

**Table 1. Clinical characteristics of two independent Japanese BrS cohorts**

	<b>BrS cohort-I</b>	<b>BrS cohort-II</b>
Total (n)	415	288
Males (n, %)	403 (97.1)	274 (95.1)
Age at diagnosis [mean±SD (median)]	46.1±13.8 (44.9)	42.6±14.2 (41.0)*
Baseline type-1 ECG (n, %)	299 (72.0)	210 (72.9)
SCN5A rare variant carriers (n, %)	60 (14.5)	0 (0)
History of LAE (n, %)	88 (21.2)	180 (62.5)
History of non-LAE symptoms (n, %)	99 (23.9)	102 (35.4)
Asymptomatic (n, %)	228 (54.9)	6 (2.1)

LAE: Lethal arrhythmic event, \*: Patients lacking age information (n=49) were excluded

**Table 2. Lethal arrhythmic events in BrS cohort-I subgroups classified by different *SCN5A* functional properties**

<b>Subgroups</b>	<b>Patient characteristics</b>	<b>Patient number</b>	<b>LAE during follow-up (%)</b>	<b>Annual event rate (%/year)</b>	<b>Estimated mean LAE-free period (months, mean±SE)</b>
All BrS	All BrS patients	415	62 (14.9)	2.5	206.9±6.0
<i>SCN5A</i> (-)	Rare <i>SCN5A</i> variants non-carriers	355	49 (13.8)	2.2	210.8±6.0
<i>SCN5A</i> (+)	Rare <i>SCN5A</i> variant carriers	60	13 (21.7)	5.1	136.6±12.9
LOF	LOF- <i>SCN5A</i> mutation carriers	45	13 (28.9)	7.9	94.5±10.7
Non-LOF	Non-LOF <i>SCN5A</i> variant carriers	15	0 (0)	0	NA
Non-LOF + <i>SCN5A</i> (-)	Patients without LOF- <i>SCN5A</i> mutations	370	49 (13.2)	2.1	208.8±5.9

LOF: Loss-of-function

**Table 3. Univariate and multivariate analyses of LAE during the follow-up of BrS cohort-I**

**A. Univariate analysis**

Variables	Hazard ratio (95% CI)	P value
History of aborted cardiac arrest	6.58 (3.94-10.97)	5.3E-13
LOF-SCN5A mutations	3.18 (1.72-5.90)	2.4E-04
<i>In silico</i> -predicted rare SCN5A variants	2.08 (1.12-3.84)	0.02
History of syncope (without aborted cardiac arrest)	2.07 (0.92-4.69)	0.08
Male	1.43 (0.20-10.34)	0.72
VT/VF by programmed electrical stimulation	1.72 (0.98-3.02)	0.06
Family history of sudden cardiac death*	1.11 (0.56-2.18)	0.77
Documented atrial fibrillation	1.83 (1.02-3.27)	0.043
Late potential positive	1.50 (0.75-2.97)	0.25
Spontaneous type-I ST elevation	1.34 (0.74-2.44)	0.33
QRS (V <sub>5</sub> )≥120 ms	2.57 (1.34-4.93)	0.005
P (II)≥120 ms	2.71 (1.53-4.80)	0.001

\*: Prevalence at ≤45 years old

**B. Multivariate analysis**

Variables	LOF-SCN5A mutations		<i>In silico</i> -predicted rare SCN5A variants	
	Hazard ratio (95% CI)	P value	Hazard ratio (95% CI)	P value
History of aborted cardiac arrest	6.31 (3.69-10.80)	1.7E-11	6.46 (3.77-11.09)	1.2E-11
SCN5A status	2.89 (1.50-5.57)	0.002	2.08 (1.10-3.95)	0.025
QRS (V <sub>5</sub> )≥120 ms	1.11 (0.55-2.25)	0.77	1.25 (0.63-2.49)	0.53
Documented atrial fibrillation	1.02 (0.56-1.87)	0.94	0.98 (0.54-1.80)	0.95