

## CORRESPONDENCE

## Response letter to: the Hispanic paradox further unraveled?

Dr Young and Ms. Hopkins<sup>1</sup> suggest that the lack of a confirmation of the 'Hispanic paradox' for lung phenotypes in the Multi-Ethnic Study of Atherosclerosis (MESA) Lung Study could be due to differences in the distribution of Hispanic subgroups and lower smoking exposure in MESA compared to the study by Bruse *et al.*<sup>2</sup> As suggested, we repeated our analyses stratifying the Hispanic group into those of Mexican and non-Mexican origin and found similar results to initial findings. In a sensitivity analysis including only those Hispanic-Americans who identified Mexico as their country of origin, we again found that among both women and men, genetic ancestry did not modify the effect of pack-years of cigarette smoking on either the forced expiratory volume at 1 s (FEV<sub>1</sub>) or the ratio of the FEV<sub>1</sub> to the forced vital capacity (all p values >0.20). Furthermore, in analyses restricted to smokers with greater than 10 pack-years, findings were again unchanged (p>0.4). While the results of these sensitivity analyses were underpowered and should not be taken as definite statements on this topic, they support our general conclusion that smoking is similarly harmful across these race/ethnic groups.

Although the prevalence of COPD varies by race/ethnic groups in the USA, there is relatively little evidence to suggest that the risk of developing COPD varies substantially by race/ethnicity after accounting for established risk factors. For example, the prevalence of COPD among

non-Hispanic blacks is higher than that of Mexican-Americans, and the prevalence of smoking is higher as well.<sup>3</sup> Indeed, our results for both self-reported and genetically estimated ancestry do not show evidence of greater susceptibility to cigarette smoke among those of African ancestry.<sup>4</sup>

That said, we agree with Dr Young and Ms. Hopkins that non-genetic and genetic factors may play an important role in the risk of developing COPD, including dietary explanations, as suggested, and some of these factors may vary substantially across continents and cultures. Ongoing research in the Hispanic Community Health Study<sup>5</sup> and other studies should provide a better-powered understanding of COPD risk among Hispanic populations and other groups.

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**Correspondence relation to:** Powell R, Davidson D, Divers J, *et al.* Genetic ancestry and the relationship of cigarette smoking to lung function and per cent emphysema in four race/ethnic groups: a cross-sectional study. *Thorax* 2013;68:634–42.

Young, RP, Hopkins, RJ. The Hispanic paradox further unraveled? *Thorax* 2013, forthcoming.

**Funding** The MESA and MESA Lung Studies are conducted and supported by the NHLBI (contracts N01-HC-95159 through N01-HC-95165 and N01-HC-95169 and grants R01 HL-077612, R01 HL-075476 and RC1-HL100543).

**Competing interests** Please see original ICMJE COI forms submitted with the initial article for Drs Powell and Barr. No competing interests related to this letter. In general, RP has no competing interests. RGB received costs of conference travel from Boeringher Ingelheim.

**Ethics approval** IRB from all participating universities and the National Heart Lung Blood Institute (NHLBI).

**Provenance and peer review** Not commissioned; internally peer reviewed.

**Data sharing statement** Researchers interested in working with MESA. Investigators are welcome to submit a manuscript proposal or ancillary study proposal directly to the study. Please feel free to review additional materials related to establishing a collaborative relationship with MESA at the following link <http://www.mesa-nhlbi.org/ancillary.aspx>.

**To cite** Powell R, Barr RG. *Thorax* Published Online First: [please include Day Month Year] doi:10.1136/thoraxjnl-2013-204408

Received 29 August 2013

Accepted 30 August 2013



► <http://dx.doi.org/10.1136/thoraxjnl-2013-204152>

*Thorax* 2013;0:1. doi:10.1136/thoraxjnl-2013-204408

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