

SPECTRA XT: A MULTIPLE PLATFORM Nd:YAG DEVICE

Lutronic unveils two new unique wavelengths, the 595 nm and 660 nm, in Lutronic's latest model, SPECTRA XT



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If something ain't broke, don't fix it! A laser manufacturer cannot use this as its credo, however, because science and medicine are constantly on the move. Perhaps the appropriate phrase is: 'Take something that works really well, and make it work better.' Lutronic followed this adage with their SPECTRA™ XT, a new Nd:YAG-based multiplatform, with the addition of two new wavelengths: 595 nm new generation Gold Toning, and 660 nm RuVY (Ruby-like Versatile Yag) Touch. Technological advances include a really quick pulse-to-pulse (Q-PTP) mode for more comfortable treatment in patients with sensitive or thin skin, and Optimum Lattice Technology (OLT) to enable more efficient and homogeneous distribution of output power. Extend your practice with SPECTRA XT – the extended platform.

595 nm handpiece

The good absorption in oxyhaemoglobin at this wavelength ensures selective targeting of ectatic blood vessels, while the significantly lower absorption in deoxyhaemoglobin gives better penetration to reach the problematic arterial blood vessels in inflammation-mediated skin disorders.

Dr Bettina Rümmelein, a dermatologist practicing in Kilchberg/Zürich, Switzerland, has found the low-fluence 595 nm approach with the 5 mm handpiece ideal for any case where there is

redness with an underlying vascular-related inflammatory component. Following treatment of acne lesions, post-acne redness can sometimes be seen which will usually spontaneously resolve, but it can take several weeks or months. *Figure 1* shows a 29-year-old female who was previously treated for acne, showing residual mild acne lesions and areas of post-acne redness (*Figure 1A*). She was treated over 5 sessions and *Figure 1B* shows the very good result 6 weeks after the final treatment session.

'The SPECTRA XT Nd:YAG-based multiplatform is the fourth system I have in my clinic from Lutronic,' says Dr Rümmelein. 'I am quite surprised and very impressed with the result of the 595 nm Gold Toning handpiece, which has made in the response of these dermal vasculature inflammatory condition-mediated lesions,' she adds. 'I am very happy and so are my patients.'

660 nm handpiece

Treatment of freckles and lentigines with the Q-switched Nd:YAG (QSNY) is usually applied with the frequency-doubled 532 nm visible green beam, but overtreatment can cause separation or even damage at the dermoepidermal junction leading to postinflammatory hyperpigmentation (PIH) formation. The 660 nm beam is highly absorbed in melanin to ensure subcellular selective photothermolysis. On the other hand, the 660 nm energy is significantly less well absorbed in blood, removing that

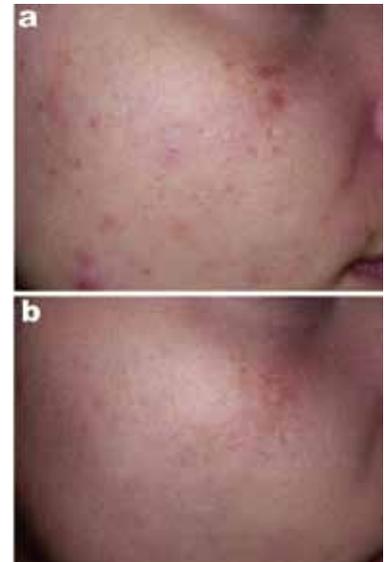


Figure 1 (A) 29 year-old female with residual acne and post-acne redness at baseline. (B): Good results seen 6 weeks after the final SPECTRA XT 595 nm Gold Toning treatment session with no recurrence.

element as a competing chromophore and making it a safer treatment, helping to minimise inflammation in the epidermis.

'The 660 nm handpiece is ideal for treating discrete epidermal pigmented lesions,' explains Dr Rümmelein, 'because 532 nm-associated side-effects with unattractive crusting or even bleeding are significantly reduced. Concealing makeup is therefore not needed on the hands in particular in the short-term post-treatment,' she adds, 'where the healing process takes up to three weeks. This makes the patient, and me, much happier.' *Figure 2A-D* shows the baseline

findings in the left (532 nm) and right (660 nm) hands of a 79-year old female. *Figure 2B-E* is the condition at 5 days post-treatment with more unsightly crusting and damage seen on the 532 nm-treated left hand than on the 660 nm-treated right hand. The condition at 24 days post-treatment as seen in *Figure 2C-F* is comparable between the two with more residual erythema seen on the 532 nm-treated left hand. The 660 nm RuVY Touch is also effective on the face, where it not only removes pigmented lesions safely and effectively, it also leaves the skin in overall better condition as illustrated in *Figure 3*.

Other Indications for the SPECTRA XT: Onychomycosis

Dr Rümmelein has found the 1064 nm Spectra 300 μ s quasi long-pulsed mode of the SPECTRA XT very effective in adjunctive treatment for even severe onychomycosis, together with a reduced dose of oral terbinafine. *Figure 4A-C* illustrates in the left column the stages in Dr Rümmelein's treatment approach respectively at baseline, with the diseased nail cut back as far as possible, and new, healthy nail growing from the bed and matrix with no fungal infection. *Figure 4D-G* shows examples of successful treatment of multiple nails on infected feet using the SPECTRA XT.

Conclusion

SPECTRA XT extends the capability of the clinician with its two new wavelengths, 595 nm and 660 nm, to deal more safely and effectively with a variety of inflammatory and pigmented targets. The 300 μ s quasi long-pulsed mode deliverable at 45 J over 1 second offers flexible and



Figure 2 (A) and (D) Baseline, pigmented lesions on the dorsum of the hands in a 79 year-old female, upper row treated with 532 nm (1.8 mm, 1.8 J/cm²) and lower with 660 nm RuVY Touch (2 mm, 2.6 J/cm²). (B) and (E) 5 days post-Tx, unsightly damage with erythema is more visible on the 532 nm-treated hand, particularly when comparing the magnified views in the insets. (C) and (F) 24 days post-Tx, the clearance is comparable between the two hands, with the 532 nm lesions a little more erythematous

tailored treatment for onychomycosis, and therefore gives even delivery of heat to the nail, nail bed and surrounding skin. The large 10 mm spot has proved ideal for low-fluence 1064 nm laser toning with faster treatment times, and can be combined with the Q-PTP and OLT for gentler and more efficient treatments, including tattoo removal. SPECTRA XT—the extended platform—extends the ability and scope of the clinician to treat his or her patients safely and effectively.

► Further information

www.international.lutronic.com/spectrxt

► **Figure 1-4** © Bettina Rümmelein

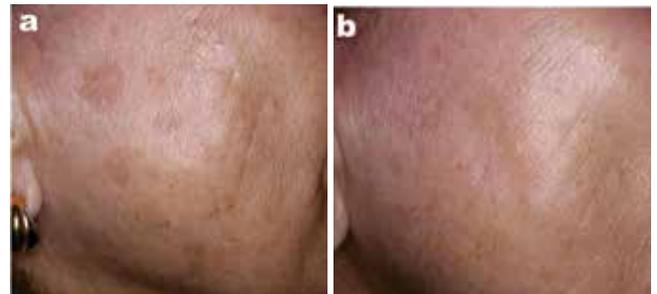


Figure 3 Well-demarcated facial pigmented lesions seen in a 71 year old female. (A): Baseline findings. (B): 10 weeks after one RuVY Touch treatment. Good lesion clearance and improved skin tone and texture is witnessed



Figure 4 (A) A diseased nail, (B) is clipped back as much as possible, and the laser applied. (C) The fungal infection is inactivated, and normal nail growth gradually replaces the old nail. (D, F): Example of onychomycosis involving multiple toenails. (E, G): The results following treatment of infected nails with the SPECTRA XT showing complete regrowth of new nails, and no sign of recurrence.