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## Objectives

- Patients treated with **superficial femoral artery (SFA) stenting** have better outcomes when scheduled duplex ultrasound (DUS) surveillance and routine clinical follow-up occurs for in-stent restenosis (ISR).
- The relationship between **community factors** and **outcomes** after SFA stenting is unknown.
- We aimed to evaluate the effects of the **Distressed Community Index (DCI)** and **related social parameters on amputation rates** after SFA stenting in patients with peripheral arterial disease.

## Methods

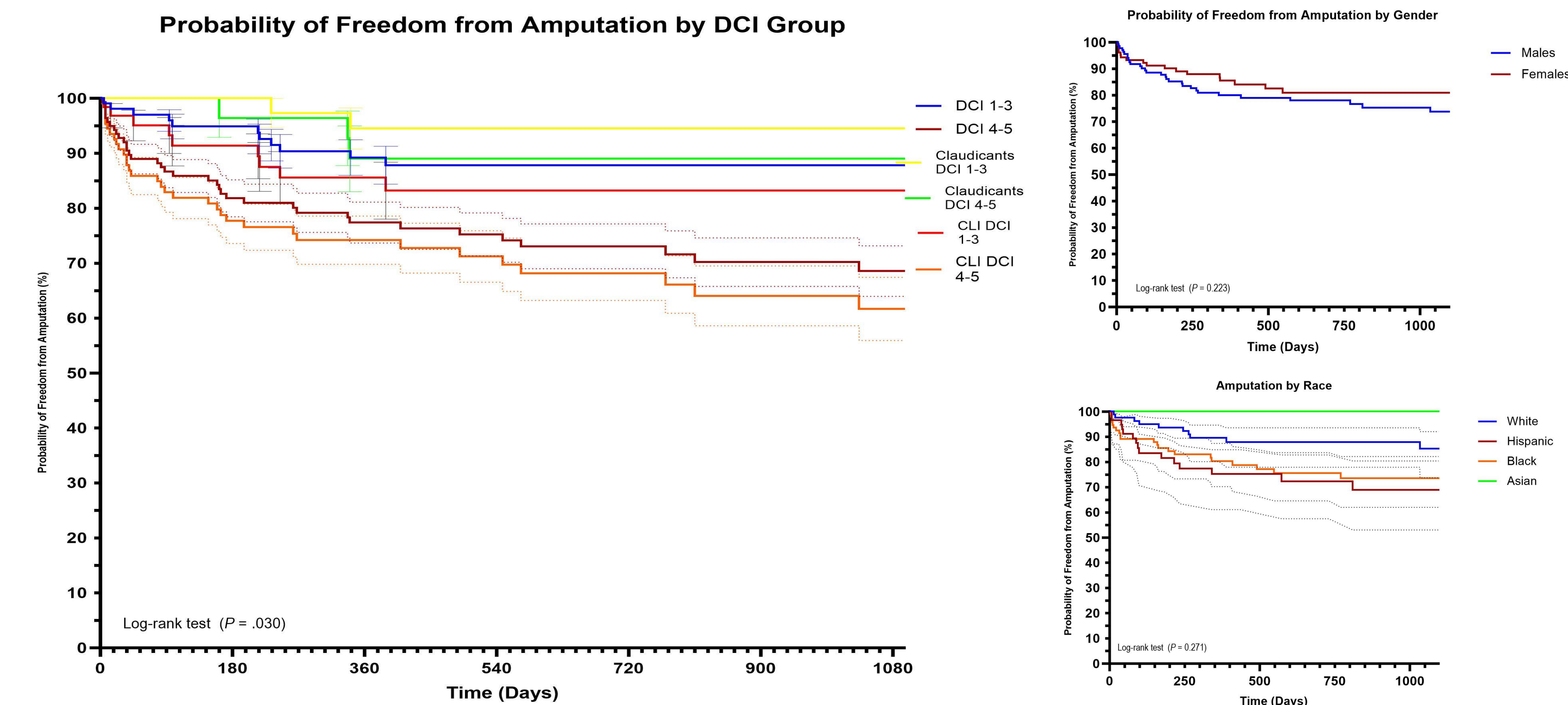
- Retrospective review of **patients** who **underwent SFA stenting between 2005-2020** with follow-up at a university hospital.
- Two groups were identified according to zip code level for DCI, which corresponded to **more affluent (DCI 1-3)** and **more disadvantaged (DCI 4-5) communities**
- Clinical information included **ISR on duplex ultrasound, reintervention, and symptomatic status**
- The primary endpoint was **amputation-free survival** and **secondary endpoints** were **patency, reintervention and mortality**.
- Predictors of mortality and reintervention were identified by **multivariable logistic regressions and Cox multivariate regression models**.
- Survival curves were presented as **Kaplan-Meier plots using log-rank test** for subgroup comparison.

## Results

- **257 patients** were included, with mean age of  $64.1 \pm 11$ , and 146 (57%) were male.
- Initial presentation with chronic limb-threatening ischemia (CLI) (80%) and tissue loss (65%) was higher for DCI 4-5.
- Of those with CLI, tissue loss incidence was similarly higher in DCI 4-5 (65%) versus 45% DCI 1-3 ( $P = .002$ ).
- Mortality was lower for the DCI 1-3 in comparison to the DCI 4-5 (14% vs 25%,  $P=0.045$ ), while reintervention did not show significant differences among both subgroups ( $P = 0.294$ ).
- Overall 1-year and 2-year amputation-free survival curves had **worse outcomes for DCI 4-5 in comparison to patients with DCI 1-3 ( $P = 0.30$ ) as well as subgroup analysis for CLI and claudicants**.
- No significant differences for ethnicity or gender subgroup analysis were observed ( $P=0.271$  and  $P= 0.223$ )

Variable	DCI 1-3 (n = 110)	DCI 4-5 (n = 147)	P value
Age, years	63 (56-63)	62 (56-71)	0.6623
Gender, male	58 (53)	88 (60)	0.2531
History of smoking	82 (75)	113 (78)	0.529
Race, Hispanic	21 (20)	47 (32)	<b>0.018</b>
Critical limb ischemia presentation	68 (62)	117 (80)	<b>0.001</b>
Tissue loss	50 (45)	95 (65)	<b>0.002</b>
Chronic total occlusion	35 (32)	57 (39)	0.249
Postop dual antiplatelet therapy	93 (85)	124 (85)	0.966
Mortality	33 (30)	62 (42)	<b>0.045</b>
Amputation	15 (14)	37 (25)	<b>0.028</b>
Reintervention	43 (39)	47 (32)	0.294
In-stent restenosis	70 (64)	88 (60)	0.538
Primary patency	67/96 (70)	75/129 (58)	0.073
Primary assisted patency	19/30 (63)	19/27 (70)	0.573
Secondary assisted patency	13/15 (87)	15/21 (71)	0.278
Median follow-up, days	1782 (1056-2627)	1517 (851-2455)	<b>0.036</b>

Figure 1. Kaplan-Meier survival estimates



## Conclusion

- Higher levels of DCI are associated with worse amputation outcomes for patients who undergo SFA stenting.
- Prompt intervention and active surveillance should be performed to ensure long-term limb salvage.
- Further strategies must be designed to address socioeconomic factors and the impact of these disparities in optimal care for more vulnerable populations