

# Recurrent Preeclampsia and Long-term Cardiovascular Risk

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## 1 Background

- Preeclampsia increases risk of long-term cardiovascular disease.
- 14% of women have recurrent preeclampsia, but the association with future cardiovascular risk is not understood.

## 5 Conclusion

- Recurrent preeclampsia increases long term cardiovascular risk significantly more than non-recurrent preeclampsia.

## 2 Methods

**Data** 606,820 women with  $\geq 2$  deliveries in Quebec, Canada, 1989-2014

**Exposure** Recurrent (n=6,066), non-recurrent (n=33,493), and no preeclampsia (n=567,261)

**Outcomes** Hospitalization for heart failure, myocardial infarction, stroke, coronary artery bypass graft, aorta surgery, and coronary care unit admission

### Analysis

Study design = Time-to-event analysis, using accelerated failure time Weibull regression models, adjusted for baseline age, diabetes, preexisting cardiovascular disease, poverty, and year

## 3 Results

**Table 1 Association of recurrent and non-recurrent preeclampsia with cardiovascular outcomes (vs. no preeclampsia)**

	Incidence per 1,000		Hazard Ratio (95% CI)	
	Recurrent	Non-recurr.	Recurrent	Non-recurr.
Heart failure	21.8	7.0	4.2 (2.9, 6.1)	2.0 (1.6, 2.5)
Myocardial infarction	23.2	17.2	3.0 (2.1, 4.3)	2.0 (1.6, 2.4)
Ischemic stroke	14.0	8.3	2.8 (1.9, 4.0)	1.8 (1.5, 2.2)
Coronary artery bypass graft	4.0	0.9	3.5 (1.4, 8.6)	1.2 (0.6, 2.2)
Aorta surgery	6.2	2.2	5.3 (2.6, 10.9)	2.6 (1.7, 4.0)
Coronary care unit	15.8	9.8	2.9 (2.1, 4.1)	1.8 (1.5, 2.2)

## 4 Results

**Fig 1 Cumulative incidence of cardiovascular outcomes**

