

Poster presentation

0080 RETROSPECTIVE EXPOSURE ASSESSMENT ON THE PHOTOLITHOGRAPHY PROCESS IN SEMICONDUCTOR MANUFACTURING FACILITY

¹Seok Won Lee, ¹Young Hee Yoon, ¹Kyoung Ho Lee, ¹Hyun Hee Jung, ²Kwan Sick Kim, ^{1,3}Dong Il Kim. ¹Samsung Health Research Institute, Samsung Electronics Co., Ltd., Yongin, Republic of Korea; ²Environment Safety Center, Samsung Electronics Co., Ltd., Yongin, Republic of Korea; ³Kangbuk Samsung Hospital, School of Medicine, Sungkyunkwan University, Seoul, Republic of Korea

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Objectives The purpose of this study was to assess potential occupational exposure to chemicals among workers using both qualitative and quantitative information during specific job tasks on the photolithography process of a semiconductor manufacturing facility.

Method Historical exposure measurement data from 1997 to 2012 (n = 1347) were collected and classified by each type of chemical during 8 of 36 job tasks, and hallmark risk assessment was performed to determine control bands by job task of interest using the qualitative information on health hazard, duration of use, quantity, exposure control, etc. Finally, Bayesian Decision Analysis was performed to evaluate potential exposure ratings for those 8 job tasks by combining the prior distribution and likelihood distribution into the posterior distribution.

Results Control bands for 8 job tasks of interest were determined as 1, interpreting that workers use appropriate industrial hygiene, follow recommended job practices, wear personal protective equipment, and install proper ventilation systems. Arithmetic mean and standard deviation for 7 types of chemicals from historical exposure measurement data were 2-heptanone 0.013 ± 0.011 ppm, 1-methoxypropyl-2-acetate 0.163 ± 0.261 ppm, acetone 0.456 ± 0.609 ppm, ethyl 3-ethoxy propionate 0.131 ± 0.106 ppm, ethyl lactate 0.058 ± 0.067 ppm, isopropyl alcohol 0.594 ± 0.923 ppm, and n-butyl acetate 0.071 ± 0.368 ppm, respectively, and all concentrations of chemicals were below 10% of OELs. Therefore, exposure ratings of the 8 job tasks were determined as exposure category 1, indicating that the 95th percentile of exposures infrequently exceed 10% of the OELs.

Conclusions In conclusion, the study findings suggest that potential exposures to chemicals of interest among semiconductor workers for 16 years were very low (below 10% of the OELs) and "highly controlled."

0081 THE ASSOCIATION BETWEEN STATINS USE AND RISK OF HOSPITALIZATION FOR ACUTE HEPATITIS IN PATIENTS WITH HBV INFECTION

¹Pau-Chung Chen, ¹Meng-yin Chen, ¹Yu-Tse Tsan, ¹Yao-Hsu Yang, ²Meng-Hung Lin. ¹Institute of Occupational Medicine and Industrial Hygiene, Taipei, Taiwan; ²School of Medicine, China Medical University, Taichung, Taiwan, Taichung, Taiwan

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Objectives Statins are commonly used to prevent coronary heart disease and stroke, but they may increase the risk of hepatotoxicity and muscle toxicity. Hepatitis B virus (HBV) infected patients are more susceptible to acute hepatitis. However, the safety of statins use in patients with HBV infection is unclear. The purpose of this study was to investigate the association between statins use and risk of hospitalizations related to acute hepatitis in patients with HBV infection.

Method Our study was a population-based retrospective cohort study. We used a nationwide data of HBV-infected patient from 1999 to 2010 from the Taiwanese National Health Insurance database. Cox proportional hazards regression was used to calculate the hazard ratios (HRs) and 95% CIs for the association between statins use and the occurrence of acute hepatitis in the HBV-infected study cohort.

Results A total of 255 344 HBV-infected patients were included in the study cohort. Of these patients, 127,672 (50%) had used statins, and 283 (0.11%) were diagnosed with acute hepatitis within one year and incident rate of acute hepatitis in patients with HBV infection was 110.9 per 100000 person-years. After controlling for potential confounders, no association of acute hepatitis between statins user and non-statin user was found in different follow-up periods and doses within one year.

Conclusions Among patients with HBV infection, statins use may be not association with acute hepatitis regardless of larger cumulative dose, drug class of statins. Statins given to HBV-infection patients may not associate with severe liver injury.

0082 DIABETES MANAGEMENT AT WORK

Kandouci Chahrazed, Belhadj Zoubida, Arab Aicha, Badreddine Abdelkrim Kandouci. University of Sidi Bel Abbes, Sidi Bel Abbes, Algeria

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Objectives This study aims to demonstrate the interaction between diabetes and work, but also to identify any difficulties that a diabetic patient can meet at his place of work, which could hinder the daily management of the disease.

Method This is a descriptive, cross-sectional study that was conducted in the month of September 2012 until April 2013. The support for the survey is a pre anonymous self-administered questionnaire, among diabetic patients in employment in various institutions under agreement with the Department of Occupational Medicine of the University Hospital of Sidi Bel-Abbes during their periodic visits.

Results

- The final sample consisted of 83 diabetics with 61.4% men and 38.6% women, the average age of employees is 50 years, 62.6% of our patients are non-insulin-treated, 77.1% are type 2 diabetes, 68.7% for patients work schedules are compatible with meals and taken the treatment, and 65.1% find it difficult to follow the diet to work, 53% reported hypoglycemia at work with variable severity.
- The type of diabetes is strongly linked to hypoglycemia occurred in the workplace and change of occupation (p = 0.022, p = 0.008)
- Two factors related to the disease: duration of illness affects the occurrence of hypoglycemia (p = 0.014) and has a link with the achievement of capillary blood glucose and Modified Work.

Conclusions We have seen with the study, some socio-professional factors and factors related to the disease can occur in diabetes management.

0083 OCCUPATIONAL INJURIES AT THE COMMUNITY LEVEL

Linda Forst, Brian Chin, Lee Friedman. University of Illinois at Chicago, Chicago, Illinois, USA

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