ABSTRACT

BACKGROUND: There is lack of uniformity in reflectance confocal microscopy (RCM) terminology for non-melanocytic lesions (NMLs). OBJECTIVE: To review published RCM terms for NMLs and identify likely-synonymous terms. METHODS: Systematic review of original research articles adhering to PRISMA guidelines was conducted until August 19, 2017. Two investigators gathered all published RCM terms used to describe basal cell carcinoma (BCC), squamous cell carcinoma (SCC), and seborrheic keratosis/solar lentigo/lichen planus-like keratosis (SK/SL/LPLK). Synonymous terms were grouped based on similarity in definition and histopathological correlates. RESULTS: Thirty-one studies met inclusion criteria. Average frequency of use per term was 1.6 (range 1-8). By grouping synonymous terms, the number of terms could be reduced from 139 to 66 terms (52.5%) in total, from 66 to 18 for BCC, 58 to 36 for SCC, and 23 to 12 for SK/SL/LPLK. The frequency of terms usage stratified by anatomic layer (suprabasal epidermis vs. basal layer/DEJ/Superficial dermis) was 27 (25.7%) vs. 78 (74.2%) for BCC; 60 (64.5%) vs. 33 (34.5%) for SCC, and 15 (45.4%) vs. 18 (54.5%) for SK/SL/LPLK, respectively. LIMITATIONS: Non-peer reviewed articles were excluded. CONCLUSIONS: Systematic review of published RCM terms provides the basis for future NMLs terminology consensus. Copyright © 2018. Published by Elsevier Inc. KEYWORDS: actinic keratosis; basal cell carcinoma; diagnosis; lichen planus-like keratosis; melanoma; non-melanoma skin cancer; reflectance confocal microscopy; seborrheic keratosis; squamous cell carcinoma PMID: 30529706 DOI: 10.1016/j.jaad.2018.12.007