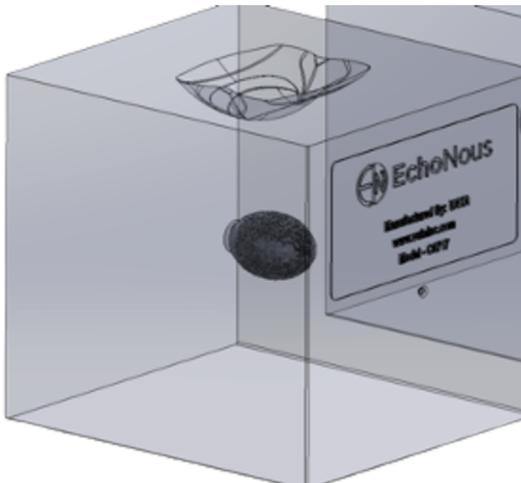# EchoNous

Kosmos®
Bladder AI
Volume Accuracy

Kosmos Bladder testing was conducted to evaluate the accuracy of the Kosmos Bladder Volume AI algorithm against high-precision Industrial CT scanned phantoms.

How was Kosmos Bladder Volume Accuracy Determined?

To determine the accuracy of Kosmos Bladder, EchoNous utilized Industrial Computed Tomography (CT), which is the most advanced non-destructive inspection technique available. Bladder phantoms ranging from 10 mL to 600 mL were CT scanned by Delphi Precision Imaging to generate a 3D CAD model. This process involved a 360º rotation of the sample to collect 2D "slices," which were then rendered into a 3D image to provide the most accurate possible dimensions.

The clinical testing phase involved three participants who captured data on four different phantoms. To ensure statistical rigor, each phantom underwent 30 sets of data capture (10 measurements per each of the 3 scanners). These captures were performed using the Kosmos bladder probe and software in the same manner as clinical personnel would scan a patient.

Comparison Results

The results of the comparison between the CT scan and Kosmos Bladder measurements demonstrated high correlation across all tested volumes.

Kosmos Bladder Accuracy: +/- 3mL for volumes under 100mL and +/-3% for volumes between 100 and 600mL				
Phantom Size	**CT Scan**	**Kosmos Measured**	**% Difference**	**Absolute Difference**
10 mL	10.27	9.77	-5%	0.5
35 mL	33.6	33.95	1%	0.35
100 mL	96.77	99.42	3%	2.65
600 mL	607.33	613.69	1%	6.37
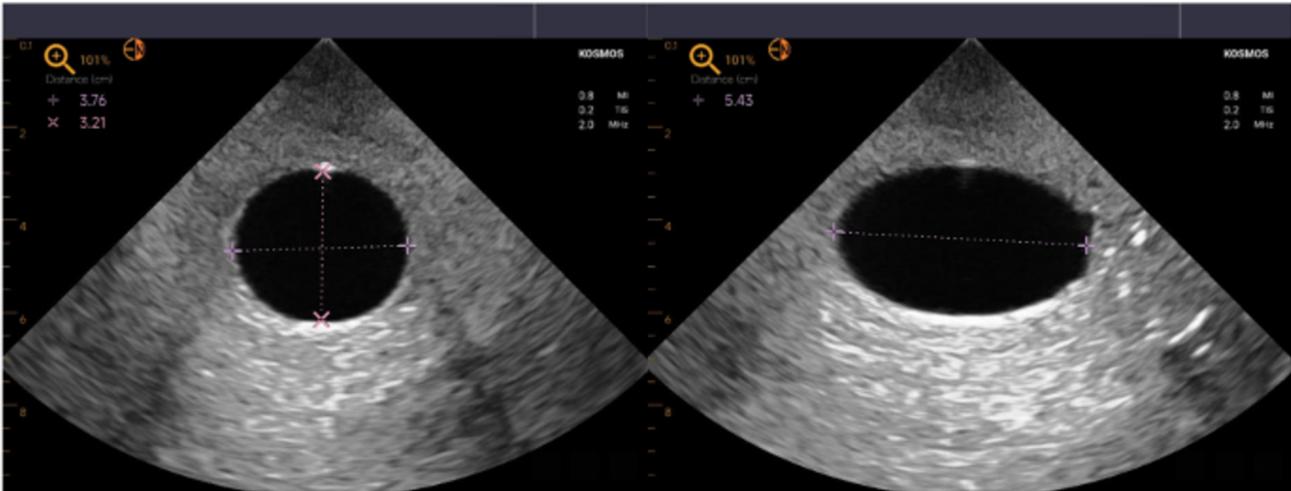
Note: Not all features are available in all markets, please check with your local representative for availability in your region.

DO12472_Rev A

EchoNous