# Global Variation in Patient-Reported Outcome Measures After Microsurgical Head and Neck Reconstruction

P. Pfister, J. Stoffel, M. Perrin, E. C. Minger, C. Appenzeller-Herzog, F. S. Halbeisen, L. Seifert, D. Bodmer, L. Muller, M. Burger, R. D. Largo, T. Ismail, E. A. Kappos

## Background

Patient-reported outcome measures (PROMs) have become an integral part of outcome evaluation in reconstructive microsurgery

## AIM

This study evaluates the usage of PROMs in microsurgical oncological head and neck reconstruction across surgical specialties and geographic regions

## METHODS

- Systematic review
  - → 5006 studies screened; 354 studies (30'369 patients) included
- Embase, Medline and Web of Science

## RESULTS

### PROM tools used

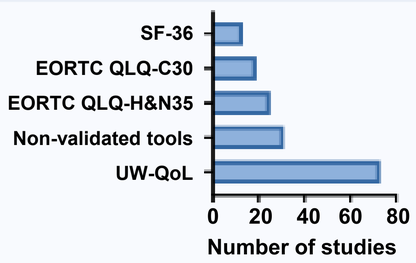
- **94 different** PROM tools were used
  1. University of Washington-Quality of Life Questionnaire version 4 (35%)
  2. PROM assessment with a non-validated tool (26%)
  3. EORTC QLQ-H&N35 (22%)
- 51% of studies used multiple PROM tools
- 49% used a single PROM tool

### Interdisciplinary collaboration and PROM selection

Single surgical discipline (80%, n = 282)
Interdisciplinary (20%, n = 72)

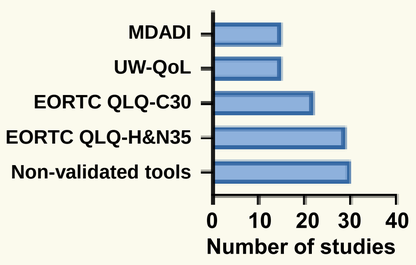
**Oral and maxillofacial surgery**

51%, n = 180 studies



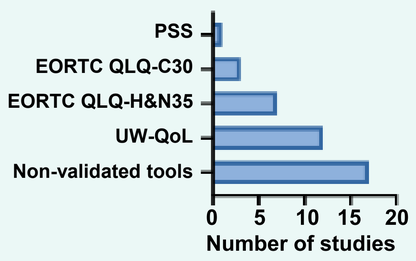

**Head and neck surgery**

45%, n = 161 studies




**Plastic and reconstructive surgery**

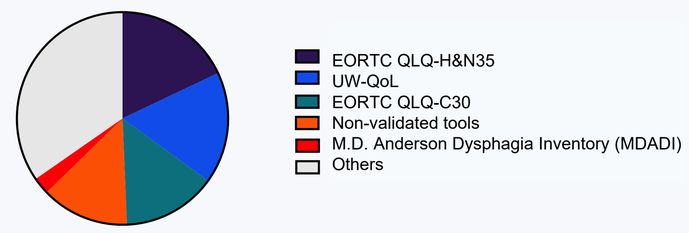
27%, n = 97 studies




### Global Variation in PROM use

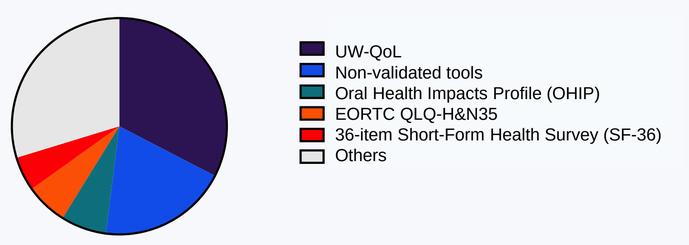
**Europe**

n = 160



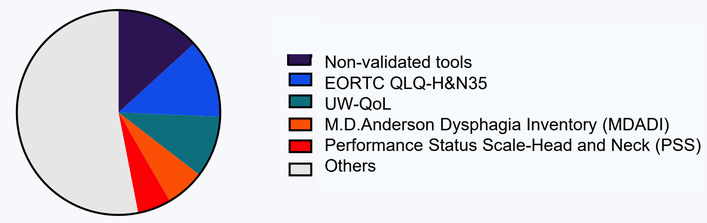

**Asia**

n = 130




**North America**

n = 58




### Donor Site Outcomes

Donor site-specific PROMs were underutilized

Variety of tools addressing donor site

- upper and lower extremity
- aesthetic aspects
- scar evaluation
- pain-related

Significantly more donor-site questionnaires were used with Plastic and Reconstructive Surgery involved (31% vs. 16%)

## CONCLUSION

Substantial heterogeneity exists in the use of PROMs in head and neck reconstruction, with variations within specialty and region. This lack of standardization hinders meaningful cross-study comparisons and the development of robust quality benchmarks. A unified, validated PROM framework is urgently needed to support international evidence-based practice. Future efforts should prioritize interdisciplinary collaboration and incorporate donor site evaluation to comprehensively assess outcomes in oncologic head and neck reconstruction.