## Materials and Methods

### *Acquisition and Selection of Patient Data*

We conducted a retrospective systematic single-center analysis on data about patients treated for accidental tattoos by laser therapy at the Dermatology Department of the University Hospital of Zurich. We acquired the data by searching the internal clinical information system KISIM for patients with a diagnosis of accidental hyperpigmentation and gave all patients a number for anonymization. We selected all patients where the diagnosis was definite, collecting a total of 70 patients, 38 of whom were treated with laser. We analyzed the patients’ data with reference to the laser devices that were used including parameters such as wavelength, fluence, spot size and intervals between the sessions. Furthermore, the number of sessions performed and the overall success were registered. We defined the latter as a complete removal of the unwanted hyperpigmentation or as no wish for any further laser sessions due to the patients’ satisfaction. We regularly photodocumented the accidental tattoos between the laser sessions to monitor their pigment change. Prior to lasering the whole area of the accidental tattoo, we performed a test laser session to assess the skin’s reaction to the laser. Thus, we minimized the risk for adverse events. If the hyperpigmented area was small or the patient asked for immediate treatment, no test laser session was done. Before therapy, we pretreated some lesions with a cream containing local anesthetic to reduce the pain during treatment. During laser therapy, there was no overlapping of the spots. After treatment, we applied a cream containing hyaluronic acid. We advised the patients to take care of good solar protection by means of textiles and sunscreen (SPF 50+) for at least 6 weeks before and after laser therapy.

### *Statistical Analysis*

We conducted the statistical analysis by means of the program Windows Exce**l**® (2016) and the statistical software SPSS® (Version 25; IBM, Armonk, NY, USA). Descriptive analysis is presented as numbers, percentage, mean and standard deviation, median and range.