FIB-4 Score = 
$$\frac{age \times AST}{PLT \times \sqrt{ALT}}$$

FAST Score = 
$$\frac{e^{-1.65+1.07 \times ln(LSM)+2.66*10^{-8} \times CAP^3-63.3AST^{-1}}}{1+e^{-1.65+1.07 \times ln(LSM)+2.66*10^{-8} \times CAP^3-63.3AST^{-1}}}$$

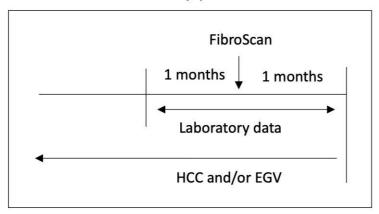
$$\text{Agile 3+} = \frac{e^{-3.92368 + 2.29714 \times In(E) - 0.00902 \times PLT - 0.98633 \times \frac{ALT}{AST} + 1.08636 \times DM - 0.38581 \times Gender + 0.03018 \times Age}}{1 + e^{-3.92368 + 2.29714 \times In(E) - 0.00902 \times PLT - 0.98633 \times \frac{ALT}{AST} + 1.08636 \times DM - 0.38581 \times Gender + 0.03018 \times Age}}$$

Agile 4 = 
$$\frac{e^{7.50139 - 15.42498 \times \frac{1}{\sqrt{E}} - 0.01378 \times PLT - 1.41149 \times \frac{ALT}{AST} - 0.53281 \times Gender + 0.41741 \times DM}}{1 + e^{7.50139 - 15.42498 \times \frac{1}{\sqrt{E}} - 0.01378 \times PLT - 1.41149 \times \frac{ALT}{AST} - 0.53281 \times Gender + 0.41741 \times DM}}$$

## Supplemental Figure 1

Supplemental Figure 1 Formula of each VCTE-based scoring system.

## Study protocol



Supplemental Figure 2

Supplemental Figure 2 A schema of study protocol.

## Supplemental Table 1 The impact of each parameter on the scoring systems

	data	FIB-4	FAST	Agile 3+	Agile 4
LSM	1	N/I	1	<b>↑</b>	<b>↑</b>
CAP	$\uparrow$	N/I	1	N/I	N/I
AST	$\uparrow$	<b>↑</b>	1	$\uparrow$	$\uparrow$
ALT	$\uparrow$	$\downarrow$	N/I	$\downarrow$	$\downarrow$
PLT	<b>↑</b>	$\downarrow$	N/I	$\downarrow$	$\downarrow$
gender	Men	N/I	N/I	$\downarrow$	$\downarrow$
DM	Yes	N/I	N/I	$\uparrow$	$\uparrow$
Age	$\uparrow$	<b>↑</b>	N/I	$\uparrow$	N/I

N/I: Not included in scoring system; PLT: Platelet count; DM: Diabetes mellitus;

Supplemental Table 2 Stratification of each VCTE-based scoring system and fibrosis marker

	Risk			
_	Low	Intermediate	High	
FIB-4 index	< 1.3	1.3-2.67	< 2.67	
FAST	< 0.35	0.35-0.66	≤ 0.67	
Agile 3+	< 0.45	0.45-0.68	< 0.68	
Agile 4	< 0.25	0.25-0.57	< 0.57	
LSM	≤ 6.1	6.2-11.8	≤ 11.9	
M2BPGi	≤ 1.2	1.3-2.3	≤ 2.4	

<sup>↑:</sup> Increase; ↓: Decrease.