client population, while they make up 29% of the clients that frequently do not attend appointments.

Conclusions Surprisingly, a disproportionate percentage of individuals account for 1/5 of patients who do not attend or cancel appointments. Individuals surveyed by phone the majority had no actual perception of the average number of appointments they miss without cancelling. Interestingly, although the BCC serves 63 counties, 78% of those who frequently miss appointments live in the immediate area (within 30 miles of the BCC)- so transportation barriers that were identified during focus group sessions may not have a significant impact on those who frequently miss appointments.
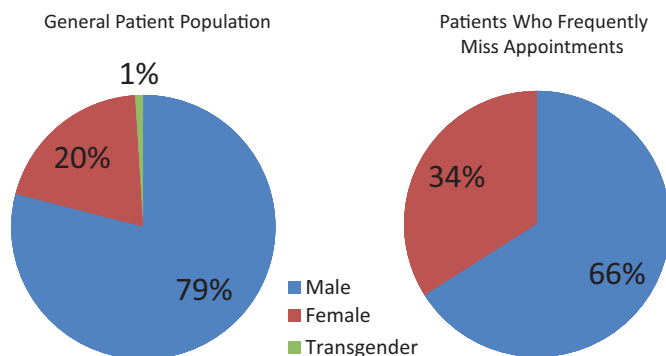
Abstract P3-S3.07 Figure 1   Bluegrass care clinic: gender.

SENSITIVITY AND SPECIFICITY OF RAPID HIV TESTING IN A COMMUNITY SETTING

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Background It was estimated in 2005 that 13% of men who have sex with men (MSM) in Montréal were HIV-positive, and that 23% of these were not aware of their diagnosis. Clinique l'Actuel introduced a pilot rapid HIV testing program using the MedMira kit in 2008. The objective of this study was to describe the sensitivity and specificity of rapid HIV tests in a community based, high HIV risk setting.

Methods An advertising campaign encouraged MSM and others at risk for HIV to undergo testing through dedicated clinics offering rapid HIV tests. Patients calling for testing deemed at high risk were given appointments within 2 weeks, where they filled out a short questionnaire, received medical consultation routine STI screening, pre- and post- test counselling and their HIV test results within the hour. Those consenting received with a MedMira or and INSTI rapid test and regular HIV screening. Any positive result was confirmed by Western blot.

Results 2500 individuals were tested: 98% men with a median age of 34 (IQR: 26—41). For the MedMira test there were 43 true positives, 2295 true negatives, 13 false positives and four false negatives. 145 patients received the finger-prick INSTI test giving two true positives and 143 true negatives. For MedMira, sensitivity was 91.5% and specificity 99.5% while both figures were 100% for INSTI. The four false negatives were also negative by standard ELISA but positive for P24 antigen. Patients testing positive for HIV had significantly more history of previous STI than those testing negative ($p=0.041$).

Conclusion In this setting sensitivity and specificity of the rapid tests used was comparable to standard testing. Acute seroconversion likely explains the four false negatives. As with conventional testing, rapid testing requires adequate counselling about the possibilities of

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a false negative test. In high-risk populations, routine STI screening should always be performed together with HIV screening.

NEW DRUGS TARGETING TOXICITIES HAVE HIGHEST HOPE OF IMPACTING PATIENT PROGNOSIS

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Background As more HIV drugs enter the market there is a need to evaluate the effect of various antiretroviral therapies (ART) on patient outcomes. We aim to quantify the impact of different first- and second-line ART strategies on patient outcome including TMC278, an investigative non-nucleoside reverse-transcriptase inhibitors, thought to have low toxicity rates.

Methods A deterministic model was developed representing a cohort of 100 000 HIV-infected individuals. The model was parameterised using data from Athena; a cohort encompassing all patients infected with HIV-1 followed longitudinally since 1996 at 25 HIV treatment centres in the Netherlands. Clinical, biological and immunological data for HIV-infected patients are collected upon entry and at each follow-up visit. The model allows comparison of different ART strategies and of the impact of adverse outcomes: (I) toxicity; (II) general failure and (III) resistance on time on ART and life-years saved per person treated.

Results One of the main reasons for switching treatment is toxicity; therefore, new drugs aimed at reducing toxicity will be valuable. The model shows that if TMC278 can reduce incidence of toxicity leading to discontinuation of first-line ART from 74 to 49 per 1000 patients per year (34%) compared with current treatment then this would equate to one additional life-year saved per patient (Abstract P3-S3.09 figure 1). In comparison, a reduction in general failure from 38 to 25 incidences per 1000 patients per year (34%) adds 6 months and a reduction in resistance from 13 to 1 incidence per 1000 patients per year (92%) adds only 5 months (Abstract P3-S3.09 figure 1). For second-line, reducing incidence of toxicity from 143 to 53 per 1000 patients per year (63%) will add one life-year to per patient. This compares favourably with empirical estimates of toxicity for TMC278 in clinical trials (70% reduction in toxicity leading to discontinuation of first-line ART compared with efavirenz). The model also shows that by reducing rates of toxicity for first-line ART, consequently improving patient prognosis, patients on average spend more time on first-line ART before switching. Decreasing toxicity by 34% equates to an additional 18 months on first-line ART and a 61% decrease in toxicity equates to about five additional years on first-line ART.
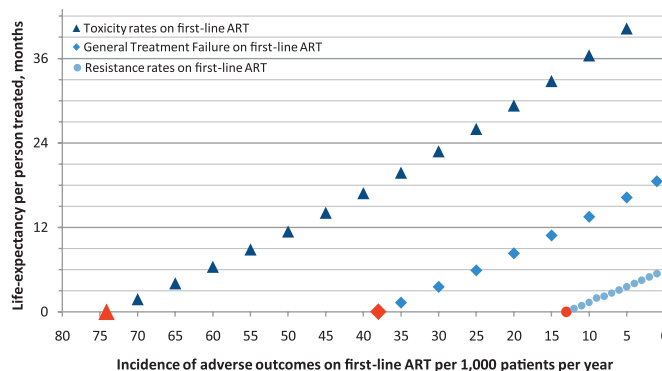
Abstract P3-S3.09 Figure 1   Increase in life-expectancy per person treated with reduced annual incidence of adverse outcomes per 1000 patients for first-line ART. The red markers indicate empirical data; the blue markers indicate simulated estimates.