For some years now, laser devices have been facilitating dental treatment procedures—ensuring a quick, precise and almost bleeding-free intervention. Nevertheless, there are still some questions every practitioner is faced with. Which laser is suitable for which treatment? Is a laser a valuable investment in the dental practice? Where is a laser therapy superior to conventional treatment methods? In the present interview, laser addressed some questions to Prof. Dr Michael Bornstein from the University of Bern, who is working in the Department of Oral Surgery and Stomatology and thus is an expert in the field of laser surgery.

Prof. Dr Michael Bornstein, which type of laser would you recommend for surgical treatment and for which reasons?

First, we need to define the type of surgery. Surgical interventions in hard tissues such as bone are quite different from procedures in the oral mucosa. In our oral medicine service, the CO2 laser is the laser we use most often. Only rarely, we use diode or Er:YAG lasers, usually for research purposes. The CO2 laser is ideal for incisional and excisional biopsies of the oral mucosa since it offers good hemostasis and thus an optimal visibility of the surgical field, which is critical for many interventions. Nevertheless, the thermal damage to the excised tissues is limited, and can even be reduced further by choosing the optimal mode of the laser. This is also a crucial issue, as the physical side effects should be kept to a minimum when excising suspicious or precancerous soft tissue lesions for optimal histopathological evaluation.

Prof. Dr Bornstein, which type of laser would you recommend for surgical treatment and for which reasons?

Where do you see the advantages of the CO2 laser application?

In dental medicine, the CO2 laser is by far the laser that has been tested and studied the most. By choosing this laser for soft tissue applications, it is certainly a safe choice and based on solid evidence. Nevertheless, when I am speaking about advantages over the scalpel, these have not been tested in randomised controlled trials (RCTs) to date. Therefore, advantages such as better wound healing properties, less pain during or after interventions and faster duration of surgical procedures remain hypothetical. This