60.9, -19.65)	
Missing	51 (-40, 74)	
EQ-5D usual activities at 30 day follow-up	- ( -) - /	
I have no problems in performing my usual activities	35 (14, 76)	
I have some problems in performing my usual activities	-22 (-64, -9.9)	
I am unable to perform my usual activities	-12.8 (-38.4, -6.2)	
Missing	51 (-40, 74)	
EQ-5D pain/discomfort at 30 day follow-up	01 (10, 11)	
I have no pain or discomfort	-8 (-74.56, 15)	
I have moderate pain or discomfort	6 (-18, 58.86)	
I have extreme pain or discomfort	2 (-6.57, 11.06)	
Missing	51 (-40, 74)	
EQ-5D anxiety/depression at 30 day follow-up	01 (10, 11)	
I am not anxious or depressed	13 (-14, 45)	
I am moderately anxious or depressed	-14.3 (-39.4, 1.3)	
I am extremely anxious or depressed	1 (-5.8, 9.6)	
Missing	51 (-40, 74)	
Patient satisfaction	01 (10, 11)	
Very satisfied	-12 (-45.57, 27)	
Somewhat satisfied	14 (3.16, 53.3)	0.39 (-27.05, 2.55)
Somewhat dissatisfied	-2.5 (-17.13, 10.9)	0.03 (-21.00, 2.00)
Very dissatisfied	-1 (-21.48, 17.3)	
Missing	19 (-29, 36)	
Number of hospitalizations for this injury	0 (-1, -1)	
Missing	39 (29, 57)	
EQ-5D health state at discharge	-5 (-68.92, 60)	
Da or nearth brave at discharge	-5 (-55.52, 55)	

Missing	33 (-38, 62.24)	
EQ-5D health state at 30 day follow-up	90 (86, 116)	
Missing	49 (-35, 77)	
Cost of treatment	-9500 (-74630.2, 10549.64)	
Missing	60 (-66, 95)	9.57 (0.05, 94)

Table S11 Absolute and relative differences in changes from baseline for all outcomes, comparing standard care with  ${\it PTC}$ 

Outcome	Absolute difference	Relative difference
30 day mortality		
Yes	18.5 (14.1, 44.3)	
No	-18 (-44, -14)	
Missing	19 (-14.83, 37)	
24 hour mortality		
Yes	-2.4 (-9.8, 0)	
No	2(0, 10)	
Missing	4 (-10, 12)	
In-hospital mortality	- ( )	
Yes	10 (3.8, 25.8)	
No	-10 (-26, -5)	
Missing	2 (-1, 6)	
Self-ambulatory at discharge	2 (-1, 0)	
Yes	3 (-10, 40.7)	
No	· · · · · · · · · · · · · · · · · · ·	
	-2.4 (-40.06, 10.2)	
Missing	$27\ (15.73,\ 49)$	
Return to work	16 ( 61 . 54)	
Yes	16 (-61, 54)	
No	-16 (-56, 57.88)	
Missing	43 (-6, 69.51)	
Pulmonary complication		
Yes	2.2 (0, 10)	
No	-2(-10, 0)	
Missing	32 (-3, 52)	
Septic complication		
Yes	-0.5 (-7.44, 7.44)	
No	0 (-9, 5)	
Missing	34 (-2, 55)	
Renal failure	<b>,</b> , ,	
Yes		
No		
Missing	32 (-2, 51)	
Coagulopathy	J= ( =, J=)	
Yes	0 (-17.31, 4.2)	
No	0 (-17, 0)	
Missing	33 (-2, 52)	
Need for reexploration or resurgery	33 (-2, 32)	
Yes	3 (-0.1, 10.7)	
No		
	-3 (-11, -1)	
Missing	41 (-1, 64)	
Failure of conservative management	0 ( 07 4)	
No N	-2 (-27, 4)	
Yes	2.3 (-4.1, 27.3)	
Missing	41 (-42, 64)	
EQ-5D mobility at discharge		
I have no problems in walking	-9 (-45, 37.2)	
I have some problems in walking	8 (-10.76, 43.6)	
I am confined to bed	-0.4 (-71.7, 22)	
Missing	44 (33, 74)	

EQ-5D self-care at discharge		
I have no problems with self-care	-14 (-67.77, 24)	
I have some problems bathing or dressing myself	19.7 (-9.7, 62.13)	
I am unable to bathe or dress myself	-6.4 (-47, 21)	
Missing	44 (33, 74)	
EQ-5D usual activities at discharge	11 (33, 11)	
I have no problems in performing my usual activities	-16 (-72.97, 22)	
I have some problems in performing my usual activities	16.7 (-15, 65.46)	
I am unable to perform my usual activities	$0.1 \ (-34, 32.74)$	
Missing	44 (33, 74)	
EQ-5D pain/discomfort at discharge	( , ,	
I have no pain or discomfort	-39 (-78.7, -13)	
I have moderate pain or discomfort	27 (0, 61)	
I have extreme pain or discomfort	11.4 (-3.77, 36.29)	
Missing	44 (33, 74)	
EQ-5D anxiety/depression at discharge	, ,	
I am not anxious or depressed	-9 (-45.55, 37.45)	0.59(0, 9.18)
I am moderately anxious or depressed	7.8 (-42.26, 43.34)	0.59 (0.03, 12.41)
I am extremely anxious or depressed	1.5 (-2, 13.5)	, , ,
Missing	44 (33, 74)	
EQ-5D mobility at 30 day follow-up	<b>,</b> ,	
I have no problems in walking	5(-35, 49)	
I have some problems in walking	11 (-16, 83)	
I am confined to bed	-16.5 (-82.9, 0)	
Missing	48 (-7, 76.59)	
EQ-5D self-care at 30 day follow-up		
I have no problems with self-care	2(-65.02, 32)	
I have some problems bathing or dressing myself	13.2 (-14.34, 87.99)	
I am unable to bathe or dress myself	-15.8 (-44.79, 21.8)	
Missing	48 (-7, 76.59)	
EQ-5D usual activities at 30 day follow-up		
I have no problems in performing my usual activities	6 (-70, 32)	
I have some problems in performing my usual activities	-4 (-21.6, 47.5)	
I am unable to perform my usual activities	-1.5 (-17, 36.26)	
Missing	48 (-7, 76.59)	
EQ-5D pain/discomfort at 30 day follow-up		
I have no pain or discomfort	-4 (-61.12, 34.64)	
I have moderate pain or discomfort	0 (-48, 45)	
I have extreme pain or discomfort	4.3 (2.1, 12.9)	
Missing	$48 \ (-7, 76.59)$	
EQ-5D anxiety/depression at 30 day follow-up	10 ( 00 0)	
I am not anxious or depressed	-13 (-60, 8)	
I am moderately anxious or depressed	9.3 (-11.4, 60.2)	
I am extremely anxious or depressed	3.3(2, 12.9)	
Missing	$48 \ (-7, 76.59)$	
Patient satisfaction	10 ( 66 .6)	
Very satisfied Somewhat satisfied	-18 (-66, 6)	
	1.3 (-41.15, 30.03)	
Somewhat dissatisfied Very dissatisfied	5.6 (-3.77, 19.4)	
Very dissatisfied Missing	$ \begin{array}{c} 11\ (4.3,\ 25) \\ 24\ (15,\ 48) \end{array} $	
Number of hospitalizations for this injury	0 (-1, -1)	
Missing	29 (-33.53, 52)	
EQ-5D health state at discharge	-10 (-90, 39)	
24 02 nouten beate at amonarge	10 ( 00, 00)	

Missing	35 (-3, 59)
EQ-5D health state at 30 day follow-up	73 (15, 114)
Missing	45 (-8, 73.22)
Cost of treatment	-10975 (-81672.96, 7582.31)
Missing	64 (-2, 103)

Table S12 Absolute and relative differences in changes from baseline for all outcomes, comparing ATLS with PTC

Outcome	Absolute difference	Relative difference
30 day mortality		
Yes	8.9 (-12.57, 32.12)	
No	-9 (-32.63, 12)	
Missing	-4 (-37, 7)	
24 hour mortality		
Yes	0 (-12, 0)	
No	0 (-11, 0)	
Missing	-3 (-15, 3)	
In-hospital mortality		
Yes	6.6 (-4.2, 24.9)	
No	-7 (-25, 2)	
Missing	1(-2, 6)	
Self-ambulatory at discharge	, ,	
Yes	7 (0, 41)	
No	-7.1 (-41.1, -0.7)	
Missing	5 (-25, 33)	
Return to work	( , ,	
Yes	-21 (-89, 10)	
No	21 (-12, 89)	
Missing	-2 (-66, 41)	
Pulmonary complication	( ) /	
Yes	2.2 (0, 10)	
No	-2 (-10, 0)	
Missing	0 (-47, 36)	
Septic complication	( -1, 33)	
Yes	1.2 (-3.75, 13.86)	
No	-1 (-14, 3)	
Missing	1 (-44.28, 39)	
Renal failure	, ,	
Yes		
No		
Missing	1 (-41.9, 37)	
Coagulopathy	- (0, 0.)	
Yes	4.3 (0, 16)	
No	-4 (-16, 0)	
Missing	1 (-42.61, 38)	
Need for reexploration or resurgery	(,,	
Yes	0.5 (-6.1, 5.2)	
No	0 (-5, 6)	
Missing	2(-46, 49)	
Failure of conservative management	- (10, 10)	
No	-8 (-28, -2)	
Yes	8.6 (2.1, 28.5)	
Missing	-8 (-67, 9)	
EQ-5D mobility at discharge	S ( 01, 0)	
I have no problems in walking	13 (-12, 72)	
I have some problems in walking	9.7 (-7.7, 45)	
I am confined to bed	-23.4 (-57.5, -1.76)	
	,	
Missing	9 (-39, 51)	

EQ-5D self-care at discharge		
I have no problems with self-care	4 (-32.19, 58.2)	
I have some problems bathing or dressing myself	-2.3 (-50.44, 25.2)	
I am unable to bathe or dress myself	-2.4 (-38, 33)	
Missing	9 (-39, 51)	
EQ-5D usual activities at discharge	- ( , - )	
I have no problems in performing my usual activities	2 (-36, 56.83)	
I have some problems in performing my usual activities	3.7 (-34.93, 48)	
I am unable to perform my usual activities	-4.9 (-51.52, 21)	
Missing	9 (-39, 51)	
EQ-5D pain/discomfort at discharge	,	
I have no pain or discomfort	-14 (-65.85, 40)	
I have moderate pain or discomfort	16 (-23, 70)	
I have extreme pain or discomfort	-2.6 (-30, 6.85)	
Missing	9 (-39, 51)	
EQ-5D anxiety/depression at discharge	,	
I am not anxious or depressed	11 (-15, 70)	1.5 (0.5, 35)
I am moderately anxious or depressed	-14 (-67.3, 8.2)	1.74 (0.56, 28.5)
I am extremely anxious or depressed	2.4(0, 11.4)	, , ,
Missing	9 (-39, 51)	
EQ-5D mobility at 30 day follow-up	,	
I have no problems in walking	6 (-34, 57)	1.86(0.3, 44)
I have some problems in walking	10 (-16, 87.6)	
I am confined to bed	-16.4 (-101.8, 2.94)	
Missing	-3 (-72, 40)	
EQ-5D self-care at 30 day follow-up		
I have no problems with self-care	-9 (-93, 16)	
I have some problems bathing or dressing myself	-2.3 (-39.42, 30.96)	
I am unable to bathe or dress myself	11.3 (-7.7, 62.3)	
Missing	-3 (-72, 40)	
EQ-5D usual activities at 30 day follow-up		
I have no problems in performing my usual activities	-29 (-66, 7)	
I have some problems in performing my usual activities	18 (-1.3, 44.9)	
I am unable to perform my usual activities	$11.3 \ (1.1, \ 34.5)$	
Missing	-3(-72, 40)	
EQ-5D pain/discomfort at 30 day follow-up		
I have no pain or discomfort	4 (-39.62, 56.63)	
I have moderate pain or discomfort	-6 (-62.71, 31)	
I have extreme pain or discomfort	2.3 (0, 12)	
Missing	-3 (-72, 40)	
EQ-5D anxiety/depression at 30 day follow-up	(	
I am not anxious or depressed	-26 (-49, -17.47)	
I am moderately anxious or depressed	$23.6\ (12.2,46)$	
I am extremely anxious or depressed	2.3 (0, 11)	
Missing	-3 (-72, 40)	
Patient satisfaction	0 ( 17 00 05)	
Very satisfied	-6 (-47.26, 25)	
Somewhat satisfied	-12.7 (-57.2, 2.75)	
Somewhat dissatisfied	8.1 (0.9, 30)	
Very dissatisfied	12 (4.2, 26)	
Missing Number of hospitalizations for this injury	5 (-22, 30)	
Number of hospitalizations for this injury	0 (-1, -0.5)	
Missing EQ-5D health state at discharge	-10 (-55, 11) -5 (-78.91, 41.66)	
nd-on nearm state at discharge	-0 (-10.01, 41.00)	

Missing	2(-44.02, 42)
EQ-5D health state at 30 day follow-up	-17 (-109, 20)
Missing	-4 (-71, 18)
Cost of treatment	-1475 (-33639.83, 29927.2)
Missing	4 (-75, 76)