

# The 10 Year Incidence of Glaucoma Among Treated and Untreated Ocular Hypertensive Patients

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# Goal

OHTS published 5 year and 7.5 year incidences of POAG in untreated OHTS participants. We thought a 10 year incidence would be helpful for clinicians and patients.

# Methods

Take 10 year data from treatment group.

Model 10 year data from observation group –  
mean 7.5 year f/u without treatment.

# Results

At all 3 levels of baseline risk, treatment reduces the 10 year incidence by about 50%.

# 10 Year Incidence of POAG Among Treated and Untreated OHTS Participants

	Ethnicity	Untreated for 10 years	Treated for 10 years
		POAG (95% CI)	POAG (95% CI)
<b>Lowest Risk</b> <6%*	All	7% (4%-11%)	4% (2%-5%)
	Others	7% (4%-11%)	3% (2%-5%)
	African American	8% (5%-12%)	5% (3%-8%)
<b>Moderate Risk</b> 6% to 13%†	All	18% (13%-26%)	8% (6%-10%)
	Others	18% (13%-26%)	8% (6%-10%)
	African American	19% (13%-29%)	9% (6%-12%)
<b>High Risk</b> >13%‡	All	42% (32%-54%)	19% (15%-23%)
	Others	40% (31%-52%)	18% (14%-22%)
	African Americans	45% (34%-59%)	21% (16%-26%)

\*Baseline risk of developing POAG <6%, †Baseline risk of developing POAG 6-13%

‡Baseline risk of developing POAG ≥ 13%

# Results

The absolute reduction is greatest in the highest risk group and lowest in the low risk group

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‡Baseline risk of developing POAG ≥ 13%

# Results

Within each tertile of risk, African Americans and others have similar outcome. i.e. African Americans do benefit from treatment.



# 10 Year Incidence of POAG Among Treated and Untreated OHTS Participants

	Ethnicity	Untreated for 10 years	Treated for 10 years
		POAG (95% CI)	POAG (95% CI)
<b>Lowest Risk</b> <b>&lt;6%*</b>	All	7% (4%-11%)	4% (2%-5%)
	Others	7% (4%-11%)	3% (2%-5%)
	African American	8% (5%-12%)	5% (3%-8%)
<b>Moderate Risk</b> <b>6% to 13%†</b>	All	18% (13%-26%)	8% (6%-10%)
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\*Baseline risk of developing POAG <6%, †Baseline risk of developing POAG 6-13%

‡Baseline risk of developing POAG ≥ 13%

# Discussion

The incidence of POAG appears to be roughly linear over 10 years. It is not clear if this can be extrapolated to 20 years or more.

# Discussion

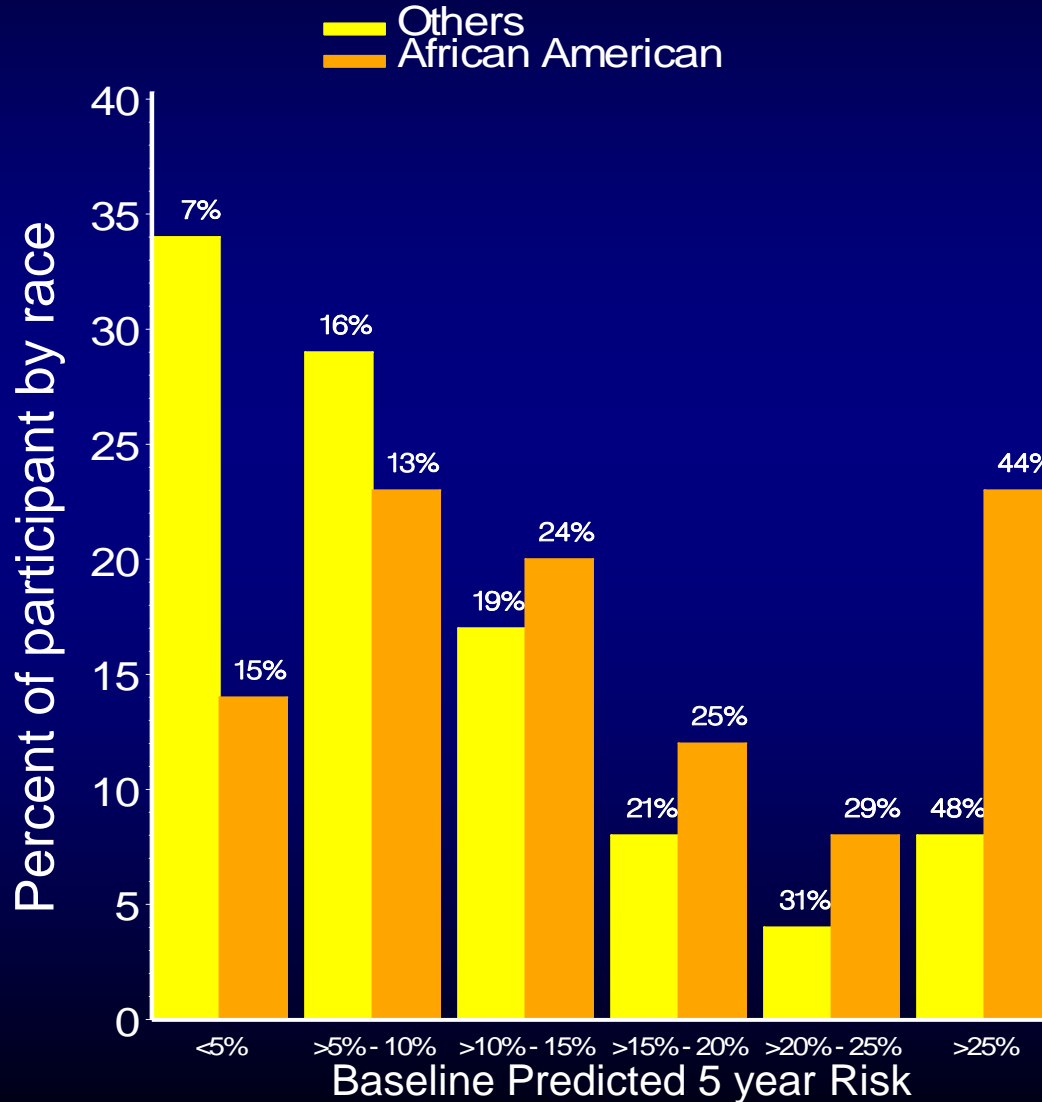
We have previously published that OHT patients at high risk may benefit from closer follow-up and early treatment, while low risk patients could have less extensive follow-up and probably do not need early treatment. Patient specific decisions depend on patient age, health, life expectancy and preference.

# Discussion

African Americans have a higher incidence of POAG but the same incidence within the same tertile of risk. This seeming contradiction is explained by the fact that African Americans are over-represented in the high risk group and under-represented in the low risk group.

# Baseline Risk of Developing POAG by Race

At each level of risk, the percent of African Americans and “Other” participants developing POAG is similar.  
Percent of Participants Developing POAG to study end on top of bars



# Summary

Medical treatment reduces the 10 year incidence of POAG by about 50%.

The absolute reduction is greatest in the high risk group.

The effect of treatment is similar in African Americans and others after adjusting for the higher baseline risk status of African Americans.