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1 **Title**

2 The future is now: the Global Atopic Dermatitis Atlas (GADA)

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4 **Running head**

5 The future is now: the Global Atopic Dermatitis Atlas (GADA)

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16 **Authors**

17 Bernd W.M. Arents,<sup>1</sup> Esther J. van Zuuren,<sup>2</sup> Olivia Hughes,<sup>3</sup> Zbys Fedorowicz,<sup>4</sup> Carsten Flohr<sup>5</sup>

18

19 **Affiliations**

20 <sup>1</sup> Dutch Association for People with Atopic Dermatitis, Nijkerk, The Netherlands

21 <sup>2</sup> Dermatology Department, Leiden University Medical Centre, Leiden, The Netherlands

22 <sup>3</sup> School of Psychology, Cardiff University, Cardiff, United Kingdom

23 <sup>4</sup> Veritas Health Sciences Consultancy, Huntingdon, United Kingdom

24 <sup>5</sup> Unit for Paediatric & Population-Based Dermatology Research, St John's Institute of Dermatology,  
25 King's College London and Guy's & St Thomas' Hospitals, London, United Kingdom

26

27 **Corresponding author**

28 Professor Carsten Flohr, MA MSc PhD FRCP FRCPC

29 Chair in Dermatology and Population Health Sciences, King's College London

30 St John's Institute of Dermatology, St Thomas' Hospital, Westminster Bridge Road, London SE1 7EH,  
31 United Kingdom.

32 Email: [carsten.flohr@kcl.ac.uk](mailto:carsten.flohr@kcl.ac.uk)

33

34 **ORCID iD:**

35 Bernd W.M. Arents: 0000-0001-6884-8014

36 Esther J. van Zuuren: 0000-0002-4780-0182

37 Olivia Hughes: 0000-0001-9587-9430

38 Zbys Fedorowicz: 0000-0003-3952-965X

39 Carsten Flohr: 0000-0003-4884-6286

40

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56

### 57 **Conflict of interest**

58 BWMA, EJvZ, OH and ZF have received compensation from King's College London for their work on  
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69

### 70 **Ethics statement**

71 For the GADA report referred to in this article, written informed consent was given by the patients,  
72 both for their words and/or (unedited) photographs.

73

### 74 **Data availability**

75 No data was collected for the article, nor the report referred to.

76 **Abbreviated Abstract** (2-3 sentences, mandatory for submission)

77 The International League of Dermatological Societies (ILDS) initiated the Global Atopic Dermatitis  
78 Atlas (GADA) in 2022 to address the worldwide differences in prevalence and disease burden of  
79 atopic dermatitis (AD), as well as a lack of data in many middle and low income settings. To establish  
80 a baseline, the inaugural Global Report on Atopic Dermatitis was recently published. Moving forward,  
81 GADA will provide a 'go to' hub for AD burden data through regular systematic evidence syntheses  
82 and fieldwork in hitherto unstudied populations.

83

#### 84 **Main text**

85 These are exciting times for advancements in treating atopic dermatitis (AD), the most prevalent  
86 chronic skin condition affecting approximately 225 million people worldwide, particularly children.<sup>1-3</sup>  
87 Various topical and systemic therapies have recently been approved. As well as this, fundamental  
88 research into the pathogenesis of AD is being conducted. Yet, these projects are often undertaken in  
89 Europe or North America, and we are only starting to understand the potential differences in the  
90 immune profiles underlying the different clinical phenotypes of people with pigmented skin.<sup>4</sup> So,  
91 what is the current state of AD worldwide?

92 In 2020 the Global Burden of Disease (GBD) Project published data on the prevalence, incidence and  
93 disability adjusted life years (DALYs) of AD.<sup>2,3</sup> Contrary to common perception, AD is not limited to  
94 Western or industrialized countries. Regions such as Andean Latin America and Sub-Saharan Africa  
95 have also demonstrated a high disease burden,<sup>2,3</sup> and AD is becoming increasingly common in middle  
96 and low income countries due to urbanisation and lifestyle changes associated with higher socio-  
97 economic status. In 2022, the World Health Organization (WHO) acknowledged this with a strategy  
98 framework document on skin-related neglected tropical diseases, including non-communicable skin  
99 diseases, such as AD.<sup>5</sup>

100 Therefore, the International League of Dermatological Societies (ILDS) initiated the Global Atopic  
101 Dermatitis Atlas (GADA) in collaboration with the International Society of Atopic Dermatitis (ISAD),  
102 the International Eczema Council (IEC), the European Taskforce for Atopic Dermatitis (ETFAD) and the  
103 International Alliance of Dermatology Patient Organizations (GlobalSkin).

104 To establish a baseline for GADA, a Global Report on Atopic Dermatitis was published in October  
105 2022.<sup>1</sup> It illustrates the high prevalence and immense impact of AD across the globe. The disease  
106 burden crosses geographic boundaries, affecting people in both developed and developing nations.  
107 Its impact extends beyond physical symptoms, including a range of psychosocial and economic  
108 burdens for patients and their families. Significant disparities in disease burden and care provision  
109 have been identified, giving witness to unmet needs and suboptimal patient outcomes. Treatment  
110 innovations have not solved the existing inequalities, and paradoxically could have increased them  
111 due to lack of access and affordability. It would be helpful for the WHO essential medicines list to be  
112 updated to include moderately potent topical corticosteroids, and preferably some novel systemic  
113 medications, in addition to methotrexate. Governments and other stakeholders should take a  
114 proactive role in addressing pressing issues of accessibility and affordability of current and future  
115 treatments. Public awareness should be increased to reduce stigma and discrimination. To ensure  
116 such approaches are inclusive and patient-centred, patient organizations should be acknowledged  
117 and involved.

118 To improve care and management of AD, dermatological societies are recommended to develop  
119 clinical practice guidelines in collaboration with patients.<sup>6</sup> They could also provide (online) training for  
120 physicians in low- and middle-income countries to facilitate diagnosis and treatment, and implement

121 innovative healthcare delivery strategies like tele dermatology, to address barriers such as lack of  
122 capacity and travel distances.

123 The lack of epidemiological data has also been highlighted in the report. Importantly, the Global  
124 Burden of Disease data is typically released with a delay of several years, and an up-to-date *living*  
125 platform providing the latest available evidence is therefore needed. In addition, there is considerable  
126 diversity in the methodologies employed by epidemiological studies, hampering direct comparisons  
127 between settings. Therefore, efforts should be made to harmonise epidemiological data collection to  
128 enable a more accurate understanding of the prevalence, severity, and treatment needs of AD  
129 worldwide, and the contributing environmental risk factors. These data, combined with projects on  
130 the pathogenesis of AD, could be synergistic to improve care for people with AD.

131 The report reflects the state of AD worldwide in 2022, but where do we go from here? GADA will  
132 address the gaps in epidemiological data through (1) a systematic evidence synthesis of current  
133 epidemiological data; (2) an international consensus exercise to standardize and improve  
134 epidemiological study designs; and (3) the development of a digital ecosystem to conduct research  
135 for fieldwork in settings which lack data (Figure 1). Original fieldwork with the developed  
136 methodologies will follow suite.

137 There is a need to address these inequalities faced by AD patients and to commence a joint research  
138 effort to benefit patients and their families worldwide. Quoting the people with AD featured in our  
139 report: *“If you care, make it so that people can get the care they need. Do something right now. You*  
140 *have the power to change our lives.”* We ask you to join the future of research into the global burden  
141 of AD at [www.atopicdermatitisatlas.org](http://www.atopicdermatitisatlas.org), where our findings will be regularly published.

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## 159 **Legends**

160 Figure 1

161 Caption: The start and future of the Global Atopic Dermatitis Atlas (GADA)