

# Benefits of HIV Single-Tablet Regimens (STRs)

## STRs combine several different HIV drugs into one pill that is taken once a day.

- Effective HIV treatment involves taking a daily combination of HIV medicines. Initiating HIV treatment as early as possible can help patients live healthier and longer lives and dramatically reduces the risk of HIV transmission.<sup>1-4</sup>
- In order to fully benefit from HIV treatment, patients must take their HIV medicines every day, exactly as prescribed. This was particularly challenging in the past as early treatment regimens required patients to take more than 25 pills, as often as three times a day.<sup>5-6</sup>
- Advances in HIV therapy in the last decade have led to the development of STRs, which has made HIV treatment simpler and more convenient.<sup>5-6</sup>
- The proportion of HIV patients in the U.S. that have started treatment for the first time on STRs has grown significantly, from 48% in 2009 to 83% in 2018.<sup>7</sup>

## STRs are associated with higher levels of adherence to daily HIV treatment regimens, which lowers patients' risk of hospitalization and reduces overall healthcare costs.

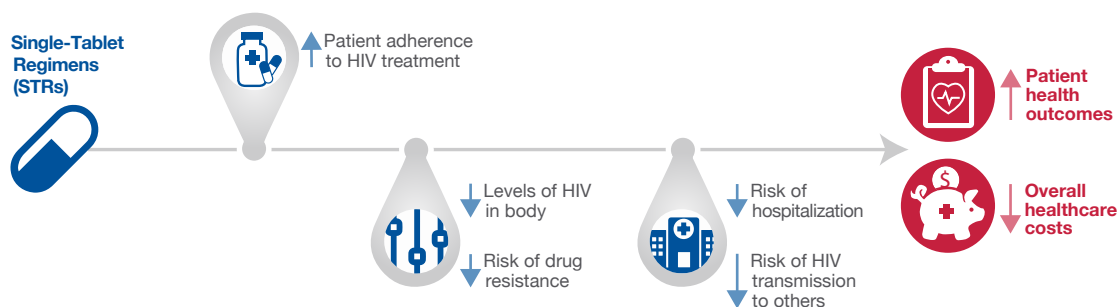
- Compared to patients on multi-tablet regimens (MTRs, or regimens of two or more pills per day), patients on STRs have higher rates of adherence to HIV treatment and lower levels of virus in the body.<sup>8-15</sup>
- By improving adherence to therapy, patients on STRs are able to better control their HIV, resulting in decreased rates of hospitalization and lower overall healthcare costs.<sup>10-15</sup>
- STRs have been associated with a lower risk of treatment discontinuation compared to MTRs.<sup>8, 16-17</sup>
- STRs also prevent additional adverse consequences—like the development of drug resistance or an increase in hospitalization—that can occur when patients take some but not all pills of a MTR.<sup>18-19</sup>

## STRs help lower the risk of transmitting HIV to others.

- Patients on STRs are better able to take their treatment regularly, which not only benefits their own health but can also lower their risk of transmitting HIV to others by as much as 96%.<sup>4, 8-15, 20</sup>
- This concept, referred to as “HIV Treatment as Prevention,” is a key part of the National HIV/AIDS Strategy.<sup>21</sup>

## Benefits of STRs have been observed in multiple studies with patient populations from the Veterans Affairs (VA) health system, Medicaid and commercial insurance.

- A large study of Medicaid enrollees who received HIV treatment found that patients on STRs were significantly more likely to be highly adherent ( $\geq 95\%$ ) to HIV treatment than patients on MTRs.<sup>12</sup> The use of STRs was associated with a 23% lower risk of hospitalization and a 17% reduction in overall healthcare costs in the Medicaid population.
- A similar study among commercially insured patients with HIV observed a 24% lower risk of hospitalization among patients on STRs.<sup>14</sup>
- In an analysis of HIV patients within the VA health system, 75% of patients on STRs were adherent to their regimens compared to only 56% of patients on MTRs.<sup>11</sup> Patients on STRs had a 31% lower risk of hospitalization and 46% fewer hospitalizations compared to patients on MTRs and were 21% more likely to have undetectable levels of virus in the body.



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