



Joint news release

IIVS Collaborates with BASF and Givaudan to Validate a Non-animal Test for Regulatory Submissions

GAITHERSBURG, **MD** –**August 28**– The Institute for In Vitro Sciences (IIVS), with an established track record in the validation of alternatives to animal testing, is teaming up with BASF and Givaudan to validate an improved skin sensitization reactivity method to address the needs of toxicologists and regulators.

Scientists at BASF and Givaudan have developed the Kinetic Direct Peptide Reactivity Assay (Kinetic DPRA), a non-animal test to predict allergic reactions in the skin known as sensitization. Three other non-animal sensitizer tests have been internationally accepted. However, the Kinetic DPRA has the potential to go beyond a yes/no answer and predict the potency of a sensitizer, which is required by some regulatory agencies. Until now the only way to predict potency classifications was through animal testing.

"Being able to determine potency with minor modifications of the well-established and routinely used DPRA method was highly attractive to us," stated Dr. Robert Landsiedel, Vice President, Experimental Toxicology and Ecology, BASF. "Once validated, we hope that the Kinetic DPRA will obviate the need for further animal testing to determine potency of chemicals. We are pleased that IIVS is joining our efforts to prove the validity of the method."

"Assessing potency of skin sensitizers is an essential step in risk assessment to determine safe use levels, and we have shown that kinetic data are key for this," indicates Dr. Andreas Natsch, Head of in vitro molecular screening at Givaudan.

The validation project, designed by BASF and Givaudan, will be conducted over the course of 2018 and, pending a successful outcome, will be submitted to the Organization for Economic Cooperation and Development (OECD) in 2019.

"We are pleased to be working again with BASF and Givaudan to validate a technology that will be available for many industry sectors and applications," said Erin Hill, President, IIVS.

"Our ability to participate in such programs is through the generous support of our contributors." Other participating laboratories include The Procter & Gamble Company (developer of the original DPRA), Charles River and the Czech National Institute of Public health.

About the Institute for In Vitro Sciences (IIVS)

IIVS is a non-profit organization wholly dedicated to the promotion of rapid and innovative non-animal test methods. Founded in 1997, IIVS is recognized as a leading provider of in vitro testing in support of toxicological safety evaluations. Rigorous scientific programs coupled with educational and outreach initiatives have established IIVS as a global leader in the advancement of alternatives to animal testing. For more information, visit us at www.iivs.org.

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The more than 115,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into five segments: Chemicals, Performance Products, Functional Materials & Solutions, Agricultural Solutions and Oil & Gas. BASF generated sales of €64.5 billion in 2017. BASF shares are traded on the stock exchanges in Frankfurt (BAS), London (BFA) and Zurich (BAS). Further information at www.basf.com.

About Givaudan

Givaudan is the global leader in the creation of flavours and fragrances. In close collaboration with food, beverage, consumer product and fragrance partners, Givaudan develops tastes and scents that delight consumers the world over. With a passion to understand consumers' preferences and a relentless drive to innovate, Givaudan is at the forefront of creating flavours and fragrances that 'engage your senses'. The Company achieved sales of CHF 5.1 billion in 2017. Headquartered in Switzerland with local presence in over 100 locations, the Company has more than 11,100 employees worldwide. Givaudan invites you to discover more at www.givaudan.com.

Media Contact:

IIVS	BASF SE	Givaudan
Erin Hill	Birgit Lau	Marie Laure Andre
	Media Relations	Communications Fragrances
Phone: +1 301-947-1281	Phone: +49 621 60-20732	Phone: +33 139984477
Ehill@iivs.org	birgit.lau@basf.com	marie-laure.andre@givaudan.com