

AbstractID: 10406 Title: The Diagnostic Accuracy of in vivo Confocal Laser Scanning Microscopy of Basal Cell Carcinoma: A Preliminary Study in Chinese Patients

Purpose The objective of this study was to evaluate the diagnostic accuracy of in vivo CLSM compared with the golden standard diagnostic technology-histopathology. **Methods** 62 patients with suspicious lesions of BCC were prospectively recruited to undergo clinical, CSLM (VivaScope 1500 Plus, Lucid Inc, Henrietta, NY) examinations, and biopsies. A diagnosis was made preoperatively with CLSM technique, and the lesion was then excised and diagnosed using histopathology. The diagnostic criteria with CLSM were presence of elongated monomorphic basaloid nuclei, polarization of these nuclei along the same axis of orientation, prominent inflammatory infiltrate, increased dermal vasculature, and pleomorphism of the overlying epidermis indicative of actinic changes, which had been reported elsewhere. **Results** 62 patients with 62 lesions were determined with histopathology, comprising 40 BCC, 5 Squamous cell carcinoma (SCC), 3 Actinic Keratosis and 14 others. The CLSM had a sensitivity of 95.23%, specificity of 91.30% in BCC imaging. **Conclusions** This is the first study in China mainland to investigate the accuracy of CLSM in BCC imaging. Non-invasive CLSM offered a sensitive and specific tool in diagnosis of BCC, which was essential screening tool in BCC diagnosis.