Table SI. Functional role of lncRNAs in different experimental models.

Models	Туре	Procedure	LncRNA expression	Effects
Rat	MCAO/R model (54)	Middle cerebral artery obstruction (MCAO)/reperfusion (R) model was established in rats.	MALAT1↑	MALAT1 expression in the blood of rats with ischemic stroke was significantly higher than that of controls (P<0.01).
	MCAO/R model (56)	MCAO/R model was established in rats.	MALAT1↑	MALAT1 expression in the OGD/R model was significantly different (P<0.05) between different time points (12, 24 and 48 h).
	AMI model (95)	By blocking coronary arteries, the investigators established in male SD rats. (95)	H19 ↑	H19 overexpression significantly improved cardiac function (P<0.05).
	Myocardial ischemic preconditioning (IP) (99)	IP treatment of rat hearts, exposure of rat cells to H <sub>2</sub> O <sub>2</sub> pretreatment and hypoxic pretreatment of rat cardiomyocytes, respectively.	H19 ↑	IP significantly reduces subsequent damage from exposure to long-term I/R.
	OGD / R (41)	Primary cortical neurons were isolated from the cortex of adult male rats exposed to OGD / R.	TUG1↑	TUG1 was significantly elevated.
Mouse	Myocardial I / R mouse model (96)	Expose cardiomyocytes to OGD/R.	H19 ↑	Knockdown of H19 significantly reduced infarct size, increased left ventricular systolic pressure, and decreased left ventricular end-diastolic pressure.
	AMI mouse model (98)	Establishment of a myocardial infarction model in male mice by left anterior descending coronary artery ligation surgery and sham operation.	H19 ↑	H19 robustly expresses in the hearts of 8-week-old mice. H19 promotes early cardiac dilation, fibrosis and extracellular matrix-related gene expression after myocardial infarction.
Patients with ischemic stroke	Blood (54)		MALAT1↑	MALAT1 expression in the blood of ischemic stroke patients was significantly higher than that in control normal subjects. (P<0.001).
	Blood (41)		TUG1 ↑	TUG1 was significantly elevated in the blood of subjects tested by RT-PCR (P<0.001).
Cell models	OGD/R model (57)	HT22 cells were cultured in glucose-free medium under hypoxic conditions for 4 h at 37°C. After OGD, cells were incubated in intact medium under normoxic conditions for 12 h, 24 h and 48 h.	MALAT1↑	MALAT1 levels increased in a time-dependent manner and showed a significant increase at 48 h after reoxygenation.