Conflict of interest statement
No conflict of interest.

Reference

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Comment on “The role of endoscopic ultrasound in the evaluation of chronic mesenteric ischaemia”

Sir,

We read with great interest the article by Almansa et al. published in Digestive and Liver Disease regarding the role of Doppler endoscopic ultrasound as a comprehensive test to evaluate patients with chronic upper abdominal pain in order to exclude chronic mesenteric ischaemia [1]. In this study, authors employed, both in Doppler endoscopic ultrasound and Doppler transabdominal ultrasound, measurement of Peak Systolic Velocity (PSV) in celiac artery and superior mesenteric artery as single parameter for the detection of chronic mesenteric ischaemia. We would add that, beside PSV, another Doppler parameter could be considered: End-Diastolic Velocity (EDV) appears comparable or superior to PSV in identify significant arteriography-detected stenosis, and is not influenced by an hyperdynamic circulation as for PSV [2–5]. In the study of Almansa et al., Doppler endoscopic ultrasound (assessed by means of PSV) presented a specificity of 84% in detecting chronic mesenteric ischaemia; this figure could be even more appealing employing EDV.

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None declared.

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Nationwide prediction of future expenditure for protease inhibitors in chronic hepatitis C

Dear Editor,

Peginterferon plus ribavirin is the current standard of care for chronic hepatitis C, which determines sustained virological response (SVR) in 30–50% of patients. Protease inhibitors (namely boceprevir and telaprevir) are a further advancement that could increase SVR to approximately 60% [1]. Boceprevir and telaprevir have already been approved by the Food and Drug Administration (FDA) and are about to be marketed in Europe (boceprevir is available in France where its cost per patient is around €22,000 according to the website http://viralmatters.blogspot.com). The globalization of pharmaceutical markets has much increased the international homogeneity of drug prices; hence, transferring the cost of innovative drugs from one country to another is likely to imply a reasonable approximation.

Predicting the economic impact of adding a protease inhibitor to patients treated for hepatitis C is a crucial point in terms of pharmaceutical governance, especially in countries like Italy where the national health system provides full economic coverage of all essential treatments. The first step in evaluating an innovative treatment is to determine its cost-effectiveness; if the pharmacoeconomic profile is acceptable and the drug is therefore likely to be used, the next step is to estimate the budget impact.

Since preliminary studies [2] indicate that the cost-effectiveness of these protease inhibitors is favourable, a budget impact analysis focused on these agents is worthwhile. The national expenditure for ribavirin in Italy has been €33 million in 2009; assuming that each patient receives 840 capsules for a whole treatment (considering a cost of €4.2 per capsule, and including adjustments for treatment interruptions and suboptimal compliance [3]), this figure of national expenditure indicates that 9300 Italian patients/year receive treatment for hepatitis C regardless of their genotype. Given that genotype 1 accounts for 60% of all patients [4], this translates into a prediction of 5500 Italian patients with genotype 1 to be treated yearly with a protease inhibitor.

To estimate the economic impact of adding a protease inhibitor to these patients, we used a prediction model described previously [5]. According to this model, the yearly expenditure for the drug is directly proportional to the yearly number of treated patients (where the proportionality factor is the yearly cost per patient). The model is not drug-specific because the mathematical function simply handles an initial phase where expenditure increases as more and more patients of the eligible yearly population are being treated over time.

Fig. 1 shows the results of our budget impact analysis for protease inhibitors based on this model. In our base-case prediction, after projecting the expenditure for up to 5500 patients/year from mid-2012 until 2017, the overall budget impact is estimated to be €115 million per year at steady state (solid line).

Two factors affect the above budget impact analysis by acting in opposite directions. The first is that the patients actually receiving

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Reference

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