How to use read-across

ECHA and Cefic are still searching for a common understanding

Philippa Jones
Desk editor - EU

The use of read-across in testing proposals by REACH registrants has posed difficulties for ECHA and industry. The agency has urged companies to provide a thorough scientific justification for its use, and to strengthen the rationale for its use in testing proposals and registration dossiers (CW 13 December 2011). But it remains an area of uncertainty, with at least one appeal launched against an ECHA rejection of its use of read-across to fulfil data requirements (CW 1 November 2012).

In an effort to put these concerns to rest, the agency and the European Chemical Industry Council (Cefic) held a workshop in October on how to use the technique. "ECHA has an interest to ensure the high quality of dossiers, including when registrants use adaptations to the standard testing regime," says Mike Rasenberg, head of its computational methods unit. "Therefore, dialogue with industry and stakeholders [on read-across] is necessary."

Bruno Hubesch, research and innovation spokesman at Cefic, says his organisation's Long Range Research Initiative (LRI) started a discussion with the chemicals agency in late 2011 to "try and bring together industry, ECHA and EU member states in a workshop environment to exchange experiences in developing and evaluating scientifically credible read-across." In parallel to this, industry's European Centre for Ecotoxicology and Toxicology of Chemicals (Ecetoc) established a taskforce at the start of 2012 to "collate and summarise available guidance and tools" on read-across. By examining a number of case studies, the taskforce set out to "extract generic insights to assist in the development, evaluation, justification and documentation of read-across approaches." Based on this research, it delivered a draft report that it says "helped to tease out some of the questions from industry's perspective that could be discussed during the workshop".

One of the workshop's aims was to share the agency's "current thinking on read-across assessment… even if ECHA's approach is still a work in progress," says Mr Rasenberg. This included encouraging industry to "provide, in a transparent and explicit manner, a robust and scientifically convincing justification for why read-across is possible". According to Mr Rasenberg, "often the justifications in a dossier… assume too much pre-understanding of the case" and "uncertainties in a read-across argument are not addressed explicitly". Registrants must therefore "create dossiers with explicit and concrete arguments." But even with "a clear understanding of the case and the arguments it is built on", he says, regulators face uncertainty about read-across predictions. "There is no unique formula to calculate uncertainty and it must be considered individually for each endpoint and read-across case. This process involves a lot of expert judgment, and the streamlining of the assessment will require considerable effort to develop an approach that will ensure a transparent and consistent read-across examination."

Mr Hubesch says the workshop went some way to reaching a common understanding of what scientifically valid read-across represents and how it should be characterised. "The aim of sharing experiences to start the dialogue of what constitutes valid read-across was met. Industry has a clearer perspective of many of the [agency's] expectations, ECHA has a better appreciation of the issues with which industry has been wrestling, and the discussion allowed for some of the misconceptions and confusion to be clarified in a science-based forum."

Katy Taylor, science advisor at the European Coalition to End Animal Experiments (ECEAE), and an attendee at the event, says her organisation was "disappointed that [it] didn't provide an opportunity to tackle specific issues with the agency's proposed read-across approach". This is necessary "as cases get thrown out on specifics such as whether consistent toxicity needs to be seen across all endpoints or can be endpoint-specific, or whether read-across that proves a negative [no toxic effects] is equally acceptable or needs more proof, and what that proof should be. Until the approach is fully worked out and everyone buys into it, we fear that ECHA's Member State Committee will reject more read-across cases than it accepts."

> ECHA has an interest to ensure the high quality of dossiers, including when registrants use adaptations to the standard testing regime
>
> – Mike Rasenberg, ECHA

"The workshop was not intended to provide a solution to stop similar problems but served to start the dialogue, clarify some of the current issues and provide some guidance on the direction to go forward," says Dr Hubesch. He hopes that a combination of the insights derived from the recently published Ecetoc taskforce report (CW 22 November 2012), coupled with the on-going dialogue with ECHA, as well as developing illustrative case studies, could be helpful to offset similar challenges in the use of read-across in the future".

To comment on this article, click here: Chemical Watch Forum