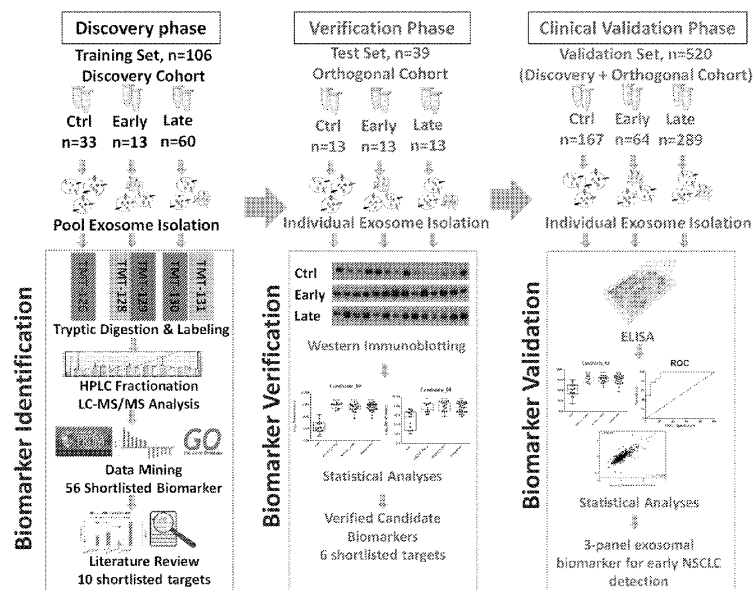




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Figure 1



(57) Abstract: The present disclosure is directed to a method of determining the likelihood of the presence of lung cancer in a subject. The method comprises determining the level of a biomarker selected from the group consisting of catalase (CAT), C-X-C motif chemokine receptor 4 (CXCR4), superoxide dismutase 3 (SOD3) and surfactant protein B (SFTPB) from a vesicle population isolated from a biological sample from said subject, wherein a change in the level of biomarker as compared to a reference indicates the likelihood of the presence of lung cancer in the subject. In the preferred embodiment, the presence of non-small cell lung cancer (NSCLC) is determined based on an increase in the levels of said markers based on plasma derived exosomes as compared to a healthy subject. The present disclosure relates further to determining lung cancer progression or responsiveness of a subject suffering from lung cancer to an anti-cancer therapy based on these biomarkers.

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