

Supplementary data for the article:

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Supplementary material

Evaluation of trace metals in thyroid tissues: Comparative analysis with benign and malignant thyroid diseases

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Fig. 1. Box-plots for investigating metals in the tissue samples.

Table S1. Validation parameters of ICP-MS method.

Table S2. Results of Kolmogorov-Smirnov (KS) test.

Table S1**Validation parameters of ICP-MS method.**

| | LOD ^a | LOQ ^b | SRM (mg/kg) | | |
|-----------|------------------|------------------|--------------------|-------------------|--------------|
| | | | Found | Certified | Recovery (%) |
| Mn | 0.0068 | 0.0228 | 9.46 | 10.5 | 90.1 |
| Cu | 0.0161 | 0.0536 | 263.5 | 275.2 | 95.75 |
| Zn | 0.2044 | 0.6812 | 188.0 | 181.1 | 103.81 |
| As | 0.0101 | 0.0336 | 21.85 ^c | 19.6 ^c | 111.5 |
| Se | 0.0208 | 0.0692 | 1.87 | 2.0 | 93.5 |
| Cd | 0.0084 | 0.0280 | 92.2 ^c | 97.0 ^c | 95.1 |
| Pb | 0.0094 | 0.0313 | 64.1 | 62.8 | 102.1 |
| U | 0.0009 | 0.0030 | - | - | - |

^a Limit of detection (LOD)^b Limit of quantification (LOQ)^c ng/g**Table S2****Results of Kolmogorov-Smirnov (KS) test.**

| | Mn | Zn | Cu | As | Se | Cd | Pb | U |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|
| CG | 0.000 | 0.194 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| BT | 0.000 | 0.000 | 0.000 | 0.010 | 0.000 | 0.021 | 0.200 | 0.000 |
| HT | 0.159 | 0.200 | 0.004 | 0.007 | 0.174 | 0.020 | 0.200 | 0.200 |
| MNG | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| TC | 0.000 | 0.001 | 0.028 | 0.000 | 0.077 | 0.000 | 0.000 | 0.000 |

*The significance level is 0.05.