DUAL YELLOW ASTHETIC AND SURGICAL LASER INDICATIONS CHART

			Skin Rejuvenation			Other Lesions					
LASER	**W/L (nm)**	**Spectrum**	**Age Spots**	**Telang-iectasia**	**Wrinkles**	**Pigmented Lesions**	**Stretch Marks**	**Vascular Lesions**	**Scars**	**Surgical. Ablation**	**Warts**
Norseld DUAL YELLOW	578	YELLOW									
	511	GREEN									
	578 & 511	YELLOW/ GREEN									
KTP	532	GREEN									
NON-LASER IPL	IPL	WHITE LIGHT									
FPDL	585-595	YELLOW									
LPYAG	1064, 1340	1R									

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OVERVIEW ARGUMENTS COMPETITION - *DUAL YELLOW*

advantages compared to Low Power KTP	advantages compared to High Power KTP (pulsed KTPs)	advantages compared to Flashlamp-pumped Dye Lasers	advantages compared to pulsed Nd:YAGs
Examples: Iriderm Diolite 532; HGM Corium, ...	Examples: Coherent Versapulse VPW, Laserscope Aura SL, ...	Examples: various Candela and Cynosure lasers	Examples: ESC Vasculight, Laserscope Lyra,
➢ **The Colour** 532nm (KTP Green) is less well absorbed in blood and better absorbed in melanin compared to 578nm (Yellow). Thus it is less potent and gives more side effects. ➢ **The Power** The Low Power KTPs emit maximum 3W green, most of them less. The DUAL YELLOW emits 2.5W Yellow + 5.5W Green, i.e. in total 8 Watts. If the power is too low, the treatment time has to be set very long in order to get enough energy to close a vessel. This will cause non-specific tissue heating and thus peri-vascular thermal damage. ➢ **Less Side Effects** Due to the less-than-optimum wavelength and the lower power, Low Power KTP laser treatment may cause eschar / temporary crusting. ➢ Compared to these small, quite cheap units, the Dual Yellow should be positioned as the **professional solution** for practioners doing frequent cosmetic vascular treatments. A Low Power KTP might be the right solution for a beginner (looking for a first laser).	➢ **The Colour** same argument as Low Power KTPs ➢ **Less side effects** Due to the less-than-optimum wavelength, pulsed KTP laser treatment may cause eschar / temporary crusting. ➢ **Less pain** For most treatments, skin cooling is necessary with pulsed KTPs to make the procedure tolerable for the patient. With the DUAL YELLOW, no cooling is necessary for most of the same treatments.	➢ **The Colour** 585nm FPDL **cannot** be used to treat pigmented lesions like age spots, sebKs etc. ➢ **The pulse length** The classic FPDL has pulse widths of 0.5ms, the newer ones 1.5ms and (the latest) up to 10ms. The short pulse widths are optimum for treating finest vessels (infant hemangioma / portwine stain) but not long enough to match the thermal relaxation time of typical superficial vessels in adults. ➢ **Less side effects** If vessels are treated with FPDL, usually instant purpura occurs due to the short pulses. The purpura is temporary, but nevertheless it is unacceptable for adult cosmetic patients. ➢ **Lower Running costs** No disposables (dye kits) are needed for the Dual Yellow ➢ FPDL is the gold standard for infant hemangioma / portwine stain. This is not a suitable application for the DUAL YELLOW. The DUAL YELLOW, on the other hand, is the better choice for cosmetic procedures in adults.	➢ **Nd:YAG heats tissue non-specifically!** Nd:YAG lasers have previously been sold for non-specific coagulation. The newer Nd:YAGs are mainly marketed for hair removal. They are also marketed for larger vessel treatment because FDA clearance is quicker for vascular treatment compared to hair removal. Thus, the competitors get the chance to start marketing earlier. ➢ It is still not evident that Nd:YAG works better over time on leg veins than yellow and green lasers. ➢ Superficial red vessels cannot be treated well with Nd:YAG lasers as the laser light is insufficiently absorbed by the small volume of haemoglobin and most of the energy penetrates the tissue too deeply.

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