

## INTRODUCTION

- Lumen opposing metal stents (LAMS) allow for safe and effective endoscopic drainage of pancreatic fluid collections (PFCs) [1]
- LAMS have been associated with bleeding within the cavity and pseudoaneurysm formation [2]
- Placement of a coaxial double pigtail plastic stent (DPPS) may theoretically reduce the risk of bleeding and symptomatic stent occlusion

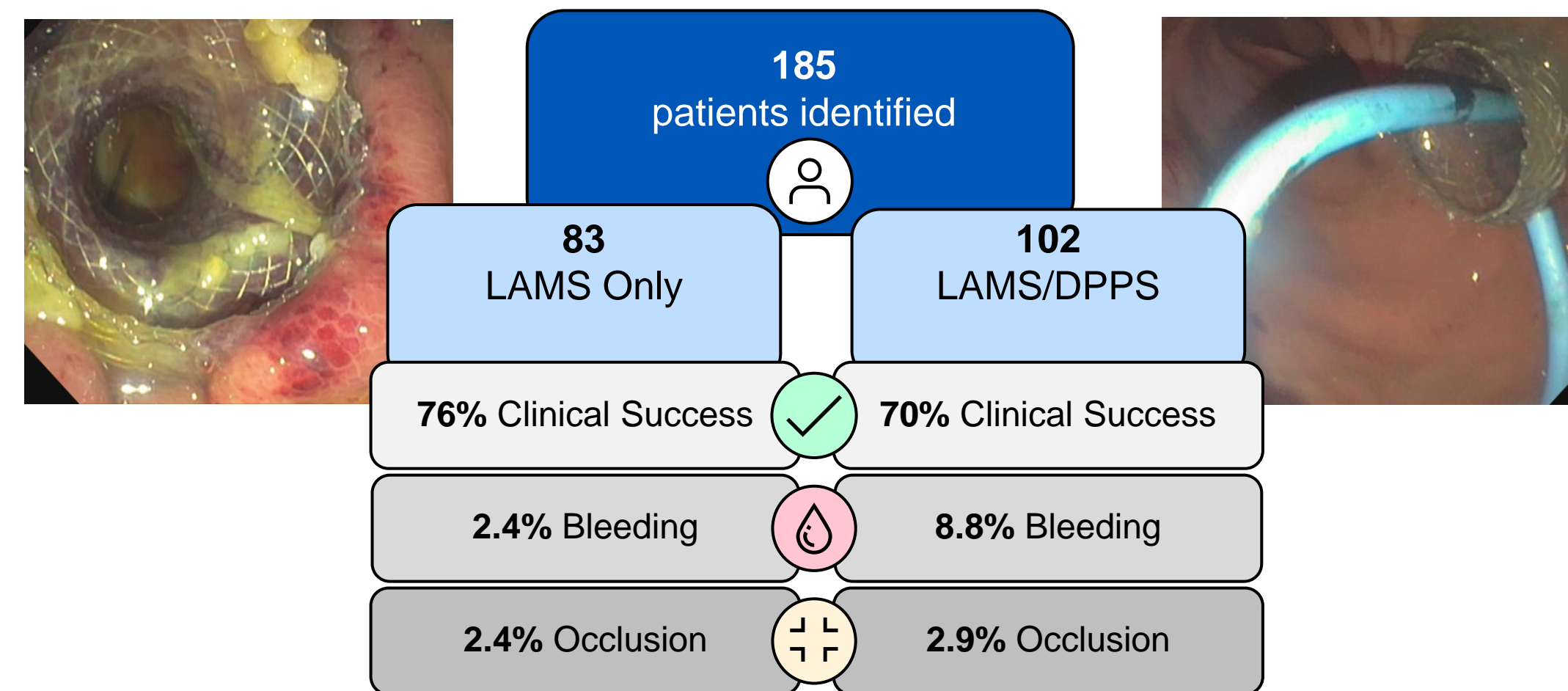
## AIMS

- Compare the safety of LAMS alone versus LAMS with coaxial DPPS placement (LAMS/DPPS) for the management of PFCs
- Compare the efficacy of LAMS alone versus LAMS/DPPS for the management of PFCs

## METHODS

- Retrospective, cohort study
- Single tertiary care center
- LAMS placement for management of a PFC between Sep 2019 and Feb 2022
- Categorized as LAMS only or LAMS/DPPS if a coaxial DPPS was placed
- Demographics, clinical characteristics, and outcomes extracted through chart review and compared between the two cohorts
- Primary outcome:** incidence of adverse events and adverse event type
- Secondary outcomes:** rates of clinical success, time to clinical success

Figure 1. Study highlights



	LAMS (N = 83)	LAMS/DPPS (N = 102)	P value
<b>Age, y, median (IQR)</b>	55.0 (45.5 – 65.0)	56.5 (42.8 – 65.0)	0.760
<b>Female</b>	22 (26.5)	41 (40.2)	0.051
<b>Collection Type</b>			0.550
Walled-off necrosis	64 (77.1)	80 (78.4)	
Pseudocyst	21 (25.3)	22 (21.6)	
<b>Maximum diameter of dominant collection, cm, median (IQR)</b>	12.0 (7.9 – 18.4)	11.0 (7.8 – 15.0)	0.098
<b>Multiple collections</b>	30 (36.6)	51 (50.0)	0.068
<b>Paracolic extension</b>	32 (38.6)	34 (33.3)	0.461
<b>LAMS dwell time, d, median (IQR)</b>	69.0 (31.0 – 131.0)	35.0 (21.0 – 65.5)	<b>0.017</b>
<b>Clinical success</b>	63 (75.9)	71 (69.6)	0.341
<b>Total therapeutic endoscopies, no., median (IQR)</b>	2 (1 – 3)	3 (2 – 4)	0.216
<b>Total necrosectomies, no., median (IQR)</b>	1 (0 – 2)	1 (0 – 2)	0.976
<b>Unplanned early necrosectomy</b>	12 (14.6)	16 (15.7)	0.843
<b>Incidental stent migration</b>			
LAMS	1 (1.2)	1 (0.9)	0.883
DPPS	N/A	12 (11.8)	N/A
<b>Adverse Events</b>	13 (15.7)	16 (15.7)	0.996
LAMS Occlusion	2	3	0.825
LAMS Migration	3	1	0.220
Bleeding	2	9	0.067
Infection	6	4	0.322

Table 1. Clinical characteristics and outcomes for PFC drainage with LAMS only vs. LAMS/DPPS

## DISCUSSION

- No significant difference in rates of clinical success or occlusion
- No significance difference in bleeding, however slightly higher incidence noted in the LAMS/DPPS cohort despite theoretical benefit provided by DPPS when PFC collapses
- LAMS/DPPS dwell time was significantly longer which may have impacted the rate of adverse events
- The incidence of bleeding and occlusion was low overall and not significantly impacted by the presence of a DPPS

## CONCLUSION

- The safety profile of LAMS was similar to LAMS/DPPS in this cohort
- Randomized studies are needed to further elucidate the role of coaxial DPPS in drainage of PFCs

## REFERENCES

- Muthusamy VR et al. The role of endoscopy in the diagnosis and treatment of inflammatory pancreatic fluid collections. *Gastrointest Endosc.* 2016 Mar;83(3):481-8.
- Varadarajulu S, Christein JD, Wilcox CM. Frequency of complications during EUS-guided drainage of pancreatic fluid collections in 148 consecutive patients. *J Gastroenterol Hepatol.* 2011 Oct;26(10):1504-8.

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