

MARK ROBERT OSIER
Senior Research Scientist I
Gilead Sciences, Inc.

Additional Contact Information Available By Request

Education

University of Rochester, Rochester, NY
Ashland University, Ashland, OH

Toxicology, Ph.D. 1998
Toxicology/Biology/Chemistry, B.S. 1991

Professional Certifications

American Board of Toxicology

D.A.B.T. 2002, Recertification in 2007

Professional Affiliations

Society of Toxicology, Associate Member

Employment History and Relevant Experience

Gilead Sciences, Inc – Senior Research Scientist I (2011-present)

At Gilead Sciences, Inc, I am responsible for the conduct of nonclinical studies to evaluate the safety profile of compounds to enable selection of development compounds and support of clinical trials and marketing applications. Responsibilities of the position include:

- Independently designs and conducts nonclinical studies to support discovery and development projects.
- Interfaces with staff to share scientific information and consistent practices.
- Leads protocol review discussions concerning scientific and procedural aspects of study design.
- Serves as resource for junior staff.
- Presents scientific information.
- Addresses questions regarding scientific issues.
- Prepares and reviews regulatory documents including INDs, IND/NDA annual reports, Investigator Brochures and NDAs/MAAs.
- Represents Research on multifunctional project teams.
- Maintains excellent working relationships with internal and external groups.

SNBL USA – Scientist/Study Director (2006-2011)

At SNBL USA, my primary duties were to serve as the single point of control for the design, conduct, and interpretation of preclinical laboratory studies generally intended for submission as part of an IND package. I was the study director for more than 40 nonclinical laboratory studies, both GLP compliant (U.S. FDA, OECD, MHLW) and non-GLP. Among

these studies were evaluations of small molecule, oligonucleotide/siRNA, antibody, and protein therapeutic molecules. My duties in this position included:

- Design, plan, implement and coordinate studies according to protocols, SOPs and applicable GLPs. Study designs have included:
 - Single-dose and multi-dose toxicology studies in rats, mice, and nonhuman primates (NHP)
 - Carcinogenicity studies in rats and transgenic mice.
 - Functional Observational Battery (FOB) studies in rats and mice
- Analyze and interpret study data, including writing the Final Report for the study.
- Communicate with clients, including relaying of preliminary study data and responding to client requests and comments. Provide customer service and maintain client satisfaction.
- Assist in the training of new study directors, and serve as a resource as they begin taking studies.
- Served a one-year term on the IACUC, reviewing proposed animal use protocols for upcoming studies.

Syracuse Research Corporation – Senior Toxicologist (1999-2006)

At Syracuse Research Corporation, I was involved primarily in the evaluation and summarization of epidemiologic and animal toxicology data and in the preparation of risk assessment documents for various commercial and government sponsors. Some of my assignments included the preparation of ATSDR toxicological profile (arsenic, asbestos, cobalt, dichlorobenzenes, 1,4-dioxane, ethion, zinc) and interaction profile (uranium, fluoride, cyanide, and nitrate; strontium, cesium, cobalt, trichlorethylene, and polychlorinated biphenyls; and carbon monoxide, formaldehyde, methylene chloride, nitrogen dioxide, and tetrachloroethylene) documents, the draft Toxicological Reviews of several chemicals (acetaldehyde, antimony, chlorine dioxide, dichlorobenzenes, phosgene, toluene, xylenes, and zinc) for U.S. EPA, toxicology issue papers, including toxicological risk values in support of the Hazardous Waste Identification Rule and the Superfund Technical Support Center, and literature summaries on numerous agents. I also served as task manager for several projects, in which I coordinated activities with the sponsor, supervised up to seven other employees, and served as quality assurance manager.

My duties in this position included:

- Evaluation and interpretation of scientific literature, and preparation of concise summaries of the available data according to the sponsor's specifications
- Preparation of risk assessment documents, using the established guidelines and regulations of the sponsor, that accurately reflect the available data in the literature and, in many cases, serve as a basis for agency policy (*e.g.* Toxicological Reviews and IRIS summary sheets for U.S. EPA)
- Application of appropriate mathematical models, including U.S. EPA's Benchmark Dose Software and physiologically-based pharmacokinetic models when available, to derive toxicity risk values

- Interaction with sponsoring agencies to achieve consensus regarding the derivation of toxicity risk values (e.g. ATSDR's MRLs; EPA's RfD, RfC, and Slope Factor/Unit Risk values) prior to finalization of the source document
- Serving as quality assurance manager, providing constructive feedback to other employees regarding preparation of toxicity risk documents
- Serving as task manager, ensuring proper completion of deliverables within time and financial constraints and using available personnel appropriately to accomplish these goals
- Assisting with the preparation of project status reports, summarizing current progress on tasks and outlining plans for future work on the project
- Instructing other employees on application of current risk assessment guidelines and the use of available software tools (e.g. Benchmark Dose Software)
- Design and implementation of relational databases containing chemical and toxicological data, according to the sponsor's specifications
- Presentation of material at scientific meetings, in particular the Society of Toxicology's Annual Meeting

Haematologic Technologies, Inc. (1999)

I served as an interim technician between my postdoctoral fellowship and starting with Syracuse Research Corporation. My duties in this position included:

- Conducting quantitative immunoassays (ELISAs) on human serum samples
- Isolation of coagulation proteins from bovine serum

University of Vermont – Postdoctoral Associate (1998)

As a postdoctoral associate, I worked under the supervision of Drs. Beth Hart and Jen-Fu Chiu, evaluating the ability of inhaled cadmium to affect oxidative status, particularly relating to glutathione, in pulmonary cells. My duties in this position included:

- Operation of the nose-only inhalation chamber, including preparation of animals, generation and monitoring of cadmium aerosol, sacrifice, necropsy, and tissue preparation
- Histologic evaluation of tissues, including immunohistochemical staining
- Maintenance of cultured cell lines and exposures of cultured cells to cadmium
- Gel electrophoresis and northern analysis of isolated RNA using ³²P-labeled probes

University of Rochester – Graduate Studies (1991-1997)

I performed my graduate studies in the laboratory of Dr. Günter Oberdörster, with a focus on the effects of inhaled fine and ultrafine particles on the respiratory tract. My thesis was titled "TiO₂ Particle Interactions with Pulmonary Cells." In addition to coursework in pharmacology and toxicology, my duties and training during this time included:

- Generation, characterization, and monitoring of particulate (titanium dioxide) aerosols
- Operation and maintenance of inhalation exposure systems, including an intratracheal inhalation exposure system in rats
- Animal handling, including exposure, sacrifice, and gross necropsy of rats and mice

- Histopathology, including preparation of samples, sectioning and staining of slides and evaluation and interpretation of lesions
- Tissue culture, including cell subculturing, archiving, and exposure to test materials
- Organ culture of peripheral lung explants from human and animal samples
- Immunoassay development and application, including ELISA and immunohistochemistry
- Presentation of material at scientific meetings, including the Society of Toxicology's Annual Meeting, and preparation of manuscripts for publication in scientific journals.

Eli Lilly and Company, Greenfield Laboratories (Summer 1990)

In the summer of 1990, I participated in the Society of Toxicology Summer Internship Program, working under the direction of Dr. Ronald Wolff. The project involved an examination of clearance of material from the nasal cavity of the Rhesus monkey, in order to evaluate various regions of the nose as potential drug delivery sites. My duties in this position included:

- Exposure of monkeys to ^{99m}Tc particles and evaluation of nasal clearance rates and patterns using gamma scintigraphy
- Care of the 10 monkeys available for the project, including feeding, cleaning, and anesthesia when necessary
- Presentation of the project results to the division

Publications, Book Chapters, and Proceedings

Shukla, G.S., A. Shukla, R.J. Potts, M. Osier, B.A. Hart, and J.F. Chiu. 2000. Cadmium-Mediated Oxidative Stress in Alveolar Epithelial Cells Induces the Expression of Gamma-Glutamylcysteine Synthetase Catalytic Subunit and Glutathione S-Transferase Alpha and Pi isoforms: Potential Role of Activator Protein-1. *Cell Biol. Toxicol.* 16(6):347-62.

Eneman, J.D., R.J. Potts, M. Osier, G.S. Shukla, C.H. Lee, J.F. Chiu, and B.A. Hart. 2000. Suppressed Oxidant-Induced Apoptosis in Cadmium Adapted Alveolar Epithelial Cells and its Potential Involvement in Cadmium Carcinogenesis. *Toxicology* 147(3):215-28.

Hart B.A., C.H. Lee, G.S. Shukla, A. Shukla, M. Osier, J.D. Eneman, and J.F. Chiu. 1999. Characterization of Cadmium-Induced Apoptosis in Rat Lung Epithelial Cells: Evidence for the Participation of Oxidant Stress. *Toxicology* 133(1):43-58.

Osier, M., R.B. Baggs, and G. Oberdörster. 1997. Intratracheal Instillation vs. Intratracheal Inhalation: Influence of Cytokines on Inflammatory Response. *Proceedings of the Sixth International Meeting on the Toxicology of Natural and Man-Made Fibrous and Non-Fibrous Particles.* *Environ. Health Perspect.* 105(Suppl 5):1265-1271.

Osier, M. and G. Oberdörster. 1997. Intratracheal Inhalation vs. Intratracheal Instillation: Differences in Particle Effects. *Fund. Appl. Toxicol.* 40(2):220-227.

Driscoll, K.E., J.K. Maurer, D. Hassenbein, J. Carter, Y.M.W. Janssen, B.T. Mossman, M. Osier, and G. Oberdörster. 1994. Contribution of Macrophage-Derived Cytokines and Cytokine

Networks to Mineral Dust-Induced Lung Inflammation. In: Toxic and Carcinogenic Effects of Solid Particles in the Respiratory Tract. Dungworth, Mauderly, and Oberdörster (Eds). ILSI Monographs, U. Mohr, editor-in-chief, ILSI Press, Washington, DC., p. 177-189.

Wolff, R.K., D.L. Allen, B.L. Hughes, M. Osier, and M.A. Dorato. 1993. Nasal Clearance in Rhesus Monkeys. *J. Aerosol Med.* 6:(2):111-119.

Selected Abstracts and Presentations

Bowenkamp, K., C. Hayden, G. Argentieri, M. Osier, E. Giddens, P. Savage, H. Smith and P. Sahota. 2008. Nilotinib Produces No Detectable Cardiotoxicity after 39 Weeks of Oral (Gavage) Administration to Cynomolgus Monkeys. *The Toxicologist* 102:(Abstr 2308), 475.

Abadin, H., M. Osier, O. Faroon, C. Smith, and C. De Rosa. 2003. ATSDR's Intermediate-Duration Oral Minimal Risk Level for Cobalt. *The Toxicologist* 72:(Abstr 1196), 246.

Odin, M., S. Bosch, M. Osier, and P.M. McGinnis. 2003. Evaluation of Mode of Action in Assessment of Cancer Risk Associated with Exposure to 1,4-Dichlorobenzene. *The Toxicologist* 72:(Abstr 672), 138.

Osier, M. and P.R. McClure. 2003. Application of a Physiologically-Based Pharmacokinetic (PBPK) Model to the Calculation of a Reference Concentration for Xylenes. *The Toxicologist* 72:(Abstr 679), 140.

Osier, M., M. Odin, C. Smallwood, and J. Swartout. 2002. The Oral Reference Dose for Ethylene Dibromide: A New Look at an Old Problem. *The Toxicologist* 66:(Abstr 507), 104.

McClure, P., M. Osier, and L. Flowers. 2002. Updated Assessment of Health Effects from Toluene Exposure. *The Toxicologist* 66:(Abstr 511), 105.

Ingerman, L., H. Choudhury, and M. Osier. 2002. Refinement of Reference Dose (RfD) for Zinc. *The Toxicologist* 66:(Abstr 512), 105.

Osier, M., M. Odin and P. McGinnis. 2000. Proposed New Risk Assessment for Acetaldehyde. *The Toxicologist* 54:(Abstr 862), 183.

Hart, B.A., J.D. Eneman, M. Osier, G.S. Shukla, C.H. Lee, and J-F. Chiu. Modification of Oxidant-Induced Apoptosis in Cadmium-Adapted Lung Epithelial Cells. Abstract presented at the American Thoracic Society meeting, (San Diego, California);1999

Shukla, G.S., A. Shukla, M. Osier, J-F. Chiu, and B.A. Hart. 1999. Potential Role of Activator Protein-1 in Cadmium-Induced Alveolar Epithelial Gene Expression of g-Glutamylcysteine

Synthetase and Glutathione S-Transferase Isoforms. Abstract presented at the American Thoracic Society meeting, (San Diego, California); 1999 .

Osier, M., R.B. Baggs, and G. Oberdörster. 1997. A Comparison of *In Vivo* and *Ex Vivo* Pulmonary Response to Insoluble Particles. *The Toxicologist* 36:(Abstr 387), 75.

Osier, M., R.B. Baggs, and G. Oberdörster. Intratracheal Inhalation vs Intratracheal Instillation: Influence of Cytokines on Inflammatory Response. Poster presented at the Sixth International Meeting on the Toxicology of Natural and Man-Made Fibrous and Non-Fibrous Particles. (Lake Placid, New York); 1996.

Osier, M., R.B. Baggs, and G. Oberdörster, G. 1995. Intratracheal Inhalation vs Intratracheal Instillation: Differences in Particle Effects. *The Toxicologist* 15(1): (Abstr 247), 46.

Osier, M., R.B. Baggs, and G. Oberdörster. 1994. Methods of Particle Dosing of Lung Explant Cultures: A Comparison. *The Toxicologist* 14:(Abstr 153), 62.

Selected Reports

Pohl, H. and M. Osier. 2005. Draft Interaction Profile For: Carbon Monoxide, Formaldehyde, Methylene Chloride, Nitrogen Dioxide, and Tetrachloroethylene. Prepared by Syracuse Research Corporation, North Syracuse, NY for the Agency for Toxic Substances and Disease Registry, Atlanta, GA, under contract with Eastern Research Group.

Faroon, O.M., H. Abadin, S. Keith, M. Osier, L. Chappel, G. Diamond, and G. Sage. 2004. Toxicological Profile for Cobalt. Prepared by Syracuse Research Corporation, North Syracuse, NY for the Agency for Toxic Substances and Disease Registry, Atlanta, GA.

Wilbur, S., D. Jones, S. Wright, F. Lladós, M. Osier, G. Diamond, and R. Amata. 2004. Draft Toxicological Review for 1,4-Dioxane. Prepared by Syracuse Research Corporation, North Syracuse, NY for the Agency for Toxic Substances and Disease Registry, Atlanta, GA.

Flowers, L., M.W. Broder, P.R. McClure, M. Osier, and C. Troxel. 2003. Toxicological Review of Xylenes (CAS No. 1330-20-7). Prepared for National Center for Environmental Assessment, U.S. EPA, Washington, DC.

Socha, M.L., C.V. Smith, M. Williams, R. Amata, and M. Osier. 2003. Toxicological Profile for Zinc. Prepared by Syracuse Research Corporation, North Syracuse, NY for the Agency for Toxic Substances and Disease Registry, Atlanta, GA.

Osier, M. 2003. Provisional Toxicological Values for the Health Effects Assessment Summary Table (HEAST): Ethylene Cyanohydrin (109-78-4). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2003. Provisional Toxicological Values for the Health Effects Assessment Summary Table (HEAST): Dicyclopentadiene (77-73-6). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M., M. Odin, and P.M. McGinnis. 2002. Toxicological Review of Antimony and Compounds (CAS No. 7440-36-0). Prepared for National Center for Environmental Assessment, U.S. EPA, Washington, DC.

Osier, M. 2002. Antimony (CASRN 7440-36-0). In Support of the Integrated Risk Information System (IRIS). Prepared for National Center for Environmental Assessment, U.S. EPA, Washington, DC.

Osier, M. 2002. Antimony Oxides (CASRN 1309-64-4). In Support of the Integrated Risk Information System (IRIS). Prepared for National Center for Environmental Assessment, U.S. EPA, Washington, DC.

Ingerman, L., M. Osier, M.E. Fransen, A.R. McDonald. 2002. Draft Toxicological Review of Zinc (CAS No. 1314-98-3): In Support of Summary Information on the Integrated Risk Information System (IRIS). Prepared for National Center for Environmental Assessment, U.S. EPA, Washington, DC.

McClure, P.R. and M. Osier. 2002. Toxicological Review of Xylenes (CASRN 1330-20-7) in Support of Summary Information on the Integrated Risk Information System (IRIS). Prepared for National Center for Environmental Assessment, U.S. EPA, Washington, DC.

Bosch, S., M. Odin, and M. Osier. 2002. Toxicological Review of Dichlorobenzenes (CASRN 95-50-1; 541-73-1; 106-46-7) in Support of Summary Information on the Integrated Risk Information System (IRIS). Prepared for National Center for Environmental Assessment, U.S. EPA, Washington, DC.

Osier, M. 2002. Provisional Toxicological Values for the Health Effects Assessment Summary Table (HEAST): Formic Acid (64-18-6). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2001. Draft Toxicological Review of Phosgene (CAS No. 75-44-5): In Support of Summary Information on the Integrated Risk Information System (IRIS). Prepared for National Center for Environmental Assessment, U.S. EPA, Washington, DC.

Pohl, H., M. Osier, and P. McClure. 2001. Interaction Profile For: Strontium, Cesium, Cobalt, Trichloroethylene, and Polychlorinated Biphenyls. Prepared by Syracuse Research Corporation, North Syracuse, NY for the Agency for Toxic Substances and Disease Registry, Atlanta, GA.

Osier, M. 2001. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Inadequate Data to Derive an Inhalation Unit Risk for 2-Methoxyethanol (CASRN 109-86-4). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2001. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Inadequate Data to Derive a Slope Factor for 2-Methoxyethanol (CASRN 109-86-4). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2001. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Derivation of a Provisional RfD for 2-Methoxyethanol (CASRN 109-86-4). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2001. STSC Issue Paper for: Derivation of a Provisional RfD for 4,6-Dinitro-o-cresol (CASRN 534-52-1). Prepared for Superfund Technical Support Center, National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2001. STSC Issue Paper for: Derivation of a Provisional RfC for 4,6-Dinitro-o-cresol (CASRN 534-52-1). Prepared for Superfund Technical Support Center, National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2001. STSC Issue Paper for: Provisional Carcinogenicity Assessment for 4,6-Dinitro-o-cresol (CASRN 534-52-1). Prepared for Superfund Technical Support Center, National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. and P.R. McClure. 2001. Draft Toxicological Review of Toluene (CAS No.108-88-3): In Support of Summary Information on the Integrated Risk Information System (IRIS). Prepared for National Center for Environmental Assessment, U.S. EPA, Washington, DC.

Roney, N., M. Osier, and A.D. Avallone. 2000. Toxicological Profile for Ethion. Prepared by Syracuse Research Corporation, North Syracuse, NY for the Agency for Toxic Substances and Disease Registry, Atlanta, GA.

Osier, M. 2000. STSC Issue Paper for: Derivation of a Provisional RfD for 1,1,2,2-Tetrachloroethane (CASRN 79-34-5). Prepared for Superfund Technical Support Center, National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. STSC Issue Paper for: Feasibility of Deriving an RfC for 1,1,2,2-Tetrachloroethane (CASRN 79-34-5). Prepared for Superfund Technical Support Center, National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. STSC Issue Paper for: Provisional Carcinogenicity Assessment for 1,1,2,2-Tetrachloroethane (CASRN 79-34-5). Prepared for Superfund Technical Support Center, National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. STSC Issue Paper for: Provisional Carcinogenicity Assessment for Cobalt (CASRN 7440-48-4) and Compounds. Prepared for Superfund Technical Support Center, National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. STSC Issue Paper for: Derivation of a Provisional RfD for Cobalt (CASRN 7440-48-4) and Compounds. Prepared for Superfund Technical Support Center, National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. STSC Issue Paper for: Derivation of a Provisional RfC for Cobalt (CASRN 7440-48-4) and Compounds. Prepared for Superfund Technical Support Center, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Derivation of a Provisional RfD for Ethylene Dibromide (CASRN 106-93-4). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Derivation of a Provisional RfD for α -Hexachlorocyclohexane (CASRN 319-84-6). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Derivation of a Provisional RfD for β -Hexachlorocyclohexane (CASRN 319-85-7). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Inadequate Data to Derive an RfC for 4-Bromodiphenyl ether (CASRN 101-55-3). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Inadequate Data to Derive an RfD for 4-Bromodiphenyl ether (CASRN 101-55-3). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Inadequate Data to Derive an RfC for 1,4-dichloro-2butene (CASRN 764-41-0). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Inadequate Data to Derive an Inhalation Unit Risk for 4-Bromodiphenyl ether (CASRN 101-55-3). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Inadequate Data to Derive an Oral Slope Factor for 4-Bromodiphenyl ether

(CASRN 101-55-3). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Inadequate Data to Derive a Provisional RfD for Benz[a]anthracene (CASRN 56-55-3). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 2000. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Inadequate Data to Derive a Provisional RfD for Acenaphthalene (CASRN 208-96-8). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 1999. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Derivation of a Provisional RfC for Acrylamide (CASRN 79-06-1). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 1999. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Provisional Cancer Assessment for Acrylonitrile (CASRN 107-13-1). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 1999. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Provisional Carcinogenicity Assessment for 1,4-Dichlorobenzene (CASRN 106-46-7). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 1999. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Carcinogenicity Assessment for Pyridine (CASRN 110-86-1). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 1999. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Feasibility of Deriving Provisional Cancer Assessments for Silver (CASRN 7440-22-4). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 1999. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Feasibility of Deriving Provisional Cancer Assessments for Thiram (CASRN 137-26-8). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Osier, M. 1999. Toxicological Review of Acetaldehyde (CAS No. 75-07-0): In Support of Summary Information on the Integrated Risk Information System (IRIS). Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

Odin, M., D. Wohlers, M. Osier, A.R. McDonald, M.E. Fransen, S. Bosch, F. Lladós, D. Gefell, P.R. McClure, L. Ingerman and G.L. Diamond. 1999. Provisional Toxicity Value Assessment for Hazardous Waste Identification Rule (HWIR): Feasibility of Deriving HWIR Toxicological Risk Values for 25 Chemicals. Prepared for National Center for Environmental Assessment, U.S. EPA, Cincinnati, OH.

