

# Who gains the most quality-of-life benefits from metabolic and bariatric surgery:

one-year findings from the prospective REBORN study Reyhaneh Yousefi<sup>1,2</sup>, Tair Ben-Porat<sup>1,2</sup>, Ariany Marques-Vieira<sup>1,2</sup>, Kim L Lavoie<sup>1,3</sup>, Simon L Bacon<sup>1,2</sup>



# INTRODUCTION

- It is essential to prioritise patients for metabolic and bariatric surgery (MBS) based on their potential postoperative benefits.
- Quality of life (QoL) is one component of the core outcome set for MBS to inform clinical decision-making.

### **AIMS AND HYPOTHESIS:**

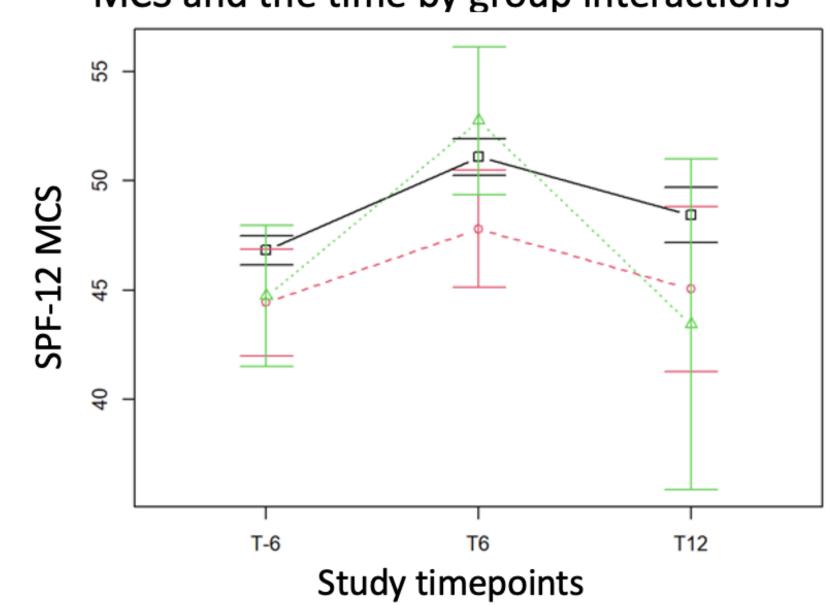
- We aimed to examine changes in QoL during the first postoperative year.
- We hypothesised that patients with varied obesity classes and comorbidity status will experience QoL benefits from MBS.

### **RESULTS:**

- We found significant interactions between time and group for weight, BMI and %EWL (p<0.001, for all).
- There were no interactions between time and group for the physical components summary (PCS) and mental components summary (MCS) of QoL.
- There were main effects of time for physical (p<0.001) and mental (p<0.001) component of, indicating that PCS increased consistently across time and MCS increased from pre- to 6 months post-surgery.

## **RESULTS:**

Figure 1. The change trajectory in SF-12 MCS and the time by group interactions



• There was no significant difference in change trajectory between groups over time.

## **METHODS:**

Sociodemographic measures

**QoL questionnaire [SF-12])** 

Anthropometric measurements

**QoL measurements (Short-Form** 

Medical history

Groups	Conditions				
	Class of obesity	Comorbidity			
G1	Class II (35≤BMI<40)	No			
	Class II (30≤BMI<35)	Yes			
G2	Class II (35≤BMI<40)	Yes			
G3	Class III (BMI≥40)	Yes/No			
	T0 Operation day	T12 • Anthropometric measureme • QoL measurements			
T-6	4 to 6 months)				
Baseline visit	Anthropometric mea	<ul> <li>Anthropometric measurements</li> </ul>			

QoL measurements

\* Repeated measures mixed models was used to

investigate change in variables over time

# **RESULTS:**

Dependent Variable	Main effect time		Main effect group		Time-group interaction	
Deg	F	<i>P</i> -value	F	<i>P</i> -value	F	<i>P</i> -value
Weight	204.48	<0.001	45.96	<0.001	6.75	<0.001
BMI	259.87	<0.001	69.16	<0.001	10.43	<0.001
EWL%	162.17	<0.001	0.19	0.66	8.4	<0.001
SF-12 PCS	804.17	<0.001	4.16	0.01	1.28	0.27
SF12 MCS	629.33	<0.001	3.32	0.04	0.65	0.63

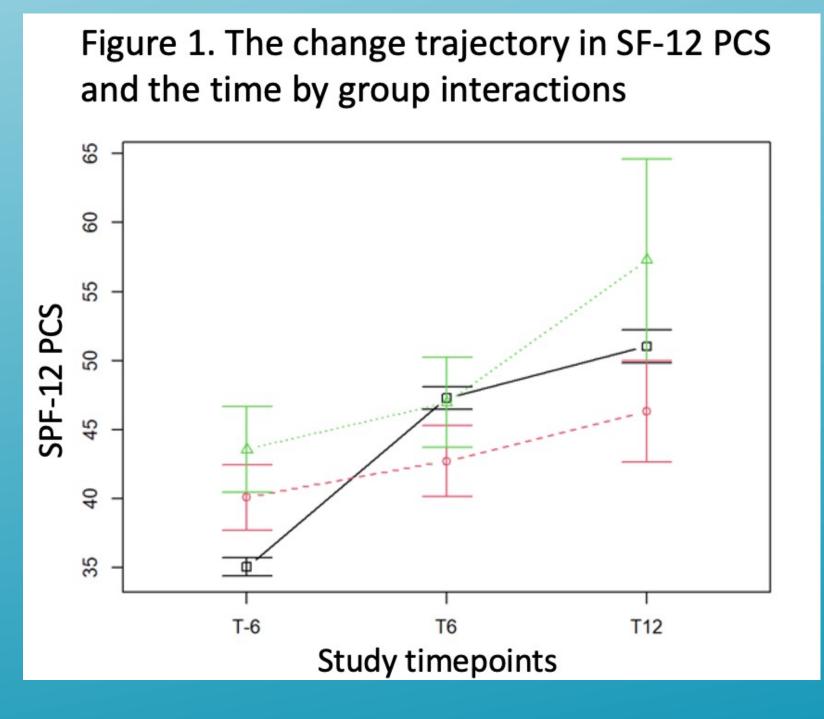
## **CONCLUSION:**

- All patients had similar patterns of changes in QoL despite different weight trajectories
- This suggests not excluding patients due to their initial weight and comorbidity status
- Eligibility criteria should encompass all patients who might benefit from surgery

# PARTICIPANT CHARACTERISTICS:

Variable Mean (SD) or % (N)		Group 1 (n=28)	Group 2 (n=36)	Group 3 (n=460)
Age		42.6(99.9)	47.5(10.1)	44.2(11.4)
Female		92.9(26)	72.2(26)	77.2(355)
Weight		102.8(7.8)	109.9(13.1)	139.1(27.2)
BMI		37.2(2.5)	38.2(1.4)	50.2(7.8)
MBS	Sleeves	82.1(23)	75(27)	91.3(420)
	Gastric bypass	17.9(5)	25(9)	8.7(40)

### **RESULTS:**



 There was no significant difference in change trajectory between groups over time.











