THYROID CANCER IN UKRAINE AFTER CHERNOBYL

dosimetry, epidemiology, pathology, molecular biology
M Tronko, T Bogdanova, V Saenko, GA Thomas, I Likhtarov, S Yamashita

Editors

THYROID CANCER IN UKRAINE AFTER CHERNOBYL
dosimetry, epidemiology, pathology, molecular biology

2014
Tronko Mykola, MD, PhD, Professor, Academician of NAMS – Director of the Institute; Head, Department of Fundamental and Applied Problems of Endocrinology, State Institution “VP Komisarenko Institute of Endocrinology and Metabolism”, National Academy of Medical Sciences of Ukraine, Kyiv, Ukraine

Bogdanova Tetiana, PhD, Professor – Head, Laboratory of Morphology of Endocrine System, State Institution “VP Komisarenko Institute of Endocrinology and Metabolism”, National Academy of Medical Sciences of Ukraine, Kyiv, Ukraine

Saenko Vladimir, PhD – Associate Professor, Department of Health Risk Control, Atomic Bomb Disease Institute, Nagasaki University, Nagasaki, Japan

Thomas Geraldine, PhD – Professor of Molecular Pathology, Department of Surgery and Cancer, Imperial College London, UK

Likhtarov Ilya, PhD, Professor – Head, Department of Dosimetry and Radiation Protection, State Institution “National Research Centre for Radiation Medicine”, National Academy of Medical Sciences of Ukraine; Director, Ukrainian Radiation Protection Institute, Kyiv, Ukraine

Yamashita Shunichi, MD, PhD – Trustee and Vice-President, Nagasaki University; Professor and Chairman, Department of Radiation Medical Sciences, and Department of Health Risk Control, Atomic Bomb Disease Institute, Nagasaki University; Vice-President, Fukushima Medical University; Appointed Professor and Vice-Director, Radiation Medical Science Center for the Fukushima Health Management Survey, Fukushima, Japan
 Contributors:

Chepurny Mykola – Scientist, Laboratory of Radiation Protection, State Institution “National Research Centre for Radiation Medicine”, National Academy of Medical Sciences of Ukraine; Ukrainian Radiation Protection Institute, Kyiv, Ukraine

Gerasymenko Valentina – Junior Scientist, Laboratory of Radiation Protection, State Institution “National Research Centre for Radiation Medicine”, National Academy of Medical Sciences of Ukraine; Ukrainian Radiation Protection Institute, Kyiv, Ukraine

Ivanova Olga – Scientist, Laboratory of Radiation Protection, State Institution “National Research Centre for Radiation Medicine”, National Academy of Medical Sciences of Ukraine; Ukrainian Radiation Protection Institute, Kyiv, Ukraine

Ito Masahiro, MD, PhD – Director, Department of Pathology, Clinical Research Center, National Nagasaki Medical Center, Nagasaki, Japan

Kashcheev Valerii, PhD – Senior Scientist, Federal State Institution «Medical Radiological Research Center» of the Russian Ministry of Health, Obninsk, Russian Federation

Kovgan Leonila, PhD, Doctor of technical sciences – Head, Laboratory of Radiation Protection, State Institution “National Research Centre for Radiation Medicine”, National Academy of Medical Sciences of Ukraine; Ukrainian Radiation Protection Institute, Kyiv, Ukraine
LiVolsi Virginia, MD – Professor of Pathology and Laboratory Medicine; Director, Strategic Initiatives and Quality Improvement, Anatomic Pathology; Professor of Surgical Pathology in Surgery; Professor of Otorhinolaryngology Head and Neck Surgery, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, USA

Masiuk Sergiy, PhD – Senior Scientist, Laboratory of Radiation Protection, State Institution “National Research Centre for Radiation Medicine”, National Academy of Medical Sciences of Ukraine; Ukrainian Radiation protection Institute, Kyiv, Ukraine

Mine Mariko, PhD – Professor, Research Center for Nuclear Weapons Abolition, Nagasaki University, Nagasaki, Japan

Nakashima Masahiro, MD, PhD – Professor and Chairman, Department of Tumor and Diagnostic Pathology, Atomic Bomb Disease Institute, Nagasaki University, Nagasaki, Japan

Schoetz Ulrike, PhD – Research Associate, Department of Surgery and Cancer, Imperial College London, UK

Shpak Victor – Senior Scientist, Department of Medical Consequences of the Chernobyl accident and International Cooperation, State Institution “VP Komisarenko Institute of Endocrinology and Metabolism”, National Academy of Medical Sciences of Ukraine, Kyiv, Ukraine
Williams Dillwyn, MD, FMedSci, Emeritus Professor of Histopathology – Honorary Senior Visiting Fellow, Department of Public Health, University of Cambridge, Cambridge, UK

Zurnadzhy Liudmyla, MD, PhD – Senior Scientist and part-time pathologist of highest category, Laboratory of Morphology of Endocrine System, State Institution “VP Komisarenko Institute of Endocrinology and Metabolism”, National Academy of Medical Sciences of Ukraine, Kyiv, Ukraine
The authors gratefully acknowledge financial support provided by the following bodies since 1994: The European Commission (Grant numbers ECP8, ERB15CT97 1100, FIR1200120123, FP7 211712), the National Cancer Institute of the USA (grant number 5U24CA082102), the Sasakawa Memorial Health Foundation of Japan and the World Health Organisation. We acknowledge the commitment of our colleagues at the Institute of Endocrinology and Metabolism (IEM) in Ukraine, especially the staff of the laboratories of Morphology and of Radiation Damage of Endocrine System who collected pathological material and frozen samples, extracted DNA and RNA for different scientific studies, and of Surgery Department who operated on most patients with thyroid tumors included in the present analysis. We thank Pathology Panel of the Chernobyl Tissue Bank (CTB): Professors D Williams (UK), V Livolsi (USA), J Rosai (USA), M Ito (Japan), J Hunt (USA), G Fadda (Italy), A Abrosimov (Russian Federation), and T Bogdanova (Ukraine) for consensus pathological diagnoses of the CTB cases. Support of our colleagues, members of panels overseeing the CTB in the past and at present, is also gratefully acknowledged, as is the generosity of patients who have donated their tissue specimens to the CTB.

We would also like to thank Nagasaki Association for Hibakushas’ Medical Care (NASHIM) for financial support of this publication and all our colleagues from Belarus, Russia and different countries of Europe, USA and Japan who worked with us and/or performed research projects on thyroid cancer after Chernobyl. Our personal acknowledgements to A Statsenko (IEM, Ukraine), T Rogounovitch, A Bychkov, J Takahashi, and Y Kawaguchi (Nagasaki University, Japan) for their essential assistance in manuscript preparation.