Results
Natural killer cell cytotoxicity, in the absence of IL-2 stimulation, was no different between the groups. With IL-2 stimulation, EU demonstrated significantly higher cytotoxicity compared to cHCV (32.8±4.4% vs 17.6±3.2%, p=0.023), with similar levels to SR (27.7±9.9%, p=0.50). The proportion of NK cells in PBMC was not significantly different between the groups.

Conclusion
The current findings point to enhanced NK cytotoxicity in EU cases compared to those with chronic infection and suggests a role for NK cells in early viral clearance and resistance to HCV infection.

Abstract P46 Table 1  LRO and survival by Ishak Stage

<table>
<thead>
<tr>
<th>Ishak Stage</th>
<th>Annual Incidence of LRO (%)</th>
<th>HR of LRO (95% CI, p value)</th>
<th>3 year survival (%)</th>
<th>5 years survival (%)</th>
<th>7 years survival (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0.7%</td>
<td>Ref.</td>
<td>97.7 (84.6, 99.7)</td>
<td>97.7 (84.6, 99.7)</td>
<td>94.1 (77.6, 98.5)</td>
</tr>
<tr>
<td>4</td>
<td>3.2%</td>
<td>4.76 (0.87 to 26.018, 0.0715)</td>
<td>93.8 (63.2, 99.1)</td>
<td>87.1 (57.3, 96.6)</td>
<td>76.4 (48.0, 92.6)</td>
</tr>
<tr>
<td>5</td>
<td>5.1%</td>
<td>6.996 (1.578 to 31.019, 0.0105)</td>
<td>94.4 (79.6, 98.6)</td>
<td>82.8 (65.5, 91.9)</td>
<td>68.2 (48.6, 81.7)</td>
</tr>
<tr>
<td>6</td>
<td>11.0%</td>
<td>15.986 (3.816 to 66.961, 0.0001)</td>
<td>68.8 (64.6, 79.3)</td>
<td>53.3 (38.6, 66.0)</td>
<td>41.8 (28.9, 56.0)</td>
</tr>
</tbody>
</table>
decreased in analogous rate in all groups. 2 patients in LAM + ADV and ETV groups developed VB. No viral mutations associated with drug resistance were detected in the LAM + ADV and TDF group, including those with VB, NR or SR; in contrast 1 ETV patient with SR at m12 (genotype C) developed mutation rtM204I. HBeAg seroconversion was more frequent in LAM + ADV cohort vs ETV and TDF (21% vs 8% and 7%, p=0.06) and HBsAg seroconversion occurred only in LAM + ADV and ETV patients (2% and 1%).

**Conclusion** De-novo antiviral therapy with different therapeutic approaches of nucleos(t)ide analogues LAM-ADV, ETV and TDF achieves similar efficacy within 12 months of treatment in real-life patient cohorts with CH-B.

---

**P48**

**TELAPREVIR SUBSTANTIALLY IMPROVED SVR RATES ACROSS ALL IL28B GENOTYPES IN THE ADVANCE TRIAL**

doi:10.1136/gutjnl-2011-300857a.48

1G M Dusheiko, 1M Jacobson, 1I Catlett, 2S George, 3S Seepersaud, 3R Ramachandran, 3K Suskuy, 4R S Kauffman, 3M Botfield, 3Royal Free and University College, London, UK; 2Weill Cornell Medical College, New York, New York, USA; 3Vertex Pharmaceuticals Incorporated, Cambridge, Massachusetts, USA

**Aim** Single nucleotide polymorphisms (SNPs) near the IL28B gene region have been strongly associated with the likelihood of SVR in genotype 1 HCV patients treated with peginterferon/ribavirin (PR). During the evaluation of an exploratory diagnostic test that characterises genetic polymorphisms near the IL28B gene, the impact of rs12979860 on SVR in telaprevir (T)-based regimens in the ADVANCE trial was evaluated.

**Method** IL28B genotype testing was performed according to a US FDA guidance governing use of de-identified leftover samples for in vitro diagnostic testing. The guidance requires a strict de-identification procedure that was carried out by an independent third party. Only specimens from the USA were used; and as non-Caucasian patients could not be de-identified in sufficient numbers, they were excluded from the study.

**Results** The diagnostic assay developed provided consistent, unambiguous genotype calls and was considered suitable for research. 454/1088 (42%) patients had IL28B test results available. 150/454 (33%) were CC, 224/454 (49%) CT, and 80/454 (18%) TT. SVR rates for each subgroup by arm are shown in the Abstract P48 table. 72%, 54% and 48% of CC, CT and TT telaprevir patients, respectively had undetectable HCV RNA at weeks 4 and 12 (eRVR) compared with 16%, 2% and 0% of PR patients. Among eRVR telaprevir patients, 91% achieved SVR (97% of CC, 88% of CT, 85% of TT) with 24 weeks of therapy whereas 43% of non-eRVR telaprevir patients had SVR (63% of CC, 53% of CT, 46% of TT) with 48 weeks of therapy.

**Abstract P48 Table 1**

<table>
<thead>
<tr>
<th>In patients tested for IL28B allele</th>
<th>In all ADVANCE patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>% (n/N)</td>
<td>CC (N = 150)</td>
</tr>
<tr>
<td>T12PR*</td>
<td>90 (45/50)</td>
</tr>
<tr>
<td>T12PR**</td>
<td>84 (38/45)</td>
</tr>
<tr>
<td>PR</td>
<td>64 (35/55)</td>
</tr>
</tbody>
</table>

*1T12PR = T1-PR 12 weeks, then PR 12 or 36 weeks depending on eRVR status.
**2T12PR = T1-PR 8 weeks, then PR 16 or 40 weeks depending on eRVR status.

**Conclusion** Telaprevir-based therapy improved eRVR and SVR rates across all IL28B genotypes. Specifically, telaprevir-based therapy more than doubled the rates of SVR in CT/TT patients, and substantially increased SVR rates in those with CC genotype, as compared with PR therapy alone. Non-attainment of eRVR was associated with lower SVR rates across all IL28B genotypes, with the largest decrement in CT/TT patients.

---

**P49**

**TREATING HEPATITIS C IN THE PATIENT’S HOME: A HOSPITAL AND HOMECARE PARTNERSHIP**

doi:10.1136/gutjnl-2011-300857a.49

1K Jack, 2J Barnett, 1B Thomson. 1Nottingham University Hospitals NHS Trust; 2Healthcare At Home

**Introduction** It is long established that the UK has poorer outcomes regarding numbers of patients treated with antivirals for chronic hepatitis C (HCV) than its European counterparts. Exploring alternative models of care that will facilitate the engagement of those whom regular hospital attendance would be a barrier to treatment is important if one is to reduce the incidence of end stage liver disease among this group of patients. Against this backdrop we initiated a project in Nottingham to deliver care in tandem with a community nursing service.

**Aim** To treat HCV infected patients with pegylated interferon and ribavirin in the patient’s home via a partnership between secondary care and an established homecare company.

**Method** Patients with stable HCV infection and no evidence of decompensated liver disease are offered this model of care in the hepatitis clinic and referred to the homecare company by the Consultant or Specialist Nurse. The antiviral drugs are delivered directly to the patient’s home, and a skilled homecare nurse trained in the management of HCV visits the patient to undertake: teaching how to self inject pegylated interferon and take ribavirin correctly; draw blood samples for monitoring treatment progress and safety; assess side effects and provide nursing care in managing these; and regularly report back to the referring clinician. Nursing support is available to patients 24 h a day. Once treatment is complete the patient returns to the hepatitis clinic to be reviewed.

**Results** Since this model’s inception in February 2004, approximately 110 patients were offered the option of homecare. 87 patients elected to be treated at home and were referred by the secondary care HCV clinic using an agreed proforma. Investigations during treatment were conducted using the same schedule as the specialist clinic and hospital staff reviewed the results. The specialist team took all decisions on changes to drug treatment. Treatment outcomes and drop out rates are comparable to hospital-managed clinics, but the non-attendance rates are exceptionally low; only two home visits have been missed by patients. No adverse events as a result of receiving treatment and monitoring at home have occurred. Furthermore this model of care is cost effective; drugs are supplied VAT-free by not being routed into the hospital pharmacy, and this offsets the home nursing cost.

**Conclusion** Our results demonstrate that homecare treatment for HCV infection is feasible, safe and the preferred option of most patients. It is well tolerated by patients with very high compliance rates which we anticipate will lead to improvements in treatment outcomes. We suggest that this innovative homecare model can be an important facet of hospital HCV services, and thus be a major means of facilitating the engagement of more patients into therapy without an additional burden of nursing staff costs.