

Invited Speaker

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Usefulness of biomarkers in work-related airway disease

Jolanta Walusiak-Skorupa¹

¹Nofer Institute of Occupational Medicine, Department of Occupational Diseases and Environmental Health, Lodz, Poland

Determination of biomarkers may be useful in the surveillance of occupational exposure and workers' health. The possibility of predicting development/clinical course of specific disorders or current disease, diagnosing in early steps and health condition monitoring, is a real necessity. Various agents present in the workplace environment (or their metabolites) can be measured in samples possessed from human body (blood and urine, saliva, etc.). On the other hand, inhalant exposure may induce specific or non-specific, local or systemic, acute or chronic biological response expressed by synthesis or releasing specific or non-specific substances/mediators that also can be determined in blood, nasal and bronchial lavage or sputum, tear fluid, exhaled breath, etc. The least is known about genetic markers which may predict individual susceptibility to develop some work-related disorders under the influence of occupational exposure. Due to common exposure to inhalant agents at workplace, researches on biomarkers that allow to inspect the impact of exposure to humans' health, are still needed. The utility of biomarkers' determination in work-related airway diseases in a recent clinical approach will be reviewed.