

## Certification

This is to certify that RWS Life Sciences, Inc. has performed the following procedures on the **DERMATOLOGY LIFE QUALITY INDEX (DLQI)** [RWS Life Sciences Job #: 241759]:

Source File Name: *CAIN457P12302\_DLQI\_English\_UK\_QSDLQI01.docx*

Target File Name: *CAIN457P12302\_DLQI\_Tswana\_South Africa\_QSDLQI01.docx*

- Two independent forward translations
- One harmonized forward translation
- Two independent back-translations
- Reconciliation of back-translations and harmonized translation
- Review of back-translation by Survey Research Analyst
- Developer review of back-translation
- Review of harmonized translation by on-site sponsor representative
- Cognitive debriefing with five patients with psoriatic arthritis in South Africa
- Developer review of debriefing results
- Desktop publishing of validated translation
- Proofreading of validated translation

These documents were translated from ENGLISH to TSWANA and prepared by a team of translators and interviewers who are fully bilingual in both Tswana for South Africa and English. All procedures were performed in accordance with current industry standards and FDA guidance.

Authorized Signature:



Elizabeth McCullough  
*Director of Linguistic Validation Operations*

Date of Production: 25 March 2020