中文題目:肺癌小於2公分的實質性變化對於疾病預後的影響

英文題目: Characteristics of solid parts on the prognosis of lung cancer less than 2 cm in size 作 者: 吳珈潤<sup>1</sup>, 吳致瑩<sup>2</sup>, 吳青陽<sup>3</sup>, 王智亮<sup>4</sup>, 楊宗穎<sup>1</sup>, 曾政森<sup>1</sup>, 徐國軒<sup>1</sup>, 黃彥翔<sup>1</sup>, 徐中平<sup>5</sup>, 莊政諺<sup>5</sup>, 林志鴻<sup>5</sup>, 曾政森<sup>1</sup>, 曾建華<sup>6</sup>, 陳焜結<sup>1</sup>, 張基晟<sup>1</sup> 服務單位:<sup>1</sup>台中榮民總醫院內科部胸腔內科,<sup>2</sup>台中榮民總醫院病理部,<sup>3</sup>林口長庚醫院外科部 胸腔及心臟血管外科,<sup>4</sup>林口長庚醫院內科部肺腫瘤及內視鏡科,<sup>5</sup>台中榮民總醫院外科部胸腔 外科,<sup>6</sup>衛生福利部雙和醫院胸腔內科

*Background*: Lung cancer patients can have advanced-stages at diagnosis, even the tumor size is <2 cm. We aimed to study the relationship between image characteristics, clinical, and histopatholoigcal results.

*Method:* We used Taiwan Cancer Registry (TCR) database from 2009 to 2013 for initial survey. For detailed analysis, we retrospectively enrolled lung cancer patients with primary tumor size <2 cm for lymph node (LN) and distant metastasis evaluation, with clinicopathological characteristics, including solid part ratio (SPR) (tumor diameter at the mediastinal/lung window) over chest computed tomography scans, pathological diagnosis, disease-free survival (DFS), and overall survival (OS).

## Results

53,982 patients from TCR were surveyed and 3,148 had tumor size <2 cm; 18.0% had LN involvement, and 16.4% had metastasis. For detailed analysis, 307 patients were enrolled. Clinical LN involvement and distant metastasis increased significantly when SPR  $\geq$ 50% compared with <50% (23.7% vs 0% for LN involvement; 29.0% vs 0% for distant metastasis; both p<0.001). For 247 surgical treatment patients, SPR  $\geq$ 50% revealed more advanced pathological stage, and more tumors containing micropapillary or solid subtypes when diagnosed adenocarcinoma. With SPR  $\geq$ 50%, significantly worse DFS (HR, 16.47; 95% CI, 2.14–126.77; p=0.007) and a trend of worse OS (HR, 6.40; 95% CI, 0.78–52.23; p=0.083) were noted in multivariate survival analysis.

## Conclusion

For lung cancer patients with primary tumor <2 cm, SPR  $\geq$ 50% was related to more advanced stages, the presence of micropapillary or solid components of adenocarcinoma subtypes, worse DFS, and a trend of worse OS.