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**The value of in vivo Reflectance Confocal Microscopy in monitoring and diagnosis of inflammatory and infectious skin diseases - A Systematic Review.**

*Hoogedoorn L, Peppelman M, van de Kerkhof PC, van Erp PE, Gerritsen MJ., Br J Dermatol. 2014 Oct 30. doi: 10.1111/bjd.13499.*

### **ABSTRACT**

In vivo examination of the skin by reflectance confocal microscopy (RCM) has been performed for about 20 years, leading to a broad spectrum of imaged infectious and inflammatory skin diseases (ISD) with many described RCM features. We systematically reviewed all available literature concerning ISD evaluated by RCM. Furthermore, we assessed the accuracy of the features and defined recommendations for future studies after indicating the limitations in the current published literature. Pubmed, EMBASE, Cochrane Library and Web of science databases were searched for literature. All studies on RCM and ISD were reviewed and quality assessment was determined by using the Strengthening the Reporting of Observational studies in Epidemiology (STROBE) checklist. Literature search revealed 77 eligible studies for inclusion. Different RCM features in a broad spectrum of ISD have been described. Further, RCM has been used for monitoring treatment and evolution of ISD, as well as diagnostic purposes. This systematic review provides an overview of the broad spectrum of ISD imaged by RCM. Although RCM seems to be a promising monitoring and diagnostic tool for ISD, studies with appropriate methodological quality are necessary to create adequate guidelines and protocols for further implementation of RCM in clinical practice.