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Erratum
Combined identification of long non-coding RNA XIST and HIF1A-AS1 in serum as an effective screening for non-small cell lung cancer: Int J Clin Exp Pathol. 2015; 8(7): 7887-7895

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Abstract: Objective: Long non-coding RNAs (lncRNAs) XIST and HIF1A-AS1 have been shown to play important regulatory roles in cancer biology, and lncRNA-XIST and HIF1A-AS1 are upregulated in several cancers such as glioblastoma, breast cancer and thoracoabdominal aorta aneurysm, however, its value in the diagnosis of non-small cell lung cancer (NSCLC) is unclear. The aim of this study is to evaluate the clinical significance of serum XIST and HIF1A-AS1 as a biomarker in the screening of NSCLC. Methods: Expression levels of lncRNA-XIST and HIF1A-AS1 in tumor tissues and serum from NSCLC patients were evaluated by quantitative real-time PCR, and its association with overall survival of patients was analyzed by statistical analysis. Moreover, the XIST and lncRNA-XIST expression correlation between tumor tissues and plasma was demonstrated by linear regression analysis. Results: The levels of XIST ($P < 0.05$) and HIF1A-AS1 ($P < 0.05$) were significantly increased in tumor tissues or serum from NSCLC patients as compared to those of control group. Correlation of lncRNA-XIST or HIF1A-AS1 expression between tumor tissues and serum from the same individuals was confirmed in NSCLC patients. Moreover, serum levels of XIST and HIF1A-AS1 were significantly decreased after surgical treatment as compared to pre-operative. The ROC curves illustrated strong separation between the NSCLC patients and control group, with an AUC of 0.834 (95% CI: 0.726-0.935; $P < 0.001$) for XIST and 0.876 (95% CI: 0.793-0.965; $P < 0.001$) for HIF1A-AS1, however, the combination of XIST and HIF1A-AS1 yielded an AUC of 0.931 (95% CI: 0.869-0.990; $P < 0.001$), which was significantly improved as compared to XIST or HIF1A-AS1 alone. Conclusion: Our results demonstrated that increased serum XIST and HIF1A-AS1 could be used as a predictive biomarker for NSCLC screening, and that combination of XIST and HIF1A-AS1 had a higher positive diagnostic efficiency of NSCLC than XIST or HIF1A-AS1 alone.

Keywords: Non-small cell lung cancer, long non-coding RNA, XIST, HIF1A-AS1, tumor biomarker

In this article published in IJCEP, a minor mistake needs modification that the description of department in the manuscript may not be accurate enough.

"Department of Pulmonary Medicine" in published article changes it to "Department of Thoracic Surgery".

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Disclosure of conflict of interest

None.