due to anaemia occurred in 3.3%, 0.8% and 0.6% in T8PR, T12PR and control arms, respectively.

Conclusion A significantly greater proportion of patients achieved SVR with 12-week and 8-week telaprevir-based combination regimens (75% and 69%, respectively), compared with PR48 control arm (44%, p<0.0001). The safety and tolerability profile of telaprevir in the ADVANCE trial was consistent with the profile previously reported, with an improvement in treatment discontinuation rates due to adverse events, including rash and anaemia. These first Phase 3 results confirm the clinical benefit previously reported in Phase 2.

Abstract P70 Table 1 Viral response

	T8PR N=364	T12PR N=363	PR48 N=361
Patients achieving RVR, n (%)	242 (66)	246 (68)	34 (9)
Patients with HCV RNA undetectable at end of treatment (EOT), n (%)	295 (81)	314 (87)	229 (63)
Patients achieving SVR, n (%)	250 (69)*	271 (75)*	158 (44)
Difference in SVR rates, TVR arms vs control, % (95% CI)	25 (18 to 32)	31 (24 to 38)	NA
Patients with relapse, n (%)	28 (9)	27 (9)	64 (28)

^{*}p<0.0001, Denominator is number of patients with HCV RNA undetectable at EOT.

Transplant



A MODEL TO IMPROVE PERFORMANCE OF CURRENT CATEGORY 9 UK LISTING CRITERIA: EARLY LIVER GRAFT DYSFUNCTION. A SINGLE CENTRE COHORT

doi:10.1136/gutjnl-2011-300857a.71

M A B Al-Freah, E Dionigi, M J W McPhail, M Foxton, G Auzinger, M Rela, N D Heaton, J G O'Grady, M A Heneghan, W Bernal, J A Wendon. *Institute of Liver Studies, King's College Hospital, London, UK*

Introduction Current super urgent criteria for listing for early liver graft dysfunction (ELGD) in the UK (category 9, C9C) is defined as fulfilling 2 out of 4 of the following criteria within 7 days post liver transplant (LT): AST >10 000IU/l, INR >3, Lactate >3 mmol/l and absence of bile production. We demonstrated that these criteria have critically low sensitivity in predicting early post LT death or need for re-LT (Al-Freah, *et al. Hepatology* 2009;**50** Suppl 4:A148).

Aim To develop an improved predictive model for early re-LT or death using early post-LT clinical parameters.

Method Retrospective study of all patients transplanted at our centre 1 January 2000 to 31 December 2008. Daily clinical and laboratory parameters for the first 7 days post LT were reviewed. These included AST, bilirubin, INR, lactate, vasopressor requirement and/or haemofiltration.

Results Over the study period, 1286 patients underwent first LT at our centre. Patients excluded (28) because of re-LT for hepatic artery thrombosis (22), died on table (5) and one re-LT because of donor cancer. We analysed data on 1258 patients (median age 51 (16-74) years (16-74), 60% male). The most common aetiology was viral hepatitis in 303 patients (24%) and alcohol related liver disease in 227 patients (18%); 181 patients (14.4%) with hepatocellular carcinoma. Median MELD score was 16 (6-40). Death or re-LT rate at 3 months was 9.9% (124). Only 27 (2.1%) fulfilled C9C at 3 months: 17 (63%) of those died or had re-LT within 3 months (p<0.001). C9C had sensitivity of 14% (9.8-17%), specificity 99% (98-99%), positive likelihood ratio (LR+) 15.533 (7.41-32.73) and negative likelihood ration (LR-) 0.87 (0.83-0.91). Abstract P71 table 1 shows the univariate and multivariate analyses of predictors of 3 months liver-related death or re-LT using Cox regression hazard method. Accordingly, we generated a model comprises any 1 of the following 5 to predict ELGD and death or re-LT: vasopressor requirement at day D7, D1 lactate >3 mmol/l, D7 AST >500 IU/l and D7 bilirubin >100 μ mol/l. Those scored 1, 2, 3, 4 or 5 points had OR of risk of death/re-LT within 3 months of 1.26 (0.897–1.766, p=0.184), 1.345 (0.8817–2.051, p=0.171), 2.811 (1.669–4.732, p=0.0001), 15.561 (7.425–32.611, p<0.0001) and 36.509 (13.188–101.074, p<0.0001), respectively. 85 of 124 patients who had a 3 month liver related outcome met this criterion compared to 16 who met C9C. This gave sensitivity 68% (58–77%), specificity 67% (64–70%), LR+ 2.08 (1.77–2.45) and LR- 0.48 (0.36–0.63).

Abstract P71 Table 1 Cox regression hazard analysis of predictors of 3 months liver related deaths or re-LT

Univariate			Multivariate		
Variables	OR (95% CI)	p Value	OR (95% CI)	p Value	
D7 AST >500 IU/I	2.188 (1.162 to 4.121)	0.0159	1.807 (0.953 to 3.425)	0.0711	
D1 lactate >3 mmol/l	2.500 (1.739 to 3.594)	< 0.0001	1.939 (1.400 to 2.872)	0.001	
D7 bilirubin $>$ 100 mol/l	1.530 (1.149 to 2.036)	0.0037	1.469 (1.101 to 1.960)	0.0094	
D7 on vasopressors	5.241 (3.143 to 8.739)	< 0.0001	4.067 (2.395 to 6.906)	< 0.0001	

Conclusion The new model is simple to use and significantly improved the sensitivity of detection of severe ELGD. Validation in another cohort of LT patients is warranted.

P72

LIVER TRANSPLANTATION FOR FAMILIAL AMYLOIDOSIS; LONG-TERM DATA FROM THE FAMILIAL AMYLOID POLYNEUROPATHY WORLD TRANSPLANT REGISTRY (FAPWTR)

doi:10.1136/gutjnl-2011-300857a.72

¹A Stangou, ²H Wilczek, ²M Larsson, ³O Suhr, ²Bo-G Ericzon. ¹NHS Amyloid Treatment Programme, Liver Unit, Queen Elizabeth Hospital, University Hospital Birmingham, UK; ²Transplantation Surgery, Center for Surgical Sciences, Karolinska Institute, Stockholm, Sweden; ³Department of Medicine, Umea University Hospital, Umea, Sweden

Introduction Liver transplantation (LT) is the only available treatment for familial amyloid polyneuropathy (FAP). The Familial Amyloid Polyneuropathy World Transplant Registry (FAPWTR), established shortly after LT was introduced as potential treatment for FAP in 1990, is a centralised service based in Karolinska Institute in Sweden for the collection, monitoring and analysis of international data on LT for FAP.

 $\pmb{\mathsf{Aim}}$ We present here the long-term FAPWTR results on the 20 years anniversary of LT for FAP.

Results Between April 1990 and January 2010, data on 1782 liver transplant procedures and regular follow-up were reported to the FAP registry from 70 transplant centres in 18 countries. Annual international transplant activity for FAP has remained stable at 80–120 procedures since 1996. Among those 866 liver transplants were performed in Portugal, 216 in France, 130 in Sweden, followed by USA 79, UK 78, Brazil 77, Spain 74, Japan 65. The Mediterranean Val30Met transthyretin (TTR) mutation was identified in 83% of cases. A further 50 different variants were reported, collectively referred to as non-ValMet30, and additionally a dozen of non-TTR mutations such as Glu526Val and ApoA1 Gly26Arg. The Ser77Tyr and Thr60Ala mutations appear to be the commonest among non-Val30Met variants. Median age at LT was 38 years (range 21–72 years), 57% of patients were male. Median disease duration prior to transplantation was 3 years (range 0–30 years). Of patients in the Val30Met group 98% received isolated LT, while 11% of non-Val30Met cases required either simultaneous (9%) or sequential heart and liver transplant (2%). Overall 1-, 3-, 5-, and 10-year survival after LT in the entire FAP population including all variants was 86.9%, 81.8%, 77.6% and 71%. Five-year and 10-year survival in the Val30Met group was 80.9% and 73.4% respectively, significantly superior to 57.8% and 43.9% in the non-Val30Met group (p<0.001).