Exponent®
Engineering & Scientific Consulting

Rebecca Silcock, Ph.D.

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Professional Profile

Dr. Silcock is an experienced technical specialist. She has a proven track record of providing metabolism and dietary safety inputs to successful substance approvals and product registrations.

Dr. Silcock has 28 years of experience gained in industry and consulting, and evaluates metabolism and residue data, conducts strategic data reviews and data gap analyses, writes JMPR dossiers for residue submissions, prepares residues sections of active substance dossiers, product dossiers (dRRs) and MRL/import tolerance dossiers for submission to the EU, and prepares toxicokinetic assessments for inclusion in REACH submissions. She has a strong metabolism background and places and monitors the full range of residue study types.

Academic Credentials & Professional Honors

Ph.D., Biosynthetic Chemistry, University of Cambridge, England, 1995

B.A., Natural Sciences, University of Cambridge, England, 1991

Prior Experience

Regulatory Metabolism Senior Study Director, Syngenta CTL, UK, 2001-2008

Dietary Exposure Team Leader, Syngenta (formerly Zeneca Agrochemicals), 1995-2001

Publications

Harris RC, Cutter AL, Weissman KJ, Hanfeld U, Timoney MC, Staunton J. Enantiospecific synthesis of analogues of the diketide intermediate of the erythromycin polyketide synthase (PKS). Journal of Chemical Research (S) 1998; 283.

Harris RC, Cutter AL, Weissman KJ, Hanfeld U, Timoney MC, Staunton J. Enantiospecific synthesis of analogues of the diketide intermediate of the erythromycin polyketide synthase (PKS). Journal of Chemical Research (M) 1998; 1230-1247.

Holzbaur IE, Harris RC, Bycroft M, Cortes J, Bisang C, Staunton J, Rudd BAM, Leadlay PF. Molecular basis of Celmer's rules: The role of two ketoreductase domains in the control of chirality by the erythromycin modular polyketide synthase. Chemistry and Biology 1999; 6:189-195.

Weissman KJ, Bycroft M, Cutter AL, Hanefeld U, Frost EJ, Timoney MC, Harris R, Handa S, Roddis M, Staunton J, Leadlay PF. Evaluating precursor-directed biosynthesis towards novel erythromycins through

in vitro studies on a bimodular polyketide synthase. Chemistry & Biology 1998; 5(12):743-754.

Presentations

Harris RC. Biosynthesis of macrolide antibiotics. 15th Mona Symposium, University of West Indies, Jamaica, 1994.

Project Experience

Preparation of residues sections for active substance approvals (AIR dossiers, DARs), product authorisations (dRR dossiers) and MRL/import tolerance dossiers for submission to the EU for a range of active substances and products, and provision of post-submission support during regulatory review.

Preparation of JMPR dossiers for residue evaluations of new compounds, periodic reviews and top-up dossiers for new uses.

Modelling consumer exposure to pesticide residues using deterministic techniques (UK, EFSA and WHO models), including combined risk assessments for mixtures.

Conducting data gap analyses and strategic data reviews, preparation of expert opinions and data waivers.

Preparation of toxicokinetic assessments for inclusion in REACH submissions, and previously for NONS submissions, and ADME metabolism and dermal absorption study summaries for inclusion in EU submissions.

Prior experience of study directing and conducting crop metabolism, livestock metabolism, ADME, pharmacokinetic and dermal absorption studies, and study reviewing crop residue trial and method validation studies placed at contract laboratories. Placement and study monitoring of plant metabolism, livestock metabolism and feeding studies, pyrolysis, confined and field crop rotation studies, residue trials, storage stability and method validation studies. Experience includes the design of non-standard studies to address specific technical questions.