

# Science, Innovation and Technology Committee: Under the Microscope Inquiry

## 1. What area of science and technology do you think we should be looking at over the next Parliament?

Autoimmune conditions occur when the immune system goes awry and mistakenly attacks the person's own body. The immune system is essential; it is the body's first line of defence against infections and is important in the healing process. Autoimmune attack on a part of the body can stop that part of the body from functioning properly and, in some cases, can destroy it completely.

What causes autoimmune conditions is poorly understood. For some, we know that certain genes or environmental factors can make these conditions more likely to develop. We know that having one autoimmune condition makes a person more likely to develop another; up to one third of people living with an autoimmune condition live with more than one. We also know that women are more likely to live with an autoimmune condition than men, although this does alter depending on the condition.

But we don't know why this is, nor what triggers the development of an autoimmune condition. At present, they cannot be cured. This means that, for most people who develop an autoimmune condition, a lifetime of daily management and potential health complications and pain lies ahead, making everyday life more challenging.

## 2. Why does it matter to you?

There are over 100 autoimmune conditions, with over six million people in the UK thought to be living with one. That's one in every 10 of us. Up to one third of those individuals is living with more than one autoimmune condition. And the numbers of these incurable conditions are increasing, coupled with rising numbers of people diagnosed with a second autoimmune condition.

The cost of treating these conditions is significant. Direct and indirect costs to the UK for type 1 diabetes, rheumatoid arthritis and multiple sclerosis is over £13 billion per year. And that is only three autoimmune conditions. With the rise in autoimmune conditions expected to continue, healthcare costs will continue to rise, increasing pressure on public budgets. Action is needed.

Connect Immune Research is a partnership of 12 charities with an autoimmune focus. We want to change autoimmunity research into a major biomedical priority and raise



the profile of these conditions. We want to do this by focusing on autoimmune research as a distinct research area; not as separate silos that focus on single conditions. Interdisciplinary and collaborative approaches will allow a connected research community that can address the challenges faced by people living with one, or multiple autoimmune conditions.

### **3. What should the Government do about it?**

We want to see increased research focus on autoimmunity, focusing on common threads and mechanisms between autoimmune conditions, not each condition separately.

We want the Government to commit to ring-fencing funds to support research into the root causes of, and the development of treatments for, autoimmune conditions; like that for dementia and cancer.

We want the Government to raise awareness of autoimmune conditions, including living with multiple autoimmune conditions, with the public, within Parliament and within the NHS.

We want the NHS to look at all conditions, and the person living with those conditions, as a whole individual, and not as distinct autoimmune conditions.

*Rebekah Matthews, who has type 1 diabetes, an underactive thyroid and vitiligo, says “I had no idea that having one autoimmune condition makes you more at risk of getting others...It’s difficult to know whether my autoimmune conditions affect each other...My underactive thyroid probably does affect my type 1, but the symptoms of thyroid disorders can overlap with menopause and menopause also affects type 1”.*

We believe that this way, through collaboration and synergy, a connected autoimmune research community will generate advances in understanding and treatments for people living with autoimmune conditions.



## **Connect Immune Research Partners**

Coeliac UK (<https://www.coeliac.org.uk/home/>)

Versus Arthritis (<https://www.versusarthritis.org/>)

MS Society (<https://www.mssociety.org.uk/>)

British Society for Immunology (<https://www.immunology.org/>)

Alopecia UK (<https://www.alopecia.org.uk/>)

The Psoriasis and Psoriatic Arthritis Alliance (PAPAA) (<https://www.papaa.org/>)

Bowel Research UK (<https://bowelresearchuk.org/>)

British Thyroid Foundation (<https://www.btf-thyroid.org/>)

Royal Free Charity (<https://royalfreecharity.org/>)

myaware (<https://www.myaware.org/>)

Juvenile Arthritis Research (<https://www.jarproject.org/>)

Breakthrough T1D UK (<https://breakthrought1d.org.uk/>)

## References

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2. Connect Immune Research 2018. *Are you #AutoimmuneAware? Report for parliamentarians into autoimmune conditions*. Accessed 19/03/2025. Available from: <https://breakthrough1d.org.uk/wp-content/uploads/2023/08/Connect-Immune-Research-Are-you-Autoimmune-Aware-report.pdf>
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6. Breakthrough T1D UK (2024). *Rebekah's story: Living with Type 1 Diabetes, Hyperthyroidism and Vitiligo*. Accessed on 19/03/2025. Available from: [Living with type 1 diabetes, hypothyroidism and vitiligo | Breakthrough T1D UK](#)