

Supplemental Table 1. Identified resistance-associated mutations in HCV genotype 1b.

Mutation	Region					
	NS3		NS5A		NS5B	
	T54S <sup>1</sup>	Y56F <sup>2</sup>	D168E <sup>3</sup>	L31M <sup>4</sup>	Y93H <sup>5</sup>	S556G <sup>6</sup>
Cluster A (n=7)	0	0	0	0	0	1 (14.3)
Cluster B (n=24)	0	24 (100)	0	0	0	24 (100)
Others (n=28)	1 (3.6)	12 (42.9)	1 (3.6)	1 (3.6)	1 (3.6)	2 (6.9)
Total (n=59)	1 (1.7)	36 (61.0)	1 (1.7)	1 (1.7)	1 (1.7)	28 (47.5)

<sup>1</sup>Boceprevir and telaprevir-resistance-associated mutations [refs. 24, 27-29].

<sup>2</sup>Grazoprevir-resistance-associated mutations [ref. 30].

<sup>3</sup>Asunaprevir-, simeprevir-, paritaprevir- and grazoprevir-resistance-associated mutations [refs. 24, 31].

<sup>4</sup>Daclatasvir-, ombitasvir-, elbasvir- and ledipasvir-resistance-associated mutations [refs. 24, 30-34].

<sup>5</sup>Daclatasvir, ombitasvir, elbasvir, ledipasvir and velpatasvir resistance-associated mutations [refs. 24, 30-37].

<sup>6</sup>Dasabuvir resistance-associated mutations [refs. 24, 31, 38].

Supplemental Table 2. Identified resistance-associated mutations in HCV genotype 1a.

Mutation	Region		
	NS3		NS5A
	V55A <sup>1</sup>	Q80K <sup>2</sup>	Q30H <sup>3</sup>
1a (n=4)	1 (25)	1 (25)	1 (25)

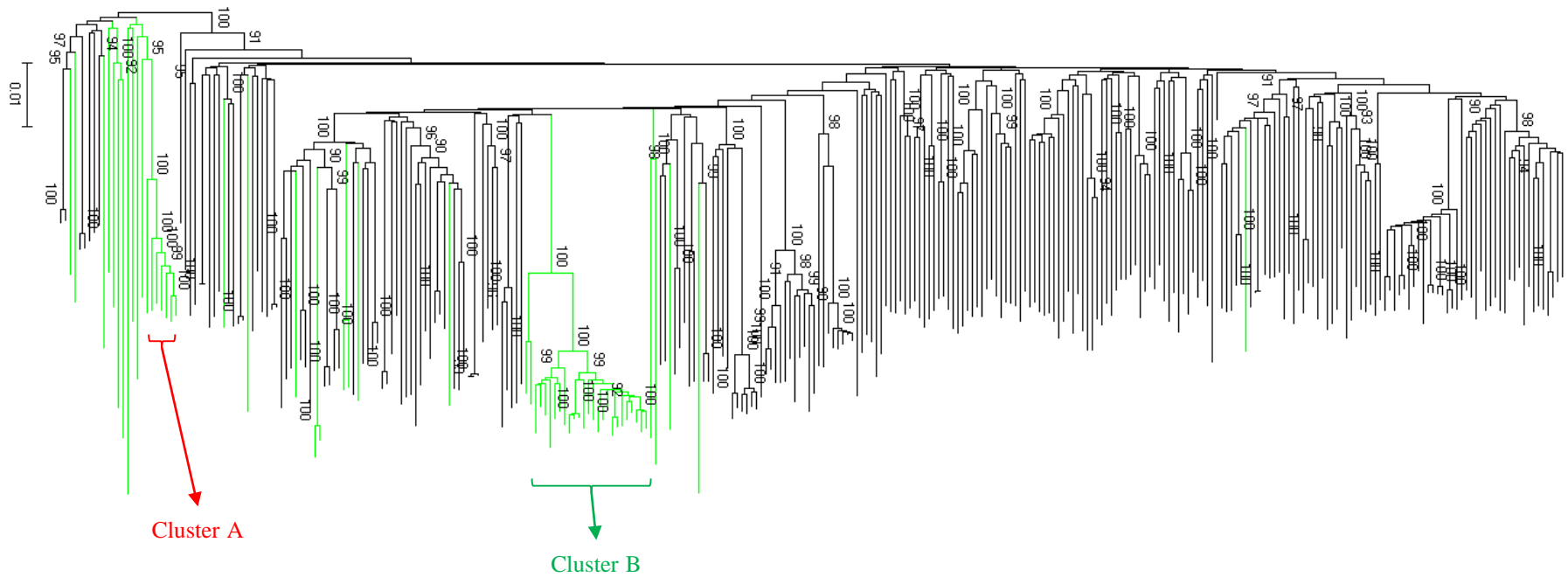
<sup>1</sup>Boceprevir- and telaprevir-resistance-associated mutation [refs. 24, 28, 39].

<sup>2</sup>Simeprevir-, asunaprevir- and paritaprevir-resistance-associated mutation [refs. 24, 31, 40, 41].

<sup>3</sup>Daclatasvir-, elbasvir-, ledipasvir- and ombitasvir-resistance-associated mutation [refs. 24, 29-32, 34, 36, 37].

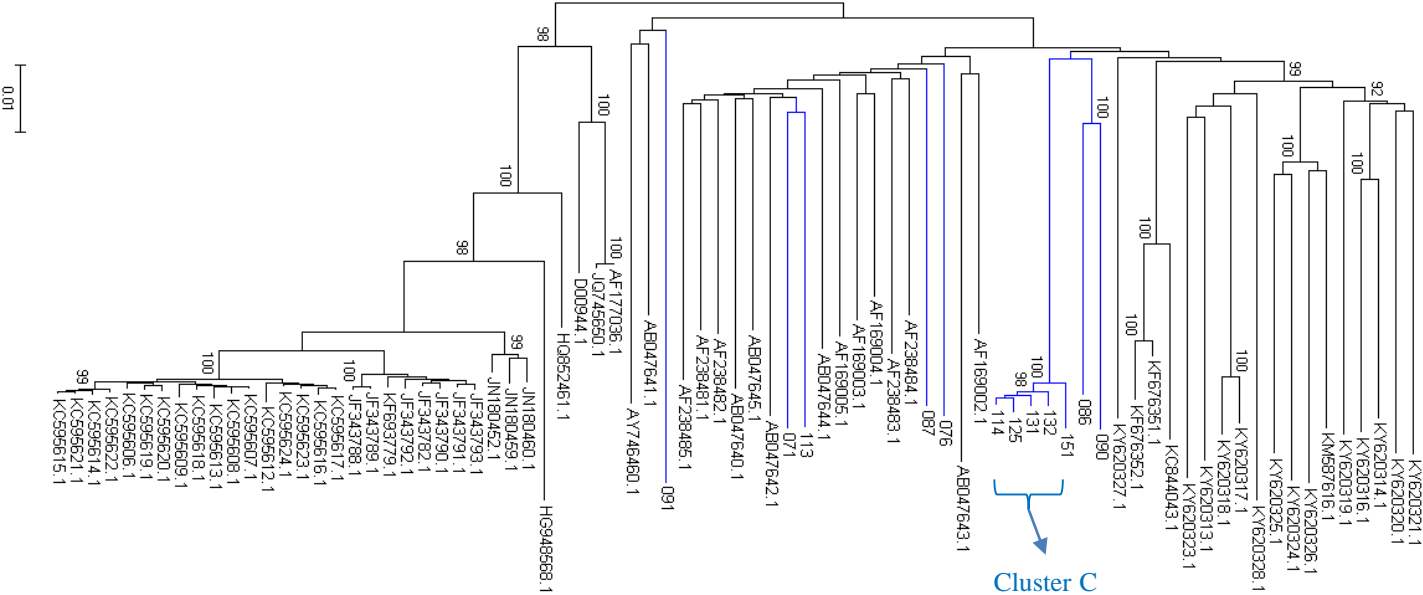
**Supplemental Figure 1.** Phylogenetic tree for HCV genotype 1b.

The tree was constructed using 59 HCV genotype 1b full-genome sequences derived from the study patients (green branches) and 255 reference sequences highly similar to one of the clustered cohort sequence (#025) selected by BLAST (black branches).

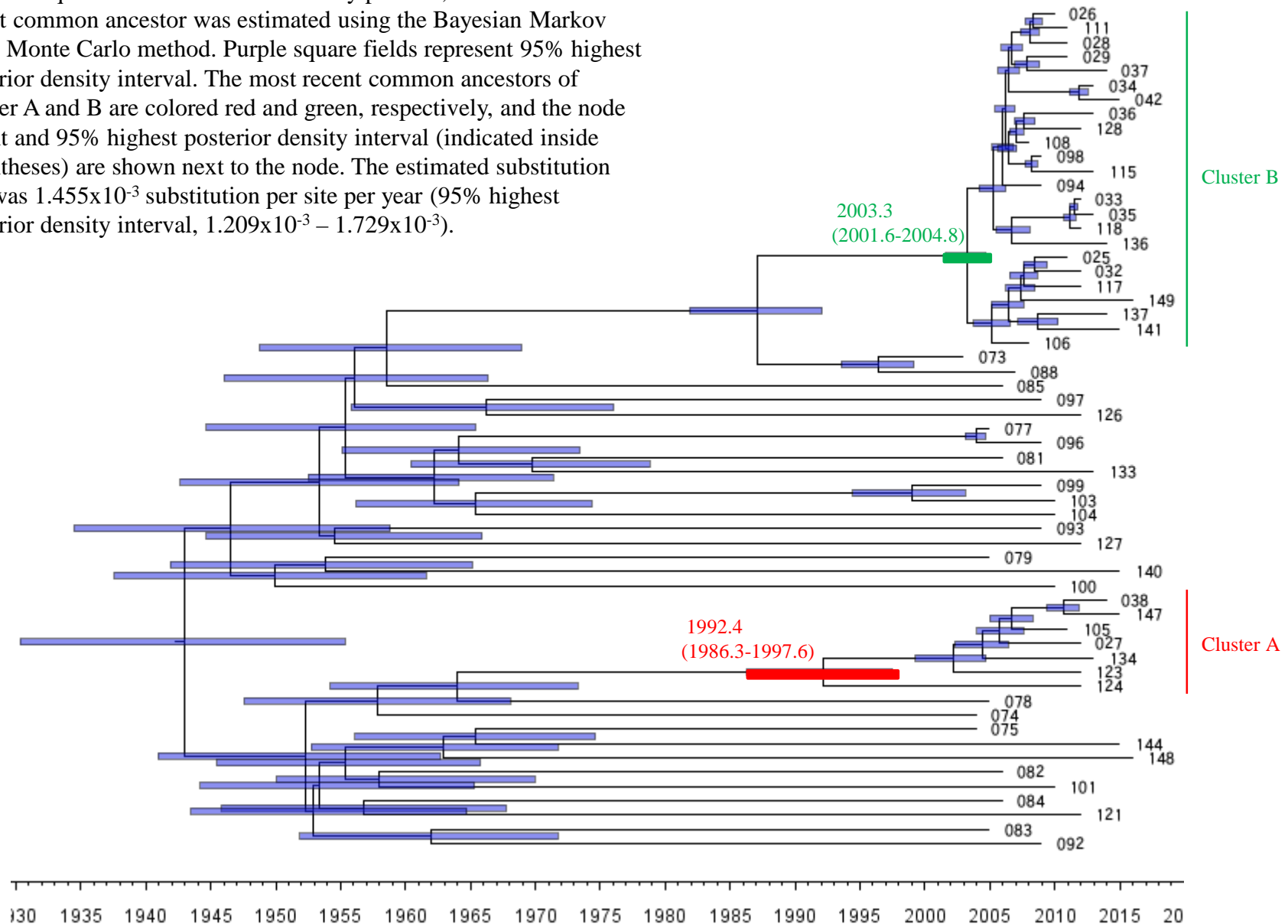


**Supplemental Figure 2.** Phylogenetic tree for HCV genotype 2a.

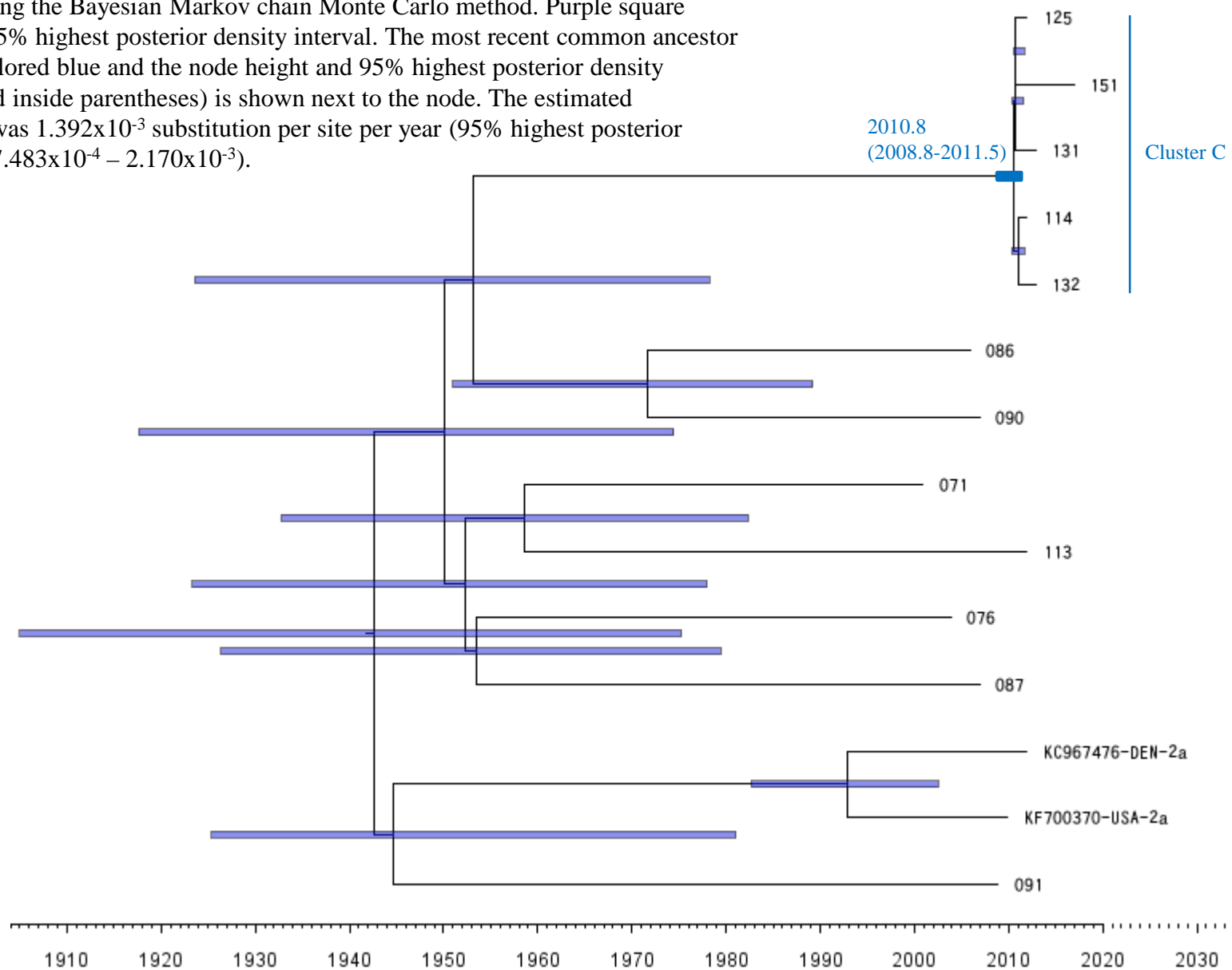
The tree was constructed using 12 HCV genotype 2a full-genome sequences derived from the study patients (blue branches) and 67 reference sequences highly similar to one of the clustered cohort sequence (#125) selected by BLAST (black branches).



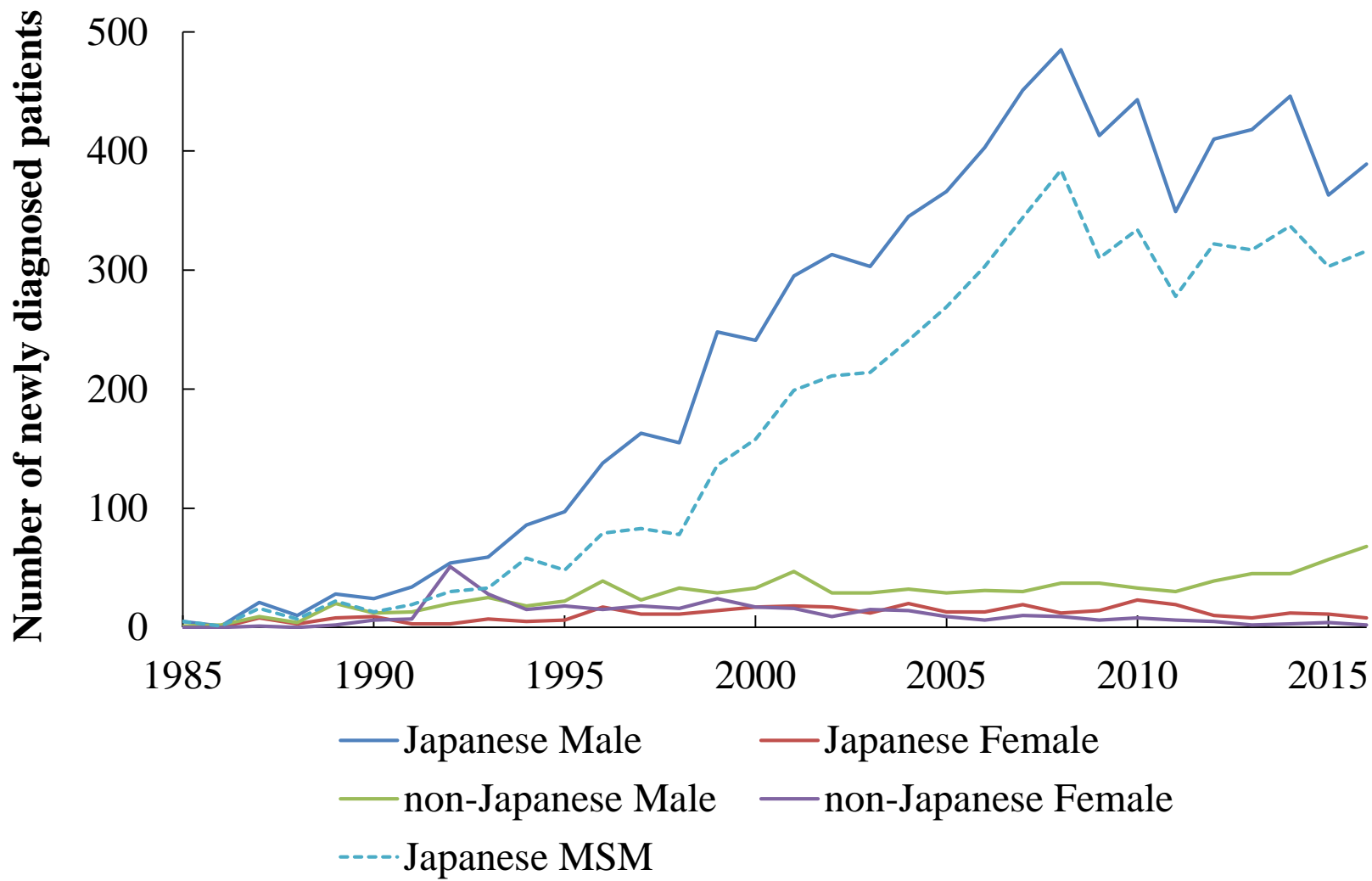
**Supplemental Figure 3.** Maximum clade credibility tree of HCV genotype 1b full-genome sequences. Using 59 HCV genotype 1b full-genome sequences derived from the study patients, the time to the most recent common ancestor was estimated using the Bayesian Markov chain Monte Carlo method. Purple square fields represent 95% highest posterior density interval. The most recent common ancestors of Cluster A and B are colored red and green, respectively, and the node height and 95% highest posterior density interval (indicated inside parentheses) are shown next to the node. The estimated substitution rate was  $1.455 \times 10^{-3}$  substitution per site per year (95% highest posterior density interval,  $1.209 \times 10^{-3} - 1.729 \times 10^{-3}$ ).



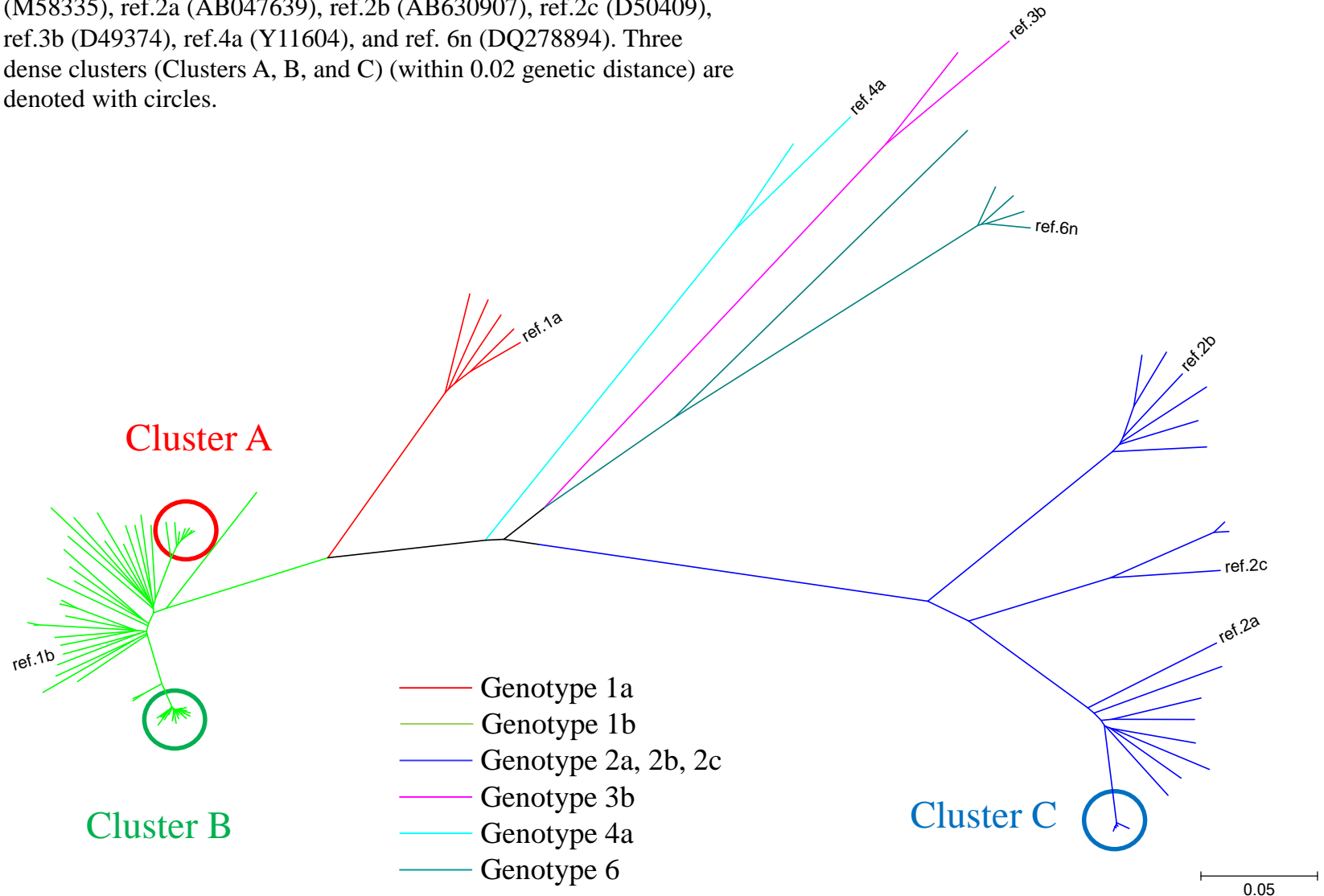
**Supplemental Figure 4.** Maximum clade credibility tree of HCV genotype 2a full-genome sequences. Using 12 HCV genotype 2a full-genome sequences derived from the study patients and 2 reference sequences, the time to the most recent common ancestor was estimated using the Bayesian Markov chain Monte Carlo method. Purple square fields represent 95% highest posterior density interval. The most recent common ancestor of Cluster C is colored blue and the node height and 95% highest posterior density interval (indicated inside parentheses) is shown next to the node. The estimated substitution rate was  $1.392 \times 10^{-3}$  substitution per site per year (95% highest posterior density interval,  $7.483 \times 10^{-4} - 2.170 \times 10^{-3}$ ).



**Supplemental Figure 5.** Annual number of newly diagnosed HIV-1-infected cases in Tokyo. Newly diagnosed cases were categorized by their gender and nationality (Japanese or non-Japanese) and their annual numbers are shown with solid lines. Additionally, the number of MSM cases are also shown with dotted line.



**Supplemental Figure 6.** Phylogenetic tree of HCV full-genome. Eighty-eight HCV sequences derived from HIV-1-coinfected patients were used and one referential sequence for each genotype was selected from Hepatitis Virus Database Server [18]; ref.1a (M62321), ref.1b (M58335), ref.2a (AB047639), ref.2b (AB630907), ref.2c (D50409), ref.3b (D49374), ref.4a (Y11604), and ref. 6n (DQ278894). Three dense clusters (Clusters A, B, and C) (within 0.02 genetic distance) are denoted with circles.





**Supplemental Figure 7.** Phylogenetic tree of HCV NS5B fragment. Eighty-eight HCV sequences derived from HIV-1-coinfected patients were used and one referential sequence for each genotype was selected from Hepatitis Virus Database Server [18]; ref.1a (M62321), ref.1b (M58335), ref.2a (AB047639), ref.2b (AB630907), ref.2c (D50409), ref.3b (D49374), ref.4a (Y11604), and ref. 6n (DQ278894). *Circles:* three dense clusters (Clusters A, B, and C) within 0.02 genetic distance.

