# Short-course treatment (8 weeks) as effective as 12 weeks treatment for black patients with hepatitis C virus (HCV) infection

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| **Challenge** | **Guidelines for hepatitis C treatment indicate that most people can be treated with ledipasvir and sofosbuvir for shorter durations (i.e., 8 weeks instead of the originally approved 12 weeks) but Black people with HCV were not included in this shorter recommendation based on data from older HCV treatments.** |
| **Existing Evidence** | Prior observational studies suggested reduced response for black patients with hepatitis C receiving 8 weeks of therapy. However, because prior studies did not limit analyses to black patients otherwise eligible for 8 weeks (i.e., treatment-naive, no cirrhosis, HIV-uninfected, and HCV RNA <6 million IU/mL), black patients receiving 8 and 12 weeks may have differed with respect to key factors for treatment response. |
| **Target Population** | KPNC patients with HCV genotype 1 infection eligible for 8 week direct-acting antiviral regimen of ledipasvir/sofosbuvir |
| **Intervention or Exposure** | 8 or 12 week ledipasvir (LDV)/sofosbuvir (SOF)  |
| **Outcomes/Key Findings** | Of 2653 patients eligible for 8 weeks of treatment with LDV/SOF, 1958 (73.8%) received 8 weeks of treatment and 695 (26.2%) received 12 weeks; the proportions of patients with sustained virologic response 12 weeks after the end of treatment (SVR12) were 96.3% for those given 8-weeks and 96.3% for those given 12 weeks of treatment (P = .94). Similarly, when stratified by race, there was no difference in SVR12 by regimen duration (see figure). Specifically, for Black people with HCV, the percentages with SVR12 for 8- and 12-week regimens were 95.6% vs 95.8%, respectively, with an adjusted relative risk of 1.0 (P = .88).  |
| **Resulting Action/Change** | **These findings changed national KP clinical practice to an 8-week course of direct-acting anti-hepatitis C treatment for eligible black patients (instead of 12-weeks). This decreased patient inconvenience, decreased cost by 1/3, and may decrease toxicity associated with longer durations of treatment. In 2019, new liver society guidelines cited this study and revised guidance to shorter regimens for Black people.**  |
| **Additional recommendations** | These results recommend evaluations for treatment differences/similarities for other medication regimens with conflicting data in the literature. |
| **Implementation Tools**  | New KP and national liver society guidelines based on these results |
| **Implementation and Follow-up Measures** | Proportions of people with guideline concordant care, consistent with these findings: (e.g. 8 weeks for eligible patients); pharmacy utilization/cost; virologic response  |
| **Reference(s) [Key Figure if applicable]** | SVR12 for HCV treatment of 8 vs. 12 weeks among 2653 HCV-infected individuals otherwise eligible for 8-week regimensdoi: 10.1016/j.cgh.2018.03.003. Epub 2018 Mar 11. <https://pubmed.ncbi.nlm.nih.gov/29535057/> |