

December 15, 2015

Geert Dancet
Executive Director, European Chemicals
Agency
P.O. Box 400
00121 Helsinki, Finland

Re: Public Consultation on Bisphenol A
(EC 201-245-8) in Thermal Paper

Dear Mr. Dancet,

The Endocrine Society appreciates the opportunity to participate in the public consultation on Bisphenol A (BPA) in thermal paper. We do not take a position on specific regulatory approaches to restrict exposures to BPA. Instead, our comments are intended to help ECHA ensure that regulatory decisions are based on a complete analysis of the public health risks and socio-economic considerations of BPA. Such analysis should integrate the assessments regarding BPA exposure through thermal paper with the other sources of exposure to BPA.

Founded in 1916, the Endocrine Society is the world's oldest and largest scientific society dedicated to the study and treatment of endocrine diseases. We are proud that our membership of over 18,000 includes the world's leading experts on hormones and endocrine disrupting chemicals (EDCs) from over 120 countries. The Endocrine Society works with our member experts to craft policy documents, statements, and other resources to help ensure that governments and regulatory agencies worldwide are able to make evidence-based decisions regarding EDCs.

BPA is a known EDC that humans are routinely exposed to through a variety of sources, including the handling of thermal paper receipts. Recently, the Endocrine Society published its Second Scientific Statement on Endocrine-Disrupting Chemicals¹. This statement includes 223 references to peer-reviewed, original scientific publications on BPA. The statement strongly makes the case that adverse effects due to BPA action can involve many different receptors and mechanisms, demonstrating that BPA can act through non-estrogenic pathways. Furthermore, BPA can exhibit non monotonic dose response relationships and the effects of BPA exposures can persist through multiple generations, potentially harming the unborn children and grandchildren of exposed individuals.

We understand that the SEAC considered the costs and benefits of restrictions to BPA in thermal paper. However, we note that this evaluation only took into account effects on the mammary glands, reproduction, metabolism and neuro-behaviour. The Scientific Statement contains evidence that exposure to BPA can contribute to disruption of all of the topics addressed in the manuscript, including obesity and diabetes, female reproduction, male reproduction, hormone-sensitive cancers in females, prostate cancer, thyroid, and neurodevelopment and neuroendocrine systems. Although

¹ Gore, AC et al., "EDC-2: The Endocrine Society's Second Scientific Statement on Endocrine-Disrupting Chemicals." *Endocr Rev.* 2015 Dec;36(6):E1-E150.



the strength of evidence is variable across some aspects such as human epidemiological studies on obesity and diabetes, we believe that the evidence justifies reasonable concern.

As described above, the spectrum of potential harms due to BPA exposure is broader than those evaluated by the SEAC. Furthermore, the cost estimates used by SEAC may not reflect certain relevant studies from the scientific literature. We note, in particular, recently published studies in the *Journal of Clinical Endocrinology and Metabolism* in which the authors were able to quantify the cost of EDCs including BPA attributable to different disorders of public health concern in the European Union².

In conclusion, it is critical that regulatory decisions for specific chemicals assess the spectrum of uses, sources of exposure, and potential effects for the chemical in question. We hope that the ECHA will make use of the studies mentioned above to conduct a more comprehensive assessment of the risks and benefits of BPA in thermal paper and other consumer products. These publications have been uploaded to the public consultation website as separate attachments. We also will share our comments with the European Commission in response to the public consultation on BPA in food contact materials. Thank you for considering the Endocrine Society's comments. If we can be of any further assistance, please do not hesitate to contact Joseph Laakso, PhD, Associate Director of Science Policy at jlaakso@endocrine.org.

Sincerely,

Lisa Fish, MD
President, Endocrine Society

² Legler, J et al., "Obesity, Diabetes, and Associated Costs of Exposure to Endocrine-Disrupting Chemicals in the European Union." *J Clin Endocrinol Metab*, April 2015, 100(4):1278 –1288