modifications were applied to FINJEM resulting in the development of the INTEROCC FINJEM.

Methods The following refinements were included in the INTEROCC FINJEM. 1) Development of a cross-walk between the Finnish occupational code and ISCO-68 codes. For ISCO codes that were linked to multiple Finnish codes, weighted means of the exposure estimates were calculated. Exposure was refined for codes with heterogeneous exposure according to Canadian exposure data. Coding/exposure issues were addressed, for example, supervisors and petrol station attendant. 2) Splitting of 1960–1984 into two time periods (1960–1974 and 1975–1984). 3) Improving internal consistency of hydrocarbon exposures. 4) Increasing benzene exposure estimates pre-1974. 5) Improving diesel and gasoline exhaust fume exposure assessment. 6) Including exposure to PAH and B[a]P from environmental tobacco smoke exposure.

Results The modifications generally resulted in an increase in the number of INTEROCC subjects that were considered to be exposed to chemical agents. When assigning subjects to cumulative exposure groups, the cumulative exposure level for the highest exposure group increased for most of the agents.

Conclusions The cross-walk ensured that the FINJEM exposure estimates could be applied to the INTEROCC study subjects. The modifications applied in developing the INTEROCC FINJEM improved the exposure estimates for this international study, based on peer review.

197

EXPOSURE ASSESSMENT FOR CHEMICAL AGENTS IN THE INTEROCC STUDY: REFINEMENT OF THE FINNISH JOB EXPOSURE MATRIX (FINJEM)

Martie van Tongeren,¹ Laurel Kincl,² Lesley Richardson,⁵ Geza Benke,³ Timo Kauppinen,⁴ Jérôme Lavoué,⁵ David McLean,⁶ Javier Pintos,⁵ Nils Plato,⁷ Jordi Figuerola,² Elisabeth Cardis,² The INTEROCC study group² ¹*IOM, Edinburgh, UK;* ²*CREAL, Barcelona, Spain;* ³*Monash University, Melbourne, Australia;* ⁴*FIOH, Helsinki, Finland;* ⁵*University of Montreal, Montreal, Canada;* ⁶*Massey University, Wellington, New Zealand;* ⁷*Karolinska Institute, Stockholm, Sweden*

10.1136/oemed-2011-100382.197

Objectives The INTEROCC project is a multi-centre case-control study which aims to examine occupational exposures to chemical agents and EMF and risk of brain cancer. The Finnish Job Exposure Matrix (FINJEM) was identified as the most appropriate job exposure matrix. However, a number of