HCV genotype: G4 3/5 (60%), G1 2/5 (40%) (result of 1 patient, pending). Polymorphism of IL28B not favourable in 4/6: rs12979860 CT and rs8099917 TG (2 patients pending genetic analysis). Fibroscan® at diagnosis: F2 3/6 (50%), F0 (1), F1 (1), F3 (1). No patient showed jaundice as a clinical presentation. During the evolution nobody presented decline ≥2 log of HCV-PCR at 1st month of the diagnosis, neither on the 3rd month spontaneous viral clearance. A patient has received treatment with pegIFN+ribavirine six months after the diagnosis, with rapid virological response (negative HCV-PCR at 4 wk).

Conclusion This report suggests that hepatitis C is an emergent STI in MSM population HIV-infected. The evolution towards chronicity is common. It should also be considered in case of sudden increase of transaminases, even without symptoms and therefore should be a part of the annual serology screening.

P2.039 LATE PRESENTATION TO CARE REMAINS A PROBLEM IN CROATIAN NATIONWIDE COHORT


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Background Late presentation to care of HIV-positive individuals and late introduction of antiretroviral therapy can lead to occurrence of opportunistic diseases and higher morbidity and mortality of patients. Croatia is a country with a low-level HIV epidemic. Even after interventions undertaken during the Croatian Global Fund Project in 2004–2006 late presentation to care remains a problem.

Methods The aim of this study was to determine the percentage of late presenters among newly-diagnosed HIV-positive individuals who entered clinical care from January of 2007 till December of 2011. Late presenters were defined as patients with < 500 CD4 T-cells per μl. CD4 T-cell count was measured by flow cytometry (Beckman Coulter Flow Count reagent).

Results The number of patients diagnosed with HIV did not grow dramatically over the years (52 newly-diagnosed HIV-individuals entered clinical care in 2007, and 77 in 2010). The percentage of late presenters however, did grow over the years, from 46.2% in 2007 to 64% in 2011. Still, the number of patients presented to care with less than 200 CD4 T-cells/μl was the lowest in 2011 (30 patients out of 48, 62.5%), and highest in 2007 (19 out of 24 patients, 79.2%).

Conclusion The percentage of late presenters in Croatia is still quite high, even though there are fewer patients with less than 200 CD4 T-cells/μl. A national strategy for earlier entrance to care should be developed.

P2.040 MULTIPLEXED FLUORESCENCE IMMUNOASSAY SYSTEM FOR RAPID SEROLOGIC TESTING AT THE POINT-OF-CARE


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Background Mbio Diagnostics is developing a multiplexed immunoassay platform capable of simultaneous detection of serologic disease markers from a single drop of blood. Here we demonstrate the system in the context of HIV and AIDS-related co-infection testing. Multianalyte testing at the time of HIV diagnosis is essential for individualised management of HIV infection. The MBio System is designed to address the unmet need for timely and cost-effective co-infection testing.

Methods The MBio multiplexed immunoassay system is based on single-use disposable cartridges and an inexpensive reader. A simple, 10 minute assay protocol was developed for delivering HIV-1 antibody (Ab) reactivity results on whole blood, plasma, or serum samples. A total of 87 whole blood samples were run with the 10 minute assay. 50 HIV-1 Ab negative samples were used to establish cutoffs. 37 HIV-1 Ab positive samples were used to assess system sensitivity. A set of 5 commercially available HIV-1 seroconversion panels were also used to assess the system. System demonstration in the context of syphilis and hepatitis C virus (HCV) testing was also performed on a subset of clinical specimens.

Results Ab reactivity results using the 10 minute assay protocol showed 100% concordance with known HIV serostatus for the 87 whole blood samples tested. Data for the seroconversion panels showed that MBio System performance meets or exceeds package insert data for FDA-approved HIV Ab rapid diagnostic tests. Simultaneous detection of syphilis (T. pallidum) and HCV Ab reactivity has been demonstrated.

Conclusions The dataset presented here demonstrates a simple, 10 minute assay protocol on the MBio multiplexed immunoassay system. Multianalyte testing from unprocessed whole blood at the POC should enable improved therapeutic decision making, particularly in limited resource settings.

P2.041 INTRODUCING A NEW TYPE OF HIV RAPID TESTING BASED ON ORAL FLUID AT NON-GOVERNMENTAL ORGANISATIONS OF KYRGYZ REPUBLIC


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Background In Kyrgyz Republic HIV mainly spreads among the high risk behaviour population groups (mainly injection drug users - IDUs). Approximately 450,000 people are being tested for HIV in Kyrgyzstan per annum and less than 1% of them are IDUs, when testing of IDUs results in more than 60% of all new infections. Thus, access to testing remains the main challenge and priority for the national response to HIV.

Methods The UNDF in Kyrgyzstan, jointly with the Republican AIDS centre have started a pilot to roll out of HIV rapid testing based on oral fluid. For this pilot, there’ve been assessed and selected 12 non-governmental organisations (NGOs), who work with IDUs, sex workers and men who have sex with men. A pool of non-medical testing counsellors was certified after trainings on rapid testing, based on CDC/WHO training modules. OraQuick Advanced HIV 1–2 rapid test was selected for the roll out of the pilot.

Results Within the first three months of the pilot, 1,355 clients of the mentioned above NGOs, were tested for HIV by using oral fluid rapid tests. Some 6% of tested, had preliminary positive results of rapid test and were referred to nearest AIDS centres for further HIV confirmatory tests (ELIZA, Western Blot). There were only 2 cases of false positive results of rapid tests, which is less than 0.15% of all rapid tests results.

Conclusions Kyrgyz Republic is the first country in the Central Asian region, who introduced this new type of HIV rapid testing at community based organisations. First few months of the pilot have shown that non-medical professionals can provide this type of services to their clients, after the proper training. Now, people from the high risk behaviour population groups, especially those that had never been tested for HIV, are being tested at NGOs with rapid tests.

P2.042 AN AUDIT OF HIV TESTING RATES IN PATIENTS ADMITTED WITH PNEUMONIA PRE- AND POST- IMPLEMENTATION OF OPT-OUT HIV TESTING FOR ACUTE MEDICAL ADMISSIONS


Background UK National Guidelines for HIV Testing recommend that an HIV test should be considered in all general medical admissions.
admissions where diagnosed HIV prevalence in the local population exceeds two in 1000 population as well as for all patients presenting with certain indicator diseases. The aim of this audit was to determine if HIV testing rates of patients admitted with pneumonia improved after the implementation of opt-out testing for all acute medical admissions.

**Methods** HIV testing rates were compared for patients admitted with pneumonia before (September 2011) and after (September 2012) implementing opt-out testing for acute medical admissions. Patients were identified from hospital coding data for pneumonia during their inpatient stay. Electronic patient records were used to determine which patients had received a test for HIV during their admission.

**Results** Seventy-nine patients were admitted with pneumonia in September 2011 and 86 in September 2012. Before opt-out HIV testing, 4/79 (5.1%) patients were tested for HIV during their admission (mean age 63.5 years), with no positive tests. Following the implementation of opt-out testing, 22/86 (25%) patients admitted with pneumonia were tested for HIV (mean age 62.5 years), with no patients testing positive. Since implementing opt-out HIV testing for acute medical admissions the rate of HIV testing in patients with pneumonia increased from 5.1% to 25% (p = 0.0002).

**Conclusion** Following the implementation of opt-out HIV testing for acute medical admissions, the rate of testing in patients with a diagnosis of pneumonia has significantly increased. However, despite national guidelines and regional opt-out testing for acute medical admissions, a test was only performed in a quarter of eligible patients. Further work needs to be done in all areas of the hospital to increase awareness of HIV testing and to ensure rates of testing continue to rise.

**ALBUMIN MAY INFLUENCE ELISA TEST RESULTS FOR HIV ANTIBODIES**

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There may be interference of albumin in binding of HIV antibodies on HIV specific antigens. This experiment has been done to find out any such possible influence of albumin which may alter the serological test results.

Blood samples of known HIV positive patients were collected after taking consent. Total serum proteins were estimated, HIV antibody tests were performed with the collected samples directly and after mixing egg albumin to raise 25% of the baseline protein in each sample. The ELISA test for HIV antibodies in serum was performed with both types of samples and absorbance values were recorded.

It was found that after addition of egg albumin, the absorbance values were decreased in 66.0% samples and among them in 40.0% samples there was remarkable fall of absorbance levels. In the remaining 34.0% samples there was no change in absorbance values.

This study indicates that albumin present in the blood may influence outcome of ELISA test for HIV antibodies.

**SERIAL TESTING WITH AN INTERFERON-GAMMA RELEASE ASSAY IN HIV-1-INFECTED INDIVIDUALS**

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Background The clinical utility of serial screening for tuberculosis (TB) by interferon-gamma release assays has not been established in HIV-1-infected individuals.

**Methods** In this prospective study HIV-1-infected subjects underwent repeated QuantiFERON-TB Gold In-Tube assay (QFT-GIT) testing at baseline and after 24 months to determine the rate of conversions and reversions in a low TB-incidence county. Data on demographics, history of tuberculosis and HIV-1 parameters were obtained and risk factors associated with conversion or reversion of QFT-GIT results were assessed in a multivariate regression model.

**Results** Of 846 HIV-1-infected subjects, 9% (76/846) were QFT-GIT positive, 85% (718/846) were QFT-GIT negative and 6% (52/846) QFT-GIT indeterminate at baseline, respectively. Concordance baseline and follow-up results were observed in 96% (808/846) of subjects. The observed inter-test agreement was 0.827 (95% CI: 0.847–0.899) while the inter-test agreement of serial QFT-GIT testing was moderate (Cohen’s coefficient = 0.448). QFT-GIT conversions occurred in 9% (63/718) of individuals while QFT-GIT reversions were seen in 33% (25/76). Independent predictors for QFT-GIT conversion were origin from high TB incidence county (OR, 1.93; P = 0.024) and intravenous drug abuse (OR, 2.43; P = 0.016). Of the 10 active TB cases during follow-up 5 had concordant positive QFT-GIT results and 2 were QFT-GIT converters.