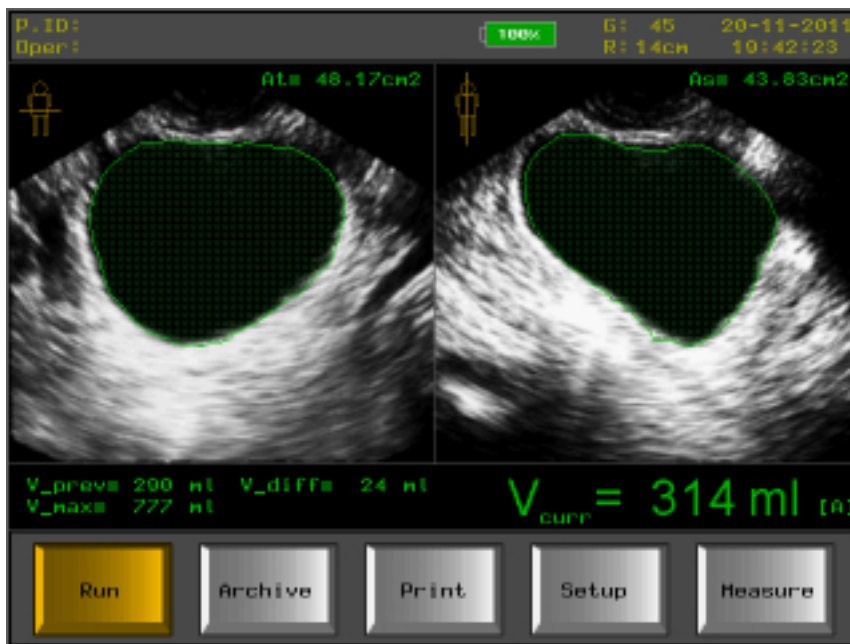


## PINIT volumetric ultrasound scanner – tool4vol

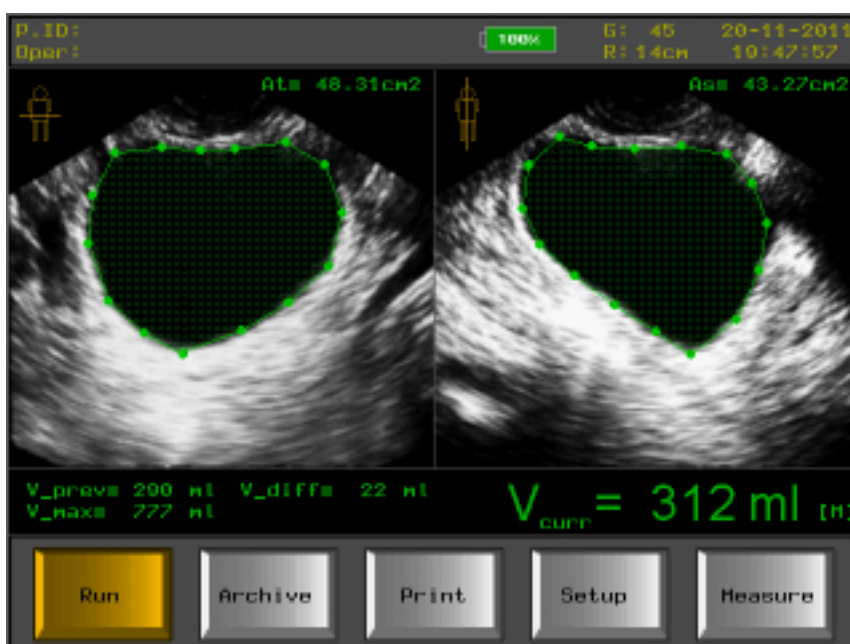
Recent, modern devices for bladder volume measurement use different method for determine biometric data and calculation of the final results. There is a lot of biological and physical factors affect to final results and for that reasons all methods (even multi-plane 3D etc) are laden an error near-by 20-25%.

Echo-Son would like to introduce the volumetric tool for bladder contains measurement – PINIT – which offers in fact four methods (algorithms) /**tool4vol**/ as a very universal and common solution. Our PINIT empowers volume measurement of bladder and additionally another organs as kidneys, papilloma, testes, prostate gland etc. and their dimension as well. There are the unique features of our **tool4vol** PINIT.



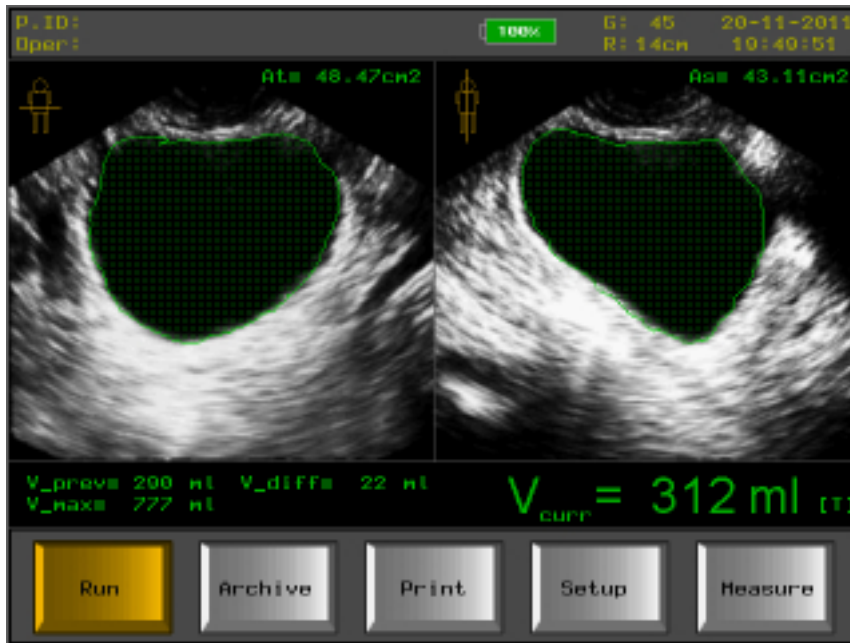
### Basic method – automatic

single- click and after 2 seconds result is displayed. Calculation via known empiric formula based on research by Rageth and Langer. Volume is calculated using of areas of 2 perpendicular plane of bladder marked in green on the scanned images.



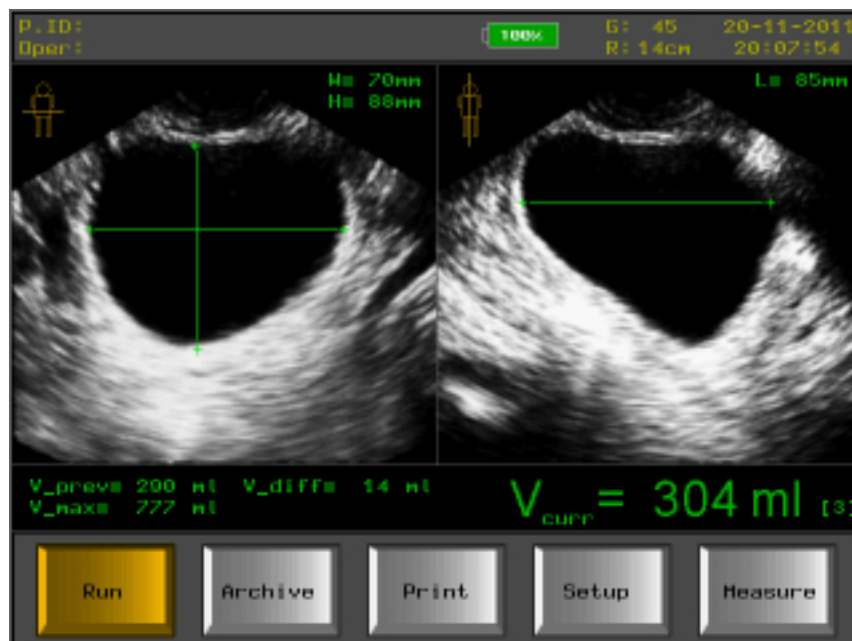
If obtaining of the corrected areas are difficult by automatic procedures, PINIT offer two semi-automatic planimetric method:

Contouring area (polygon) by free-hand point setting – **MultiPoint**



Contouring area (outline) by free-hand drawing – **Contour**

and then calculating bladder volume



For verifying and checking above automatic and semiautomatic measurements PINIT offer traditional, well known method used in all ultrasound scanners for more than 35 years. It is **3-axis** (elliptical kind) method know as well as **HWL** (High\_Width\_Lenght). This method could be used for other organs like kidney, prostate etc.

Advantage of the PINIT mode of operation as the ultrasound scanner (256 greyscale) for purpose for diagnostic exams of abdominal, pelvic floor, urinary duct, prostate etc with typical measurements (distance, volume) of organs or morphological lesions.