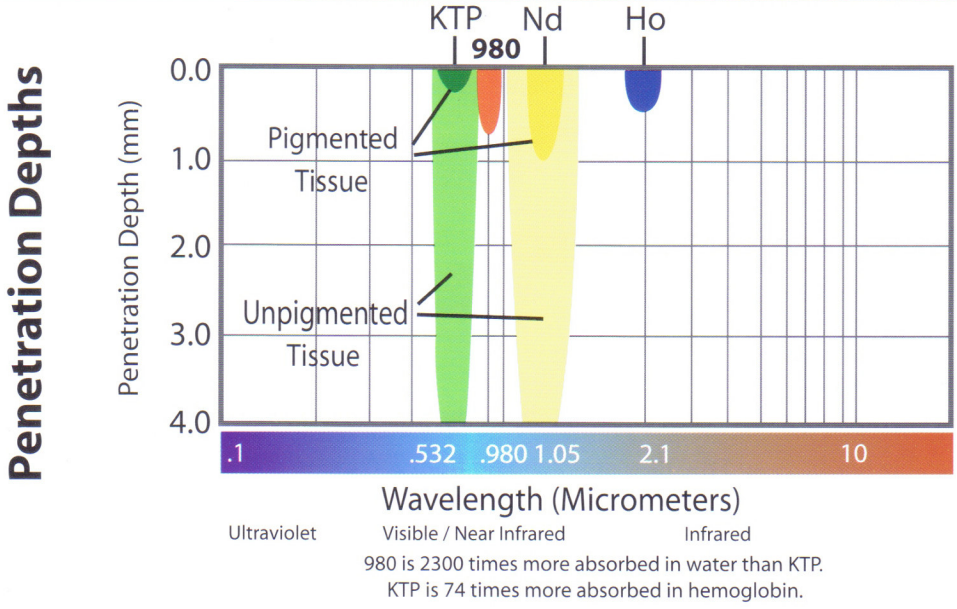
Comparison of different laser systems:

biolitec Urology laser	**KTP**	**Ho:YAG**
Wavelength 980nm	Wavelength 532nm	Wavelength 2100nm
Highest absorption in water and hemoglobin from the same wavelength	Selectively absorbed in hemoglobin	Selectively absorbed in water
Selective Light Vaporization (SLV) – combines perfectly non-contact and contact vaporization and coagulation	Non-contact vaporization of soft and vascular tissue	Non-contact ablation by creating vapor bubbles
Ability to work in continuous and pulsed mode to allow efficient removal in all tissue types	Operation in continuous mode to remove the prostate layer-by-layer	Pulsed mode generates vapor bubbles in the irrigant that ablate the superficial tissue
Optical penetration depth of the 980nm is higher than for the KTP or Ho:YAG lasers	High absorption in hemoglobin limits the penetration of the KTP	Laser energy is absorbed in the superficial tissue layer
Laser quickly vaporizes and removes the soft tissue creating a permanent state of hemostasis	Vaporization by forming vapors that burst the collagen matrix and thereby release the tissue	Ablation of soft tissue by keeping the fiber close to the tissue to avoid absorption within the irrigant
Ability to work in tight fields while providing excellent hemostasis	Hemostasis with minimal-to-no post-operational bleeding	Moderate hemostasis with post-operational need for catheterization
Limits the amount of bleeding and damage to surrounding tissue – fast operative and recovery times	Remaining heat induces a coagulation zone of only 1-2mm thickness	Tissue ablation occurs superficially providing precise incision but slow vaporization



980 is 2300 times more absorbed in water than KTP.
KTP is 74 times more absorbed in hemoglobin.