

## Evaluation of Therapeutic Effect and Nursing Significance of novel Peptide Targeting *Mycobacterium tuberculosis* on Laryngeal Tuberculosis

Yan SHI 1 & Qiaoqin LU 2 \*

<sup>1</sup> School of Nursing and Health, Zhengzhou University,  
Zhengzhou, Henan, China

<sup>2</sup> Department of Otolaryngology, Yulin No. 2 Hospital,  
Yulin, Shaanxi, China

---

**SUMMARY.** Laryngeal tuberculosis is the most common extrapulmonary tuberculosis in the respiratory system, and is one of the most common laryngeal granulomatous diseases. In recent years, the incidence of laryngeal tuberculosis has increased worldwide. The secreted protein RV0222, an important virulence factor of *Mycobacterium tuberculosis*, which can recruit anti-inflammatory protein molecules to block the host anti-tuberculosis immune pathway. Thus, novel peptides targeting the RV0222 virulence factor was designed and synthesized. The biological activities of the new peptides were evaluated with real time RT-PCR and ELISA assay.

**RESUMEN.** La tuberculosis laríngea es la tuberculosis extrapulmonar más común en el sistema respiratorio y es una de las enfermedades granulomatosas laríngeas más comunes. En los últimos años, la incidencia de la tuberculosis laríngea ha aumentado en todo el mundo. La proteína secretada RV0222, un importante factor de virulencia de *Mycobacterium tuberculosis*, que puede reclutar moléculas de proteínas antiinflamatorias para bloquear la vía inmunitaria antituberculosa del huésped. Por lo tanto, se diseñaron y sintetizaron nuevos péptidos dirigidos al factor de virulencia RV0222. Las actividades biológicas de los nuevos péptidos se evaluaron con RT-PCR en tiempo real y ensayo ELISA.

---

**KEY WORDS:** laryngeal tuberculosis, *Mycobacterium tuberculosis*, peptide.

\* Author to whom correspondence should be addressed. *E-mail:* Lu189922@163.com