

Our research explained

# **BRCsnapshots**

How does COVID-19 affect patients with atopic eczema?



## What we know

Atopic dermatitis, or eczema, can affect people of any age, but usually starts in early childhood. Eczema causes red, dry and itchy skin and is linked to asthma, hayfever and food allergies, which are all caused when parts of the immune system are overactive.

It is not currently understood how COVID-19 affects people with eczema or whether their usual medication may have an effect on their response to the virus.



Up to 1 in 10 adults in the UK are affected by eczema and around 1 in 5 children



Both genetics and environmental factors, such as irritants and bacteria, are involved in eczema



When creams and ointments don't work, eczema is treated with medications known as immune-modulators

## What is COVID-19?

COVID-19 (Coronavirus disease) is an infectious disease caused by a newly discovered coronavirus (a large family of viruses which may cause illness in animals or humans). The most common symptoms are fever, dry cough and loss of or change to taste and smell. There are a range of other symptoms which are less well understood at this time.

Research and Development Department at Guy's and St Thomas' NHS Foundation Trust incorporating the NIHR Guy's and St Thomas' Biomedical Research Centre

## What we are doing

Working with international eczema researchers, we have set up a global registry for patients with eczema (SECURE-AD Registry) where doctors and nurses can register cases of COVID-19 in their eczema patients.

We also recognise how important it is to maximise patients' contribution to research, so patients with eczema who have had COVID-19 can complete the SECURE-AD Patient Survey to provide their own stories anonymously and help us answer important questions about how COVID-19 affects patients with eczema.

We have also partnered with registries focusing on other immune conditions such as psoriasis, alopecia, inflammatory bowel disease and rheumatoid arthritis.

# What we found

"We recently shared early results of 145 eczema patients who developed COVID-19. Of these patients, 21 were seen in A&E for COVID-19 symptoms. Three patients were admitted to hospital and required ventilation. Two of those who were ventilated were obese or morbidly obese. Four patients had persistent symptoms. No patients were reported to have died."

"As the number of COVID-19 cases rise, we expect to register more patients in the study. With higher patient numbers, we can analyse the effects of different eczema treatments on the duration of symptoms, the risk of severe COVID-19 and the effects of having other illnesses, such as asthma or diabetes."

## Dr Conor Broderick, SECURE-AD team



Our team. Row 1: Prof Carsten Flohr. Row 2: (I-r) Dr Conor Broderick, Dr Dmitri Wall, Mr Tim Burton, Prof Ching-Chi Chi. Row 3: (I-r) Prof Alan Irvine, Dr Annelie Musters, Dr Aaron Drucker, Dr Angela Bosma. Row 4: (I-r) Mr Bernd Arents, Prof Phyllis Spuls, Dr Kenji Kabashima, Dr David Prieto-Merino.



#### About the study

SECURE-AD Registry is funded by the Irish not-for-profit company NISR (National and International Skin Registry Solutions) and is supported by the NIHR Guy's and St Thomas' Biomedical Research Centre.

#### **Further information**

Contact the team at <u>conor.broderick@gstt.nhs.uk</u> or on Twitter @AD\_secure <u>www.secure-derm.com</u>

#### About our NIHR Guy's and St Thomas' Biomedical Research Centre

Our NIHR Biomedical Research Centre is a partnership between Guy's and St Thomas' NHS Foundation Trust and King's College London. We work to develop and deliver new medicines and diagnostics to patients. We drive research and innovation into the NHS to provide maximum impact to our patients. www.guysandstthomasbrc.nihr.ac.uk

