

# Cost-Consequence Analysis of Transjugular Intrahepatic Portosystemic Shunt (TIPS) treatment versus Large Volume Paracentesis (LVP) in the Management of Refractory Ascites: Preliminary results overview from an Italian Healthcare Perspective

M. Nakum<sup>a</sup>, G. T. Monteverde Spencer,<sup>b</sup> F. Distasi,<sup>c</sup> T. Wiersma<sup>d</sup>

## INTRODUCTION

- Refractory ascites is a debilitating complication of advanced liver disease associated with frequent hospitalizations, high health care costs and poor quality of life.<sup>1</sup>
- Large volume paracentesis (LVP) is the standard of care but requires repeated procedures and intensive resource use.<sup>2</sup>
- Transjugular intrahepatic portosystemic shunt (TIPS) is an established alternative that may reduce the need for repeated interventions and associated Healthcare Resource Utilization.<sup>3</sup>
- To guide decision-making within the Italian National Health Care Service, it is important to evaluate the economic impact of TIPS compared with LVP.

## OBJECTIVE

- The objective was to determine whether TIPS offers cost savings through reduced hospitalizations, complications and Healthcare Resource Utilization.

## METHOD

- A 2-year cost-consequence analysis was conducted, adapted from a published Spanish economic model.
- Unit costs were derived from regional tariffs and literature, and all costs were analysed in euros.
- Outcomes included implantation, repeat procedures, diagnostics, complications, consumables, hospital stays and health care professional time.

## RESULTS

- The total cost per patient over two years was €8,829 for TIPS compared with €28,122 for LVP, resulting in an incremental saving of €19,293 in favor of TIPS.
- LVP incurred substantially higher costs due to the frequent need for paracentesis procedures (€5,843), greater health care professional involvement (€618), consumables (€8,797), hospital stays (€12,110) and complications such as spontaneous bacterial peritonitis (€147).
- TIPS was associated with reduced health care professional involvement, fewer reinterventions and lower overall utilization of health care resources.

## RESULTS

PARAMETER	VIATORR Device	LVP	VIATORR Device vs. LVP (difference)
First implantation	€5,203	€0	€5,203
Diagnostic procedures	€316	€0	€316
Repeat implantation	€274	€0	€274
LVP	€2,055	€27,368	-€25,313
Complications	€981	€753	€228
Total	€8,829	€28.122	-€19,293

## CONCLUSIONS

- Although TIPS was associated with higher initial procedure costs, it resulted in substantial long-term savings compared with repeated LVP.
- Over a two-year period, TIPS reduced hospitalizations, healthcare professional involvement, and the need for repeated interventions, leading to an average saving of more than €19,000 per patient from the Italian National Health Care Service prospective.
- This analysis demonstrated that TIPS was a cost-saving alternative for the management of refractory ascites within the Italian National Health Care Service.

<sup>a</sup> Department of Health Economics and Outcomes Research, W. L. Gore & Associates, London, U.K.

<sup>b</sup> Market Access Strategist, W. L. Gore & Associati S.r.l., Verona, Italy

<sup>c</sup> Market Access Strategy Leader, W. L. Gore & Associati S.r.l., Verona, Italy

<sup>d</sup> Product Specialist, W. L. Gore & Asociados S.L., Barcelona, Spain

## REFERENCES

1. Siqueira F, Kelly T, Saab S. Refractory ascites: Pathogenesis, clinical impact, and management. *Gastroenterology and Hepatology* 2009;5(9):647-656.  
2. Runyon B, AASLD Practice Guidelines Committee. Management of adult patients with ascites due to cirrhosis: an update. *Hepatology* 2009;49(6):2087–2107.  
3. Pomier-Layrargues G, Bouchard L, Lafortune M, et al. The transjugular intrahepatic portosystemic shunt in the treatment of portal hypertension: current status. *International Journal of Hepatology* 2012. doi: 10.1155/2012/167868

## CONTACT INFORMATION

mnakum@wlgore.com



Refer to *Instructions for Use* at [eifu.goremedical.com](http://eifu.goremedical.com) for a complete description of all applicable indications, warnings, precautions and contraindications for the markets where this product is available. <sup>®</sup> Only  
Products listed may not be available in all markets.  
© 2025 W. L. Gore & Associates GmbH. All rights reserved. All trademarks referenced are trademarks of either a member of the Gore group of affiliated companies or their respective owners. “Together, improving life” mark and design are trademarks of a Gore company. 25PL2273-EN01 OCTOBER 2025

