

COVID-19 is an emerging, rapidly evolving situation.

Get the latest public health information from CDC: <https://www.coronavirus.gov>.

Get the latest research from NIH: <https://www.nih.gov/coronavirus>.

Find NCBI SARS-CoV-2 literature, sequence, and clinical content: <https://www.ncbi.nlm.nih.gov/sars-cov-2/>.



FULL TEXT LINKS



[Review](#) > [Lancet Neurol.](#) 2020 May 20;S1474-4422(20)30139-3.

doi: 10.1016/S1474-4422(20)30139-3. Online ahead of print.

## Understanding Multifactorial Brain Changes in Type 2 Diabetes: A Biomarker Perspective

Geert Jan Biessels <sup>1</sup>, Flavio Nobili <sup>2</sup>, Charlotte E Teunissen <sup>3</sup>, Rafael Simó <sup>4</sup>, Philip Scheltens <sup>5</sup>

Affiliations

PMID: 32445622 DOI: [10.1016/S1474-4422\(20\)30139-3](https://doi.org/10.1016/S1474-4422(20)30139-3)

### Abstract

People with type 2 diabetes are at an increased risk of cognitive impairment and dementia (including Alzheimer's disease), as well as subtle forms of cognitive dysfunction. Current diabetes guidelines recommend screening for cognitive impairment in groups at high risk and providing guidance for diabetes management in patients with diabetes and cognitive impairment. Yet, no disease-modifying treatment is available and important questions remain about the mechanisms underlying diabetes-associated cognitive dysfunction. These mechanisms are likely to be multifactorial and different for subtle and more severe forms of diabetes-associated cognitive dysfunction. Over the past years, research on dementia, brain ageing, diabetes, and vascular disease has identified novel biomarkers of specific dementia aetiologies, brain parenchymal injury, and cerebral blood flow and metabolism. These markers shed light on the processes underlying diabetes-associated cognitive dysfunction, have clear applications in current research and increasingly in clinical diagnosis, and might ultimately guide targeted treatment.

Copyright © 2020 Elsevier Ltd. All rights reserved.

### LinkOut – more resources

#### Full Text Sources

[ClinicalKey](#)

[Elsevier Science](#)

#### Miscellaneous

[NCI CPTAC Assay Portal](#)