Nuchal Translucency (NT) measurement at 11-13+6 weeks scan with maternal age is a highly sensitive means of screening for trisomy for earlier diagnosis of fetal aneuploidy. In order to reduce variability and maximize reliability of NT measurements, the Fetal Medicine Foundation (FMF) has provided technical guidelines. Furthermore, Herman et al. developed a novel method of image-scoring for NT measurement for the purposes of training and audit – called Herman score – which is calculated based on criteria such as section, caliper placement, skin line, image size, amnion and head position. However, of the standards for measuring NT, delineation of a good fetal sagittal section, proper placement of caliper and measurement at the maximum distance of NT are difficult to perform without proper training and thus often operator-dependent. This situation led to the development of a new measurement technology, 5D NT.

5D NT is an intuitive solution resolving operator dependency to recognize the correct mid-sagittal plane during volume data acquisition and providing improved Herman score.
“5D NT is a new technology that offers reliable NT measurement with improved visualization by FRV™ and auto zooming for improved Herman score.”

By Joon SunWoo, MD

A novel technology, 5D NT, automatically finds the mid-sagittal plane from an acquired volumetric data and measures the maximum NT distance in as few as 4 seconds upon the operator’s selection of region-of-interest over the nuchal area.

5D NT showed a high inter- and intra-observer reproducibility between experienced and inexperienced sonographers and could reduce the number of erroneous risk calculations by inexperienced sonographers.

Reference