# Summary table reporting evidence of Longitudinal Construct Validity (Responsiveness) for OMERACT Filter 2.3

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study Reference**  (Author, Year) | **Study description** | | **Results** | | | | | **Judgement** | |
| **Brief sample description (i.e., n = , type of patient for this analysis)** | **Brief description of study design / methods\*** | **Groups being contrasted**  (within- person change over time Or between- person differences Or between-group differences of within-person change)\*\* | **Hypothesis of change**  **(**described expectation or anchor) | **Anticipated results** | **Statistic used** | **Results observed** | **Interpretation of authors of adequacy**  (+, +/-, -) | **Overall rating of the study**  (+, +/-, -) |
| ***EXAMPLE:*** | | | | | | | | | |
| *(adapted from Leung 2021)*  *Leung 2020* | *414 patients with  >= 2 years duration of PsA; data for 350 at follow-up* | *prospective longitudinal observational study in 14 countries; patients seen at baseline then 1-6 month follow-up* | *Within-person change over time* | * *Change scores of HAQ-DI strongly correlated with change scores of other function scores (SF-12 PCS, PsAID FC)* * *Change scores of HAQ-DI with change scores of disease activity (PGA, pain, DAPSA) moderately correlated* | * *r<0.3*   *=very weak*   * *r 0.3-0.5 =weak* * *r 0.5-0.7 =moderate*   *r >0.7 = strong* | *Spear mans’ rho correla-tion (r) for change scores* | *•High correlation with change scores of function:*  *SF-12 PCS  r=-0.71; PsAID FC r=0.68*  *•Moderate correlation with change in PGA, pain, DAPSA (r=0.54-0.57)*  *•weak correlation with change in tender/ swollen joint (r=0.34 – 0.37)*  *•very weak correlation with change in skin global r=0.29* | *+*    *78% a priori hypothesis on correlation of change scores achieved.* | *+*  *Adequate evidence of responsiveness using different measures* |
| *Between-group differences of within- person change* | *Change scores statistically different from 3 groups (improved/same/ worsened)* | *Change scores between patients with change vs no change statistically significant* | *ANOVA* | *Significant difference in change scores in worsened group compared to no change group (p<0.05) and improved group (NS)* | *+*  *Statistical significantly difference in change scores were only seen in worsen group compared to no change group (this is expected)* |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

*\*Greater detail on study design & methods can be provided in the table, ‘Description of studies in general’*

*\*\*Groups being contrasted can include: Within-person change, Between-person differences (if used for the study of responsiveness) or Between-group differences of within person change (contrasting relative change between two groups).*

***References contributing to reporting of responsiveness table:***

* National Quality Forum. Patient Reported Outcomes (PROs) in Performance Measurement. January 10, 2013 Final Report
* Buchbinder R, Bombardier C, Yeung M, Tugwell P. Which outcome measures should be used in rheumatoid arthritis clinical trials? Arthritis and Rheum 1995; 38(11):1568-1580.
* Terwee CB, Dekker FW, Wiersinga WM, Prummel MF, Bossuyt PMM. On assessing responsiveness of health-related quality of life instruments: Guidelines for instrument evaluation. Quality of Life Research 2003; 12(4): 349-362.
* Beaton DE, Bombardier C, Katz JN, Wright JG. A taxonomy of responsiveness. Journal of Clinical Epidemiology 2001; 54(12):1204-1217.
* Beaton DE, Bombardier C, Katz JN, Wright JG, Wells G, Boers M, et al. Looking for important change/differences in studies of responsiveness. OMERACT MCID working group. J Rheumatol. 2001;28:400–5.
* (Example adapted from: Leung et al. HAQ-DI and the SF-36 Physical Functioning subscale provisionally endorsed as outcome measurement instruments of the physical function domain in psoriatic arthritis using OMERACT Filter 2.1 methodology. 2021 Seminars in Arthritis and Rheumatism)