

# UNDERSTANDING THE LINK BETWEEN COVID-19 AND DIABETES

Diabetes UK welcomes applications which seek to better understand the link between COVID-19 and diabetes.

## Background

During the pandemic the impact of COVID-19 on people with diabetes has become clear but there are still many unanswered questions on the relationship between COVID-19 and diabetes.

Diabetes has emerged as one of the most important risk factors for severe illness and death from COVID-19.<sup>1,2</sup> But there remains more to learn about the underlying mechanisms behind this and bidirectional interplay.

There is growing but mixed evidence to suggest that COVID-19 is linked to a new diagnosis of diabetes in some people. Studies from the UK<sup>3</sup>, the United States<sup>4,5</sup> and Germany<sup>6</sup> point to a raised risk of developing diabetes after COVID-19 infection. Results suggest people who've had COVID-19 are anywhere between 31% and 166% more likely to later develop diabetes, compared to people who haven't had the virus.<sup>3-6</sup>

Yet other studies raise important questions about whether COVID-19 is playing a direct role in the increase in new cases of diabetes seen during the pandemic. For example, there's evidence to suggest that some people may have had undiagnosed diabetes when they caught coronavirus which was discovered only when they became ill with the virus.<sup>7</sup>

## Research Questions

We welcome applications for studies in the following areas, but not limited to:

- Analysis of data which furthers our understanding of the association between COVID-19 and diabetes.
- Research which explores the relationship between COVID-19 and new-onset diabetes, including the potential biological mechanisms underpinning the development of diabetes after infection with COVID-19.
- Research which seeks to better understand the pathophysiological mechanisms which lead to worse outcomes in people with diabetes following COVID-19 infection.
- Research which seeks to better understand the longer-term impact of COVID-19 on people with diabetes.

Applications must make clear that the proposed research is discreet and not being undertaken elsewhere in the UK or internationally.

## Funding

Diabetes UK invites applications for research in these areas in line with our project grant scheme which provides funding of up to £500,000 over five years.

## Deadline

1 December 2022 17:00 hrs (Committee meets in May/June 2023)

## How to apply

Apply for a Diabetes UK grant through our online portal and select *“Understanding the link between COVID-19 and diabetes”*

For further details please contact the Diabetes UK Research team at [research@diabetes.org.uk](mailto:research@diabetes.org.uk)

## Application assessment process

All applications received under this highlight notice will be assessed through the Diabetes UK standard assessment procedure for Project grants and will be considered in competition with all applications submitted.

**Applications will be assessed by the scientific panel on the following criteria:**

- Potential difference the research will make to the lives of people with diabetes.
- Scientific excellence and potential impact.
- Track record of the applicants.
- Value for money.

**Applications will be assessed by the Grants Advisory Panel on the following criteria:**

- Relevance to people with diabetes and its potential impact.
- The timescale on which the project could make a difference to people living with diabetes.
- The extent of involvement of people with diabetes in the development and the management of the study.

## References

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3. Ayoubkhani D, Khunti K, Nafilyan V, Maddox T, Humberstone B, Diamond I et al. Post-covid syndrome in individuals admitted to hospital with covid-19: retrospective cohort study *BMJ* 2021; 372 :n693 doi:10.1136/bmj.n693
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5. Xie Y, Al-Aly Z. Risks and burdens of incident diabetes in long COVID: a cohort study. *Lancet Diabetes Endocrinol.* 2022 May;10(5):311-321. doi: 10.1016/S2213-8587(22)00044-4
6. Rathmann, W., Kuss, O. & Kostev, K. Incidence of newly diagnosed diabetes after Covid-19. *Diabetologia* 65, 949–954 (2022). <https://doi.org/10.1007/s00125-022-05670-0>
7. Paul M. McKeigue, Stuart McGurnaghan, Luke Blackbourn, Louise E. Bath, David A. McAllister, Thomas M. Caparrotta, Sarah H. Wild, Simon N. Wood, Diane Stockton, Helen M. Colhoun; Relation of Incident Type 1 Diabetes to Recent COVID-19 Infection: Cohort Study Using e-Health Record Linkage in Scotland. *Diabetes Care* 2022; dc220385. <https://doi.org/10.2337/dc22-0385>