

## ELECTRONIC SUPPLEMENTARY MATERIAL

Le Bescond V. et al.: Validation of the postoperative Quality of Recovery-15 questionnaire after emergency surgery and association with quality of life at three months

**Disclaimer:** Electronic Supplementary Material (ESM) is supplied by the authors for the benefit of readers. This feature is intended to provide additional information, context, and/or dimension to complement articles. Readers should be aware that unlike the main print manuscript, ESM may not undergo extensive peer review and typically is posted as supplied by the authors without editing, proofreading, accuracy checking, copyediting, or typesetting; it is published online only.

## TABLE OF CONTENTS

Different types of emergency surgical procedures
Hospitalization status and POMS complication at 24 hr (H24) and 48 hr (H48)
after surgery
Recovery status according to the patient at 24 (H24) and 48 hr (H48) after surgery
Items responsiveness of the QoR-15 score between preoperative phase and 24 hr
after surgery
Items responsiveness of the QoR-15 score between preoperative phase and 48 hr
after surgery
Description of the domains of the EQ5D-3L quality of life scale at 3 months and
association with the QoR-15 score completed at 24 hr after surgery
Heatmap representation of inter-item correlations for the QoR-15 at 24 hr after
surgery
Heatmap representation of inter-item correlations for the QoR-15 at 48 hr after
surgery
Scree plot representation of the QoR-15 score at 24 hr after surgery
Scree plot representation of the QoR-15 score at 48 hr after surgery

eTable 1 Different types of emergency surgical procedures

Types of surgical procedure	<b>Overall</b> N = 352 (%)
Abdominal laparoscopy	58 (16)
Abdominal laparotomy	13 (4)
Abdominal wall surgery	23 (6)
Facial bone surgery	25 (0)
Facial plastic surgery	1 (0.3)
Tracheal endoscopy	2(1)
Other ENT procedures	5(1)
Orthopedic lower limb procedures	96 (27)
Orthopedic upper limb procedures	67 (19)
Orthopedic tendon procedures	4(1)
Proctology surgery	12 (3)
Kidney	4(1)
Video thoracoscopy	4(1)
Urological endoscopy	30 (8)
Laparotomy for urinary tract	2(1)
Vascular / Aorta	1 (0.3)
Vascular / Lower limb	` '
	4(1)
Vascular / Upper limb	1 (0.3)
Cervical spine	2(1)
Lumbar spine	6 (2)
Other	14 (4)

ENT = Ear, Nose, Throat

eTable 2 Hospitalization status and POMS complication at 24 hr (H24) and 48 hr (H48) after surgery

	Overall		
	<i>N</i> = 352 (%)		
Hospitalization status at H24			
Home	114 (32)		
Surgical ward	212 (60)		
Medical ward	14 (4)		
Intensive care unit	12 (3)		
At least one POMS complication at H24	180 (51)		
The main POMS Complications at H24			
Pulmonary	23 (6)		
Infectious/sepsis	87 (25)		
Renal	19 (5)		
Gastrointestinal	18 (5)		
Cardiovascular	8 (2)		
Neurological	5(1)		
Wound complication	3 (1)		
Hematological	8 (2)		
Pain	99 (28)		
Opioid consumption at H24 (mg)	0.0 [0.0–6.0]		
Hospitalization status at H48			
Home	192 (55)		
Surgical ward	136 (39)		
Medical ward	14 (4)		
Intensive care unit	8 (2)		
At least one POMS complication at H48	99 (28)		
The main POMS Complications at H48			
Pulmonary	8 (2)		
Infectious/sepsis	67 (19)		
Renal	9 (3)		
Gastrointestinal	11 (3)		
Cardiovascular	1 (0,3)		
Neurological	6 (2)		
Wound complication	3 (1)		
Hematological	7 (2)		
Pain	18 (5)		
Opioid consumption at H48 (mg)	0 [0.0–0.0]		

eTable 3 Recovery status according to the patient at 24 (H24) and 48 hr (H48) after surgery

	Overall
	N = 352 (%)
7-point Likert scale for recovery status at H24	
"Really worse"	1 (0.3)
"Worse"	8 (2)
"Slightly worse"	18 (5)
"Same"	57 (16)
"Slightly better"	104 (29)
"Better"	94 (27)
"Really better"	70 (20)
"Good recovery" at H24	312 (89)
7-point Likert scale for recovery status at H48	
"Really worse"	3 (1)
"Worse"	11 (3)
"Slightly worse"	12 (3)
"Same"	35 (10)
"Slightly better"	98 (28)
"Better"	96 (27)
"Really better"	94 (27)
"Good recovery" at H48	330 (5)

eTable 4 Items responsiveness of the QoR-15 score between preoperative phase and 24 hr after surgery

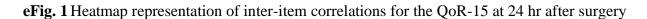
QoR-15 item	Preoperative	Postoperative (H24)	Mean change	% Change from baseline	Cohen effect size	Standardized response mean
Q1	9.21 (1.78)	9.27 (1.46)	-0.02 (-0.3 to 0.19)	-0.65	0.01	0.01
Q2	6.72 (3.98)	7.1 (3.31)	-0.39 (-0.92 to 0.15)	-5.67	0.1	0.07
Q3	6.35 (2.8)	6.29 (2.55)	0.04 (-0.34 to 0.42)	0.94	0.01	0.01
Q4	5.53 (3.08)	5.93 (2.94)	-0.48 (-0.9 to -0.05)	-7.27	0.16	0.11
Q5	6.83 (3.66)	6.19 (3.41)	0.68 (0.16 to 1.17)	9.41	0.19	0.14
Q6	9.15 (1.95)	9.29 (1.67)	-0.11 (-0.35 to 0.15)	-1.54	0.06	0.05
Q7	9.12 (1.62)	9.46 (1.2)	-0.34 (-0.56 to -0.14)	-3.74	0.21	0.17
Q8	3.86 (3.78)	3.92 (3.25)	-0.09 (-0.62 to 0.38)	-1.54	0.02	0.02
<b>Q</b> 9	5.96 (3.27)	5.62 (2.81)	0.33 (-0.15 to 0.69)	5.67	0.1	0.08
Q10	6.06 (3.06)	6.41 (2.6)	-0.36 (-0.74 to 0.02)	-5.74	0.12	0.09
Q11	4.57 (3.28)	5.22 (2.9)	-0.77 (-1.2 to -0.37)	-14.13	0.23	0.18
Q12	5.72 (3.5)	7.17 (2.85)	-1.5 (-1.95 to -1.07)	-25.44	0.43	0.35
Q13	8.42 (2.94)	9.18 (2.13)	-0.77 (-1.15 to -0.45)	-9.05	0.26	0.22
Q14	5.54 (3.42)	7.52 (3.23)	-2.02 (-2.48 to -1.52)	-36	0.59	0.43
Q15	7.28 (3.27)	8.14 (3.06)	-0.91 (-1.36 to -0.43)	-11.78	0.28	0.2
Total	100.31 (22.99)	106.7 (22.66)	-6.71 (-9.88 to -3.28)	-6.37	0.29	0.21

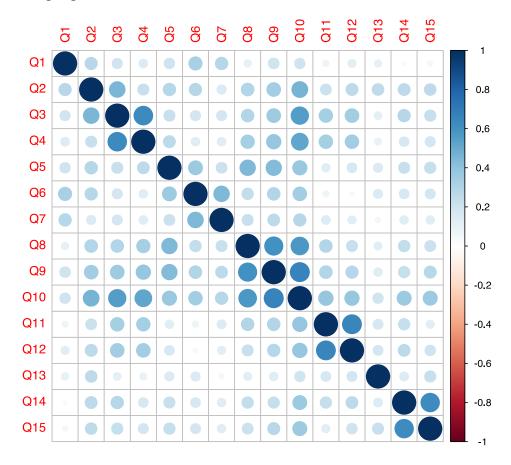
eTable 5 Items responsiveness of the QoR-15 score between preoperative phase and 48 hr after surgery

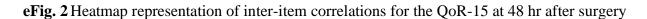
QoR-15 item	Preoperative	Postoperative (H24)	Mean change	% Change from baseline	Cohen effect size	Standardized response mean
Q1	9.21 (1.78)	9.45 (1.42)	-0.25 (-0.49 to -0.03)	-2.61	0.14	0.11
Q2	6.72 (3.98)	7.8 (2.85)	-1.04 (-1.54 to -0.56)	-16.12	0.26	0.21
Q3	6.35 (2.8)	7.18 (2.32)	-0.75 (-1.13 to -0.41)	-12.97	0.27	0.22
Q4	5.53 (3.08)	6.82 (2.66)	-1.32 (-1.72 to -0.95)	-23.45	0.43	0.35
Q5	6.83 (3.66)	7.09 (2.93)	-0.38 (-0.81 to 0.1)	-3.82	0.1	0.08
Q6	9.15 (1.95)	9.43 (1.54)	-0.32 (-0.6 to -0.05)	-3.08	0.16	0.12
Q7	9.12 (1.62)	9.47 (1.17)	-0.31 (-0.52 to -0.11)	-3.85	0.19	0.16
Q8	3.86 (3.78)	4.94 (3.07)	-1.06 (-1.58 to -0.55)	-27.69	0.28	0.21
Q9	5.96 (3.27)	6.34 (2.64)	-0.36 (-0.78 to 0.05)	-6.33	0.11	0.09
Q10	6.06 (3.06)	7.03 (2.43)	-0.9 (-1.3 to -0.46)	-15.9	0.29	0.23
Q11	4.57 (3.28)	6.17 (2.7)	-1.63 (-2.04 to -1.21)	-34.78	0.5	0.42
Q12	5.72 (3.5)	8.23 (2.43)	-2.57 (-3 to -2.13)	-44.04	0.73	0.6
Q13	8.42 (2.94)	9.53 (1.59)	-1.11 (-1.45 to -0.73)	-13.21	0.38	0.33
Q14	5.54 (3.42)	8.09 (2.88)	-2.55 (-3 to -2.07)	-46.36	0.75	0.57
Q15	7.28 (3.27)	8.39 (2.8)	-1.09 (-1.54 to -0.65)	-15.21	0.33	0.26
Total	100.31 (22.99)	115.95 (22.28)	-15.62 (-19.09 to -12.37)	-15.59	0.68	0.49

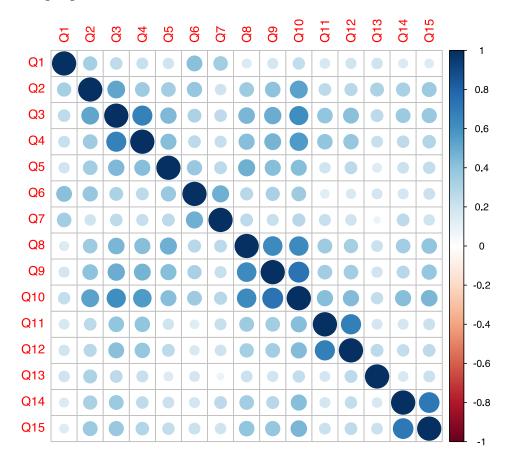
**eTable 6** Description of the domains of the EQ5D-3L quality of life scale at three months and association with the QoR-15 score completed at 24 hr after surgery

	Overall (N = 338)	Mean QoR-15 score at 24 hours	P value
EQ5D – Mobility (%)			0.007
No problem in walking	248 (73)	108.6 (23.3)	
Some problems in walking	84 (25)	101.5 (21.2)	
Confined to bed	6 (2)	96.7 (19.0)	
EQ5D – Self-care (%)			0.021
No problems with self-care	288 (85)	108.0 (22.8)	
Some problems washing or dressing	38 (11)	98.3 (21.7)	
Unable to wash or dress	12 (4)	100.7 (24.6)	
EQ5D – Usual activities (%)			0.025
No problems with performing activities	227 (67)	108.6 (23.4)	
Some problems with performing activities	95 (28)	103.0 (21.8)	
Unable to perform activities	16 (5)	100.4 (20.6)	
EQ5D – Pain/Discomfort (%)			0.043
No pain or discomfort	187 (55)	109.1 (23.5)	
Moderate pain or discomfort	137 (40)	103.3 (22.3)	
Extreme pain or discomfort	14 (4)	105.3 (17.9)	
EQ5D – Anxiety/Depression (%)			0.005
Not anxious or depressed	280 (83)	108.3 (22.7)	
Moderately anxious or depressed	50 (15)	97.9 (22.2)	
Extremely anxious or depressed	8 (2)	100.8 (24.7)	



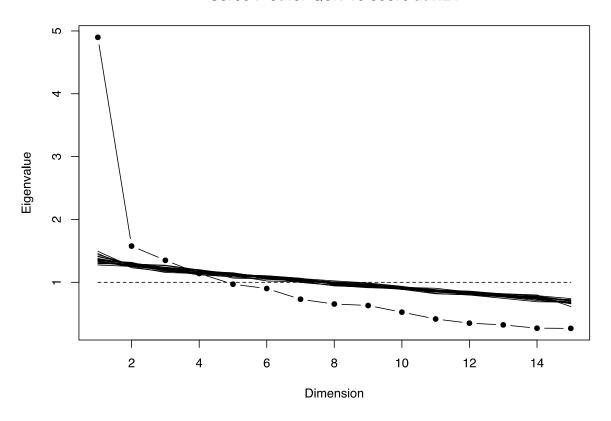






**eFig. 3** Scree plot representation of the QoR-15 score at 24 hr after surgery

## Scree Plot for QoR-15 score at H24



**eFig. 4** Scree plot representation of the QoR-15 score at 48 hr after surgery

## Scree Plot for QoR-15 score at H48

