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Toxic *in vitro* effects of flavoured-air inhalers containing essential oils in differentiated human nasal epithelial cells at air-liquid interface.

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Supplementary Table 2 – Sensitivity analyses for the primary endpoints, using linear mixed-effects models with patient as a random intercept. (a) Nested model: the treatment factor reparameterised as flavour nested within brand. The within-brand flavour effect compares the full six-product model with a brand-only model; the brand main effect compares the brand-only model with an intercept-only model (likelihood-ratio tests). (b) Sex analysis: sex main effect (from a model including sex as a covariate) and sex x treatment interaction (likelihood-ratio test); n = 4 female / 4 male donors (TEER, 4 female / 3 male). All p-values are nominal and uncorrected for multiple testing.

(a) Nested model (flavour within brand)

Endpoint	Within-brand flavour effect (LRT)	Brand main effect (LRT)
TEER	$\chi^2 = 8.59$, df = 3, p = 0.035	$\chi^2 = 18.52$, df = 3, p < 0.001
Apical BCA protein	$\chi^2 = 8.85$, df = 3, p = 0.031	$\chi^2 = 13.70$, df = 3, p = 0.003
Basal BCA protein	$\chi^2 = 9.45$, df = 3, p = 0.024	$\chi^2 = 17.22$, df = 3, p < 0.001
Apical LDH	$\chi^2 = 4.22$, df = 3, p = 0.239	$\chi^2 = 2.89$, df = 3, p = 0.409
Basal LDH	$\chi^2 = 8.00$, df = 3, p = 0.046	$\chi^2 = 3.53$, df = 3, p = 0.317

(b) Sex covariate and sex × treatment interaction

Endpoint	Sex main effect	Sex × treatment interaction (LRT)
TEER (4F/3M)	p = 0.007	$\chi^2 = 11.10$, df = 6, p = 0.085
Apical BCA protein	p = 0.007	$\chi^2 = 25.46$, df = 6, p < 0.001
Basal BCA protein	p = 0.084	$\chi^2 = 9.06$, df = 6, p = 0.170
Apical LDH	p = 0.338	$\chi^2 = 5.18$, df = 6, p = 0.522
Basal LDH	p = 0.456	$\chi^2 = 2.07$, df = 6, p = 0.913