

Table S1 Comparison of the efficiency of different diagnostic models in predicting cervical LNM in PTC patients

| Model type | AUC (95% CI) | Sen | Spe | PPV | NPV | Acc | P | Z value |
|-------------------|---------------------|-------|-------|-------|-------|-------|--------|---------|
| US | 0.718 (0.634–0.801) | 0.929 | 0.400 | 0.505 | 0.895 | 0.610 | 0.001 | 3.694 |
| UE | 0.711 (0.628–0.795) | 0.429 | 0.882 | 0.706 | 0.701 | 0.702 | <0.001 | 3.953 |
| SD | 0.607 (0.525–0.689) | 0.661 | 0.553 | 0.493 | 0.712 | 0.596 | <0.001 | 5.732 |
| OQ | 0.688 (0.601–0.776) | 0.929 | 0.471 | 0.536 | 0.909 | 0.652 | <0.001 | 3.978 |
| US + UE + SD + OQ | 0.861 (0.803–0.919) | 0.911 | 0.659 | 0.637 | 0.918 | 0.759 | – | – |

P: DeLong's test results (P) for model US + UE + SD + OQ vs. other models; Z value: DeLong's test results (Z values) for model US + UE + SD + OQ vs. other models. AUC, area under the curve; CI, confidence interval; Sen, sensitivity; Spe, specificity; PPV, positive predictive value; NPV, negative predictive value; Acc, accuracy; PTC, papillary thyroid carcinoma; LNM, lymph node metastasis; US, ultrasound; UE, ultrasound elastography; SD, S-Detect; OQ, orientation quantification.