



<b>Title</b>	<b>Endoscopic Ultrasound for Evaluating Pancreatic, Gastric, Esophageal and Hepatobiliary Neoplasms</b>
<b>Agency</b>	MSAC, Medical Services Advisory Committee Commonwealth Department of Health and Ageing, MDP 106, GPO Box 9849, Canberra ACT 2601, Australia; Tel: +61 2 6289 6811, Fax: +61 2 6289 8799; msac.secretariat@health.gov.au, www.msac.gov.au
<b>Reference</b>	MSAC 1072 Assessment report. ISBN 1-74186-199-3. Ms Ann Jones edited the report

## Aim

To evaluate the safety, effectiveness, and cost effectiveness of endoscopic ultrasound (EUS) and endoscopic ultrasound-guided, fine-needle aspiration (EUS-FNA) in diagnosing and staging gastrointestinal neoplasms.

## Conclusions and results

*Safety:* The data suggest that use of EUS + FNA for diagnosing and staging gastrointestinal neoplasms is associated with a low perforation risk and is generally a safe procedure.

*Effectiveness:* Direct evidence indicated that the potential value of EUS + FNA was not increased survival, but fewer inappropriate surgeries performed. Diagnostic accuracy evidence indicated that EUS + FNA in addition to computed tomography (CT), or CT plus positron emission tomography (PET), increased sensitivity in esophageal, gastric, and pancreatic cancer staging. Increased sensitivity is likely to occur at the expense of a small trade-off in specificity. Compared to current clinical practice, EUS + FNA was found to have greater sensitivity in pancreatic, biliary, and gastric submucosal tumor diagnoses. Patient management studies indicated that EUS + FNA findings contributed to avoiding surgeries and other investigations, which reduced the number of complex procedures performed.

*Cost effectiveness:* Economic evaluation was undertaken for indications with sufficient clinical evidence. Use of EUS was determined to be cost saving for gastric and pancreatic cancer staging. Compared to current clinical practice, EUS + FNA was associated with an incremental cost for staging esophageal cancer and diagnosing pancreatic tumors. The annual financial impact for the first 3 years following listing was estimated to be 1 098 600 and 2 279 010 Australian dollars for EUS and EUS-FNA, respectively.

## Recommendations

MSAC recommended that endoscopic ultrasound should be publicly funded for staging esophageal, gastric, and pancreatic cancer, with or without fine-needle aspiration in diagnosing pancreatic, biliary, and gastric submucosal tumors. The Minister for Health and Ageing endorsed this recommendation in 2007.

## Methods

The literature on EUS and EUS-FNA in diagnosing and staging gastrointestinal (esophageal, gastric, pancreatic, and extrahepatic biliary tract) neoplasms was systematically reviewed.

## Further research/reviews required

N/A