

Perioperative biopsychosocial phenotypes and their relationship with long-term pain outcomes

Amber De Groote^{1,2*}, Lore Dams^{1,2,3*}, Elien Van der Gucht³, Jan Schepers⁴, Michel Mertens^{1,2,5}, An De Groef^{1,2,6}, Mira Meeus^{1,2}

1. MOVANT, Department of Rehabilitation Sciences and Physiotherapy, Faculty of Medicine and Health Sciences, University of Antwerp, Wilrijk, Belgium; 2. Pain in Motion International Research Group, 3. University Hospital Leuven, Department of Physical and Rehabilitation Medicine, Leuven, Belgium; 4. Department of Methodology and Statistics, Maastricht University, Maastricht, The Netherlands; 5. Research School CAPRHRI, Department of Rehabilitation Medicine, Maastricht University, The Netherlands; 6. KU Leuven – University of Leuven, Department of Rehabilitation Sciences, Leuven, Belgium. * Shared first authors

KU LEUVEN

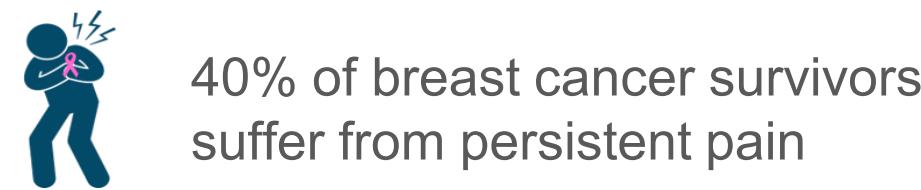
UZ
LEUVEN

University
of Antwerp

Maastricht
University

PAIN IN MOTION

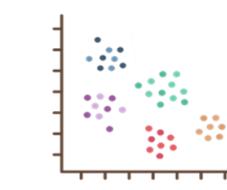
INTRODUCTION



40% of breast cancer survivors suffer from persistent pain



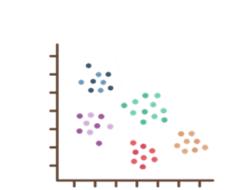
Biopsychosocial phenotypes



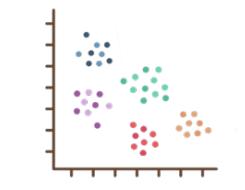
AIMS



Identifying phenotypes before and 1 week post-surgery using latent class analysis



Relationship between identified phenotypes and pain 1 year post-surgery?



METHODS



n = 184

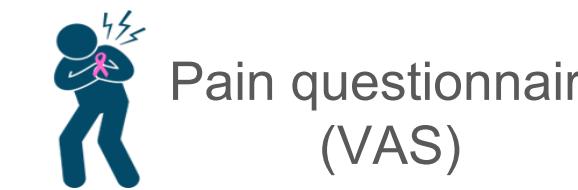


Preop evaluation

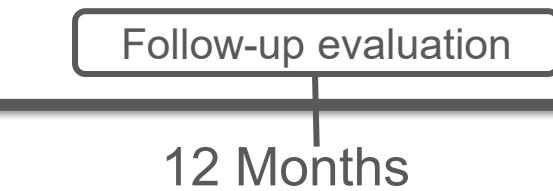


Postop evaluation

Breast cancer surgery 1 week 12 Months



Pain questionnaire (VAS)



RESULTS

Preoperative phenotypes

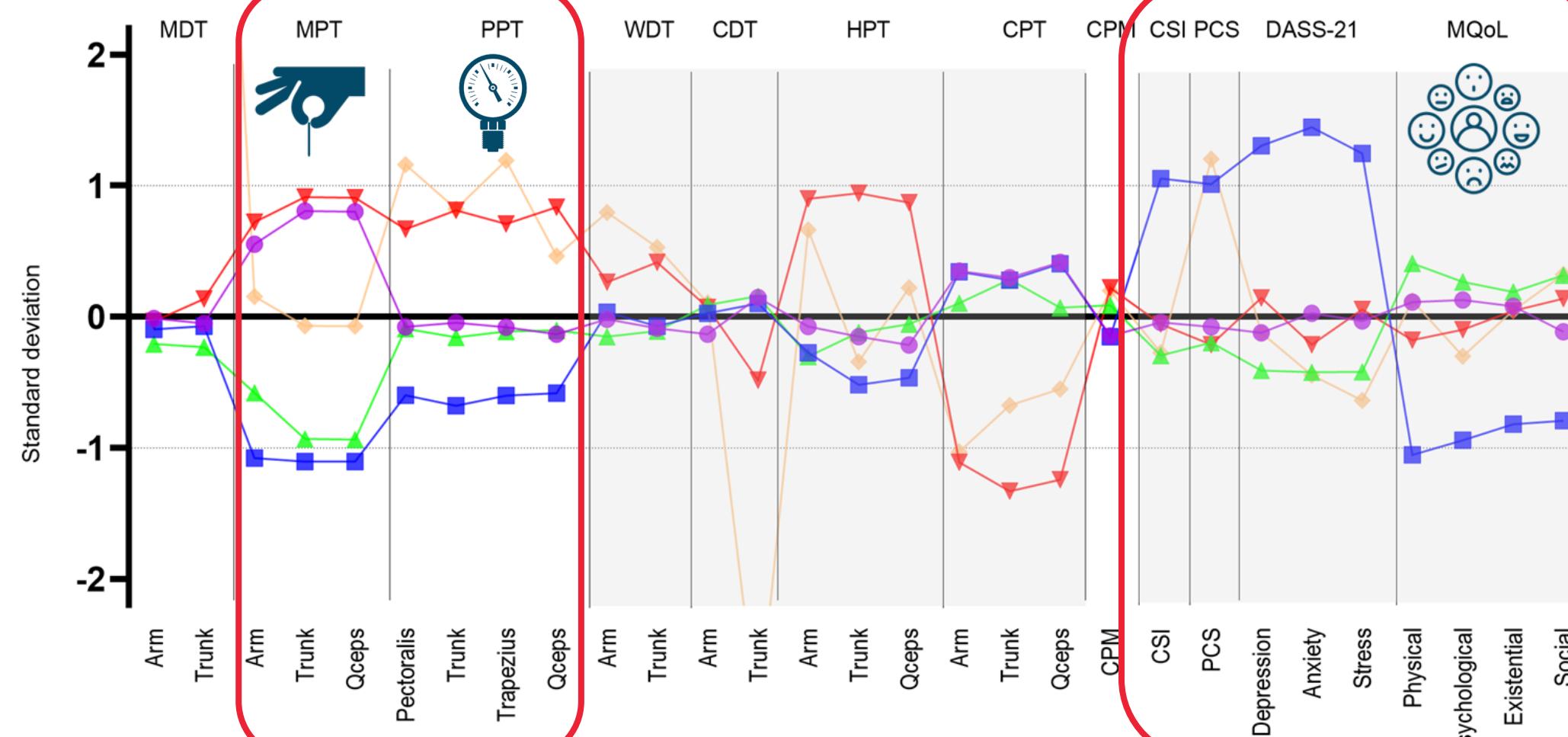
phenotype 1
n=65; 35,7%
VAS: 22,8 (21,4)

phenotype 2
n=21; 12,1%
VAS: 33,4 (24,1)

phenotype 3
n= 63; 33,6%
VAS: 22,6 (21,4)

phenotype 4
n=32; 17,5%
VAS: 21,3 (20,2)

phenotype 5
n=2; 1,1%
VAS: 24,0 (33,9)



Postoperative phenotypes

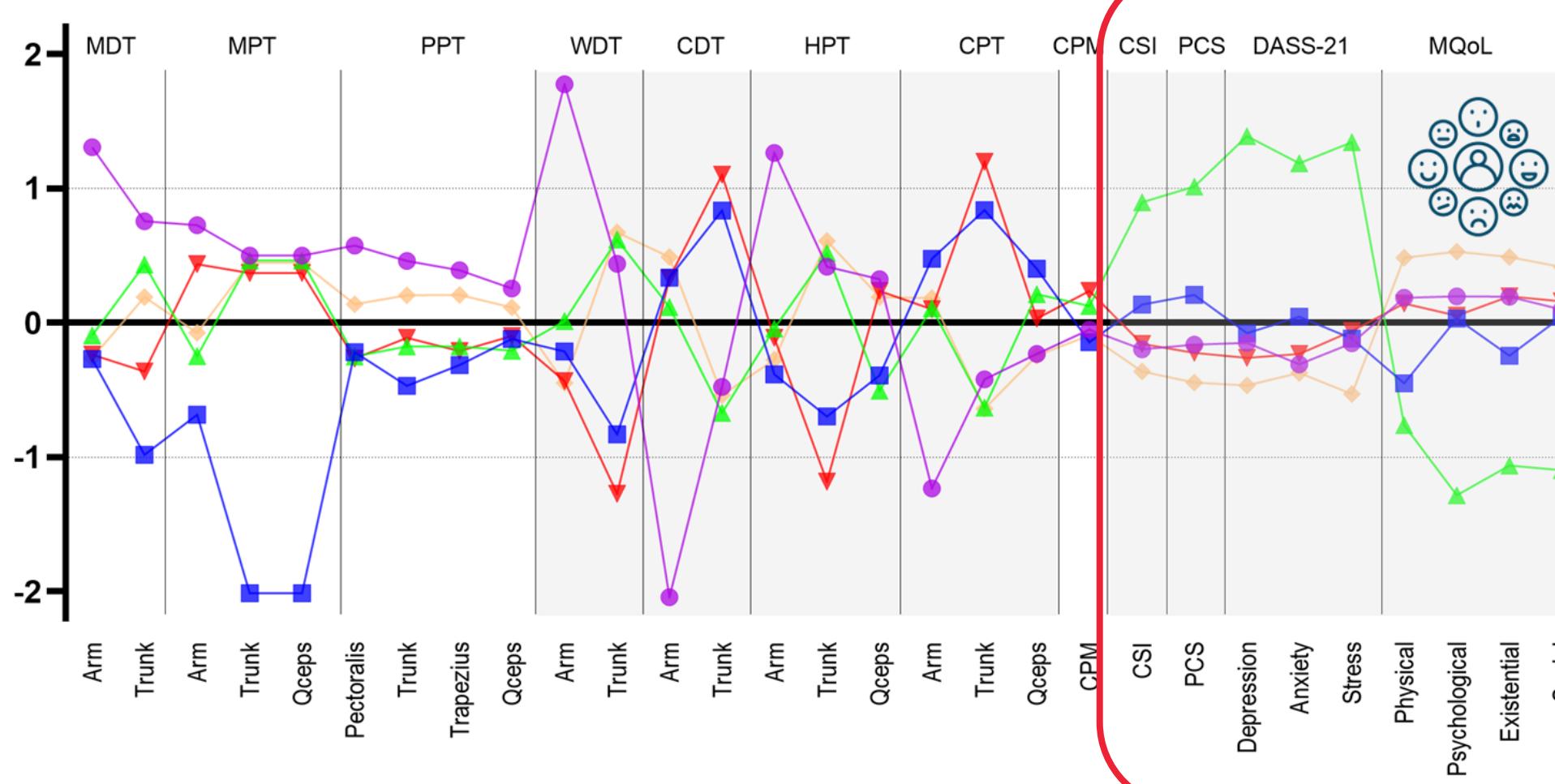
phenotype 1
n= 27; 14,7%
VAS: 24,6 (14,7)

phenotype 2
n= 33; 17,9%
VAS: 26,6 (20,3)

phenotype 3
n= 31; 16,7%
VAS: 37,7 (25,1)

phenotype 4 n=34; 18,4%
VAS: 25,6 (24,1)

phenotype 5
n=59; 32,4%
VAS: 15,2 (19,2)



CONCLUSION



Presurgical mechanical and pain thresholds should be included

Using psychosocial questionnaires perioperatively



Be aware of patients psychosocial distress to intervene if necessary

CONTACT



lore.dams@uantwerpen.be



Scan to find full-text