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Polypill for Cardiovascular Disease Prevention in an Underserved Population. Reply.

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Authors reply:

Brugts raises concerns about the use of a polypill for the primary prevention of cardiovascular disease, given pharmacogenetic differences and variability in clinical response between individual recipients. We acknowledge that a variety of factors, including genotype, may affect response to blood pressure (BP) and cholesterol-modifying medications. That said, genetic data are not presently used to guide the implementation of such therapies, given separately or in combination.

The results from our randomized trial add to the accumulating evidence on the effectiveness of polypill-based strategies in individuals at risk for cardiovascular disease.^{1–4} Such an approach may be particularly useful in settings where frequent clinic visits, repeated laboratory testing, and/or genotyping are not easily accessible. Ultimately, further trials may be warranted to compare highly-tailored approaches, as advocated by Brugts, with simpler strategies.

Bilal and Cainzos-Achirica raise the importance of addressing underlying social and economic drivers of disease in vulnerable populations, a recognition also emphasized in the recent national practice guideline for the primary prevention of cardiovascular disease.⁵ We agree with the need to better understand and address fundamental root causes of cardiovascular health disparities. The polypill represents just one of several potential tactics that may be required to reduce the disparities in cardiovascular outcomes. A pharmacologic strategy like the polypill should not preclude the pursuit of lifestyle interventions and policies to address the social and medical vulnerabilities of low-income persons.

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Since the publication of their article, the authors report no further potential conflict of interest.

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