Methods: A retrospective review of outpatient medical records was conducted to identify HCV Genotype 1 co-infected patients who failed a regimen containing a HCV protease inhibitor in a HIV Primary care clinic. SVR 12 rates were collected and tabulated.

Results: 14 patients were retreated during this two year period; 13 males and 1 female. 4 (29%) were Black, 8 (57%) Caucasian, 2 (14%) Hispanic. Age ranged from 37-69. 12 (86%) had genotype 1a, 1 (7%) genotype 1b, 1 had genotype 1a/1b. 9 (64%) were treated previously with pegylated interferon-Ribavirin (Peg-ribavirin) plus telaprevir, 2 (14%) simeprevir/sofosbuvir, 1 (7%) Peg-ribavirin/telaprevir. 1 (7%) Peg-ribavirin. HIV regimen was changed in 536 patients prior to HIV treatment due to drug-drug interactions. 7 (50%) patients were F4, 1 (7%) patient was F2, 3 (21%) patients were F1, 1 (7%) patient had an unknown fibrosis status. 10 (71%) were treated with ledipasvir/sofosbuvir, 2 (14%) were treated with simeprevir/sofosbuvir, 1 (7%) was treated with ledipasvir/sofosbuvir/ribavirin (1%), which was treated with simeprevir/sofosbuvir/ribavirin. 13 (93%) patients obtained an SVR12 and 1 (7%) patient was lost to follow up after 8 weeks of ledipasvir/sofosbuvir.

Discussion

In ION-4 which evaluated the role of ledipasvir/sofosbuvir in HIV/HCV co-infection, 185 patients had been previously treated with the following regimens with an SVR rate of 96.6% (CI 93.1% to 98.6%).

- Pegylated interferon/Ribavirin (118)
- Pegylated interferon/Ribavirin + telaprevir (34)
- Pegylated interferon/Ribavirin + boceprevir (14)
- Simeprevir/ribavirin (13)
- Pegylated interferon/Ribavirin + simeprevir (3)
- Pegylated interferon/Ribavirin + simeprevir (2)
- Simeprevir/ribavirin (1)

53 patients in ION-4 received prior DAA therapy that included an HIV PI + pegylated interferon + ribavirin.

In ION-4, 98.1% (CI 89.9%-100%) attained an SVR 12. Similar to ION-4, the majority of our patients had also received PR + telaprevir (9/14) and all of our patients received sofosbuvir-based regimens, mostly in combination with ledipasvir.

Response rate in our study (93%) mirrors SVR rates of 98.1% in ION-4 for PI- and sofosbuvir- treatment experienced patients.

Conclusion

The role of HCV management in HIV/HCV co-infection can be complex. Our study results demonstrate that successful management of HIV/HCV co-infected patients can be done in a busy primary care HIV clinic using a multidisciplinary approach. SVR12 rates are similar in our analysis compared to published results even in PI- and DAA- experienced patients.

Acknowledgement

The Health Research Institute (HRI), the New York State Department of Health, Project Sponsor Reference grant no. 4043-5S. The content is solely the responsibility of the authors and does not necessarily represent the official views of the HRI or the project sponsor.