

**Online Supplement**

**Estrous cycle dependent neurovascular dysfunction induced by angiotensin II in the mouse neocortex**

Carmen Capone<sup>1</sup>, Josef Anrather<sup>1</sup>, Teresa A. Milner<sup>1,2</sup>, and Costantino Iadecola<sup>1</sup>

<sup>1</sup>Division of Neurobiology  
Department of Neurology and Neuroscience  
Weill Cornell Medical College  
1300 York Avenue  
New York, NY 10021, USA

<sup>2</sup>Harold and Margaret Milliken Hatch Laboratory of Neuroendocrinology  
The Rockefeller University  
New York, NY 10065

**Running head:** Estrus cycle and cerebrovascular effects of AngII

**Correspondence:**

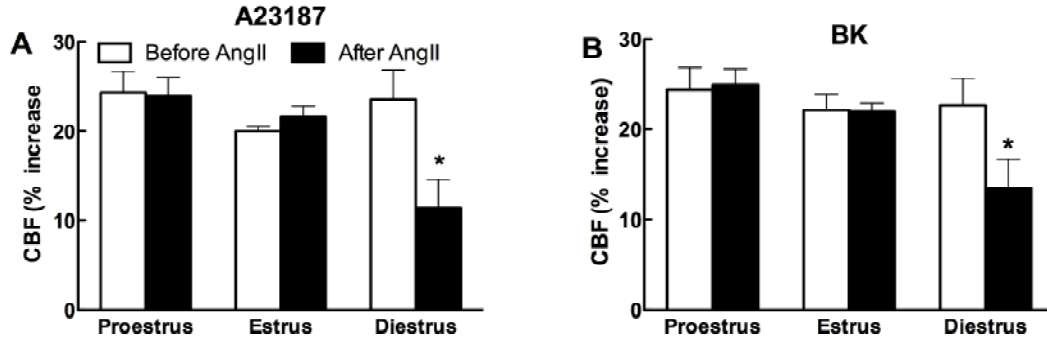
Costantino Iadecola, M.D.  
Division of Neurobiology  
Weill Cornell Medical College  
407 East 61<sup>st</sup> Street  
New York, NY 10065  
Phone: 646/962-8279  
Email: [coi2001@med.cornell.edu](mailto:coi2001@med.cornell.edu)

### Supplemental table S1

Arterial blood gases and pH in the mice in which CBF was studied

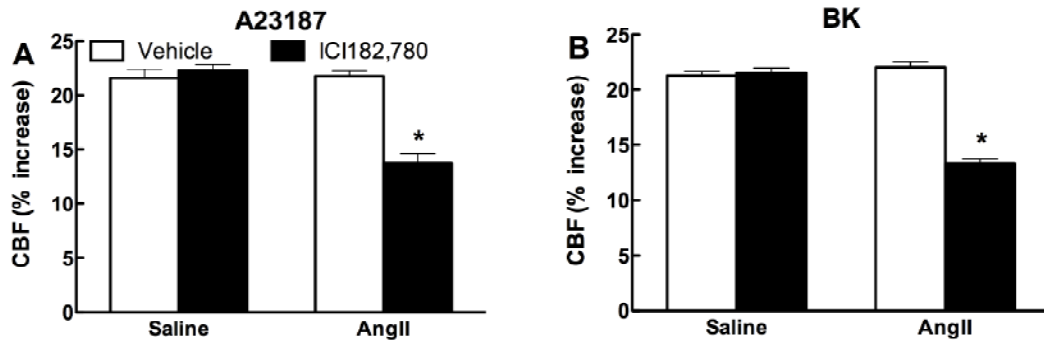
Cycle phase	Treatment	n	pCO <sub>2</sub> (mmHg)	pO <sub>2</sub> (mmHg)	pH
Proestrus	saline	6	36.6±1.2	129.4±3.8	7.37±0.05
	AngII		35.8±1.1	132.2±3.7	7.37±0.04
Estrus	saline	6	35.9±1.7	128.8±4.6	7.35±0.06
	AngII		37.1±1.8	133.1±2.5	7.36±0.06
Diestrus	saline	6	36.9±1.5	131.3±4.2	7.35±0.07
	AngII		36.1±2.1	129.8±2.9	7.37±0.06
Proestrus+ ICI182,780	saline	5	36.9±1.4	130.1±4.8	7.36±0.05
	AngII		37.3±1.3	130.9±4.3	7.37±0.07

## Online figures



**Figure S1**

**Figure S1:** Cerebrovascular effect of acute i.v. administration of AngII in cycling female mice. Effect of AngII on CBF increase produced by A23187 (A) or BK (B). \* $p < 0.05$  from respective control before AngII; analysis of variance and Tukey's test;  $n = 6$ /group.



**Figure S2**

**Figure S2:** Cerebrovascular effect of AngII in proestrus mice treated with the estrogen receptor inhibitor ICI182,780 (10 $\mu$ M; neocortical application). Effect of AngII on the CBF increase produced by A23187 (A) or BK (B) \* $p < 0.05$  from vehicle; analysis of variance and Tukey's test;  $n = 5$ /group.