SUPPLEMENTAL MATERIAL

Prevalence and predictors of cholesterol screening, awareness, and statin treatment among U.S. adults with familial hypercholesterolemia or other forms of severe dyslipidemia (1999-2014)

Emily M. Bucholz, MD, PhD, MPH, Angie Mae Rodday, PhD, MS, Katherine Kolor, PhD, MS, Muin Khoury, MD, PhD, Sarah de Ferranti, MD, MPH

TABLE OF CONTENTS

Supplemental Table 1. Comparison of familial hypercholesterolemia sample size depending on approach to adjusting LDL-C levels for use of lipid-lowering-medications

Approach to adjusting LDL-C values for use of lipid-lowering medications	Definite/Probable FH sample size / total population	Weighted percent (%)
Adjusted for self-reported lipid-lowering agent or documented statin use (n=42471)	1007020 / 212438580	0.47% (0.03%)
Adjusted for documented statin use only (n=42471)	740230 / 212438580	0.35% (0.03%)
Adjusted for self-reported lipid lowering agent only (n=42471)	941386 / 212438580	0.44% (0.04%)

Abbreviations: LDL-C, low-density lipoprotein cholesterol.

Supplemental Table 2. Sensitivity analyses limiting sample to patients with non-missing LDL-C values and non-missing personal and family history of early atherosclerotic cardiovascular disease (n=11688)

	Definite/Probable FH (n=438688)	Severe Dyslipidemia (n=6772676)	General Population (n=212438580)	p-value[*]	p-value[†]
Cholesterol checked in last 5 years	91.3 (5.4)	85.8 (1.9)	69.9 (0.7)	0.39	0.014
Previously told had elevated cholesterol	88.7 (6.1)	84.3 (1.9)	38.0 (0.7)	0.53	<0.001
Currently on a documented statin	52.9 (9.7)	37.1 (2.6)	17.0 (0.5)	0.08	<0.001
Self-reported lipid-lowering medication	80.6 (6.7)	55.7 (2.8)	17.2 (0.5)	0.003	<0.001
Documented higher-intensity statin	18.7 (7.1)	13.0 (2.0)	6.7 (0.3)	0.35	0.006
Documented lower -intensity statin	34.2 (8.3)	24.0 (2.5)	10.3 (0.5)	0.18	<0.001

Abbreviations: FH, familial hypercholesterolemia; LDL-C, low-density lipoprotein cholesterol.
[*]p-value for comparison between participants with definite/probable FH and participants with LDL-C ≥190mg/dL.
[†]p-value for comparison between participants with definite/probable FH and the general population.

Supplemental Table 3. Sensitivity analyses varying the LDL-C multiplier for statin therapy to reflect low- and high-intensity statin use
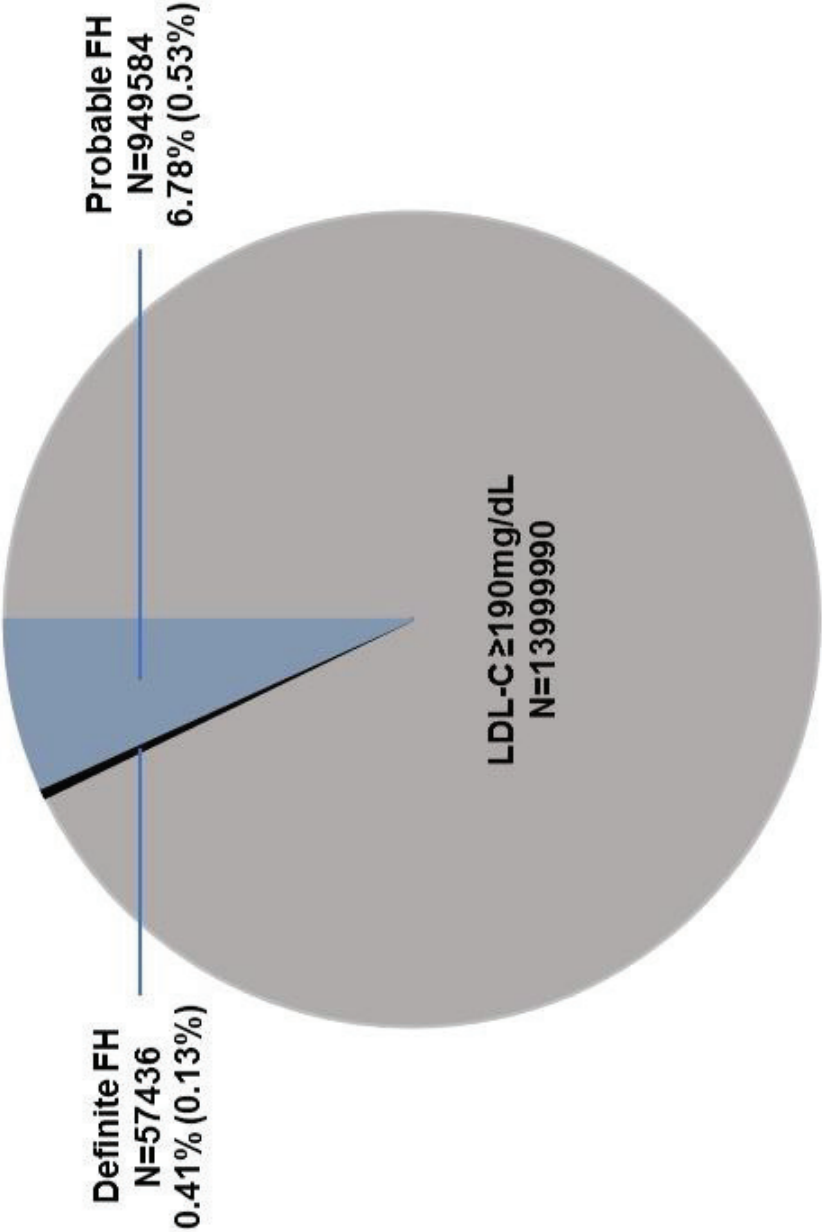
	Definite/Probable FH (n=1005293)	Severe Dyslipidemia (n=13436594)	General Population (n=212438580)	p-value[*]	p-value[†]
Cholesterol checked in last 5 years	91.3 (2.4)	82.3 (1.1)	66.6 (0.5)	0.006	<0.001
Previously told had elevated cholesterol	94.3 (1.9)	82.0 (1.1)	38.1 (0.4)	<0.001	<0.001
Currently on a documented statin	55.0 (3.8)	35.1 (1.2)	13.8 (0.3)	<0.001	<0.001
Self-reported lipid-lowering medication	79.2 (3.4)	51.2 (1.3)	14.3 (0.3)	<0.001	<0.001
Documented higher-intensity statin	45.2 (4.1)	25.6 (1.2)	5.9 (0.2)	<0.001	<0.001
Documented lower-intensity statin	9.7 (2.5)	9.5 (0.7)	7.9 (0.2)	0.94	0.43

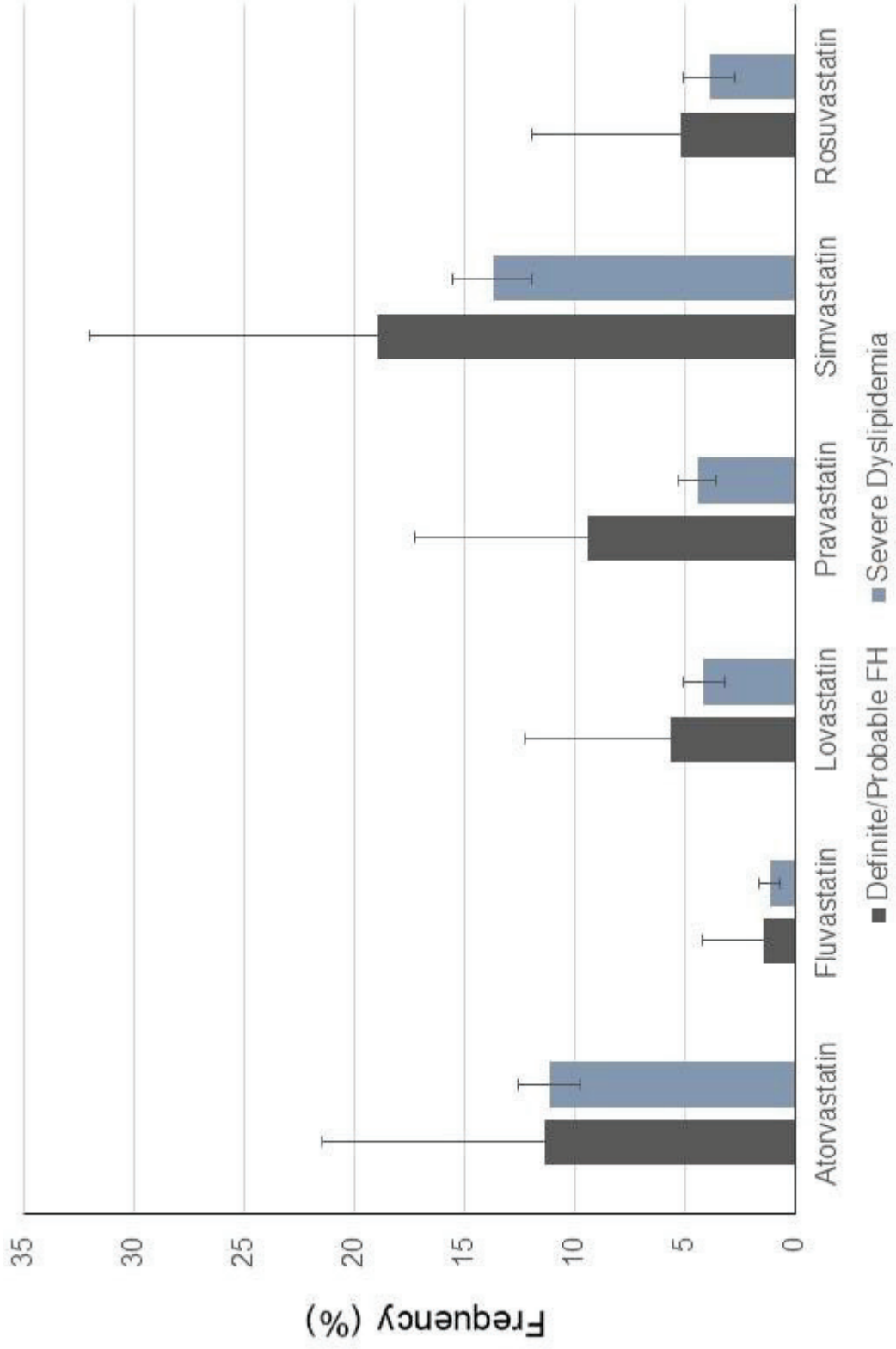Abbreviations: FH, familial hypercholesterolemia; LDL-C, low-density lipoprotein cholesterol.
[*]p-value for comparison between participants with definite/probable FH and participants with LDL-C ≥190mg/dL.
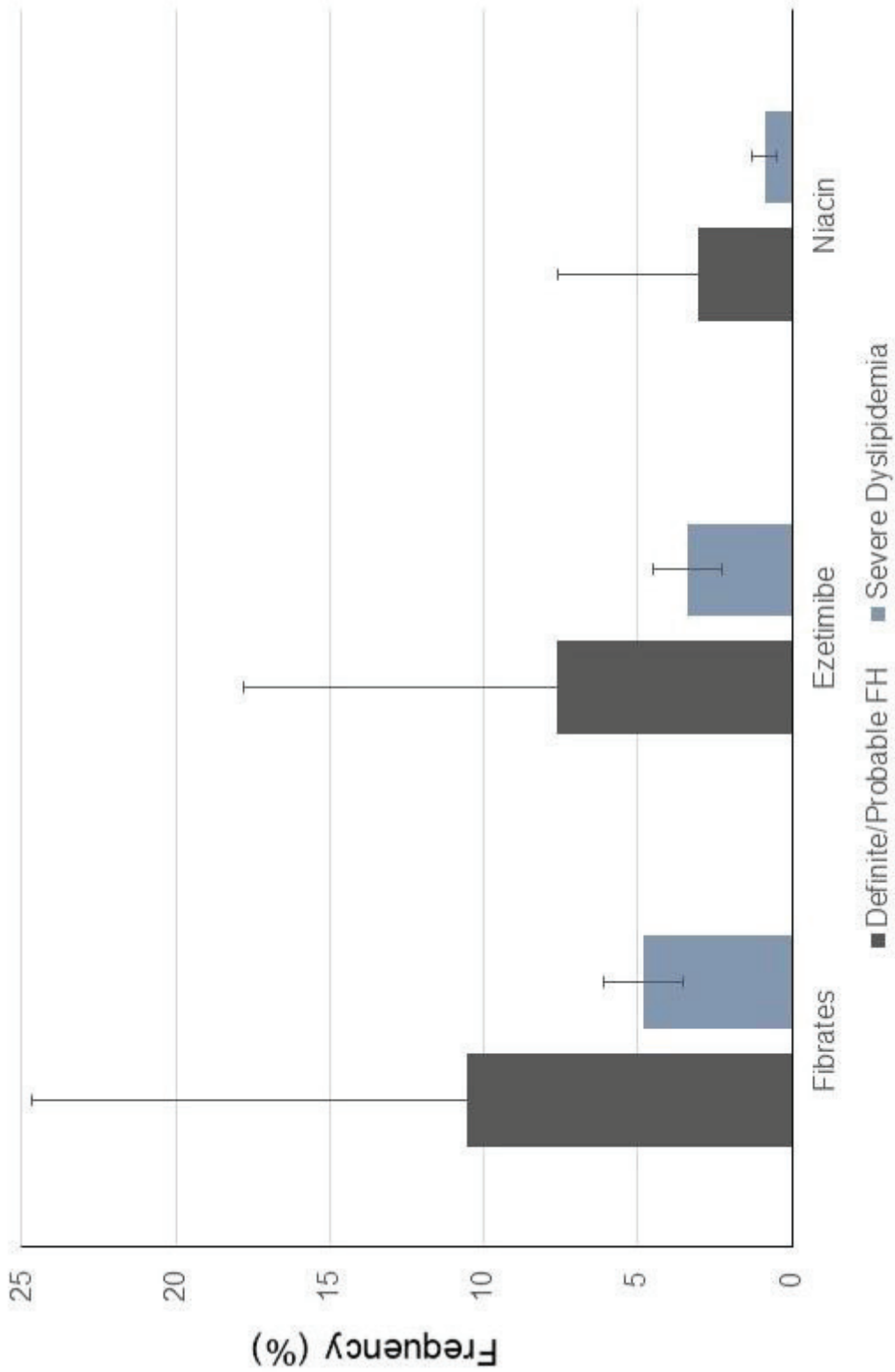[†] p-value for comparison between participants with definite/probable FH and the general population.

Supplemental Figure 1. Percentage of U.S. individuals with LDL-C ≥190mg/dL with definite or probable familial hypercholesterolemia

Probable FH
N=949584
6.78% (0.53%)

LDL-C ≥190mg/dL
N=13999990

Definite FH
N=57436
0.41% (0.13%)

Supplemental Figure 2. Prevalence (95% confidence interval) of specific statin use among individuals with severe dyslipidemia (adjusted LDL-C ≥190mg/dL)

9

Supplemental Figure 3. Prevalence (95% confidence interval) of other cholesterol-lowering medications among individuals with severel dyslipidemia (adjusted LDL-C ≥190mg/dL)

Supplemental Figure 4. Prevalence of self-reported screening, awareness, documented statin use and self-reported lipid-lowering medication use among U.S. adults with severe dyslipidemia (adjusted LDL-C ≥190mg/dL) stratified by sociodemographic and clinical characteristics