

Takeda is a research-based global company with its main focus on pharmaceuticals. It is the largest pharmaceutical company in Japan and among the leaders in the world.



«We, Takeda Chemical Industries, Consumer Healthcare Company, Healthcare Research Laboratories, have responsibility for development, application and scale-up of new non-prescription formulations. Sensory characteristics such as appearance, odor and taste significantly affect patient (customer) acceptance, preference and compliance in oral formulations. In other words, patients (customers) do not take the formulation whose sensory characteristics are worse. Therefore, we think that evaluation of sensory characteristics in formulations is one of the most important formulation studies. In the pharmaceutical field, sensory evaluation is mainly carried out with volunteers. However, there is a limit on the performance of the sensory evaluation because of the individual difference, acclimation, pain especially in the case of evaluation of unpleasant taste and odor, and safety.



That is why we have been trying to use instruments for evaluation of sensory characteristics. Recently, we have tried the electronic nose system (Prometheus, Alpha M.O.S.) for evaluation of odor in formulations and confirmed the utility of the electronic nose system. We used the electronic nose system for the development of a novel coating technique for the masking of unpleasant odor of Lcysteine.

The usage of the electronic nose system was helpful to the development and launch of the new formulations containing L-cysteine, HICEE WHITE 2 and HICEE B MATE 2. Now, we continue to use the electronic nose system for formulation study of unpleasant odor drugs and evaluation of odor in formulations.»

*Takeda Publication:* Application of an electronic nose system for evaluation of unpleasant odor in coated tablets - European Journal of Pharmaceutics and Biopharmaceutics - 2005, volume 59, issue 2