

## NEW ACQUIDATA ZOOM WINDOW FOR UROREPORT URETHRAL ANALYSIS

### BACKGROUND:

The majority of urodynamicists had until recently predominantly been recording just the filling and voiding CMG and occasional maximum resting urethral pressure noted when the Pves catheter was withdrawn through the urethral. However more comprehensive urethral testing is being recognised as being of more clinical value now that the catheter, powered perfusion and transducer combination has become more refined (eg; with the new Neomedix NeoPress system).

The automatic analyse of the filling and voiding CMG is relatively easy from a software point of view than is the case for the functional urethral testing phases. The difficulty presented in urethral testing has been the very artifactual nature of the Pura channel as the catheter is withdrawn. This is caused by the technique used in recording the sphincter pressure, patient generated baseline pressure changes due to movement and varying abdominal muscle tension and the uncertainty at times as to precisely where the catheter Pura port is 'currently' located. Also there is often a significant temporal disassociation of the 'pressure profile' part of the test from the cough transmission ratio and urethral closing pressure manoeuvres. Automated software thus has difficulty in correctly determining the pressure measurement reference points. For this reason Neomedix has decided that the pattern recognition abilities of the urodynamicist was the more appropriate analyser.

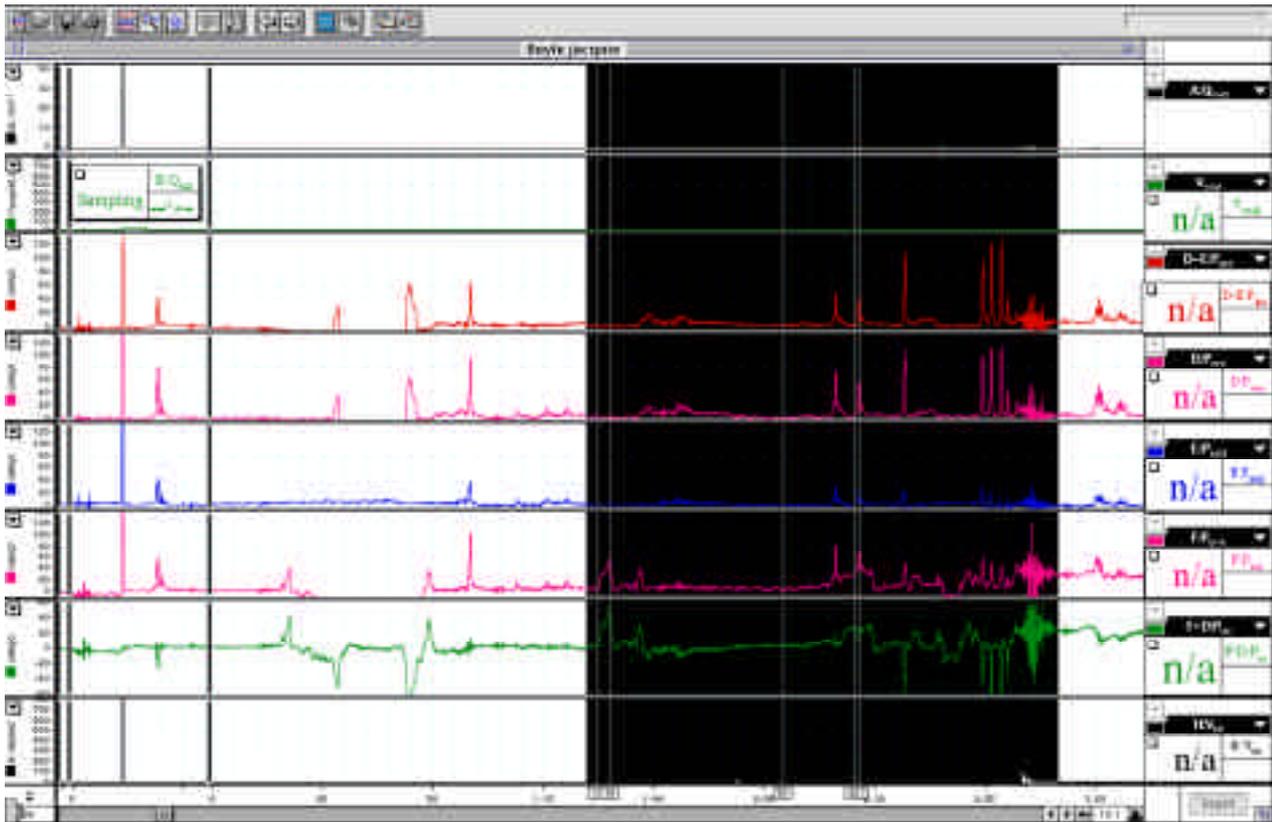
Thus once the transfer of data points to the report is called up (Report Setup/Urethral Empty (or Full) /Transfer) the software displays a small prompting window to advise the next physiological point to be 'click'. There are only two points to click obtain the Pura(max) and four to obtain the Puc at stress and the cough pressure transmission ratio.

### PROBLEM RECOGNITION AND RECENT SOFTWARE SOLUTION:

It is somewhat difficult, or at least more time consuming than is ideal, to locate and select these measurement points for the auto analysis. This is due to the need to expand the time base to provide adequate temporal resolution. As the 'expand' does not happen progressively either side of the point of interest, then when the time expand mode is used the area of interest can disappear off the left side of the screen and the user then has to scroll to find it again. This can be confusing and increases reporting time. Not only that, but the expansion of the data needs to be in both X and Y axes to provide good resolution when 'clicking' the measurement markers. The original Zoom window tool would have been ideal but previous software versions did not allow the transfer of measurement points from it to the Uroreport.

With a renewed interest by our Acquidata Uromac users we have been looking at the way the semi-automated Uroreport measurements are carried out and have now released a version which allows the Zoom window to be used for this.

The screen display **Fig 1** shows how the user previously had to make measurements off the main raw data waveforms. Accurately identifying and placing measurement points was not very easy.



**Fig 1**

The new Uromac v3.6.8 software allows the urodynamicist to very quickly select with the mouse the section of Urethral testing trace for which analysis is desired and the Zoom window button clicked. The following screen image **Fig 2** shows on the same patient file as above the instantly available Zoom window. Now the user can very easily ‘click’ the measurement points on the visually larger Zoom waveform, which are then automatically transferred and processed by the Uroreport software.

The size and location of the Zoom window can be set as the user desires as shown on this same patient file in **Fig 3** below.

If users of older versions of Uromac want to receive details on the upgrade to v3.6.8 (price varies from \$50 to \$1,000 depending upon model and ROM version) Please contact us at Tel: 02 9987 2311 Fax: 02 9987 2411 or email either [tony@neomedix.com](mailto:tony@neomedix.com) or [lizc@neomedix.com](mailto:lizc@neomedix.com) .

Note that not all systems are upgradeable The AcquiProcessor must be the slim case version (ie the AcquiAmp and AcquiProcessor will have the same height case. The systems with the much taller AcquiProcessor cannot be upgraded to accept this new option.

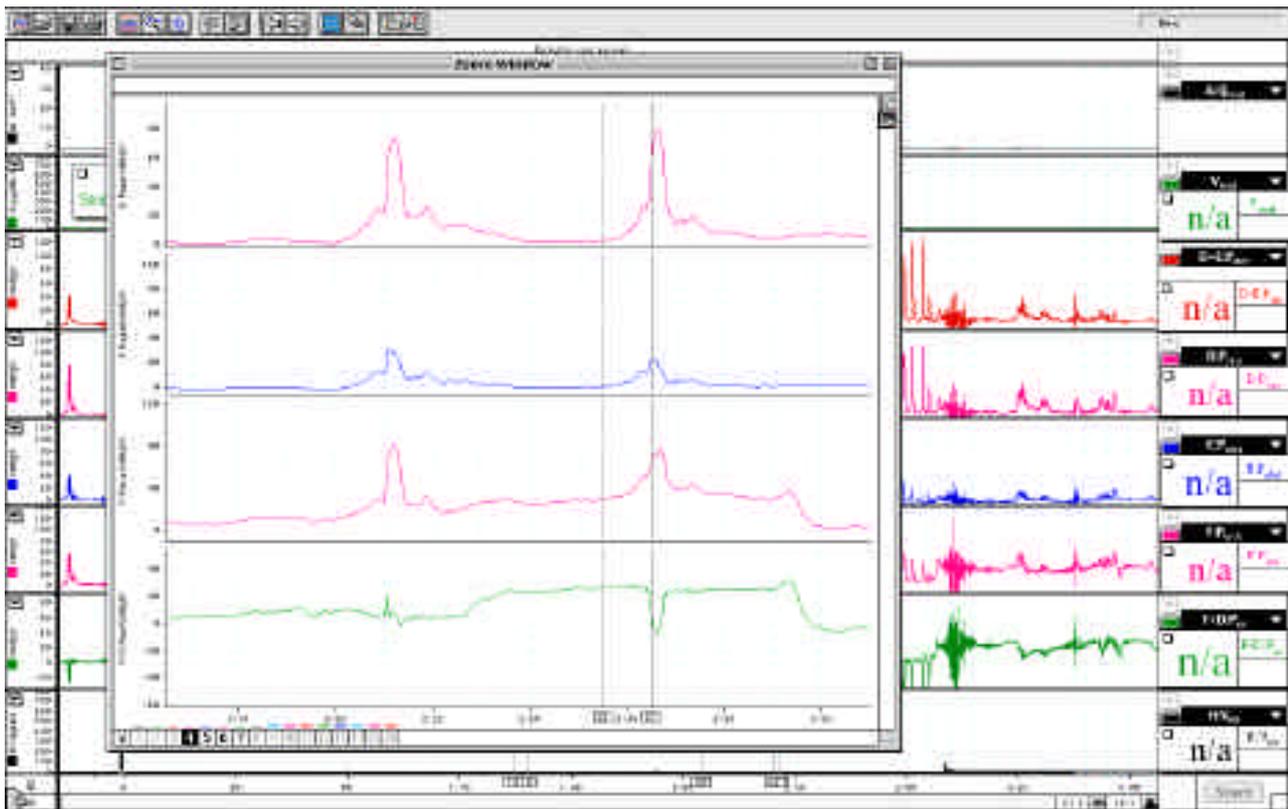


Fig 2

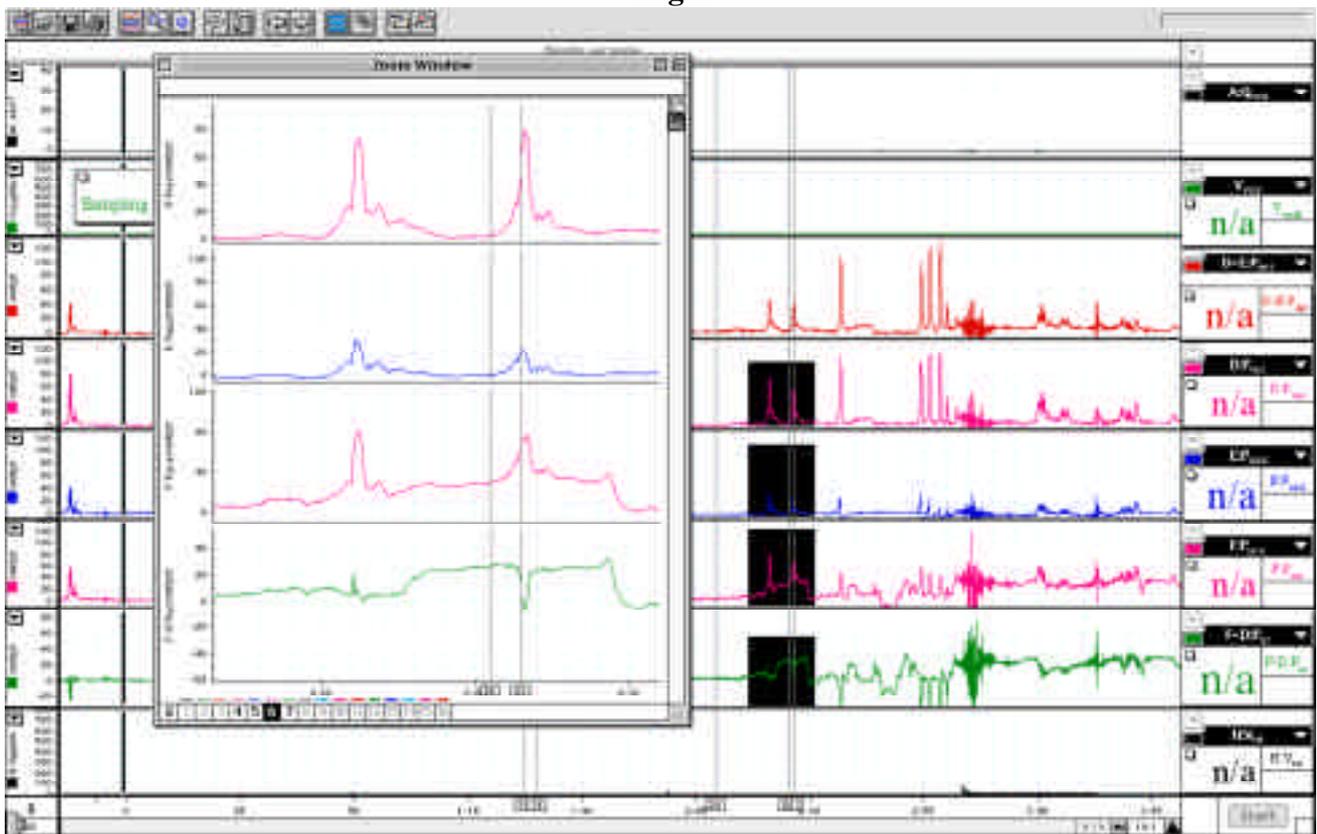


Fig 3

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