

DATA SHEET

OMNIA X[®] CLINICAL APPLICATIONS POSITIONAL VERTIGO (NYSTAGMUS) DISORDERS

VESTIBULAR LITHIASIS & VARIANTS	OTHER (NON-PARTICLE) PERIPHERAL OR CENTRAL VESTIBULAR DISEASE
1. Canalithiasis a. 'Classic' or 'simple' BPPV (posterior) b. Horizontal or anterior canalithiasis 2. Cupulolithiasis a. Adherent b. Non-adherent 3. Canal 'Jam' 4. Apex Block	1. Fluid density imbalances & asymmetries 2. Neural Firing (tone) imbalance & asymmetries a. Irritative lesions (e.g. inflammatory or hydropic disorders, etc) b. Increased afferent input and neural firing (e.g. cervical) c. Central (e.g. brainstem or cerebellar lesions, vascular migraine) 3. Canal dehiscence, fistulas or other coupling disorders 4. Idiopathic

TEST BATTERY TABLE

POSITIONAL TESTS	CLINICAL SIGNIFICANCE	OMNIA X EXCLUSIVE
Dix Hallpike Maneuver	Standard testing for lithiasis within the posterior or anterior semi-circular canals (120° pitch).	✓
Dix Hallpike Maneuver extended	Customized testing for lithiasis within the posterior or anterior semi-circular canals using steeper pitch angles (135°, 150°).	✓
"Roll" Test (45° or 90° lateral supine)	For differentiating geotropic vs apogeotropic horizontal nystagmus, identifying the pathology (canalithiasis vs cupulolithiasis) and locating the side of horizontal semi-circular canal (HSC) lithiasis.	✓
Anterior/Posterior Cupulolithiasis Differentiation Test	This test assists in the localization of cupulolithiasis (heavy cupula) in a PSC vs the contralateral (co-planar) ASC.	✓
Spontaneous Nystagmus and Gaze Enhanced (bilateral gaze) Nystagmus	Detects and differentiates causation: density differential vs. global spontaneous nystagmus.	✓
HSC Null ID testing	With the horizontal canal in vertical orientation, identification of a 'null point' (no nystagmus) is used to localize the involved side in a patient with apogeotropic horizontal canal lithiasis.	✓
Customer-driven menus	Periodic menu updates to meet customer driven needs and medical advances.	✓

ROTATIONAL TESTING	CLINICAL SIGNIFICANCE
Vertical Axis Rotation test (VARo) (Menu driven)	Comparative measurement of the nystagmus generated during reciprocating rotation in both directions (consistent with uncompensated unilateral HSC function).
Off-Vertical-Axis-Rotation (OVAR) testing (Free-style)	This test rules out complete, bilateral loss of otolithic organ function
Ocular Counter Rolling (OCR) (Free-style)	This test assists in the identification of unilateral utricular dysfunction
Additional rotationals	Under development

ENG/VNG POSITIONING MENU	CLINICAL SIGNIFICANCE	OMNIA X EXCLUSIVE
Automated Positioning for Standard Oculomotor, Positional and Caloric Testing	Easy and precise positioning of patient when using pre-owned ENG/VNG system.	✓
Integrated Standard Oculomotor, Positional and Caloric Testing	Under development.	✓
Next generation VNG testing	Under development.	✓

TREATMENT MANEUVERS	CLINICAL DESCRIPTION	OMNIA X EXCLUSIVE
Canalith repositioning procedure (CRP)	Canalith repositioning procedures for classic Vestibular Lithiasis and uncomplicated cupulolithiasis.	✓
Customized CRP variations (Semont, Giovanni, etc)	Starting/ending positions, movement directions and velocities can be adapted to CRP variations as desired.	✓
360° Back Flip ‘incremental’	The 360° Back Flip with a 45° offset is considered a more effective maneuver to treat posterior canalithiasis, particularly with apparent blocks or jams of the posterior semi-circular canal. Here it is carried out in increments, allowing static nystagmus monitoring at each point.	✓
360° Back Flip ‘continuous’	Here the 360° Back Flip with a 45° offset is carried out in a slow, continuous sweep.	✓
“3/4 Barrel Roll” – canalithiasis	A horizontal 360 barrel roll in 45 increments, beginning in supine and ending in upright.	✓
“3/4 Barrel Roll” – cupulolithiasis	A horizontal 360 barrel roll in 45 increments, beginning in supine and ending in upright. Starting/ending positions, movement directions and velocities can be adapted to achieve results desired.	✓
360° Forward Flip	The Forward Flip is used to treat blocks or jams of the anterior semi-circular canal.	✓
Freestyle customized maneuvers	Custom “Block rocking”, Jam release, etc., can be carried out ‘at liberty’ using the freestyle mode.	✓
Additional maneuvers	Under development. Customer driven.	✓