

OBJECTIVE

- BEST-CLI trial highlighted the high rate of reintervention following endovascular procedures
- Outcomes of endovascular reinterventions have never been reported

Aim of this study:

- Technical success
- Primary patency at 12 months
- Conversion to open surgical bypass

METHODS

- Single-center retrospective analysis
- January 2015 to July 2022
- Patients who had reintervention after index endovascular procedure were included
- Acute thrombosis, hybrid procedures and concomitant procedures in other vascular beds were excluded
- **Subgroup analysis:**
 - Drug elution vs no drug elution
 - Stenting vs stent-sparing approach

RESULTS

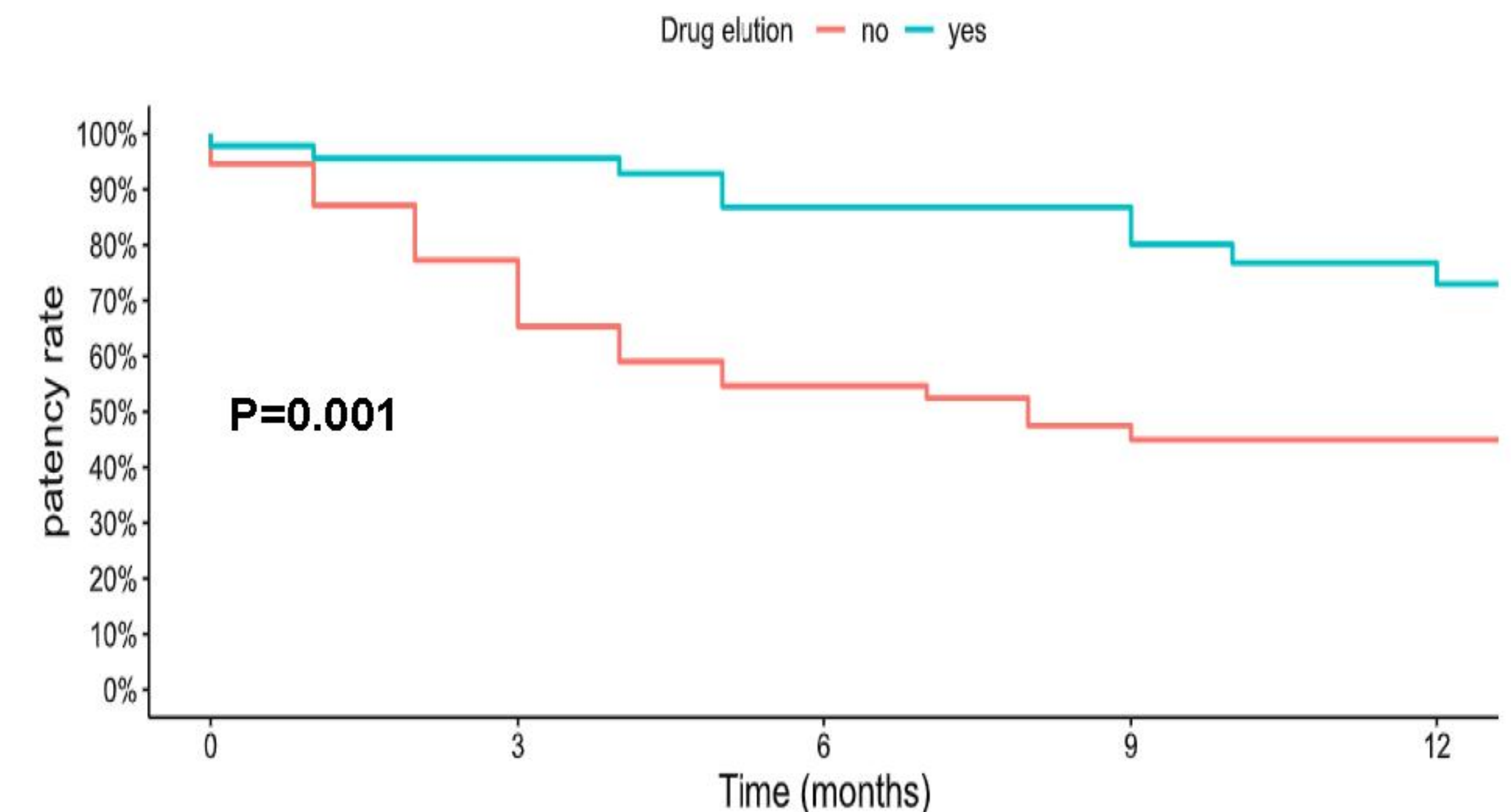
- A total of 795 patients underwent index endovascular interventions of which 111 (14%) required endovascular reintervention
- Seven were excluded due to missing data
- Median age was 69 years and 57% were males
- Indication for reintervention was occlusion in 45 (43.3%) and stenosis ($\geq 50\%$) in 59 (56.7%)
- Patients had asymptomatic high-grade in-stent stenosis (9.6%), claudication (28.8%), and CLTI (61.5%) at reintervention
- Median time for the first reintervention was 6 months (IQR= 2 to 13 months)
- Technical success 97.1%
- Mean treatment length of 13.3 ± 9.5 cms

Variable	n=104
Active smokers	24 (21%)
Coronary artery disease	38 (33%)
Insulin-dependent diabetes	44 (39%)
Dialysis-dependent	10 (9%)
Runoff score	
1	39 (38%)
2	36 (35%)
3	27 (27%)
Type of reintervention	
Plain-balloon angioplasty	38 (37%)
Drug-coated balloon angioplasty	20 (19%)
Bare metal stent	11 (11%)
Covered stent	8 (8%)
Drug-eluting stent	26 (25%)

RESULTS

- Kaplan-Meier estimates at 12 months after first reintervention:
 - Primary patency: 57.3%
 - Conversion to open bypass: 14.7%
 - Freedom from major amputation: 91%
- Drug elution (DCB or DES) offered significantly higher primary patency at 12 months (**73% vs 45%, p=0.001**)
- No significant difference between stenting vs stent-sparing approach for 12-month patency (68% vs 50%), freedom from amputation (89.8% vs 92.7%) and conversion to open bypass (15.6% vs 15.2%) (p>0.05)

Primary patency



CONCLUSIONS

Endovascular reinterventions for femoropopliteal occlusive disease provide acceptable patency rates, conversion to open bypass and freedom from major amputations. Use of drug elution during reintervention is associated with superior outcomes.