ADHERENCE IN THE ACTG A5360 HCV MINIMAL MONITORING (MINMON) TRIAL

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BACKGROUND

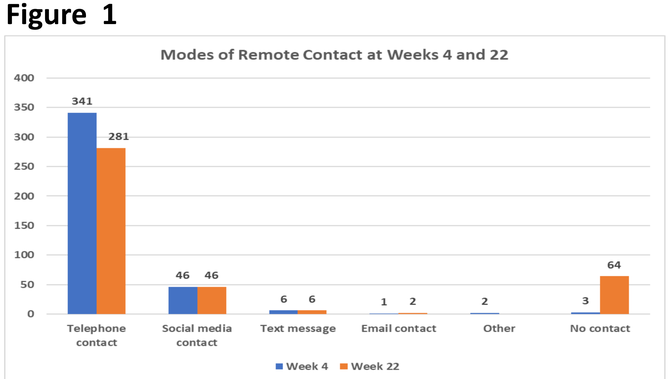
Whether good adherence is important for sustained virologic response (SVR) in DAA treatment remains inconclusive[1]. Early treatment discontinuation, however, has been shown to be associated with non-SVR. Some countries restrict access to treatment due to active alcohol or substance use, despite the lack of supporting data[2]. ACTG A5360 (MINMON) was a single-arm, open-label, multinational trial to evaluate the safety and efficacy of 12 weeks of Sofosbuvir/Velpatasvir (SOF/VEL) with minimal in-person visits and laboratory monitoring[3]. This analysis evaluates the correlates of non-adherence, association of adherence with SVR and durability of participant contact methods.

METHODS

Adults ≥ 18-years HCV treatment-naïve participants without decompensated cirrhosis were enrolled from 38 sites in 5 countries.

- Participants received all 84 tablets of SOV/VEL at entry
- No in-person on treatment monitoring after initiation
- Two remote contacts were scheduled at weeks 4 and 22
- SVR evaluation was scheduled from week 22 through 72
- Week 4 self-reported adherence was obtained remotely and dichotomized as ALL (100%) vs. <ALL.
- Week 24 adherence at the SVR visit was categorized as TIMELY (84±7 days to complete therapy) vs NOT TIMELY.
- Overall GOOD adherence was defined as ALL at Week 4 and TIMELY at Week 24.
- Logistic regression with adherence as an outcome was used to explore the correlates of week 4 and overall adherence.
- Changes in the mode of contact with participants across the study were also evaluated.

Figure 1



RESULTS

Table 1: Correlates of < ALL adherence at week 4, and NOT GOOD adherence at time of SVR evaluation

Participant Characteristics	Number of Participants in subset	Univariate odds ratio of <ALL week 4 Adherence OR (95% CI)	Main effects model odds ratio of < ALL week 4 adherence OR (95% CI)	Univariate odds ratio for NOT GOOD overall adherence OR (95% CI)	Main effects model odds ratio for NOT GOOD overall adherence OR (95% CI)
Age < 30 years	33 vs. 366	**5.86 (2.43 -14.12)**	**7.12 (2.58 – 19.60)**	**3.86 (1.75-8.52)**	**4.38 (1.83-10.50)**
Female sex at birth	139 vs. 260	0.75 (0.34 – 1.67)		0.78 (0.42-1.47)	
HCV diagnosis >1yr	289 vs. 110	0.67 (0.31 – 1.45)		0.96 (0.50-1.82)	
Substance use	56 vs. 343	1.90 (0.78 – 4.64)		**2.60 (1.30-5.18)**	**2.23 (1.07-4.63)**
Psychoactive medications use	61 vs. 338	**2.49 (1.09 – 5.79)**		**2.57 (1.31-5.05)**	
Living with HIV	166 vs. 233	0.88 (0.41 -1.86)		0.83 (0.46-1.51)	
Non-ART Polypharmacy*	56 vs. 343	1.20 (0.44 – 3.25)		1.52 (0.71-3.23)	
Region Africa vs US	27 vs. 131	**0.38 (0.08 -1.70)**	**0.25 (0.05 – 1.27)**	**0.54 (0.17-1.67)**	**0.49 (0.15-1.60)**
Region Asia vs US	110 vs. 131	**0.09 (0.02 – 0.38)**	**0.07 (0.01 – 0.31)**	**0.18 (0.07-0.45)**	**0.17 (0.07-0.44)**
Region South America vs US	131 vs. 131	**0.15 (0.05 -0.44)**	**0.17 (0.06 – 0.53)**	**0.28 (0.14-0.59)**	**0.33 (0.16-0.70)**

*Non-ART polypharmacy was defined as 5 or more non-antiretroviral medications

- Ninety-nine percent (396/399) completed the week 4 remote contact visit,. Figure 1 shows the breakdown by mode of contact at weeks 4 and 22
- 99.0% (395/399) reported completing therapy at the SVR visit.
- Ninety-two percent (362/395) reported TIMELY adherence and 88% (346/392) GOOD adherence. [missing and premature Rx discontinuation = excluded]
- Among 368 reporting taking ALL Rx at week 4, 355 (96.5%, 95% CI [94.1%, 97.9%]) had SVR. Among 31 reporting not taking ALL Rx at week 4, 24 (77.4%; 95% CI [60.2%, 88.6%]) had SVR. Results excluding missing are similar (data not shown).
- Among 346 reporting GOOD overall adherence at time of SVR evaluation, 334 (96.5% 95% CI [94.0%, 98.0%] had SVR. Among 53 without GOOD adherence, 45 (84.9% 95% CI [72.9%, 92.1%] had SVR. When missing were excluded, 42/46 had SVR [91.3%, 95% CI [79.7%, 92.1%]
- 85% of participants had week 4 remote contact by phone. 12 changed locator info at the week 4 remote contact, 9 changed phone and 3 changed address. 13 participants had change in locator information at the week 22 contact. Nature of locator change similar to week 4.

CONCLUSIONS

In this HCV treatment simplification study with minimal monitoring:

- **Study retention to SVR evaluation was 99%**
- **Self-reported <100% adherence over the first 4 weeks of SOF/VEL was associated with SVR**
- **Adherence < 100% at week 4 may help identify those requiring additional support**
- **Programs should consider additional modes of contact including social media, as these may be more stable than phone numbers**
- **Programs considering scale up of the minimal monitoring strategy may want to consider additional support for younger individuals and those reporting current substance use**

LIMITATIONS

- Adherence in this study was based on self-report and may be subject to participant bias and recall
- Some subgroups were small; and associations between overall adherence and SVR were sensitive to how the small number of participants stopping Rx early and/or missing data were handled.

REFEREENCES.

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