



# Detection of liver cancer by AI analysis of ultrasound Doppler waves

**A novel method to detect hepatocellular carcinoma via ultrasound examination and AI analysis of the portal vein.**

**IP Status:** Copyrighted ; US Patent Pending; Application No.18/924,434

## Applications

- Liver cancer screening

## Technology Overview

Hepatocellular carcinoma (HCC) is the third leading cause of cancer-related death worldwide. Typically, screening for HCC requires a skilled operator to perform a standard image-based scan of the entire liver using a commercially available transducer. Researchers at the University of Minnesota have developed a novel approach to examine the liver using a sound-based scan from the same commercially available transducer. Focusing specifically on the portal vein, with the help of artificial intelligence, this method simplifies the screening process, making it faster, accurate, and more accessible to healthcare workers with minimal training.

## Phase of Development

**TRL: 3-4**

Model has been developed and tested on an initial cohort, working now to validate against a larger cohort.

## Desired Partnerships

This technology is now available for:

- License
- Sponsored research
- Co-development

Please contact our office to become a partner in the next phase of testing, or share your clinical needs and learn more.

## Researchers

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## Technology ID

2024-097

## Category

Life Sciences/Diagnostics & Imaging

Life Sciences/Human Health

Software & IT/Artificial

Intelligence

Software & IT/Health IT

Software & IT/Image & Signal Processing

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