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LIST OF ABBREVIATIONS AND SYMBOLS

BSA Bovine serum albumin DTT Dithiothreitol GM2AP GM2 activator protein IAA Iodoacetamide Gram g h Hour Milligram mg mLMillilitre min Minute mMMillimolar MS Mass spectrometry Molecular weight MWENG MAI Nanogram ng Nanomolar nM Phosphate buffered saline **PBS** Round per minute rpm **TOF** Time-of-flight Micro μ Microgram μg Microlitre μL Alpha α β Beta °C Degree Celcius % Percentage v/vVolume per volume w/vWeight per volume

STATEMENT OF ORIGINALITY

- 1. Up-regulation of urinary GM2AP level of lung cancer patients can be considered as novel parameter for clinical development of lung cancer biomarker.
- 2. The correlation of GM2AP level in urine, serum and tissue specimens could serve as potential diagnostic and prognostic biomarker of lung cancer, especially in early pathologic stages.



ข้อความแห่งการริเริ่ม

1. การเพิ่มขึ้นของระดับ GM2AP ในปัสสาวะของผู้ป่วยมะเร็งปอดถือว่าเป็นพารามิเตอร์ใหม่ สำหรับการพัฒนาทางคลินิกเพื่อเป็นตัวบ่งชี้ทางชีวภาพของโรคมะเร็งปอด

2. ความสัมพันธ์ของระดับ GM2AP ในปัสสาวะ ซีรัม และตัวอย่างเนื้อเยื่อสามารถทำหน้าที่เป็น ตัวบ่งชี้ทางชีวภาพที่มีสักยภาพในการวินิจฉัยและการพยากรณ์ของโรคมะเร็งปอดโดยเฉพาะ อย่างยิ่งในระยะต้นของพยาธิวิทยา

