

**Supplementary table 1.** Time points of individual questionnaires

Questionnaire	Baseline	1 Day	1 week	1 month	3 months	6 months
Brief Pain Inventory	X	X	X	X	X	X
Numeric Rating Scale	X	X	X	X	X	X
Izbicki Pain score	X	X	X	X	X	X
Global Perceived Effect		X	X	X	X	X
Short Form Survey	X			X	X	X

**Supplementary table 2.** Long term pain scores

All patients	2 weeks	Mean difference	Response	1 month	Mean difference	Response	3 months	Mean difference	Response	6 months	Mean difference	Response
	n=23			n=20			n=18			n=13		
<b>Brief pain inventory</b>												
Severity of pain (0-10)	5.1 (2.6)	- 0.8 (2.2)	8/23 (35%)	4.1 (2.3)	- 1.2 (2.1)	8/20 (40%)	4.9 (2.7)	- 1.0 (2.9)	7/18 (39%)	4.3 (2.8)	- 1.2 (2.5)	5/13 (38%)
Pain interference (0-10)	4.8 (2.9)	- 0.9 (2.7)	8/23 (35%)	4.5 (2.8)	- 1.0 (2.7)	8/20 (40%)	4.1 (2.9)	- 1.4 (2.9)	11/18 (61%)	5.1 (3.5)	- 0.1 (2.7)	6/13 (46%)
<b>Numeric rating scale</b>												
Average pain (0-10)	5.2 (2.8)	- 1.3 (2.4)	7/23 (30%)	4.9 (2.5)	- 1.3 (2.7)	7/20 (35%)	4.6 (2.7)	- 1.7 (2.8)	9/18 (50%)	4.1 (2.9)	- 2.1 (2.9)	8/13 (62%)
Worst pain (0-10)	6.6 (2.9)	- 1.5 (2.8)	7/23 (30%)	6.1 (2.7)	- 1.7 (2.8)	8/20 (40%)	5.8 (2.9)	- 2.1 (3.2)	9/18 (50%)	6.2 (3.5)	- 1.8 (3.3)	4/13 (31%)
<b>Global perceived effect</b>												
Recovery of complaints (1-7)	3.9 (1.2)	NA	3/23 (13%)	3.9 (1.3)	NA	3/20 (15%)	2.9 (1.6)	NA	9/18 (50%)	3.2 (1.5)	NA	5/13 (38%)
Treatment satisfaction (1-7)	4.0 (1.9)		5/23 (22%)	3.2 (1.3)		5/20 (25%)	3.4 (1.9)		6/18 (33%)	3.0 (1.2)		4/13 (31%)
<b>Chronic Pancreatitis</b>	n=10			n=9			n=8			n=8		
<b>Brief pain inventory</b>												
Severity of pain (0-10)	5.3 (2.5)	- 0.9 (2.4)	4/10 (40%)	3.6 (2.5)	- 2.3 (2.2)	6/9 (67%)	4.1 (3.1)	- 1.9 (3.2)	4/8 (50%)	5.2 (2.5)	- 0.8 (2.3)	3/8 (38%)
Pain interference (0-10)	5.1 (3.2)	- 1.1 (2.7)	2/10 (20%)	4.4 (3.5)	- 1.7 (3.7)	5/9 (56%)	3.9 (1.3)	- 1.9 (2.8)	5/8 (63%)	6.1 (3.3)	+0.2 (2.3)	3/8 (38%)
<b>Numeric rating scale</b>												
Average pain (0-10)	5.5 (2.9)	- 1.5 (2.6)	4/10 (40%)	4.1 (2.5)	- 2.6 (3.0)	6/9 (67%)	4.1 (3.0)	- 2.6 (3.9)	5/8 (63%)	4.7 (2.9)	- 2.2 (2.5)	5/8 (63%)
Worst pain (0-10)	6.5 (3.3)	- 2.2 (3.3)	4/10 (40%)	5.2 (3.1)	- 3.2 (3.2)	5/9 (56%)	4.4 (3.1)	- 2.6 (3.9)	4/8 (50%)	7.4 (2.7)	- 3.0 (4.0)	2/8 (25%)
<b>Izbicki pain score (0-100)*</b>	72.1 (21.1)	- 3.5 (27.4)	2/10 (20%)	63.2 (21.6)	- 10.9 (16.9)	2/8 (25%)	55.5 (33.1)	- 20.9 (34.2)	2/6 (33%)	69.9 (21.3)	- 4.8 (14.3)	1/7 (14%)
<b>Global perceived effect</b>												
Recovery of complaints (1-7)	3.7 (1.4)	NA	2/10 (20%)	3.1 (1.1)	NA	2/9 (22%)	2.8 (1.4)	NA	4/8 (50%)	3.1 (1.6)	NA	4/8 (50%)
Treatment satisfaction (1-7)	3.8 (1.9)		2/10 (20%)	2.9 (1.4)		3/9 (33%)	3.8 (2.1)		3/8 (38%)	2.9 (1.2)		3/8 (38%)
<b>Pancreatic Ductal Adenocarc</b>	n=13			n=11			n=10			n=5		
<b>Brief pain inventory</b>												
Severity of pain (0-10)	5.0 (2.7)	- 0.7 (2.2)	4/13 (31%)	4.9 (1.9)	- 0.4 (1.6)	2/11 (18%)	5.5 (2.4)	- 0.4 (2.8)	3/10 (30%)	3.1 (3.1)	- 1.8 (2.9)	2/5 (40%)
Pain interference (0-10)	4.5 (2.9)	- 0.8 (2.7)	6/13 (46%)	4.5 (2.3)	- 0.5 (1.5)	3/11 (27%)	4.3 (3.0)	- 0.9 (3.0)	6/10 (60%)	3.6 (3.6)	- 1.2 (3.8)	3/5 (60%)
<b>Numeric rating scale</b>												
Average pain (0-10)	4.9 (2.8)	- 1.1 (2.3)	3/13 (23%)	5.5 (2.4)	- 0.2 (1.9)	1/11 (0%)	5.0 (2.4)	- 1.6 (2.6)	4/10 (40%)	3.2 (3.3)	- 2.2 (2.5)	3/5 (60%)
Worst pain (0-10)	6.6 (2.8)	- 1.0 (2.3)	3/13 (23%)	6.8 (2.2)	- 0.5 (1.9)	3/11 (27%)	6.1 (2.9)	- 2.2 (3.5)	5/10 (50%)	4.4 (4.2)	- 3.0 (4.0)	2/5 (40%)
<b>Global perceived effect</b>												
Recovery of complaints (1-7)	3.7 (1.4)	NA	3/13 (23%)	3.1 (1.1)	NA	1/11 (9%)	2.8 (1.4)	NA	5/10 (50%)	3.1 (1.6)	NA	1/5 (20%)
Treatment satisfaction (1-7)	3.8 (1.9)		3/13 (23%)	2.9 (1.4)		2/11 (18%)	3.8 (2.1)		3/10 (30%)	2.9 (1.2)		1/5 (20%)

No missing values unless indicated otherwise. Higher scores indicate worse condition. Bold numbers indicate clinical relevant difference. **NA**: not applicable. \*Only in n=10 at 2 weeks, n=8 at 1 month, n=6 at 3 months, and n=7 at 6 months.

**Supplementary table 3.** Long term pain scores in responders to treatment

	Baseline	1 day	Mean difference	N patients response	2 weeks	Mean difference	N patients response	1 month	Mean difference	N patients response
	n=9				n=5			n=6		
<b>Brief pain inventory</b>										
Severity of pain (0-10)	5.5 (1.3)	2.9 (1.8)	- 2.6 (0.8)	9/9 (100%)	3.0 (2.8)	- 2.7 (2.5)	4/5 (80%)	4.2 (1.9)	- 1.4 (1.8)	3/6 (50%)
Pain interference (0-10)	4.3 (2.2)	2.9 (2.3)	- 1.3 (0.9)	6/9 (67%)	3.0 (2.3)	- 1.6 (2.7)	3/5 (60%)	5.1 (3.3)	+ 1.0 (2.6)	1/5 (20%)
<b>Numeric rating scale</b>										
Average pain (0-10)	5.3 (1.6)	4.7 (1.9)	- 0.7 (1.5)	2/9 (22%)	3.2 (2.9)	- 2.4 (3.1)	3/5 (60%)	5.0 (2.2)	- 0.7 (2.3)	1/6 (17%)
Worst pain (0-10)	7.6 (1.7)	6.3 (1.9)	- 1.2 (0.9)	3/9 (33%)	4.4 (2.5)	- 3.0 (3.1)	3/5 (60%)	5.8 (2.3)	- 1.3 (2.2)	3/6 (50%)
<b>Global perceived effect</b>										
Recovery of complaints (1-7)	NA	2.7 (1.0)	NA	4/9 (44%)	3.6 (1.5)	NA	1/5 (20%)	3.8 (1.5)	NA	1/6 (17%)
Treatment satisfaction (1-7)		2.6 (1.2)		5/9 (56%)	3.4 (1.7)		2/5 (40%)	2.7 (1.0)		2/6 (33%)

	3 months	Mean difference	N patients response	6 months	Mean difference	N patients response
n=6 <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-kind="ghost"></td>						
<b>Brief pain inventory</b>						
Severity of pain (0-10)	5.8 (2.3)	+ 0.2 (2.8)	1/6 (17%)	4.1 (2.9)	- 0.9 (2.4)	1/4 (25%)
Pain interference (0-10)	4.4 (2.8)	+ 0.5 (3.2)	2/6 (33%)	5.0 (3.4)	+ 1.9 (3.5)	1/4 (25%)
<b>Numeric rating scale</b>						
Average pain (0-10)	5.7 (1.6)	- 0.3 (2.2)	1/6 (17%)	4.3 (3.1)	- 0.5 (1.7)	1/4 (25%)
Worst pain (0-10)	6.7 (1.9)	<b>-1.3 (3.3)</b>	3/6 (50%)	5.5 (3.9)	- 1.0 (2.8)	1/4 (25%)
<b>Global perceived effect</b>						
Recovery of complaints (1-7)	3.0 (1.2)	NA	4/6 (67%)	4.0 (1.6)	NA	1/4 (25%)
Treatment satisfaction (1-7)	3.0 (1.8)		3/6 (50%)	3.0 (0.8)		1/4 (25%)

**Supplementary table 4.** Association of invasive treatments and change in medication and response

	2 weeks (n=21)		1 month (n=20)		3 months (n=18)		6 months (n=13)	
	No	Yes	No	Yes	No	Yes	No	Yes
<b>Less medication</b>	2 (17%)	2 (20%)	2 (18%)	2 (25%)	2 (18%)	4 (67%)	3 (43%)	2 (33%)
<b>No change</b>	6 (50%)	6 (60%)	7 (64%)	3 (38%)	3 (27%)	2 (33%)	2 (29%)	2 (33%)
<b>More medication</b>	4 (33%)	2 (20%)	2 (18%)	3 (38%)	6 (55%)	0 (0%)	2 (29%)	2 (33%)

	No invasive treatment	Invasive treatment
<b>No response</b>	10 (36%)	10 (36%)
<b>Response</b>	4 (14%)	4 (14%)

**Supplementary table 5.** Absolute versus relative difference in pain

BPI	Day one (n=30)					
	Baseline (mean, SD)	1 day (mean, SD)	Mean absolute difference <sup>^</sup>	Mean relative difference <sup>^</sup>	N patients response AD (%)	N patients response RD (%)
Severity of pain 0-10	5.9 (1.6)	4.9 (2.4)	- 0.8 (1.5)		9/29 (31%)	8/29 (28%)
Pain interference 0-10	5.6 (2.4)	4.6 (2.5)	- 0.9 (1.1)	-16.1% -21.6%	10/28 (36%)	8/28 (29%)
BPI	Two weeks (n=23)					
	Baseline (mean, SD)	Two weeks (mean, SD)	Mean absolute difference <sup>^</sup>	Mean relative difference <sup>^</sup>	N patients response AD (%)	N patients response RD (%)
Severity of pain 0-10	5.9 (1.6)	5.1 (2.6)	- 0.8 (2.2)		8/23 (35%)	7/23 (30%)
Pain interference 0-10	5.6 (2.4)	4.8 (2.9)	- 0.9 (2.2)	- 11.2% - 12.9%	8/23 (35%)	8/23 (40%)
BPI	One month (n=20)					
	Baseline (mean, SD)	One month (mean, SD)	Mean absolute difference <sup>^</sup>	Mean relative difference <sup>^</sup>	N patients response AD (%)	N patients response RD (%)
Severity of pain 0-10	5.9 (1.6)	4.1 (2.3)	- 1.2 (2.1)		8/20 (40%)	7/20 (35%)
Pain interference 0-10	5.6 (2.4)	4.5 (2.8)	- 1.0 (2.7)	- 18.5% - 12.9%	8/20 (40%)	8/20 (40%)

BPI	Three months (n=18)					
	Baseline (mean, SD)	Three months (mean, SD)	Mean absolute difference <sup>^</sup>	Mean relative difference <sup>^</sup>	N patients response AD (%)	N patients response RD (%)
Severity of pain 0-10	5.9 (1.6)	4.9 (2.7)	-1.0 (2.9)		7/18 (39%)	6/18 (33%)
Pain interference 0-10	5.6 (2.4)	4.1 (2.9)	<b>-1.4 (2.9)</b>	- 9.6% - 15.4%	11/18 (61%)	9/18 (50%)
BPI	Six months (n=13)					
	Baseline (mean, SD)	Six months (mean, SD)	Mean absolute difference <sup>^</sup>	Mean relative difference <sup>^</sup>	N patients response AD (%)	N patients response RD (%)
Severity of pain 0-10	5.9 (1.6)	4.3 (2.8)	-1.2 (2.5)		5/13 (39%)	5/13 (39%)
Pain interference 0-10	5.6 (2.4)	5.1 (3.5)	-0.1 (2.7)	- 19.7% +10%	6/13 (46%)	5/13 (39%)

BPI: brief pain inventory, AD: absolute difference,

RD: relative difference