Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Methods: Pooled data were analyzed in subgroups by body weight (<70 kg, 70-100 kg, >100 kg) and BMI (<25 kg/m^2, 25-<30 kg/m^2, ≥30 kg/m^2) from 2 phase 3 (JADE MONO-1, NCT03349060; JADE MONO-2, NCT03575871) and the phase 2b (NCT02780167) randomized, double-blind, placebo-controlled monotherapy trials of patients aged 18-75 years (phase 2b) or ≥12 years (phase 3) with moderate-to-severe AD treated with abrocitinib 200 mg, abrocitinib 100 mg, or placebo once daily.
Results: In the pooled population (N=942), efficacy responses at 12 weeks were consistent across body weight and BMI subgroups (Table). Among body weight subgroups, response rates in the abrocitinib 200 mg and abrocitinib 100 mg treatment arms for Investigator's Global Assessment of clear (0) or almost clear (1) with ≥2-grade improvement from baseline (IGA 0/1) were 38.8%-43.8% and 23.4%-29.8%, respectively, and for ≥75% improvement from baseline in Eczema Area and Severity Index (EASI-75) were 59.6%-64.2% and 40.0%-44.7%, respectively. Frequency and severity of treatment emergent adverse events were largely consistent across all subgroups.
Conclusion: Body weight and BMI did not appreciably affect abrocitinib efficacy and safety in patients with moderate-to-severe AD. Dose effects may be most important for the highest BMI subgroup. Age, sex, and other baseline characteristics are potential confounders of this analysis.

	Body Weight Subgroup								
	<70 kg			70-100 kg			>100 kg		
	Placebo	Abrocitinib 100 mg	Abrocitinib 200 mg	Placebo	Abrocitinib 100 mg	Abrocitinib 200 mg	Placebo	Abrocitinib 100 mg	Abrocitinib 200 mg
IGA 0/1, n/N (%)	8/88 (9.1)	33/140 (23.6)	57/147 (38.8)	5/98 (5.1)	53/178 (29.8)	76/176 (43.2)	3/19 (15.8)	11/47 (23.4)	14/32 (43.8)
EASI-75, n/N (%)	10/88 (11.4)	56/140 (40.0)	87/146 (59.6)	10/98 (10.2)	76/178 (42.7)	113/176 (64.2)	5/19 (26.3)	21/47 (44.7)	20/32 (62.5)
PP-NRS4,[a] n/N (%)	13/79 (16.5)	51/122 (41.8)	70/119 (58.8)	14/88 (15.9)	64/147 (43.5)	85/152 (55.9)	4/16 (25.0)	13/35 (37.1)	16/31 (51.6)
	BMI Subgroup								
	<25 kg/m^2			25 to <30 kg/m^2			≥30 kg/m^2		
	Placebo	Abrocitinib 100 mg	Abrocitinib 200 mg	Placebo	Abrocitinib 100 mg	Abrocitinib 200 mg	Placebo	Abrocitinib 100 mg	Abrocitinib 200 mg
IGA 0/1, n/N (%)	10/109 (9.2)	37/161 (23.0)	66/173 (38.2)	3/56 (5.4)	41/122 (33.6)	46/108 (42.6)	3/40 (7.5)	19/82 (23.2)	35/74 (47.3)
EASI-75, n/N (%)	15/109 (13.8)	63/161 (39.1)	108/172 (62.8)	4/56 (7.1)	55/122 (45.1)	60/108 (55.6)	6/40 (15.0)	35/82 (42.7)	52/74 (70.3)
PP-NRS4,[a] n/N (%)	13/96 (13.5)	56/136 (41.2)	83/143 (58.0)	11/53 (20.8)	48/103 (46.6)	51/93 (54.8)	7/34 (20.6)	24/65 (36.9)	37/66 (56.1)

PP-NRS4, ≥4-point improvement from baseline in Peak Pruritus Numerical Rating Scale.
[a]The PP-NRS is used with permission of Regeneron Pharmaceuticals, Inc. and SAR&D. The Pruritus Numerical Rating Scale was used instead of the PP-NRS in the phase 2b study.

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DERMATITIS RELATED TO PPE UTILIZATION AMONG HEALTHCARE WORKERS DURING THE COVID-19 PANDEMIC

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Introduction: Increased personal protective equipment (PPE) use during the COVID-19 pandemic has led to greater rates of occupational dermatoses among healthcare workers (HCWs).
Methods: We conducted an IRB approved, anonymous survey of HCWs at a tertiary care hospital from March-April 2021. Data collected included respondent demographics, HCW role, atopic dermatitis (AD) or contact dermatitis (CD) history, PPE utilized (gloves/gown/goggles/face shield/N95 mask/surgical mask) and related skin effects (SE: erythema/pruritus/urticaria/acne/eczema/pressure injury). Statistical analyses with p<0.05 were considered significant.
Results: 105 (72%) of 146 respondents (N=115 females) reported SEs for all PPE. SE rates were comparable between age and sex but greater in nurses (RNs) and respiratory therapists (RTs) compared to physician assistants (PAs), nurse practitioners (NPs) and physicians (83% v. 65%, p<0.014). AD/CD history and PPE use duration (<6 hours vs ≥6 hours) were not associated with SE rates. N95 masks had greatest SE frequency (61%), predominantly on the nasal bridge (79%) and cheeks (68%), followed by surgical masks (59%). N95 mask SEs included redness (74%), acne (54%) and pressure injury (52%). Women and patients ≤30yo had significantly higher rates of surgical mask-related acne compared with males and those >30yo (p=0.0207 and p=0.0141, respectively). RNs/RTs and individuals with CD history reported more SEs from gloves. 38 respondents (26%) reported reduced capacity to wear PPE outside of patient care due to SE, particularly for surgical masks, N95's, gloves and face shields. 32 respondents used vaseline to reduce SEs.
Discussion: HCWs reported many PPE-related SEs, impacting their ability to wear PPE. Acneiform eruptions were commonly encountered among younger females.

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DEVELOPMENT OF A FUNCTIONAL HUMAN SKIN EXPLANT MODEL TO STUDY MAST CELL ACTIVATION

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Introduction: The human skin explant model has been utilized to determine the short-term effects of cytokines and irritants on human skin while avoiding the ethical problems of *in vivo* stimulation studies with non-approved agents. Therefore, we sought to develop an explant model to study human skin mast cell activation.
Methods: Fresh de-identified, full-thickness, non-diseased skin specimens from 11 plastic and reconstructive surgeries were procured for this IRB-exempt study. Following removal of subcutaneous fat, specimens were divided into equally-sized samples using a 4mm punch. Samples were exposed to increasing concentrations of polyclonal goat anti-IgE or MRGPRX2 ligands in various media at 37^{o}C. A subset of samples were injected with QWF. Spontaneous histamine release (HR) was measured in unstimulated sample media. Total skin histamine content (TSHC) was quantified in samples incubated overnight in 8% perchloric acid.
Results: TSHC ranged from 62.4 to 375.6ng/mL per 25mg of tissue. Stimulated HR (TSHC - spontaneous HR) varied depending on reagent, dose, media, and duration of incubation. The greatest stimulated HR (36.0-40.0%) was observed at 2 hours in media of samples injected with 0.5mg c-48/80 or 0.143μg anti-IgE. Despite recent studies indicating that QWF inhibits LAD2 cell activation by MRPRX2 ligands, we did not observe inhibition of c-48/80-stimulated HR with either pre- or co-injection of QWF.
Conclusion: This work suggests that, under optimal conditions, explants may serve as a useful model for assessing human skin mast cell function. In the future, this model may be extended to study altered mast cell function in primary mast cell disorders and chronic urticaria.

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DUPILUMAB DECREASES TOTAL AND ALLERGEN-SPECIFIC IGE IN ADOLESCENTS WITH MODERATE-TO-SEVERE ATOPIC DERMATITIS (AD)

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Introduction: AD is a chronic systemic disease, predominantly driven by dysregulated type 2 immunity associated with increased total IgE levels and sensitization to various common allergens. We report the change in total and allergen-specific IgE serum levels in