

**Plasma Fibrinogen as a Biomarker for Mortality and Hospitalized Exacerbations in People with COPD**  
**Online Supplement: Appendix 2**

**Table 1: Fibrinogen Measurements and Assay Methods Used in the 5 Studies of Interest**

Study	Study Design	Fibrinogen measurements (N)	Follow-up (years)	Fibrinogen Assay Method	Intra-Assay Coefficient of Variation (CV)	Inter-Assay Coefficient of Variation (CV)	Fibrinogen Cut-point <sup>a</sup>
ARIC	Prospective Cohort	1	12	Clauss	NR	NR	Data-specific <sup>1</sup>
CHS	Prospective Cohort	2	3	Clauss	3.1% <sup>2</sup>	NR	Data-specific <sup>2</sup>
ECLIPSE	Prospective Cohort	8	3	Immunologic	1.2% <sup>3</sup>	1.9% <sup>3</sup>	Data specific <sup>4,5</sup>
Framingham Offspring Cohort	Prospective Cohort	1	4	Immunologic	6.2% <sup>6</sup>	NR	Data specific <sup>6</sup>
				Clauss	2.6% <sup>6,7</sup>	4.7% <sup>7</sup>	

NHANES III	Cross-sectional Survey	1	N/A	Clauss	NR	NR	Detectable level: 3.0 mg/L Highly elevated: 10.0 mg/L <sup>8</sup>
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NR= Not reported

<sup>a</sup>Data-specific classification methods include classifying by fibrinogen standard deviation increments and either transformed/non-transformed tertiles, quartiles, or quintiles.

### References:

1. Johnston AK, Mannino DM, Hagan GW, Davis KJ, Kiri VA. Relationship between lung function impairment and incidence or recurrence of cardiovascular events in a middle-aged cohort. *Thorax*. 2008; 63: 599–605.
2. Jiang R, Burke GL, Enright PL, et al. Inflammatory Markers and Longitudinal Lung Function Decline in the Elderly. *Am J Epidemiol*. 2008;168(6):602–10.
3. Dickens JA, Miller BE, Edward LD, et al. COPD association and repeatability blood biomarkers in the ECLIPSE cohort. *Resp Research*. 2011;12:146. doi: 10.1186/1465-9921-12-146
4. Hurst JR, Vestbo J, Anzueto A, et al. Susceptibility to exacerbation in chronic obstructive pulmonary disease. *N Eng J Med*. 2010;363:1128-1138. doi: 10.1056/NEJMoa0909883
5. Vestbo J, Edwards LD, Scanlon PD, et al. Changes in forced expiratory volume in 1 second over time in COPD. *N Eng J Med*. 2011;365: 1184-1192. doi: 10.1056/NEJMoa1105482
6. Stec JJ, Silbershatz H, Tofler GH, et al. Association of fibrinogen with cardiovascular risk factors and cardiovascular disease in the framingham offspring population. *Circulation* 2000; 102 (14): 1634–1638.
7. Yang Q, Tofler GH, Cupples LA, et al. A genome-wide search for genes affecting circulating fibrinogen levels in the Framingham Heart Study. *Thrombosis Research* 2003; 110 (1): 57–64.
8. Mannino DM, Ford ES, Redd SC. Obstructive and restrictive lung disease and markers of inflammation: data from the third national health and nutrition examination. *Am J Med*. 2003; 114: 758–62.