IOTA-ADNEX

Assessment of different neoplasias in the adnexa (ADNEX) model in ultrasound system



ADNEX risk model

All gynecologists are faced with ovarian tumors on a regular basis, and the accurate preoperative diagnosis of these masses is important because appropriate management depends on the type of tumor. **The International Ovarian Tumor Analysis (IOTA)** group proposed the assessment of different neoplasias in the adnexa (ADNEX) model. This is the first risk model to differentiate between benign, borderline tumors, stage I invasive, stage II-IV invasive ovarian cancer and secondary metastatic cancer (Van Calster et al., 2014).

IOTA-ADNEX; ADNEX risk model in the SAMSUNG ultrasound system



Easy-to-use feature that provides accurate ovarian tumor classification

IOTA developed the ADNEX risk model, a novel ovarian tumor classification tool, to increase diagnosis accuracy. To use the ADNEX risk model, users should have access to the IOTA website or the IOTA app during/after examination. For enhanced user-convenience, IOTA and Samsung have built the model, named IOTA-ADNEX, into the Samsung ultrasound system so that all procedures, from scanning to the final report, can be completed in one system. IOTA-ADNEX provides an auto fill-in function for 2 ultrasound predictors* as soon as they are measured. With its intuitive result reports, including classification information of ovarian tumors into 5 categories**, IOTA-ADNEX can help users make the appropriate decisions to manage the patient's condition.

- *2 ultrasound predictors:
- 1) Maximal Diameter of the Lesion (mm), 2) Maximal Diameter of the Largest Solid Part (mm)
- **5 categories of ovarian tumor:
- 1) Benign tumors 2) Borderline tumors 3) Stage I invasive tumors 4) Stage II-IV invasive ovarian cancer 5) Secondary metastatic cancer

Key advantages of IOTA-ADNEX

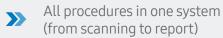


Fast

- Automatically fills in 2 ultrasound predictors* as soon as they are measured
 - * 1) Maximal Diameter of the Lesion (mm)
 - 2) Maximal Diameter of the Largest Solid Part (mm)



Convenient >>>





Accurate

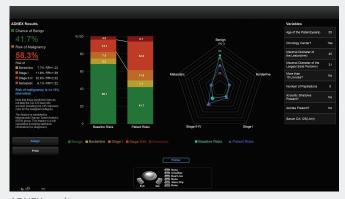
Over 90% accuracy* of tumor classification (benign vs malignant)

*1,782 cases, 10 centers



About the 9 predictors in the ADNEX model

The ADNEX model consists of three clinical predictors and six ultrasound predictors. The clinical predictors are age (years), serum CA-125 (U/mL) and type of center to which the patient has been referred for ultrasound examination. The ultrasound predictors are the maximal diameter of the lesion (mm), proportion of solid tissue (%), number of papillary projections (0,1,2,3, > 3), presence of more than 10 cyst locules (yes/no), acoustic shadows (yes/no), and presence of ascites (yes/no) (Fig. 1). The proportion of solid tissue is defined as the ratio of the maximal diameter of the largest solid component and the maximal diameter of the lesion.



ADNEX results page



Ultrasound report page

References

Van Calster B, Van Hoorde K, Valentin L, Testa AC, Fischerova D, Van Holsbeke C, Savelli L, Franchi D, Epstein E, Kaijser J, Van Belle V, Czekierdowski A, Guerriero S, Fruscio R, Lanzani C, Scala F, Bourne T, Timmerman D; International Ovarian Tumour Analysis Group. *Evaluating the risk of ovarian cancer before surgery using the ADNEX model to differentiate between benign, borderline, early and advanced stage invasive, and secondary metastatic tumours*: prospective multicentre diagnostic study. BMJ. 2014 Oct 15;349:q5920. doi: 10.1136/bmj.q5920.

Van Calster B, Van Hoorde K, Froyman W, Kaijser J, Wynants L, Landolfo C, Anthoulakis C, Vergote I, Bourne T, Timmerman D. *Practical guidance for applying the ADNEX model from the IOTA group to discriminate between different subtypes of adnexal tumors*: Facts Views Vis Obgyn. 2015;7(1):32-41. Review.

http://www.iotagroup.org/

^{*}Availability of some functions mentioned in this catalog may vary from country to country and is subject to varying regulatory requirements.

