Abstract:
WEN cleansing conditioners were designed to treat damaged hair and have been commercially available for about ten years. Recently, the FDA and WEN representatives received an increase in the number of consumer complaints associated with the use of WEN cleansing conditioners including hair loss, itching, baldness, and hair breakage. The objective of this study was to review the irritation potential of WEN ingredients. For the three most common varieties of WEN cleansing conditioner, 31 total ingredients and their maximal concentrations in the final product were identified. The ingredients include 12 botanical mixtures, a preservative mixture, and a fragrance mixture with 39 constituents. The ingredients were studied by determining: (1) if the maximal concentration was less than guidance values for those chemicals, (2) if the ingredient was reported in other cosmetic products, and (3) the irritation potential based on human studies. The fragrance ingredient’s 39 constituents were evaluated in a similar manner. Twenty-three ingredient concentrations were within the Cosmetic Ingredient Review’s (CIR) guidelines. However, for two ingredients, formula specifications (e.g. the average molecular weight of proteins) were included in the guidance and it was unclear if they were met by the WEN ingredients. Eight ingredients did not have CIR guidance. Of the fragrance constituents, one met the guidance values by the CIR and nine met guidance values by the International Fragrance Association, and 29 did not have guidance values. Almost all of the ingredients are reported in other cosmetics at similar concentrations. For ingredients and fragrance constituents with human or animal studies, the results ranged from not irritating to moderately irritating under the conditions of the study. However, most of the studies were patch tests intended to exaggerate the hazard. In human studies, mild erythema was the most reported clinical reaction. Several data gaps were identified including a lack of irritation data on four ingredients and two fragrance constituents. Taken together, the irritation potential of WEN ingredients appears to be low and would be similar to other cosmetic products on the market.