



## **Overview of Hypertension with Resources on Single-Pill Treatment**

Hypertension is a primary risk factor for a multitude of diseases worldwide. Around 1.13 billion people are affected, and hypertension has now spread from being a predominantly high-income issue to affecting low to middle-income countries (LMICs) (Bruyn et. Al 2022). Despite the existence of extremely effective hypertension treatment, it is still somewhat poorly controlled in high-income countries, and even worse in LMICs (Bruyn et. Al 2022). A majority of hypertensive patients need to take about 2-3 medications per day to achieve blood-pressure control. A solution to this obstacle is single-pill combination therapy. Single-pill combination therapy (fixed dose combination) is a combination of two or more active ingredients into one drug (Bruyn et. Al 2022). This is a widely accepted practice and is rapidly improving blood pressure (BP) control. Single-pill combination therapy has contributed to a 34% risk reduction of cardiovascular events caused by hypertension (Bruyn et. Al 2022).

Regarding the Kaiser Bundle, single-pill combination therapy would be the fifth and final step of treatment. However, there could be a follow-up after a few months of treatment. Within CIRCL Chicago, it would fall into the third/fourth aim of the design plan, that is introducing single-pill combination therapy within a multitude of organizations, and then disseminating the findings and results. These findings and results could be taken as quantitative data, measuring BP results before and after a patient's single-pill combination therapy has started.



1. Under pressure: Strategies to improve access to antihypertensive medicines. Médecins Sans Frontières Access Campaign. May 24, 2022. Accessed July 16, 2023. <https://msfaccess.org/under-pressure-strategies-improve-access-antihypertensivemedicines-low-and-middle-income-0>
2. Schmieder RE, Wassmann S, Predel H-G, Weisser B. Improved persistence to medication, decreased cardiovascular events and ... Hypertension. March 29, 2023. Accessed July 16, 2023. <https://www.ahajournals.org/doi/10.1161/HYPERTENSIONAHA.122.20810>.
3. Bruyn E, Nguyen L, Schutte AE, Murphy A, Perel P, Webster R. Implementing single-pill combination therapy for hypertension: A scoping review of key health system requirements in 30 low- and middle-income countries. Global heart. January 25, 2022. Accessed July 16, 2023. [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8796691/#:~:text=The%20use%20of%20single%2Dpill,rapidly%20improving%20blood%20pressure%20\(BP](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8796691/#:~:text=The%20use%20of%20single%2Dpill,rapidly%20improving%20blood%20pressure%20(BP)