A study funded by the Medical Research Council, British Heart Foundation and the National Institutes of Health has revealed that an ultrasound scan of blood vessels in the neck has the potential to help doctors predict whether patients have an increased likelihood of developing vascular dementia later in life.

Magdalene Crabbe, Pharma Analyst at GlobalData, a leading data and analytics company, offers her view:

“Dementia refers to a group of incurable neurodegenerative diseases that cause cognitive decline and eventual death. It affects an estimated 50 million people worldwide and is known as a disease of aging, as most people affected are diagnosed at the age of 65 or above.

“Vascular dementia makes up 25% of diagnoses, and this form of the disease is characterized by damage to cerebral blood vessels which are caused by a number of strokes.

“Accurate and early diagnosis is important in order to prevent the strokes that speed up the progression of the disease.

“Although this breakthrough research has clear advantages, such as the ability to potentially prevent or delay the onset of disease symptoms, there are still reasons to be cautious. Even people with a high risk of dementia may not necessarily develop the disease. Normally, anticoagulants are prescribed to patients who have a history of strokes, but these medicines carry risk themselves. The medicines can cause severe bleeding as they thin the blood and interrupt the clotting process.

“Other challenges include deciding how often people must be screened, choosing who should be invited for a scan, and understanding how to interpret and assess the accuracy of the results. These obstacles are compounded by the need to evaluate the financial implications of the operation and examine alternative options that are more cost-efficient or accurate.

“More research in this area is necessary to fully evaluate the efficacy of a CT or MRI scan of blood vessels in the neck as a predictor of vascular dementia. The survival rate of vascular dementia is low and prognosis is often poor. Early diagnosis and the continued development of novel therapeutics are major steps towards improving the prospects for patients living with this neurodegenerative condition.”